APÉNDICE E – CARACTERIZACIÓN GEOQUÍMICA

E.1 CONTROL Y ASEGURAMIENTO DE CALIDAD ANALÍTICA

Apéndice A.1

CONTROL Y ASEGURAMIENTO DE CALIDAD ANALÍTICA DE LA LÍNEA BASE GEOQUÍMICA PARA MODIFICACIÓN DEL ESTUDIO DE IMPACTO AMBIENTAL DEL PROYECTO YANACOCHA

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Control y aseguramiento de la Calidad

El control y aseguramiento de calidad (QA/QC, por sus siglas en inglés) se define como los procedimientos rutinarios dirigidos a obtener niveles de rendimiento establecidos y controlar el proceso integral de monitoreo, desde la colección de muestras hasta los análisis de laboratorio. En el presente apéndice se describen los procedimientos de control y aseguramiento de calidad aplicados en las diferentes etapas del proyecto y para algunas de las zonas.

Control y aseguramiento en la Calidad de Muestreo: Zona Yanacocha Verde

Para el control y aseguramiento de calidad en la recolección de la muestras, se siguió el procedimiento interno de QA/QC de MYSRL, el cual fue aplicado durante los años en que fueron perforados los 22 taladros de los que se obtuvieron 20 compósitos para caracterizar el desmonte en el proyecto Yanacocha Verde.

Este procedimiento consistía en insertar controles (Duplicados Finos, Duplicados Gruesos, Blancos Finos, Blancos Gruesos y Muestras de Referencia Estándares) a cada uno de los sondajes para luego en conjunto, con las muestras regulares de uno o más sondajes, hacer el envío al laboratorio (SGS) para su respectivo análisis.

Al recibir todos los resultados, por envío, MYSRL realizó la evaluación del aseguramiento y control de calidad previo a su carga a la base de datos. Una vez terminada la campaña de perforación y teniendo los resultados de todos los envíos, se procedió a elaborar el informe final del aseguramiento y control de calidad de la campaña de perforación. Los 22 sondajes usados para el estudio de Caracterización de Desmonte, están incluidos, sin ninguna observación, dentro de 3 Reportes Internos de QA/QC (2011, 2012 Y 2014) tal como se detalla en la tabla 1

Tabla 1. Resumen de reportes de control y aseguramiento de calidad para la campaña de perforación y muestreo del tajo Yanacocha Verde

8	SONDAJE	DESDE	HASTA	CODIGO	REPORTE DE QA/QC
1	YS-1140	50,00	62,00	50229	QAQC Report_Verde_2012
	YS-1160	4,70	13,60	50229	QAQC Report_Verde_2012
2	YS-1084	32,00	42,00	50230	QAQC Report_Verde_2012
3	YS-1089	84,20	86,80	50231	QAQC Report_Verde_2012
	YS-1125	64,00	72,00	50231	QAQC Report_Verde_2012
	YS-1187	118,00	126,00	50231	QAQC_YANACOCHA_VERDE_2014
4	YS-1027	80,00	86,00	50232	QAQC_Report_Yana_Verde_2011
	YS-1027	100,00	110,00	50232	QAQC_Report_Yana_Verde_2011
	YS-1027	110,00	122,00	50232	QAQC_Report_Yana_Verde_2011
5	YS-1111	150,50	157,95	50233	QAQC Report_Verde_2012
6	YS-1111	90,00	100,00	50234	QAQC Report_Verde_2012
	YS-1111	100,00	107,10	50234	QAQC Report_Verde_2012
7	YS-1112	123,90	130,00	50235	QAQC Report_Verde_2012
	YS-1112	138,00	148,00	50235	QAQC Report_Verde_2012
	YS-1154	190,00	203,50	50235	QAQC Report_Verde_2012
8	YS-1103	160,00	168,45	50236	QAQC Report_Verde_2012
	YS-1140	85,40	92,00	50236	QAQC Report_Verde_2012
	YS-1140	100,70	114,00	50236	QAQC Report_Verde_2012
	YS-1160	30,00	40,00	50236	QAQC Report_Verde_2012
	YS-1160	40,00	50,00	50236	QAQC Report_Verde_2012
	YS-1160	50,00	60,00	50236	QAQC Report_Verde_2012
9	YS-1103	148,00	160,00	50237	QAQC Report_Verde_2012
	YS-1140	66,85	74,00	50237	QAQC Report_Verde_2012
	YS-1140	76,00	85,40	50237	QAQC Report_Verde_2012
	YS-1160	13,60	20,00	50237	QAQC Report_Verde_2012
	YS-1160	20,00	30,00	50237	QAQC Report_Verde_2012
	YS-1160	60,00	76,00	50237	QAQC Report_Verde_2012
10	YS-1093	11,70	20,00	50238	QAQC Report_Verde_2012
	YS-1132	86,00	94,00	50238	QAQC Report_Verde_2012
11	YS-1132	94,00	104,25	50239	QAQC Report_Verde_2012
	YS-1140	92,00	100,70	50239	QAQC Report_Verde_2012
12	YS-1105	106,00	116,80	50240	QAQC Report_Verde_2012
	YS-1105	116,80	128,00	50240	QAQC Report_Verde_2012
	YS-1105	128,00	142,00	50240	QAQC Report_Verde_2012
13	YS-1048	3,15	10,00	50241	QAQC Report_Verde_2012
	YS-1048	10,00	20,00	50241	QAQC Report_Verde_2012
14	YS-1132	234,20	251,55	50242	QAQC Report_Verde_2012
	YS-1132	251,55	264,00	50242	QAQC Report_Verde_2012

15	YS-994	143,35	147,95	50243	QAQC_Report_Yana_Verde_2011
	YS-1162	178,00	191,20	50243	QAQC Report_Verde_2012
16	YS-994	154,00	160,15	50244	QAQC_Report_Yana_Verde_2011
	YS-1162	166,75	178,00	50244	QAQC Report_Verde_2012
17	YS-1099	169,15	178,20	50245	QAQC Report_Verde_2012
	YS-1143	81,40	88,00	50245	QAQC Report_Verde_2012
	YS-1143	88,00	100,00	50245	QAQC Report_Verde_2012
	YS-1143	100,00	114,00	50245	QAQC Report_Verde_2012
18	YS-994	147,95	154,00	50246	QAQC_Report_Yana_Verde_2011
19	YS-1134	238,55	248,00	50247	QAQC Report_Verde_2012
	YS-1153	70,00	82,00	50247	QAQC Report_Verde_2012
20	YS-1155	179,10	186,00	50248	QAQC Report_Verde_2012

Fuente MYSRL

Control y Aseguramiento de Calidad Analítica:

Preparación de compositos Tajo Yanacocha Verde para pruebas NCV, SPLP, NAG, BAPP y HCT

El control y aseguramiento de calidad Analítica aplicado por MYSRL para el tajo Yanacocha Verde, se realizó para el proceso de preparación de los 20 compósitos que se usaron en los ensayos NCV, SPLP, NAG, BAPP y HCT, asimismo, también se aplicó el mismo procedimiento a los compósitos utilizados para realizar el ensayo de columnas expuestas a la intemperie.

El análisis de calidad que se realizó fue el cálculo de la Diferencia Porcentual Relativa (DPR) entre dos grupos de muestras; para ello se comparan las concentraciones de metales y otros parámetros de los compósitos, obtenidos a través de dos métodos de análisis, (i) el análisis denominado “Head” que representa cálculos realizados tomando en cuenta los valores de concentración del analito analizado químicamente de cada taladro junto con la proporción en peso o longitud de cada taladro que conforman la mezcla en cada compósito, y (ii) el análisis denominado “Tail” en el cual se determina directamente la concentración del analito una vez estuvieron mezclados y homogenizados los compósitos.

Los compósitos fueron realizados a partir de mezclas de diferentes taladros. La descripción de la conformación de los compósitos se puede apreciar en la tabla 2. En la tabla 2 se puede observar la identificación que se le dio a cada compósito, los taladros de donde se obtuvieron, la litología, el tipo de alteración que presenta y la profundidad de donde se tomó. La tabla 3 presenta la leyenda empleada para describir las diferentes litologías del proyecto.

Tabla 2. Descripción de compósitos usados en los ensayos NCV, SPLP, NAG, BAPP y HCT, tajo Yanacocha Verde

Comp.	Identificación	Descripción*	Lit.	Alt.	Longitud
1	50229	YS-1140(50-62); YS-1160(4,7-13,6)	BXP	SM	20,9
2	50230	YS-1048(32-42)	BXPM	ARG	10
3	50231	YS-1089(84,2-86,8); YS-1125(64-72); YS-1187(118-126)	BXPM	SC	28,6
4	50232	YS-1027(80-86); YS-1027(100-110); YS-1027(110-122)	BXPM	SC	28
5	50233	YS-1111(150,5-157,95)	BXPM	SP	7,45
6	50234	YS-1111(100-107,1); YS-1111(90-100)	BXPM	SP	17,1
7	50235	YS-1112(138-148); YS-1154(190-203,5); YS-1112(123,9-130)	LA	SC	29,6
8	50236	YS-1103(160-168,45); YS-1160(30-40); YS-1160(40-50); YS-1160(50-60); YS-1140(100,7-114); YS-1140Í85,4-92)	Teut	SM	58,35
9	50237	YS-1160(13,6-20); YS-1160(60-76); YS-1103(148-160); YS-1160(20-30); YS-1140(76-85,4); YS-1140(66,85-74)	Teut	SM	60,95
10	50238	YS-1093(11,7-20); YS-1132(86-94)	Teut	SM	16,3
11	50239	YS-1140(92-100,7); YS-1132(94-104,25)	Teut	SM	18,95
12	50240	YS-1105(116,8-128); YS-1105(106-116,8); YS-1105(128-142)	Tft	SC	36
13	50241	YS-1048(3,15-10); YS-1048(10-20)	Upha	SC	16,85
14	50242	YS-1132(251,55-264);YS-1132(234,2-251,55)	Upha	SP	29,8
15	50243	YS-994(143,35-147,95) ; YS-1162(178-191,2)	Upha	SP	17,8
16	50244	YS-994(154-160,15); YS-1162(166,75-178)	Upha	SP	17,4
17	50245	YS-1143(88-100) ; YS-1099(169,15-178,2); YS-1143(100-114) ; YS-1143(81,4-88)	Upha	SP	41,65
18	50246	YS-994(147,95-154)	Upha	SV	6,05
19	50247	YS-1153(70-82); YS-1134(238,55-248)	Ypq	SP	21,45
20	50248	YS-1155(179,1-186)	Ypq-E	SC	6,9

*X(Y-Z); X=Taladro, Y=De, Z=Hasta
Fuente: MYSRL

Tabla 3. Leyenda de la litología empleada en el proyecto

Litología		Alteración	
Abreviatura	Significado	Abreviatura	Significado
BXP	Brecha Freática	SM	Sílice masiva
BXPM	Brecha Freatomagmática	SC	Sílice arcillosa
LA	Secuencia andesitica basal	SP	Sílice pirofilítica
Teut	Unidad Piroclástica con textura Eutaxítica	SV	Sílice vuggy
Tft	Tufo eutaxítico fino laminado a nivel local con aislados sedimentos epiclásticos y lacustrinos	ARG	Argilítica
Upha	Domos y flujos andesíticos	SG	Sílice granular
Ypq	Pórfido Yanacocha con cuarzo	SG2	Sílice granular 2
Ypq-E	Pórfido Yanacocha con cuarzo-Temprano	-	-

Tabla 4. Head de compósitos usados en los ensayos NCV, SPLP, NAG, BAPP y HCT

Analito	Unidad	Código Lims											
		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240
Au	g/t	0,2	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
SCIS	%	0,1	2,5	3,9	6,3	3,6	6,1	6,6	0,0	0,2	0,6	0,8	6,0
Hg	g/t	0,9	0,3	0,7	0,3	0,2	0,2	0,9	0,8	0,7	0,3	0,3	0,5
Ag	ppm	11,8	4,7	3,5	0,9	7,7	1,1	5,5	6,1	9,7	11,4	18,9	0,7
Al	ppm	216,7	2381,2	1375,2	509,9	383,4	467,0	737,1	71,2	69,8	76,6	256,6	911,5
As	ppm	1043,4	152,6	114,2	155,5	317,5	232,4	164,8	380,2	484,9	379,4	484,3	82,5
B	ppm	9,6	8,1	0,0	0,0	0,0	0,0	0,0	9,6	11,2	12,3	9,1	0,0
Ba	ppm	2038,7	191,7	153,9	20,8	94,2	21,5	16,8	1241,5	876,7	260,5	648,4	14,0
Ca	ppm	56,4	1464,1	564,3	127,6	43,6	177,8	109,4	86,5	40,3	75,2	251,9	138,1
Cd	ppm	0,0	4,6	1,6	0,0	0,0	0,0	3,4	0,0	0,0	0,0	0,0	0,0
Co	ppm	0,5	7,6	11,5	10,8	3,8	7,6	12,6	0,9	1,1	1,2	1,7	10,5
Cr	ppm	157,0	89,0	89,0	100,9	84,9	109,2	89,1	186,2	170,2	183,5	170,2	83,1
Cu	ppm	281,1	379,2	585,1	436,1	635,3	691,9	445,9	156,1	317,0	514,2	670,8	205,7
Fe	ppm	15701,2	24082,0	33049,8	54323,4	37267,7	53066,2	40469,4	9354,2	9420,4	9489,9	15054,8	29884,3
Li	ppm	0,4	1,1	0,9	0,8	0,6	0,8	0,7	0,4	0,4	0,4	0,6	0,7
Mg	ppm	3,3	133,0	66,0	7,6	7,1	14,1	4,4	5,2	3,1	4,8	4,0	6,4
Mn	ppm	98,0	6221,3	101,3	53,0	47,0	52,7	38,5	42,0	53,6	50,3	44,3	31,7
Mo	ppm	105,7	8,0	7,0	8,4	14,0	9,2	5,4	38,2	85,4	118,6	93,1	15,6
Na	ppm	65,9	78,7	76,4	206,5	253,2	1525,4	222,9	45,1	45,9	55,6	52,5	3598,3
Ni	ppm	5,9	5,7	8,3	7,7	4,4	7,6	7,8	6,4	5,9	7,3	6,6	6,7
Pb	ppm	533,1	470,2	293,8	45,2	57,1	41,6	444,7	315,4	355,1	28,0	63,4	50,0
Sb	ppm	32,7	4,1	6,4	5,6	10,5	4,8	7,3	12,0	12,9	10,4	16,9	2,2
Sn	ppm	2,4	0,4	1,4	1,4	1,0	1,1	1,3	1,9	1,8	2,1	3,1	0,6
Sr	ppm	5,8	21,3	10,3	8,4	11,6	13,9	12,4	2,1	2,4	4,6	9,5	8,8

Ti	ppm	5,7	9,0	5,3	4,2	2,8	3,7	5,1	5,4	6,0	9,5	11,7	4,1
V	ppm	1,2	4,0	5,4	2,3	1,2	2,3	3,3	1,4	1,1	1,6	3,7	2,7
Zn	ppm	16,3	1880,9	903,4	345,1	10,8	23,5	653,9	11,2	8,3	6,0	6,8	82,4
Fuente:MYSRL													

A partir de los resultados obtenidos al analizar las muestras de cada taladro y de la proporción en que se mezclaron se calcularon los valores de los metales en cada compósito. Los resultados de estos cálculos son mostrados en la tabla conocida como “Head” (tabla 4). Luego se determinaron los mismos parámetros de los compósitos ya preparados y se reportaron en la tabla conocida como “Tail” (tabla 5).

Tabla 5. Tail de compósitos usados en los ensayos NCV, SPLP, NAG, BAPP y HCT

Analito	Unidad	Código Lims											
		50229	**50230**	**50231**	**50232**	**50233**	**50234**	**50235**	**50236**	**50237**	**50238**	**50239**	**50240**
Au	g/t	0,166	0,096	0,154	0,128	0,117	0,105	0,102	0,101	0,147	0,134	0,115	0,125
SCIS	%	0,154	2,425	4,006	6,586	4,419	6,317	6,444	0,35	0,15	0,308	0,876	6,517
Hg	g/t	0,939	0,266	0,556	0,151	0,195	0,116	0,751	0,674	0,849	0,405	0,839	0,501
Ag	ppm	11,741	4,231	3,552	0,646	7,308	0,973	4,671	5,19	10,239	9,327	18,357	0,786
Al	ppm	224,591	2358,141	1735,539	441,471	391,47	394,636	1215,681	72,017	86,088	71,907	281,195	1349,772
As	ppm	1042,876	156,913	116,936	139,411	308,259	204,684	151,299	379,809	525,432	349,703	501,453	79,616
B	ppm	10,129	4,202	0	0	0	0	0	6,34	6,605	10,563	6,98	0
Ba	ppm	2097,383	206,762	123,19	13,194	62,323	12,836	17,904	1341,346	1093,464	281,674	729,706	14,678
Ca	ppm	36,078	1052,944	295,727	35,696	19,621	29,497	61,447	57,515	21,57	14,521	23,765	68,869
Cd	ppm	0	4,252	1,307	0	0	0	0	0	0	0	0	0
Co	ppm	0,147	7,39	10,505	9,373	2,948	6,31	8,758	0,67	0,343	0,742	0,896	8,197
Cr	ppm	162,644	79,943	150,491	40,622	57,36	34,997	65,573	124,712	173,84	141,355	142,484	67,095
Cu	ppm	283,955	381,219	538,707	381,493	446,552	504,864	398,086	149,003	314,464	428,996	610,719	182,247
Fe	ppm	16120,221	26902,961	38084,129	59310,929	43423,279	57344,263	44612,638	10066	12157,514	10800,685	18406,541	36180,724
Li	ppm	0,52	0,444	0,611	0,353	0,099	0,288	0,146	0,462	0,481	0,358	0,348	0,233
Mg	ppm	5,138	203,299	63,091	4,457	0,945	4,045	6,95	2,06	0,995	1,39	1,597	16,884
Mn	ppm	46,102	5916,021	78,743	36,61	29,194	33,569	31,484	32,422	32,748	20,232	26,541	27,353
Mo	ppm	102,047	8,811	6,136	4,95	13,673	6,965	3,394	33,821	91,991	109,594	92,045	16,12
Na	ppm	41,609	185,39	115,886	783,434	405,73	3263,181	599,32	40,634	46,01	68,898	47,755	8468,193
Ni	ppm	7,313	9,458	13,199	7,496	5,957	5,835	7,235	6,967	8,155	17,683	7,681	7,676
Pb	ppm	546,656	499,461	291,308	54,92	57,267	37,305	372,967	325,762	398,926	28,893	72,463	51,475
Sb	ppm	30,33	2,331	7,635	4,079	9,917	3,765	6,562	11,484	14,028	9,332	16,866	1,797
Sn	ppm	2,639	0,164	1,64	0,207	0,572	0	0,695	1,846	2,134	1,999	3,72	0,65

Sr	ppm	6,047	14,075	6,016	6,654	12,069	8,617	16,016	2,026	2,72	3,695	8,606	10,61
Ti	ppm	6,884	8,493	6,388	3,743	2,625	2,819	4,291	5,329	7,044	8,604	11,61	3,911
V	ppm	1,322	3,81	6,993	3,672	2,589	3,475	4,621	1,072	1,119	1,215	3,858	3,665
Zn	ppm	15,512	1844,498	795,989	192,921	2,997	12,689	365,148	10,39	8,186	3,239	7,128	29,203
Fuente:MYSRL													

Para corroborar si los compósitos preparados representan de forma estadística a los taladros de los cuales están conformados, se compararon los valores del "Head" con los valores del "Tail" calculando la Diferencia Porcentual Relativa (DPR). Debido a que cada compósito está conformado por la suma de entre 4 a 30muestras se tomó como un valor aceptable del DPR aquellos parámetros con una diferencia menor o igual a 40%. En la tabla 6 se pueden observar los valores de DPR para todos los compósitos. Al final de esta tabla se presenta el número de compósitos que presentan un DPR mayor a 40% para cada metal y el porcentaje que representa. Hay metales a los cuales no se le calculó el DPR porque estaban muy cercanos al límite de detección.

Tabla 6.Valores de DPR de compósitos usados en los ensayos NCV, SPLP, NAG, BAPP y HCT

Analito	Código Lims												DPR >40	%DPR
	50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240		
Au	-10,13	-20,69	-20,00	-10,70	11,29	-7,92	-17,02	10,33	-7,77	9,25	-4,44	0,80	0	0,0
SCIS	-39,69	1,55	-1,51	-4,92	-19,69	-3,50	3,13	-169,39	3,92	63,57	-5,63	-9,10	2	16,7
Hg	0,11	19,97	15,59	51,23	-26,09	28,15	12,72	16,35	-25,65	-25,00	-83,45	7,12	2	16,7
Ag	0,81	10,67	-1,30	37,89	5,08	14,31	16,95	15,66	-5,08	19,77	2,88	-18,18	0	0,0
Al	-3,56	0,97	-23,16	14,38	-2,09	16,80	-49,01	-1,16	-20,90	6,28	-9,15	-38,77	1	8,3
As	0,05	-2,76	-2,34	10,90	2,96	12,69	8,57	0,11	-8,01	8,15	-3,49	3,54	0	0,0
B	-5,19	63,55	-	-	-	-	-	40,92	51,41	15,18	26,69		3	25,0
Ba	-2,84	-7,55	22,14	44,80	40,76	50,27	-6,60	-7,73	-22,00	-7,81	-11,80	-4,86	3	25,0
Ca	43,96	32,67	62,45	112,54	75,91	143,09	56,14	40,26	60,52	135,24	165,51	66,88	11	91,7
Cd	-	7,51	17,14	-	-	-	-	-	-	-	-	-	0	0,0
Co	103,29	2,66	9,10	13,73	24,99	18,90	36,08	34,36	103,65	44,85	63,73	24,22	4	33,3
Cr	-3,52	10,67	-51,36	85,20	38,77	102,91	30,45	39,56	-2,09	25,97	17,73	21,36	3	25,0
Cu	-1,01	-0,52	8,25	13,35	34,90	31,25	11,33	4,62	0,80	18,07	9,37	12,07	0	0,0
Fe	-2,63	-11,07	-14,15	-8,78	-15,26	-7,75	-9,74	-7,33	-25,37	-12,92	-20,03	-19,06	0	0,0
Li	-29,58	85,42	42,22	80,34	143,02	94,70	132,56	-5,33	-26,62	14,75	49,02	104,90	8	66,7
Mg	-43,68	-41,80	4,52	51,85	153,25	110,79	-44,18	86,03	102,33	110,31	86,23	-89,68	11	91,7
Mn	72,00	5,03	25,10	36,57	46,68	44,39	20,05	25,81	48,35	85,23	50,05	14,58	6	50,0
Mo	3,54	-9,52	13,10	51,34	2,29	27,48	46,04	12,19	-7,42	7,91	1,12	-3,02	2	16,7
Na	45,13	-80,82	-41,07	-116,55	-46,30	-72,58	-91,57	10,37	-0,31	-21,41	9,45	-80,72	8	66,7
Ni	-21,46	-48,93	-45,53	2,23	-31,16	25,70	7,46	-8,81	-32,24	-83,45	-14,67	-13,70	3	25,0
Pb	-2,50	-6,04	0,84	-19,36	-0,22	10,86	17,54	-3,23	-11,61	-3,20	-13,36	-2,87	0	0,0
Sb	7,63	56,07	-17,30	32,12	6,11	23,57	10,72	3,98	-8,34	10,77	0,27	21,24	1	8,3
Sn	-11,04	87,67	-17,87	149,14	58,50	200,00	62,10	4,24	-16,32	5,64	-18,98	-15,23	5	41,7
Sr	-4,48	40,70	52,71	23,20	-4,28	47,01	-25,33	3,16	-13,17	22,44	9,89	-18,17	3	25,0
Ti	-19,38	5,84	-18,84	11,25	6,45	27,48	17,07	1,73	-15,33	9,39	0,66	5,18	0	0,0
V	-10,76	4,16	-25,34	-46,32	-71,10	-41,95	-32,47	25,41	-1,62	25,49	-5,19	-32,07	3	25,0

Zn	5,03	1,95	12,64	56,56	113,05	59,66	56,67	7,91	1,25	59,72	-5,09	95,32	6	50,0
Fuente:MYSRL														

De esta tabla resalta el Ca y Mg, debido a que para ambos el 92% de los compósitos presentan valores de DPR mayor a 40%, esto puede indicar que ambos elementos se encuentran en una fase mineral (anfíboles y plagioclasas) porfídica o poco friable que impide una correcta homogenización al momento de preparar los compósitos. El Li y Na presentan 67% de los compósitos con DPR mayores a 40%, el Na se encuentra en las plagiclasas y el Li tiende a sustituir al Na, por lo que es posible que esta sea la razón de que tengan porcentajes similares. Para el Zn y Mn el 50% de los DPR son mayores a 40% y pare el Sn el 42% de las muestras.

Luego en la tabla 7 se presentan como resumen la cantidad de metales por compósitos que presentan valores de DPR mayores a 40%. Resaltan los compósitos 50232 y 50234, los cuales presentan 44% de los metales con valores de DPR mayores a 40%, ambas muestras provienen de la litología BXPM (Brecha Freatomagmática), por lo tanto, esta litología puede ser poco friable y difícil de homogenizar, ya que los otros compósitos con esta litología, 50231 y 50233, presentan 23 y 33 respectivamente de los valores de DPR sobre 40%. Estos resultados de DPR llaman la atención al proceso de preparación de compósitos, el cual se debería verificar.

Tabla 7. Metales por compósitos con valores de DPR mayores a 40% en los ensayos NCV, SPLP, NAG, BAPP y HCT

Código Lims	analitos con DPR >40	% analitos
50229	5	19
50230	8	30
50231	6	23
50232	11	44
50233	9	36
50234	11	44
50235	8	32
50236	4	15
50237	5	19
50238	7	27
50239	6	23
50240	5	20
Fuente:MYSRL		

Preparación de compósitos Tajo Yanacocha Verde para las Columnas Expuestas a la Intemperie (WRC)

A diferencia del ensayo anterior, para los ensayos WRC los compósitos se realizaron a partir de un solo taladro pero se utilizó una mezcla de diferente granulometría. Las muestras se realizaron en tubos PVC de 6 pulgadas, las mismas fueron secadas y trituradas a la siguiente granulometría: ¾ de pulgada, ½ de pulgada, ¼ de pulgada, 8, 14, 30, 50, 100 y -100 mallas y se mezclaron en diferentes proporciones. El análisis granulométrico de los compósitos se puede apreciar en la tabla 8. Se prepararon 25 compósitos, sin embargo, solo a 17 se le realizó el ensayo WRC, de estas 14 corresponden a desmonte de sulfuros y 3 desmonte de óxidos.

Tabla 8. Descripción de compósitos usados en el ensayo WRC

N°	Código Met	Código Geol	unidad	Malla-Peso-%									Total
				3/4 "	1/2"	1/4"	+8M	+14M	+30M	+50M	+100M	`-100M	
1	13022	YV9S-W8	Peso (g)	8262,2	45597,5	20738	12655	2598,2	2771,3	1475,1	1132,4	3592,4	98822,1
			%	8,4	46,1	21	12,8	2,6	2,8	1,5	1,1	3,6	100
2	13024	YV9S-W12	Peso (g)	12331	62263	23636	14208	2887,8	3079,6	1649,2	1281	3937	125272
			%	9,8	49,7	18,9	11,3	2,3	2,5	1,3	1	3,1	100
3	13028	YV9S-W20	Peso (g)	12338	64316,5	25444	11693	1329,9	1424,9	721,2	505,6	1176,2	118950
			%	10,4	54,1	21,4	9,8	1,1	1,2	0,6	0,4	1	100
4	13029	YV9C-W33	Peso (g)	6982,5	39149,7	15711	9794	2455,9	2791,3	1423,8	1172,8	2964,4	82445,6
			%	8,5	47,5	19,1	11,9	3	3,4	1,7	1,4	3,6	100
5	13030	YV9C-W43	Peso (g)	7054,1	41553,7	19620	13298	2956,4	3102,6	1735,5	1500,1	5333,8	96153,5
			%	7,3	43,2	20,4	13,8	3,1	3,2	1,8	1,6	5,5	100
6	13031	YV9C-W49	Peso (g)	16005	82656,5	36517	26717	6429,6	6954,9	3721	3026	7203,9	189230
			%	8,5	43,7	19,3	14,1	3,4	3,7	2	1,6	3,8	100
7	13032	YV9C-W51	Peso (g)	5735,3	26868	12376	10350	2766,2	2851,8	1361,5	869,9	2453,9	65632,1
			%	8,7	40,9	18,9	15,8	4,2	4,3	2,1	1,3	3,7	100
8	13033	YV9C-W52	Peso (g)	4392,6	24639	10878	7620	2185,6	2423,6	1109,5	840	1971,7	56060,4
			%	7,8	44	19,4	13,6	3,9	4,3	2	1,5	3,5	100
9	13034	YV9C-W 53	Peso (g)	4415,6	30932	14282	9543,4	2465,8	2536,2	1180,6	989,8	2085,2	68430,2
			%	6,5	45,2	20,9	13,9	3,6	3,7	1,7	1,4	3	100
10	13035	YV9W-W52	Peso (g)	9770	55617,5	27801	19320	4321,1	4448,8	2398	1874,5	4950,7	130501
			%	7,5	42,6	21,3	14,8	3,3	3,4	1,8	1,4	3,8	100
11	13036	YV9W-W57	Peso (g)	7845	41642	15065	9539,4	2312	2811,3	1638,6	1560,5	4443,5	86857,6
			%	9	47,9	17,3	11	2,7	3,2	1,9	1,8	5,1	100
12	13037	YV9W-W58	Peso (g)	5373,6	28075,5	11057	6559,9	1684,1	2088,9	1290,5	1043,5	3168,6	60341,6
			%	8,9	46,5	18,3	10,9	2,8	3,5	2,1	1,7	5,3	100
13	13038	YV9W-W61	Peso (g)	7263,2	37863,5	16117	10027	2393,9	2837,6	1743,4	2001,8	5422,5	85669,7
			%	8,5	44,2	18,8	11,7	2,8	3,3	2	2,3	6,3	100

14	13041	YV9S-W 22	Peso (g)	7493,3	29831	10122	6723	1529,9	1750,1	966,7	678,7	1793,7	60887,9
			%	12,3	49	16,6	11	2,5	2,9	1,6	1,1	2,9	100
15	13042	YV9N-W4	Peso (g)	4938,7	15170,4	11753	8748	2808,5	4064,8	2796,6	2317,3	5117,3	57715
			%	8,6	26,3	20,4	15,2	4,9	7	4,8	4	8,9	100
16	13044	YV9C-W22	Peso (g)	11845	33729,7	12577	7409,4	1461,7	1186,1	431,4	267,7	828,6	69736,2
			%	17	48,4	18	10,6	2,1	1,7	0,6	0,4	1,2	100
17	13046	YV9C-W32	Peso (g)	14333	23086	9325,8	5062,7	1398	1714,4	908,7	666,6	1551,8	58047,5
			%	24,7	39,8	16,1	8,7	2,4	3	1,6	1,1	2,7	100

14 Columna de desmonte de sulfuros

3 Columna de desmonte de óxidos

Fuente: MYSRL

A partir de estas mezclas y proporciones se calculó el "Head", el cual se muestra en la tabla 9 y luego se determinó experimentalmente el "Tail", presentado en la tabla 10. Para corroborar si los compósitos preparados representan estadísticamente a los taladros de los cuales están conformados se comparó los valores del "Head" con los valores del "Tail" calculando la Diferencia Porcentual Relativa (DPR).

Tabla 9. Head de compósitos usados en el ensayo WRC

Analito	Unidad	Código Lims																
		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Hg	ppm	2,25	10,36	3,93	0,87	0,66	0,5	1,79	0,58	0,43	1	1,05	2,24	2,93	4,94	0,19	0,23	3,76
C_{Total}	ppm	0,04	0,14	0,03	0,03	0,03	0,02	0,03	0,06	0,02	0,02	0,03	0,02	0,02	0,02	0,05	0,1	0,33
$C_{Residual}$	ppm	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,06
S_{Total}	ppm	11,58	19,46	6,88	2,46	5,61	5,76	2,06	2,27	2,89	6,32	3,71	5,86	4,67	9,91	0,09	0,05	2,63
$S_{Sulfato}$	ppm	0,54	0,4	0,28	0,39	0,62	0,39	0,25	0,35	0,37	0,85	0,67	0,73	0,77	0,44	0,08	0,03	0,59
$S_{Sulfuro}$	ppm	11,04	19,07	6,6	2,07	4,99	5,37	1,81	1,93	2,52	5,47	3,04	5,12	3,9	9,47	0,01	0,02	2,04
Al	ppm	228,4	45,9	57,6	2771	771,1	2798,3	243,5	4550,3	3062,3	1089,5	1361,3	1190,3	870,9	161,9	5850,8	178,9	6508,5
As	ppm	339,8	603,7	589,9	195,4	795,8	283,9	1013,2	59,1	53	348	141,3	157,2	322,8	676	44,9	175,8	91,4
Cd	ppm	122	66,7	112,8	3,1	0	0	27,4	12,9	2,3	0	0	0	0	106,2	2,1	0	5,8
Fe	ppm	85926	143056	54787	20451	44460	42851	34057	20815	25070	47523	45552	51456	53716	65797	14744	7776	25021
Sb	ppm	18,3	10,7	16,7	8,4	18,7	8,7	27,4	0,5	0,4	8,2	5,8	4,6	7,9	9,4	0,2	7,2	0,5
Ti	ppm	22,5	25,7	14,1	5,1	34,1	23,4	16,5	4,1	4,8	7,6	10,1	8,1	6,6	20,2	321,8	7,6	6,6
Zn	ppm	198,4	377,9	55,2	666,6	23,4	24,1	42,3	3231	545,8	43,4	27,5	47,2	30,4	201,7	325,8	87,1	1393,9
Cu	ppm	1566	1306	1402	1689	1930	1164	1335	248	1201	2265	811	1515	1402	1776	198	121	722

Fuente:MYSRL

Tabla 10. Tail de compósitos usados en el ensayo WRC

Analito	Unidad	Código Lims																
		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Hg	ppm	3,18	12,35	4,9	0,91	1,06	1,23	1,79	0,71	0,62	0,96	1,17	2,5	3,36	4,96	0,11	0,15	0,31
C_{Total}	ppm	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,08
$C_{Residual}$	ppm	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,04
S_{Total}	ppm	11,9	20,58	6,54	1,56	4,66	5,21	1,1	1,55	2,05	4,99	2,79	5,3	3,75	8,96	0,03	0,02	1,49
$S_{Sulfato}$	ppm	0,68	0,78	0,3	0,36	0,56	0,75	0,21	0,29	0,34	0,38	0,57	0,69	0,71	0,38	0,03	0,02	0,31
$S_{Sulfuro}$	ppm	11,22	19,8	6,24	1,2	4,1	4,46	0,89	1,26	1,71	4,61	2,22	4,61	3,04	8,58	0	0	1,18
Al	ppm	256,8	90,8	63,8	1549,6	395,4	474,7	220,6	2289,5	1208,6	954,6	682,1	483,3	541	125,8	6800,3	235,1	3513,7
As	ppm	291,1	604,1	517,9	224,3	732,7	346,8	921,6	59	72,2	371,4	123,4	110,4	267,4	600,4	61,8	219,3	73,2
Cd	ppm	1	0	0	0	0	0	0	3,9	0	0	0	0	0	0	0,9	0	0,3
Fe	ppm	93727	133587	44993	14250	30540	33637	23984	10666	14590	32515	31100	32689	35249	63379	16159	8122	15321
Sb	ppm	14,6	10,6	18,3	12,3	23,3	12,5	29,9	0	1,7	12,8	6,1	7,2	12,3	9,2	0	19	0
Ti	ppm	31,8	26,6	12,4	4,4	4,8	3,1	9,8	3,9	3,6	5,7	6,1	3,8	4	19,7	449	20,6	7,2
Zn	ppm	106,9	246,1	26,3	353,3	13,7	14,2	17,1	1494,2	195,2	13,2	15,3	24,5	15,3	56,2	324,5	86,5	437,9
Cu	ppm	1113	1315	1251	921	1878	1112	1012	202	946	2214	552	1076	720	1616	175	249	188
Fuente:MYSRL																		

Debido a que cada compósito está conformado por la suma de varias granulometría se tomó como un valor aceptable del DPR aquellos parámetros con una diferencia menor o igual a 50%, en la tabla 11 se puede observar los valores de DPR para todos los compósitos. Al final de esta tabla se presenta el número de compósitos que presentan un DPR mayor a 50% para cada parámetro y el porcentaje que representa.

El Zn es el parámetro que muestra mayor porcentaje de compósitos con valor de DPR sobre 50% con 82% de los compósitos, le sigue el Al con 53% de las muestras y luego el C_{Total} con 35% de los compósitos. Es posible que el Zn se encuentre como esfalerita y al presentarse pórfidos de este mineral la homogenización no fue correcta, el Al puede estar en plagioclasas y arcillas las cuales no se homogenizaron bien y para el caso de C_{Total} hay muestras que están por debajo de 0,1 ppm los cuales se pueden considerar por debajo del límite de detección ocasionando de esta manera posibles errores en las mediciones.

Tabla 11. Valores de DPR de compósitos usados en el ensayo WRC

Analito	Código Lims																	DPR >50	DPR (%)
	13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046		
Hg	-34,3	-17,5	-22,0	-4,5	-46,5	-84,4	0,0	-20,2	-36,2	4,1	-10,8	-11,0	-13,7	-0,4	53,3	42,1	169,5	3,0	17,6
C_{Total}	66,7	150,0	40,0	40,0	40,0	0,0	40,0	100,0	0,0	0,0	40,0	0,0	0,0	0,0	85,7	133,3	122,0	6,0	35,3
S_{Total}	-2,7	-5,6	5,1	44,8	18,5	10,0	60,8	37,7	34,0	23,5	28,3	10,0	21,9	10,1	100,0	85,7	55,3	4,0	23,5
$S_{Sulfato}$	-23,0	-64,4	-6,9	8,0	10,2	-63,2	17,4	18,8	8,5	76,4	16,1	5,6	8,1	14,6	90,9	40,0	62,2	5,0	29,4
$S_{Sulfuro}$	-1,6	-3,8	5,6	53,2	19,6	18,5	68,1	42,0	38,3	17,1	31,2	10,5	24,8	9,9	200,0	200,0	53,4	5,0	29,4
Al	-11,7	-65,7	-10,2	56,5	64,4	142,0	9,9	66,1	86,8	13,2	66,5	84,5	46,7	25,1	-15,0	-27,1	59,8	9,0	52,9
As	15,4	-0,1	13,0	-13,8	8,3	-19,9	9,5	0,2	-30,7	-6,5	13,5	35,0	18,8	11,8	-31,7	-22,0	22,1	0,0	0,0
Fe	-8,7	6,8	19,6	35,7	37,1	24,1	34,7	64,5	52,8	37,5	37,7	44,6	41,5	3,7	-9,2	-4,4	48,1	2,0	11,8
Sb	22,5	0,9	-9,1	-37,7	-21,9	-35,8	-8,7	200,0	-123,8	-43,8	-5,0	-44,1	-43,6	2,2	200,0	-90,1	200,0	5,0	29,4
Ti	-34,3	-3,4	12,8	14,7	150,6	153,2	51,0	5,0	28,6	28,6	49,4	72,3	49,1	2,5	-33,0	-92,2	-8,7	5,0	29,4
Zn	59,9	42,2	70,9	61,4	52,3	51,7	84,8	73,5	94,6	106,7	57,0	63,3	66,1	112,8	0,4	0,7	104,4	14,0	82,4
Cu	33,8	-0,7	11,4	58,9	2,7	4,6	27,5	20,4	23,8	2,3	38,0	33,9	64,3	9,4	12,3	-69,2	117,4	4,0	23,5
Fuente:MYSRL																			

Luego en la tabla 12 se presenta un resumen de la cantidad de parámetros por compósitos que presentan valores de DPR mayores a 50%. Resaltan el compósito 13046, el cual presenta 75% de los parámetros sobre el 50%, el cual tiene litología Ypq (Pórfido Yanacocha con cuarzo), es posible que esta litología puede ser poco friable y difícil de homogenizar, ya que las diferencias entre el "Head" y el "Tail" es destacada sobre los otros compósitos, las muestras que le siguen en cantidad de parámetros con DPR sobre 50% son la 13042 y 13044, las cuales tienen litología Yp (Pórfido Yanacocha) y Teut (Unidad Piroclástica con textura Eutaxítica) Estos resultados de DPR llaman la atención al proceso de preparación de muestras, en especial para estos tres compósitos.

Tabla 12. Parámetro por compósitos con valores de DPR mayores a 50% en el ensayo WRC

N°	Codigo Lims	Taladro	Identificación de muestra	analitos conDPR > 50	%analitos
1	13022	YV9S-W8	YS Sur LA SM HA	2	17
2	13024	YV9S-W12	YS Sur Teut SM HA	3	25
3	13028	YV9S-W20	YS Sur Teut SM HA	1	8
4	13029	YV9C-W33	YS Cent Ypq AA-Pyr A	4	33
5	13030	W9C-W43	YS Cent YpqBX AA-Pyr HA	3	25
6	13031	W9C-W49	YS Cent Yp AA-Pyr HA	5	42
7	13032	YV9C-W51	YS Cent Teut SM A	4	33
8	13033	W9C-W52	YS Cent Ypq AA-Pyr A	5	42
9	13034	W9C-W53	YS Cent Ypq AA-Pyr A	4	33
10	13035	W9W-W52	YS Oeste YpqB* AA-Pyr HA	2	17
11	13036	W9W-W57	YS Oeste Yp2 AA-Pyr A HCT-02	2	17
12	13037	W9W-W58	YS Oeste Yp2 AA-Pyr HA	3	25
13	13038	W9W-W61	YS Oeste Yp2 AA-Pyr HA	2	17
14	13041	W9SW22	YS Sur Teut AA-AJn HA	1	8
15	13042	W9N-W4	YS Norte Yp ARGI	6	50
16	13044	W9C-W22	YS Cent Teut SM I HCT-03	6	50
17	13046	YV9C-W32	YS Cent Ypq ARG A	9	75
Fuente:MYSRL					

Preparación de compósitos Chaquicocha Subterráneo Sur

El control y aseguramiento de calidad Analítica aplicado por MYSRL para las labores subterráneas de Caharicocha Subtrerráneo Sur, se realizó para el proceso de preparación de los 8 compósitos que se usaron en los ensayos de HCT.

El análisis de calidad que se realizó fue el cálculo de la Diferencia Porcentual Relativa (DPR) entre dos grupos de muestras: el Head y el Tail, definidos anteriormente.

Los resultados de estos cálculos son mostrados en la tabla conocida como “Head” (tabla 13). Luego se determinaron los mismos parámetros de los compósitos ya preparados y se reportaron en la tabla conocida como “Tail” (tabla 14).

Tabla 13. Head de compósitos usados para celdas húmedas de Chaquicocha subterráneo Sur

Analito	Unidad	código cliente							
		CHQ-1104 (60588_T)	CHQ-1054 (60589_T)	CHQ-1038 (60590_T)	CHQ-1038 (60591_T)	CHQ-1044 (60592_T)	CHQ-1072 (60593_T)	CHQ-1075 (60594_T)	CHQ-1078 (60595_T)
Au	g/t	0,139	0,464	0,088	0,622	0,282	0,180	0,272	0,041
Ag	g/t	0,22	0,02	0,02	0,02	0,02	0,02	0,02	0,02
Cu	g/t	598,3	3948,8	60,7	540,3	106,4	22,0	27,1	56,9
S°	%	8,5	5,3	10,0	13,2	5,0	8,4	16,8	5,8
Hg	g/t	3,31	1,91	0,70	1,16	0,64	0,79	5,75	0,40
Ag	ppm	0,04	0,00	0,12	0,71	0,00	0,00	0,00	0,00
Al	ppm	36,02	31,37	99,73	130,64	59,37	34,01	35,93	39,67
As	ppm	264,34	1322,16	145,07	301,97	148,43	113,26	181,39	74,74
B	ppm	15,83	16,26	15,44	2,84	16,87	19,10	8,18	18,29
Ba	ppm	65,29	82,81	64,32	136,90	145,67	77,88	40,06	147,12
Be	ppm	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Bi	ppm	1,22	0,00	0,46	0,96	1,26	0,23	0,53	0,56
Ca	ppm	43,10	29,37	31,18	47,85	112,32	69,04	29,99	32,39
Cd	ppm	0,00	0,00	1,13	0,00	0,00	0,00	0,00	0,00
Co	ppm	0,98	2,66	4,22	1,74	2,88	0,88	12,93	1,18
Cr	ppm	135,54	106,03	146,14	106,64	366,00	316,98	167,97	136,53
Cu	ppm	506,61	4221,40	62,13	586,17	149,12	17,98	28,70	55,28
Fe	ppm	1787,44	1864,42	3127,99	2108,64	5786,51	3803,99	13506,16	1616,62
Ga	ppm	2,48	4,19	3,81	0,00	5,95	1,96	2,87	2,86
Li	ppm	0,53	0,26	0,52	0,28	0,48	0,51	0,49	0,32
Mg	ppm	8,47	6,62	6,23	7,33	23,32	6,96	7,26	6,51
Mn	ppm	12,99	13,46	12,84	11,68	40,46	36,37	22,10	13,00
Mo	ppm	2,25	7,61	14,30	15,91	3,69	8,61	0,38	8,90
Na	ppm	36,69	33,28	43,87	21,18	49,36	39,33	32,95	42,40
Nb	ppm	3,30	1,09	2,93	2,24	1,24	1,09	0,32	2,87
Ni	ppm	6,24	6,57	7,36	5,08	14,05	12,24	11,34	5,21
Pb	ppm	7,80	134,83	209,43	502,97	126,78	56,05	51,38	40,46
Sb	ppm	7,25	3,65	4,08	4,09	0,38	0,64	1,41	0,82
Sc	ppm	0,01	0,06	0,00	0,49	0,01	0,00	0,00	0,00

Se	ppm	4,95	3,70	5,99	8,76	3,43	6,05	9,09	4,58
Sn	ppm	0,95	3,05	0,69	1,26	0,73	0,20	2,95	0,74
Sr	ppm	7,77	33,34	11,76	22,14	1,54	5,34	2,28	4,95
Te	ppm	5,34	22,12	3,83	4,52	3,25	3,04	6,78	2,47
Ti	ppm	17,35	9,24	20,78	136,03	16,71	12,55	30,43	13,98
Tl	ppm	0,83	5,57	15,13	5,62	0,87	1,05	19,63	0,00
V	ppm	0,31	0,77	0,53	0,47	1,50	0,86	1,00	0,24
W	ppm	0,00	0,00	0,00	12,58	0,00	0,00	0,00	0,00
Zn	ppm	9,50	32,08	110,48	15,59	12,81	154,13	7,71	11,19
Fuente: MYSRL									

Tabla 14. Tail de compósitos para celdas húmedas Chaquicocha Subterráneo Sur

Analito	Unidad	código cliente							
		CHQ-1104 (60588_T)	CHQ-1054 (60589_T)	CHQ-1038 (60590_T)	CHQ-1038 (60591_T)	CHQ-1044 (60592_T)	CHQ-1072 (60593_T)	CHQ-1075 (60594_T)	CHQ-1078 (60595_T)
Au	g/t	0,121	0,407	0,098	0,609	0,281	0,174	0,242	0,059
Ag	g/t	0,16	0,02	0,22	0,20	0,12	0,20	0,17	0,02
Cu	g/t	595,8	4267,5	58,7	350,8	99,9	15,2	24,7	48,4
S°	%	7,7	4,6	9,6	11,0	4,1	7,9	13,6	5,4
Hg	g/t	3,90	2,21	1,39	1,28	0,74	0,97	6,40	0,58
Ag	ppm	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Al	ppm	28,70	31,97	85,31	62,61	45,97	32,05	29,20	34,76
As	ppm	329,41	1289,76	131,04	279,39	123,24	119,74	100,92	73,01
B	ppm	17,72	17,43	16,63	16,33	16,42	17,43	11,92	18,99
Ba	ppm	54,13	77,73	53,24	74,50	115,93	99,46	45,24	162,53
Be	ppm	0,00	0,00	0,00	0,00	0,00	0,01	0,00	0,00
Bi	ppm	1,21	0,00	0,28	0,59	0,87	0,24	0,04	0,24
Ca	ppm	45,26	32,63	24,83	27,08	70,70	61,21	26,26	27,19
Cd	ppm	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Co	ppm	0,19	2,16	0,16	0,63	0,00	1,32	5,37	0,82
Cr	ppm	128,94	298,06	127,57	186,36	137,38	315,51	121,39	261,67
Cu	ppm	609,48	4335,43	52,95	383,05	108,71	18,41	31,60	54,52
Fe	ppm	1699,60	4108,11	2668,85	2400,01	3024,37	3628,39	11071,74	3017,26
Ga	ppm	1,41	3,71	2,06	0,65	1,02	0,17	1,50	2,88
Li	ppm	0,35	0,24	0,39	0,24	0,26	0,29	0,28	0,27
Mg	ppm	7,00	5,83	5,45	7,85	15,63	6,20	6,72	5,68
Mn	ppm	10,43	34,69	9,80	17,50	13,36	31,67	14,82	26,68
Mo	ppm	2,59	9,05	13,54	11,73	2,67	6,94	0,74	9,52
Na	ppm	33,70	36,54	41,22	37,85	34,52	36,61	33,88	36,96
Nb	ppm	2,94	0,42	3,27	0,37	3,28	0,69	2,26	0,54

Ni	ppm	4,43	12,84	5,90	6,04	6,65	10,89	9,44	9,48
Pb	ppm	7,50	95,80	190,74	453,35	103,55	30,06	35,20	33,97
Sb	ppm	10,33	2,62	3,78	4,37	1,45	0,68	0,85	0,40
Sc	ppm	0,00	0,05	0,00	0,08	0,01	0,00	0,00	0,00
Se	ppm	6,68	3,04	5,05	10,90	1,05	7,19	7,56	2,97
Sn	ppm	1,00	2,95	0,78	1,77	0,06	0,70	2,66	0,46
Sr	ppm	7,40	34,00	10,22	7,25	1,29	4,88	2,26	3,84
Te	ppm	6,04	21,21	3,68	5,13	2,74	3,25	5,23	2,55
Ti	ppm	12,16	8,91	13,75	14,76	13,46	12,34	23,17	8,06
Tl	ppm	0,00	4,62	7,01	2,71	0,50	1,17	8,90	0,00
V	ppm	0,62	0,89	0,23	0,67	0,67	0,62	0,69	0,97
W	ppm	0,00	0,00	0,00	7,47	0,00	0,00	0,00	0,00
Zn	ppm	7,20	29,03	86,18	8,34	8,00	43,09	4,18	12,58
Fuente: MYSRL									

En la tabla 15 se pueden observar los valores de DPR para todos los compósitos. Al final de esta tabla se presenta el número de compósitos que presentan un DPR mayor a 40% para cada metal y el porcentaje que representa. Hay metales a los cuales no se le calculó el DPR porque estaban muy cercanos al límite de detección.

Tabla 15. Valores del DPR las muestras empleadas en el ensayo de celdas húmedas para Chaquicocha Subterráneo Sur.

Analito	Unidad	código cliente								DPR >50	% DPR
		CHQ-1104 (60588_T)	CHQ-1054 (60589_T)	CHQ-1038 (60590_T)	CHQ-1038 (60591_T)	CHQ-1044 (60592_T)	CHQ-1072 (60593_T)	CHQ-1075 (60594_T)	CHQ-1078 (60595_T)		
Au	g/t	13,85	13,09	-10,75	2,11	0,36	3,39	11,67	-36,00	0	0
Cu	g/t	0,41	-7,76	3,33	42,52	6,31	36,51	9,26	16,05	1	12,5
S°	%	10,75	14,17	3,68	17,88	20,02	6,01	20,54	8,59	0	0
Hg	g/t	-16,38	-14,49	-65,71	-10,42	-13,78	-19,44	-10,57	-37,05	1	12,5
Al	ppm	22,60	-1,89	15,59	70,40	25,44	5,95	20,67	13,21	1	12,5
As	ppm	-21,92	2,48	10,16	7,77	18,55	-5,56	57,01	2,34	1	12,5
B	ppm	-11,28	-6,94	-7,42	-140,78	2,67	9,18	-37,26	-3,80	1	12,5
Ba	ppm	18,69	6,32	18,85	59,03	22,74	-24,33	-12,14	-9,95	1	12,5
Ca	ppm	-4,90	-10,52	22,69	55,44	45,48	12,02	13,24	17,45	2	25
Cr	ppm	4,98	-95,04	13,57	-54,41	90,84	0,47	32,19	-62,85	4	50
Cu	ppm	-18,43	-2,67	15,95	41,92	31,35	-2,34	-9,63	1,38	1	12,5
Fe	ppm	5,04	-75,13	15,84	-12,93	62,70	4,73	19,81	-60,45	3	37,5
Mg	ppm	19,02	12,75	13,37	-6,75	39,51	11,59	7,78	13,64	0	0
Mn	ppm	21,90	-88,19	26,86	-39,92	100,73	13,82	39,40	-68,94	3	37,5

Mo	ppm	-13,76	-17,39	5,50	30,23	32,34	21,49	-63,81	-6,74	1	12,5
Na	ppm	8,49	-9,34	6,23	-56,46	35,38	7,16	-2,79	13,71	1	12,5
Ni	ppm	34,06	-64,58	21,97	-17,29	71,47	11,68	18,29	-58,10	3	37,5
Pb	ppm	3,97	33,85	9,34	10,38	20,17	60,36	37,38	17,44	1	12,5
Sn	ppm	-4,52	3,10	-12,64	-33,73	169,47	-112,85	10,09	47,87	3	37,5
Sr	ppm	4,94	-1,95	13,96	101,33	17,76	9,02	0,57	25,24	1	12,5
Te	ppm	-12,42	4,22	3,89	-12,75	17,23	-6,55	25,86	-3,11	0	0
Ti	ppm	35,18	3,64	40,73	160,85	21,55	1,65	27,09	53,74	3	37,5
Zn	ppm	27,50	9,97	24,71	60,63	46,22	112,60	59,40	-11,75	4	50
Fuente: MYSRL											

De la tabla 15 resaltan el Cr y Zn debido a que 50% de los compósitos presentan valores de DPR mayor a 40%, esto puede indicar que este elemento se encuentra en una fase mineral porfídica o poco friable que impide una correcta homogenización al momento de preparar los compósitos. El Fe, Mn, Ni, Sn y Ti presentan 37,5 % de los compósitos con DPR mayores a 40%.

Luego en la tabla 16 se presentan como resumen la cantidad de metales por compósitos que presentan valores de DPR mayores a 40%. Resalta el compósito CHQ-1038 (60591_T), el cual presenta 45,8 % de los metales con valores de DPR mayores a 40%, ambas muestras provienen de la litología LA (secuencia andesítica basal), por lo tanto, esta litología puede ser poco friable y difícil de homogenizar.

Tabla 16. Analitos por muestra con DPR > 50%

Código Cliente	número de analitos con DPR>40	% de analitos
CHQ-1104 (60588_T)	0	0
CHQ-1054 (60589_T)	5	20,8
CHQ-1038 (60590_T)	3	12,5
CHQ-1038 (60591_T)	11	45,8

CHQ-1044 (60592_T)	7	29,2
CHQ-1072 (60593_T)	4	16,7
CHQ-1075 (60594_T)	3	12,5
CHQ-1078 (60595_T)	7	29,2
Fuente: MYSLR		

Análisis de duplicados en muestra total (Head), Chaquicocha Subterráneo Sur

Para el análisis de aseguramiento de la calidad analítica de los ensayos de metales totales en el Head de Chaquicocha Subterráneo Sur, se analizó un duplicado de la muestra CHQ-1038 (60591_T) identificada como CHQ-1038 (60596_T). Para comparar ambos valores se calcula el DPR, el cual debe ser menor a 20 para darle validez a la reproducibilidad de la concentración del metal analizado, lo que está relacionado con la precisión del equipo de medida, en este caso el ICP-OES.

Tabla 17. Resultado del DPR para duplicado del Head para Chaquicocha Subterráneo Sur

Analito	unidad	60591	60596	% DPR > 20
Au	g/t	0,62	0,60	4
Ag	g/t	0,02	0,02	0
Cu	g/t	540,32	529,36	2
SCIS	%	2,56	2,91	-13
Hg	g/t	1,16	1,16	-1
Ag	ppm	0,71	0,26	94
Al	ppm	130,64	91,91	35
As	ppm	301,97	319,29	-6
B	ppm	2,84	3,31	-15
Ba	ppm	136,90	95,54	36
Bi	ppm	0,96	0,50	63
Ca	ppm	47,85	58,89	-21
Co	ppm	1,74	1,44	19
Cr	ppm	106,64	97,29	9
Cu	ppm	586,17	609,88	-4

Fe	ppm	2108,64	2207,18	-5
Li	ppm	0,28	0,13	72
Mg	ppm	7,33	8,24	-12
Mn	ppm	11,68	13,54	-15
Mo	ppm	15,91	14,98	6
Na	ppm	21,18	23,61	-11
Nb	ppm	2,24	2,00	11
Ni	ppm	5,08	4,35	15
Pb	ppm	502,97	518,72	-3
Sb	ppm	4,09	4,81	-16
Sc	ppm	0,49	0,25	64
Se	ppm	8,76	9,42	-7
Sn	ppm	1,26	1,58	-23
Sr	ppm	22,14	14,33	43
Te	ppm	4,52	4,79	-6
Ti	ppm	136,03	77,22	55
Tl	ppm	5,62	7,79	-32
V	ppm	0,47	0,44	7
W	ppm	12,58	13,18	-5
Zn	ppm	15,59	15,34	2
Fuente: MYSRL				

En la tabla 17 se presentan los datos del cálculo de DPR para cada metal analizado. Los analitos Ag, Al, Ba, Bi y Li poseen valores de DPR por encima de 20, lo que indica que la concentración de estos metales debe ser observada con detenimiento ya que poseen una baja reproducibilidad por esta técnica.

Análisis de duplicados en lixiviados de HCT Tajo Chaquicocha Subterráneo Sur

Para el análisis de aseguramiento de la calidad analítica del análisis de metales lixiviados en el ensayo de celdas de humedad de Chaquicocha Subterráneo Sur, se analizó un duplicado de la muestra CHQ-1038 (60591_T) identificada como CHQ-1038 (60596_T). Para comparar ambos valores se calcula el DPR, el cual debe ser menor a 20 para darle validez a la reproducibilidad de la concentración del metal analizado, lo que está relacionado con la precisión del equipo de medida, en este caso el ICP-MS

Tabla 18. Resultado del DPR para duplicado en el ensayo de celdas húmedas para Chaquicocha Subterráneo Sur

Analito	unidad	60591	60596	% DPR > 20
Hg	mg/L	0,001	0,001	4
Ag	mg/L	0,002	0,002	0
Al	mg/L	0,28	0,25	10
As	mg/L	0,32	0,31	2
Ba	mg/L	0,10	0,11	-8
Be	mg/L	0,002	0,002	0
Ca	mg/L	2,52	2,51	0
Cd	mg/L	0,17	0,15	11
Co	mg/L	0,047	0,046	2
Cu	mg/L	7,37	5,74	25
Fe	mg/L	5,23	4,21	22
K	mg/L	0,52	0,53	-3
Mg	mg/L	0,59	0,56	5
Mn	mg/L	0,090	0,086	4
Na	mg/L	0,98	0,97	1
Ni	mg/L	0,047	0,050	-5
Pb	mg/L	2,05	1,94	5
Tl	mg/L	0,18	0,16	15
V	mg/L	0,002	0,002	0
Zn	mg/L	0,50	0,55	-9
Cr (VI)	mg/L	0,005	0,005	0
P (Tot)	mg/L	0,16	0,14	11
Sulfuros	mg/L	0,002	0,002	0
Fuente: MYSRL				

En la tabla 18 se presentan los datos del cálculo de DPR para cada metal analizadoUnicamente los metales CU y Fe poseen valores de DPR ligeramente por encima de 20, lo que indica que en general la técnica ICP-MS se aplicó con una alta reproducibilidad en el estudio de celdas de humedad para esta zona.

Estimación de la Contaminación en el ensayo de HCT para el Tajo Yanacocha Verde

La contaminación de los analitos analizados en las muestras se evaluó empleando un blanco, el cual es una muestra que posee una matriz similar a las muestras de desmonte estudiadas y que

se asume no tiene cantidades representativas de los analitos de interés. En este caso se empleó arena de sílice; un único blanco para 12 muestras de compósitos representa el 8,33 % de las muestras, lo que es aceptable para este análisis. Se estimó la contaminación durante el análisis de los lixiviados de Celdas Húmedas realizados en el laboratorio Alberto Benavides de MYSRL, por lo cual se empleó un blanco fino, el cual consta de material pulverizado de arena de sílice. Como criterio de aceptación se tiene que el valor del blanco no debe exceder en más de 5 veces los límites de detección del elemento. La tasa de contaminación no debe superar el 2%. En la tabla 19 se presentan los resultados respectivos para esta determinación.

Se analizaron 23 elementos de los cuales tres superan el 2% de contaminación, Al, Ca y Cd. La fuente de contaminación de estos elementos en el blanco puede tener dos vías, o que se haya contaminado en alguno de los pasos del método experimental o que la arena de sílice no haya sido la más adecuada con respecto a su pureza. Sin embargo, los valores del blanco para estos elementos se encuentran por debajo de los valores promedios en las muestras. Por lo que se puede decir que la contaminación de muestras en el ensayo tiene una condición aceptable y los resultados de este ensayo poseen alta confiabilidad.

Tabla 19. Resultados de la estimación de contaminación para el ensayo HCT de Yanacocha Verde

Analito	unidad	LD. Lab. MYS.R.L.	Blanco HCT MY	LD x5 MYS.R.L.	% excedencia
Hg	µg/L	<0,00050	<0,00050	0,0025	-
Ag	mg/L	<0,002	0,004	0,01	-
Al	mg/L	<0,005	0,042	0,025	41
As	mg/L	<0,003	0,004	0,015	-
B	mg/L	-	0	-	-
Ba	mg/L	<0,03	0,053	0,13	-
Be	mg/L	<0,002	<0,002	0,01	-
Bi	mg/L	-	0	-	-
Ca	mg/L	<0,3	3,062	1,5	51
Cd	mg/L	<0,002	0,026	0,01	61
Co	mg/L	<0,002	<0,002	0,01	-
Cr	mg/L	<0,002	0,003	0,01	-
Cu	mg/L	0,0030	0,009	0,015	-
Fe	mg/L	<0,3	0,445	1,5	-
Ga	mg/L	-	0	-	-
K	mg/L	<0,2	0,590	1	-
Li	mg/L	-	0,000	-	-
Mg	mg/L	<0,2	0,196	1	-
Mn	mg/L	<0,2	0,015	1	-
Mo	mg/L	<0,003	0,011	0,015	-
Na	mg/L	<0,2	0,866	1	-

Nb	mg/L	-	0	-	-
Ni	mg/L	<0,002	0,004	0,01	-
Pb	mg/L	<0,002	<0,002	0,01	-
Sb	mg/L	<0,002	0,010	0,01	-
Sc	mg/L	-	0	-	-
Se	mg/L	<0,005	0,022	0,025	-
Sn	mg/L	-	0	-	-
Sr	mg/L	-	0	-	-
Te	mg/L	-	0	-	-
Ti	mg/L	-	0	-	-
Tl	mg/L	<0,002	0,003	0,01	-
V	mg/L	<0,002	0,002	0,01	-
W	mg/L	-	0	-	-
Zn	mg/L	<0,005	0,020	0,025	-
Cr (VI)	mg/L	<0,005	<0,005	0,025	-
P (Tot)	mg/L	<0,01	0,031	0,05	-
Sulfuros	mg/L	<0,002	<0,002	0,01	-
Fuente: MYSRL					

Límites de detección para el análisis por ICP-MS

Analito	unidad	LD. Lab. MYS.R.L.	LD. Lab. ALS Corplab
Hg	µg/L	<0,00050	<0,000050
Ag	mg/L	<0,002	<0,00001
Al	mg/L	<0,005	<0,001
As	mg/L	<0,003	<0,0001
B	mg/L	-	<0,01
Ba	mg/L	<0,03	<0,0001
Be	mg/L	<0,002	<0,0005
Bi	mg/L	-	<0,0005
Ca	mg/L	<0,3	<0,05
Cd	mg/L	<0,002	<0,00005
Co	mg/L	<0,002	<0,002
Cr	mg/L	<0,002	<0,0005
Cu	mg/L	0,0030	0,0001
Fe	mg/L	<0,3	<0,03
Ga	mg/L	-	-
K	mg/L	<0,2	<0,05
Li	mg/L	-	<0,005
Mg	mg/L	<0,2	<0,005
Mn	mg/L	<0,2	<0,00005
Mo	mg/L	<0,003	<0,00005
Na	mg/L	<0,2	<0,05
Nb	mg/L	-	-
Ni	mg/L	<0,002	<0,0005
Pb	mg/L	<0,002	<0,002
Sb	mg/L	<0,002	<0,0001
Sc	mg/L	-	-
Se	mg/L	<0,005	<0,005
Sn	mg/L	-	<0,0001
Sr	mg/L	-	<0,0001
Te	mg/L	-	-
Ti	mg/L	-	<0,01
Tl	mg/L	<0,002	<0,0001
V	mg/L	<0,002	<0,001
W	mg/L	-	-
Zn	mg/L	<0,005	<0,001
Cr (VI)	mg/L	<0,005	<0,002
P (Tot)	mg/L	<0,01	<0,01
Sulfuros	mg/L	<0,002	<0,001

E.2 INFORMES DE INVESTIGACIÓN Y MEMORANDUMS

TAJO CHAQUICOCHA – TAJO CHAQUICOCHA UNDERGROUND – TAJO MAQUI MAQUI

ANEXO 3.3
INFORMES DE GEOQUÍMICA – MYSRL

Yanacocha

Metallurgical Services

Para	:	Jorge Zuñiga, Lelis Abanto
Copia	:	Gilmar Guzmán, Leoncio Sevilla
De	:	Carolina Alva
Fecha	:	Julio 22, 2015
Tema	:	Caracterización Geoquímica del Depósito Chaquicocha 2

CARACTERIZACIÓN GEOQUÍMICA DEL DEPÓSITO CHAQUICOCHA ETAPA 2

1. Introducción

El depósito Chaquicocha Etapa 2 es una sección pequeña del tajo Chaquicocha ubicada en la zona sur del proyecto y conformada por las alteraciones Sílice Masiva y Vuggy y Sílice Granular. El mineral de esta etapa es principalmente óxido cuyo proceso será el de lixiviación en pilas (leach pads).

2. Métodos de Análisis

Los análisis geoquímicos realizados incluyen pruebas estáticas tales como Valor de Carbonato Neto (NCV, Net Carbonate Value), Procedimiento de Lixiviación por Precipitación Sintética (Synthetic Precipitation Leaching Procedure, SPLP), Generación de Ácido Neto Estático (NAG, Net Acid Generation) y el método cinético de Celdas de Humedad (HCT, Humidity Cell Test).

2.1 Valor de Carbonato Neto (NCV, ASTM E1915-11)

El NCV se determina a través de ensayos químicos de muestras minerales y desmonte para la determinación del Carbón Total y Carbón Residual después de pirólisis, del mismo modo se ensaya el Azufre Total y el Azufre residual después de pirolisis. Con estos resultados se determinará el Potencial de Neutralización Acida (ANP) y el Potencial de Generación de Acido (AGP) y el valor de NCV se calculará mediante las siguientes fórmulas:

$$ANP = 3.67*(Ctotal - Cresidual)$$
$$AGP = -1.37*(Stotal - Sresidual)$$
$$NCV = ANP + AGP$$

Tabla 1 Rangos de clasificación del método NCV

Clasificación NCV	
Altamente ácido	NCV ≤ -5
Ácido	-5 < NCV ≤ -1
Ligeramente ácido	-1 < NCV ≤ -0.1
Inerte/Neutral	-0.1 < NCV < 0.1
Ligeramente básico	0.1 ≤ NCV < 1
Básico	1 ≤ NCV < 5
Altamente básico	NCV ≥ 5

2.2 *Procedimiento de Lixiviación por Precipitación Sintética (SPLP, US EPA 1312)*

El Procedimiento de Lixiviación por Precipitación Sintética (SPLP) es usado para evaluar el potencial de lixiviación de constituyentes inorgánicos (metales) desde materiales mineralizados o no mineralizados y que podrían tener impacto en las aguas superficiales y subterráneas. Este método provee un aseguramiento más realista de la movilidad bajo las actuales condiciones de campo, por ejemplo lo que ocurre cuando llueve o cuando nieva. El pH del fluido de extracción que se usa para esta prueba debe reflejar el pH en condiciones ácidas (el pH empleado fue 4.2), modificado según una mezcla 60/40 de ácidos sulfúrico y nítrico, en el cual el mineral y/o desmonte está siendo ensayado y almacenado.

2.3 *Generación de Ácido Neto Estático (NAG, Net Acid Generation)*

Esta prueba se emplea para determinar el equilibrio entre los componentes productores de ácido y los componentes consumidores de ácido en la roca. El sulfuro total contenido en la muestra se oxida con peróxido de hidrógeno, resultando en iones H^+:

$$S^{2-} \xrightarrow{H_2O_2} SO_4^{2-} + H^+$$

El ácido que produce la oxidación de sulfuros con peróxido de hidrógeno será neutralizado por los componentes neutralizantes, como los carbonatos. El pH de la solución será medido y en caso sea menos a 4.5, el ácido restante será titulado con NaOH y se determinará el contenido de total de H_2SO_4 ácido producido por tonelada de material. En algunos casos, se reportará la cantidad de ácido neutralizada desde el pH NAG hasta pH 4.5 y luego hasta pH 7.0.

2.4 *Ensayo de Celda de Humedad (HCT, ASTM D5744-07$^{\varepsilon 1}$)*

El ensayo de Celda de Humedad simula las condiciones climáticas a escala de laboratorio de forma controlada para promover la mineralización de una muestra mediante ciclos de aire húmedo y seco para simular la precipitación. La solución resultante se filtra y analiza. La prueba determinará el tiempo o la velocidad de generación de soluciones ácidas y la calidad del agua resultante (pH, metales, sulfatos, acidez, alcalinidad, conductividad, entre otros) a lo largo de 20 semanas de prueba.La muestra empleada consiste en un compósito de 2 kg y el tamaño de partícula ha sido modificado de acuerdo al tipo de mineral y proceso.

3. Selección de Muestras

Se seleccionaron compósitos de 293 taladros (ver Apéndice 2) distribuidos en el depósito según se muestra en la Figura 1 en el shape indicado como *Tajo Chaquicocha Etapa 2 (Tajo Chaquicocha)*. Las coordenadas de los taladros se encuentran en Datum WGS84.

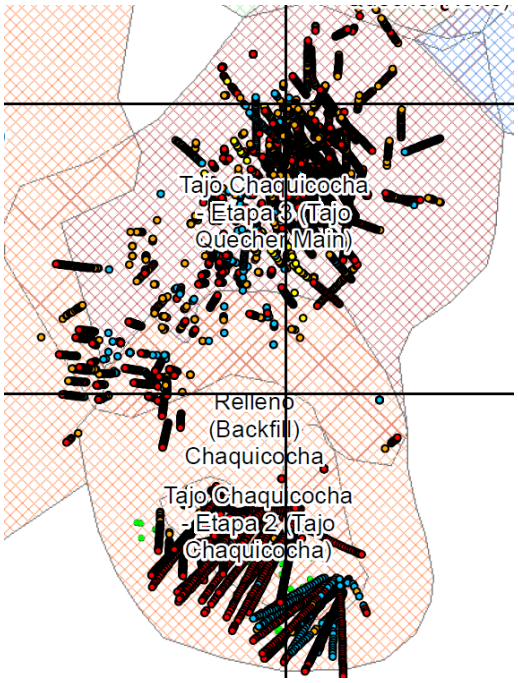


Figura 1 Distribución de muestras para caracterización geoquímica

El tipo de muestra está condicionado al método a realizar. Para el caso del ensayo de Valor de Carbonato Neto se emplearon compósitos de 10 metros obtenidos de muestras de cabeza de taladros tanto para desmonte y mineral. Una ley de oro mayor a 0.1 gpt clasificará una muestra como mineral, caso contrario, será clasificada como desmonte.

Para determinar la calidad de agua mediante los métodos SPLP y el ensayo de Celda de Humedad, se seleccionarán muestras representativas del tratamiento que se le dará al material. Los rechazos de taladros de baja concentración de oro (menor a 0.1 gpt) son las muestras más representativas para el caso de desmonte.

La selección de la muestra de mineral dependerá del proceso (lixiviación en pads o proceso Gold Mill). Para el caso del mineral a lixiviarse en el pad, se tomaron muestras de colas de columna o botella realizadas a condiciones representativas del proceso (un p80 de 10M o 1" y una concentración de cianuro libre de 50 ppm). Para el mineral a procesarse en la planta Gold Mill se tomaron muestras de colas de pruebas de botella a un p80 de 150 µm y a concentración de cianuro de acuerdo al tipo de mineral como se muestra en la Tabla 2.

Tabla 2 Selección de muestra para caracterización mediante SPLP/Celda de Humedad

Proceso	Tipo de Mineral	Muestra	p80	CN- Libre
Leach	Oxido	Cola BRT / CLT	10M o 1"	50 ppm
Gold Mill	Oxido	Cola BRT / CLT	150 µm	150 ppm
	Transitional			500 ppm
	Sulfuro			1000 ppm
Gold Mill - Flotación	Sulfuro	Cola de BRT con material flotado	150 µm	150 ppm
Desmonte	Desmonte	Muestra de taladro	10M	No aplica

4. Resultados

4.1 Resultados Valor de Carbonato Neto (NCV)

Se analizaron un total de 3103 muestras de tramos de 10 metros pertenecientes a 293 taladros. El criterio empleado para separar el mineral del desmonte fue una ley mínima de 0.1 gpt. Un total de 818 fueron clasificadas como desmonte y un total de 2285 fueron clasificadas como mineral. El resultado NCV de las muestras se encuentra en la Tabla 3. La distribución porcentual se muestra en la Figura 2.

Tabla 3 Clasificación de 3103 muestras de acuerdo al método NCV

CHQ 2	DESMONTE	MINERAL	TOTAL
ácido	586	1798	2384
ligeramente ácido	17	85	102
inerte/neutral	165	173	338
ligeramente básico	50	229	279
básico			
total	818	2285	3103

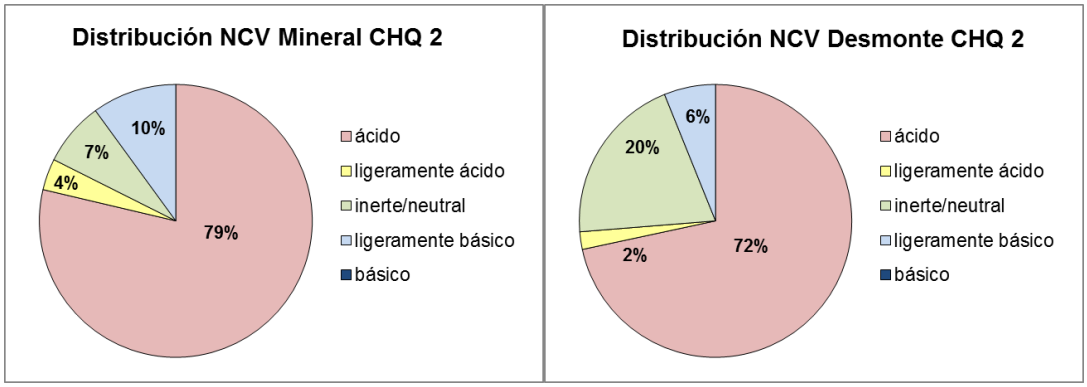


Figura 2 (A) Distribución Mineral (B) Distribución NCV Desmonte

Como se puede observar en la Tabla 3 y Figura 2, la distribución NCV entre mineral y desmonte es relativamente similar. En ambos casos, un porcentaje entre 72-79% de muestras fueron clasificadas como ácidas, es decir, con un potencial moderado para producir aguas ácidas. La fracción restante de muestras está distribuido mayormente entre material inerte y ligeramente básico. Para el caso de desmonte el porcentaje de mineral inerte/neutro es mayor, con un 20%, a comparación del mineral, con un 7%.

4.2 Resultados Procedimiento de Lixiviación por Precipitación Sintética (SPLP)

Se analizaron un total de 17 muestras, de las cuales 07 fueron de desmonte y 10 de mineral según se muestra en la Tabla 4. Las 10 muestras de mineral pertenecen a colas de pruebas de botella de mineral óxido procesado a las condiciones de lixiviación en pads.

Tabla 4 Muestras de Mineral y Desmonte analizadas por el método SPLP

Nro	Código DS	Taladro	Desde	Hasta	NCV	NAG (kg H_2SO_4/t)	Alteración	Tipo
1	DS-1383276	CHQ-1009	29	40	Inerte/Neutral	6.58	SG	Desmonte
2	DS-1383277	CHQ-1009	83	93	Inerte/Neutral	5.17	SG	Desmonte
3	DS-1383281	CHQ-274	120	132	Inerte/Neutral	6.24	SG	Desmonte
4	DS-1383282	CHQ-276	84	94	Inerte/Neutral	6.16	SMV	Desmonte
5	DS-1383283	CHQ-277	130	140	Inerte/Neutral	5.86	SG	Desmonte
6	DS-1383290	CHQ-652	110	120	Inerte/Neutral	6.26	SM	Desmonte
7	DS-1383294	CHQ-750	160	170	Inerte/Neutral	6.14	SG	Desmonte
8	DS-1383273	CHQ-070	240	250	Inerte/Neutral	6.80	SMG	Ox leach (cola BRT)
9	DS-1383274	CHQ-1007	11	21	Inerte/Neutral	6.59	SV	Ox leach (cola BRT)
10	DS-1383275	CHQ-1008	73	84	Inerte/Neutral	6.66	SM	Ox leach (cola BRT)
11	DS-1383279	CHQ-248	180	190	Inerte/Neutral	7.40	SV	Ox leach (cola BRT)
12	DS-1383280	CHQ-258	182	192	Inerte/Neutral	7.94	SG	Ox leach (cola BRT)
13	DS-1383287	CHQ-508	190	200	Inerte/Neutral	6.79	SG	Ox leach (cola BRT)
14	DS-1383288	CHQ-515	156	166	Inerte/Neutral	6.85	SG	Ox leach (cola BRT)
15	DS-1383289	CHQ-617	136	146	Inerte/Neutral	6.56	SM	Ox leach (cola BRT)
16	DS-1383295	CHQ-753	140	150	Inerte/Neutral	6.36	SM	Ox leach (cola BRT)
17	DS-1383297	CHQ-831	80	90	Inerte/Neutral	6.85	SMG	Ox leach (cola BRT)

La mayoría de los parámetros analizados en la solución SPLP, incluyendo el mercurio, se mantuvieron por debajo de los límites de detección. Los valores mínimos, máximos y promedio se muestran en la Tabla 5. Los resultados indican que a las condiciones de la prueba, el material analizado no tiene la capacidad de producir altas concentraciones de los componentes analizados, con la única excepción de los metales manganeso y fierro, que mostraron valores altos. Las muestras de desmonte presentaron la mayor concentración de ambos metales. Los resultados completos se encuentran en el Apéndice 5.

Tabla 5 Resumen resultados SPLP en mineral y desmonte

Analito	Unidad	DESMONTE (07 SPLP)			MINERAL (10 SPLP)		
		Max	Min	Promedio	Max	Min	Promedio
As	ppm	0.013	0.013	0.013	0.239	0.013	0.058
Hg		0.001	0.000	0.000	0.000	0.000	0.000
Pb		0.003	0.003	0.003	0.011	0.003	0.006
Cd		0.000	0.000	0.000	0.000	0.000	0.000
Cr		0.013	0.013	0.013	0.013	0.013	0.013
Mn		0.918	0.439	0.694	0.954	0.063	0.328
Mo		0.026	0.003	0.013	0.084	0.014	0.032
Co		0.001	0.001	0.001	0.016	0.001	0.003
V		0.013	0.013	0.013	0.013	0.013	0.013
pH final	-	6.5	6.2	6.4	7.9	6.6	7.1
Conductividad	µs/cm	45	19	30	61	33	42
ORP	mV	206	126	166	148	35	105

4.3 Resultados Ensayo de Celda de Humedad

Un total de 03 muestras, una de desmonte y dos de mineral, fueron enviadas a SGS Peru (Lima) para realizar el ensayo de Celda de Humedad. Los ensayos de cabeza de cada muestra se encuentran en la Tabla 6. A la fecha solo se tienen resultados de 04 semanas, los resultados se muestran en el Apéndice 5. La variación de concentración de los analitos se muestra en la Figura 3.

Tabla 6 Ensayos de cabeza a 03 muestras para el ensayo de Celda de Humedad

Código	DS-1383282	DS-1383275	DS-1383295
Taladro	CHQ-276	CHQ-1008	CHQ-753
Desde	84	73	140
Hasta	94	84	150
NCV cabeza	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral
Alteración	SMV	SM	SM
Material	Desmonte	Ox leach (cola BRT)	Ox leach (cola BRT)
pH pasta	6.50	8.40	8.30
Total S%	0.07	0.09	0.10
Sulfuro %	<0.01	<0.01	<0.01
S elemental %	0.04	0.05	0.04
kg H_2SO_4/ t (pH 4.5)	0.3	<0.1	<0.1
kg H_2SO_4/ t (pH 7.0)	3.9	1.5	1.3
NAG pH	4.1	6.4	6.7
NP/AP	0.76	2.13	2.76
Tipo material	Productor acido	Incierto	Incierto

Figura 3 Variación en la concentración de analitos a lo largo del ensayo HCT



4.4 Resultados Análisis de Solución de Proceso

El análisis de solución de proceso consistió en analizar los componentes de la solución final de una prueba de botella o columna a condiciones normales del proceso. Los metales totales se analizaron por ICP-34 y los aniones por Cromatografía Iónica.

En este caso el proceso de lixiviación en pilas será representado por la solución final de una BRT con un p80 de 10M realizada a 50 ppm de CN libre. Es importante resaltar que una prueba de botella es un sistema cerrado en el que los componentes disueltos se acumularán hasta que la concentración de oro se mantenga constante y eso significará que se ha llegado a la máxima extracción.

Para el depósito se presentan los resultados 10 muestras, todas de mineral óxido leach a las cual se realizó la prueba de botella como se muestra en la Tabla 7.

Tabla 7 Muestras de BRT para la determinación de calidad de agua de proceso

Código DS	NCV	Taladro	Desde	Hasta	Tipo	Tiempo lix (hrs)	CN Libre / p80
DS-1383273	Inerte/Neutral	CHQ-070	240	250.1	Oxido Leach BRT	96	50ppm, 10M
DS-1383274	Inerte/Neutral	CHQ-1007	10.9	20.8	Oxido Leach BRT	96	50ppm, 10M
DS-1383275	Inerte/Neutral	CHQ-1008	73	84	Oxido Leach BRT	96	50ppm, 10M
DS-1383279	Inerte/Neutral	CHQ-248	180	190	Oxido Leach BRT	96	50ppm, 10M
DS-1383280	Inerte/Neutral	CHQ-258	182	192	Oxido Leach BRT	96	50ppm, 10M
DS-1383297	Inerte/Neutral	CHQ-831	80	90	Oxido Leach BRT	96	50ppm, 10M
DS-1383287	Inerte/Neutral	CHQ-508	190	200	Oxido Leach BRT	96	50ppm, 10M
DS-1383288	Inerte/Neutral	CHQ-515	156	166	Oxido Leach BRT	96	50ppm, 10M
DS-1383289	Inerte/Neutral	CHQ-617	136	146	Oxido Leach BRT	96	50ppm, 10M
DS-1383295	Inerte/Neutral	CHQ-753	140	149.55	Oxido Leach BRT	96	50ppm, 10M

El resumen de los resultados se muestra en la Tabla 8. Los valores de mercurio se muestran altos debido a la alta disolución de este metal en presencia de cianuro. En ausencia de fierro, se observa que los valores de CN WAD y total son similares. El análisis completo se encuentra en el Apéndice 7.

Tabla 8 Resumen resultados solución de proceso

Analito	Unidad	Oxido Leach BRT (10 muestras)		
		Max	Min	Promedio
CN WAD	ppm	65.1	53.1	56.6
CN Total		65.1	53.1	56.6
Sulfatos		313	202	226
As		5.843	0.000	2.161
Cd		0.007	0.000	0.001
Ni		0.036	0.000	0.021
Hg		113.834	5.374	32.693
Cu		12.766	0.258	3.062
Pb		0.174	0.000	0.077
TDS		540	275	377

5. Conclusiones

- Se analizaron un total de 818 muestras de desmonte y 2285 muestras de mineral por el método NCV. La distribución NCV fue similar para ambos tipos de material, con un 72-79% clasificado como ácido.

- Se analizaron 17 muestras por el método SPLP, de las cuales 07 fueron de desmonte y 10 de mineral del tipo oxido leach. Las concentraciones de la mayoría de parámetros analizados fueron menores al límite de detección, a excepción de los metales manganeso y fierro.
- Se analizaron 03 muestras por el ensayo de Celda de Humedad y solo se han completado 04 ciclos (semanas) a la fecha.
- Se analizó la solución final de 10 pruebas BRT a condiciones óxido leach. Es importante resaltar que la BRT es un sistema cerrado y por tanto los resultados representan la disolución total de la muestra.

Apéndice 1
Tabla de Acrónimos

SPLP	Synthetic Precipitation Leaching Procedure, en español: Procedimiento de Lixiviación por Precipitación Sintética
HCT	Humidity Cell Test, en español: ensayo de Celda de Humedad
NCV	Net Carbonate Value, en español: Valor de Carbonato Neto
PPM	Partes por millón
CLT	Column Leach Test, en español: prueba de lixiviación en columna
BRT	Bottle Roll Test, en español: prueba de lixiviación en botella

Apéndice 2 Identificación de taladros perforados en Chaquicocha 2

Nro	Taladro	Este	Norte	Elevación
1	CHGE-001	18091.5	25703.9	3979.7
2	CHQ-026	18079.0	25980.7	3952.8
3	CHQ-027	18045.1	25884.8	3954.5
4	CHQ-049	18077.6	25929.1	3952.0
5	CHQ-050	18102.5	25763.1	3972.8
6	CHQ-064	18010.7	25973.7	3955.9
7	CHQ-065	17892.4	26037.2	3964.1
8	CHQ-067	18252.0	25870.8	3956.2
9	CHQ-070	18215.4	25694.3	3972.3
10	CHQ-072	18256.8	25872.1	3956.1
11	CHQ-075	18414.0	26013.5	3940.0
12	CHQ-078	18214.3	25693.3	3972.4
13	CHQ-086	18047.4	26044.1	3955.1
14	CHQ-090	18354.5	26220.0	4026.2
15	CHQ-091	18355.8	26217.2	4036.1
16	CHQ-1001	18140.5	25993.0	3750.4
17	CHQ-1002	18140.6	25993.1	3750.4
18	CHQ-1007	18121.3	25782.8	3859.5
19	CHQ-1008	18211.0	25737.0	3869.6
20	CHQ-1009	18293.2	25687.6	3879.5
21	CHQ-1011	18163.9	25945.2	3751.7
22	CHQ-1012	18269.7	25970.5	3749.7
23	CHQ-1013	18194.2	25926.2	3750.3
24	CHQ-1014	18398.3	25746.7	3798.3
25	CHQ-1015	18410.2	25720.0	3798.9
26	CHQ-1016	18397.9	25747.5	3798.2
27	CHQ-1017	18340.6	25651.8	3886.0
28	CHQ-1018	18306.1	25673.0	3881.6
29	CHQ-1019	18306.3	25673.1	3881.8
30	CHQ-1020	18415.4	25617.4	3894.4
31	CHQ-1021	18305.7	25673.3	3881.6
32	CHQ-1022	18413.5	25617.9	3894.3
33	CHQ-1023	18413.8	25615.8	3894.1
34	CHQ-1025	18415.4	25615.8	3894.1
35	CHQ-202	18221.3	25846.0	3957.5
36	CHQ-204	17993.8	26045.5	3957.4
37	CHQ-205	17949.6	25999.0	3961.3
38	CHQ-206	17905.6	25957.2	3964.9
39	CHQ-207	17933.4	25893.1	3965.2
40	CHQ-214	18192.0	25950.8	3950.8
41	CHQ-215	18153.8	25912.0	3951.2
42	CHQ-216	18118.4	25875.6	3953.6
43	CHQ-217	18335.9	25933.0	3939.3
44	CHQ-218	18432.8	25896.4	3939.1
45	CHQ-219	18387.0	25857.8	3953.1
46	CHQ-220	18333.9	25809.5	3961.8
47	CHQ-221	18295.9	25771.4	3959.4
48	CHQ-222	18250.2	25727.9	3963.3
49	CHQ-231	18105.6	25999.9	3952.6
50	CHQ-235	17938.7	26050.7	3960.2
51	CHQ-238	18035.9	26057.7	3955.9
52	CHQ-238A	18033.6	26058.2	3955.8
53	CHQ-242	17962.6	26000.1	3960.0
54	CHQ-243	18024.6	25998.9	3956.0
55	CHQ-245	18066.1	25901.7	3952.9
56	CHQ-246	18035.5	25850.6	3956.5
57	CHQ-247	18385.5	25749.4	3962.4
58	CHQ-248	18347.9	25900.7	3958.3
59	CHQ-249	18086.9	25800.0	3961.7
60	CHQ-250	18238.6	25801.4	3959.8
61	CHQ-251	18214.0	25697.0	3972.6
62	CHQ-252	18366.9	25700.4	3957.6
63	CHQ-253	17840.4	25999.9	3975.8
64	CHQ-254	18300.9	26001.6	3943.4
65	CHQ-255	18361.2	26089.3	3967.0
66	CHQ-256	18120.9	25949.8	3951.9
67	CHQ-256T	18120.9	25949.8	3951.9
68	CHQ-257	18265.9	25961.2	3950.3
69	CHQ-258	18160.1	25900.0	3951.3
70	CHQ-258T	18160.1	25900.0	3951.3
71	CHQ-259	18182.5	25854.0	3955.1
72	CHQ-259T	18182.5	25854.0	3955.1
73	CHQ-261	17983.0	26049.7	3957.9
74	CHQ-262	18222.9	25948.3	3951.2
75	CHQ-263	18017.5	25953.6	3954.0
76	CHQ-264	18069.1	25957.5	3952.4
77	CHQ-266	18289.9	25800.4	3958.8
78	CHQ-268	18012.8	25901.0	3959.3
79	CHQ-269	18217.5	25899.7	3951.1
80	CHQ-270	18292.9	25902.1	3950.6
81	CHQ-271	18135.7	25845.1	3956.3
82	CHQ-272	18273.0	25850.5	3957.2
83	CHQ-273	18188.8	25808.5	3961.8
84	CHQ-274	18184.2	25748.6	3981.9
85	CHQ-275	18133.3	25750.5	3978.9
86	CHQ-276	18267.0	25699.2	3963.8
87	CHQ-277	18237.3	25750.2	3964.5
88	CHQ-278	18326.0	25941.5	3948.2
89	CHQ-279	18359.9	26001.7	3940.5
90	CHQ-281	18310.8	25749.6	3959.9
91	CHQ-284	18298.2	26200.5	4033.7
92	CHQ-285	17904.6	25996.3	3965.0
93	CHQ-287	18082.9	25849.0	3954.7
94	CHQ-289	18354.0	26046.1	3944.3
95	CHQ-289A	18357.3	26042.4	3944.5
96	CHQ-294	18325.5	25847.9	3967.4
97	CHQ-296	18323.9	26242.0	4036.0
98	CHQ-297	18275.2	26199.0	4034.7
99	CHQ-297T	18275.2	26199.0	4034.7
100	CHQ-298	18172.3	25949.6	3951.4
101	CHQ-299	18269.3	26193.8	4035.2
102	CHQ-299T	18269.3	26193.8	4035.2
103	CHQ2PZ01	18144.5	25946.2	3750.9
104	CHQ-303	18237.4	26053.5	3973.4
105	CHQ-308	18353.2	26151.0	4008.6
106	CHQ-309	18299.4	26048.9	3952.1
107	CHQ-310	18253.8	26098.0	3982.0
108	CHQ-311	18381.2	26208.4	4036.6
109	CHQ-311A	18381.3	26208.4	4036.2
110	CHQ-313	18282.7	26156.0	4010.1
111	CHQ-315	18299.2	26107.4	3982.1
112	CHQ-319	18300.7	26199.9	4033.7
113	CHQ-320	18292.3	26227.4	4039.1
114	CHQ-321	18257.6	25874.8	3956.0
115	CHQ-328	18317.0	26162.4	4007.3
116	CHQ-329	18346.3	26228.4	4036.3
117	CHQ-339	17978.0	25850.0	3965.3
118	CHQ-345	18454.9	25799.8	3946.2
119	CHQ-352	18027.5	25800.6	3960.7
120	CHQ-355	18418.4	26045.7	3946.3
121	CHQ-357	18448.9	25850.7	3940.0
122	CHQ-359	17959.4	25949.0	3962.7
123	CHQ-361	18399.9	25801.4	3948.9
124	CHQ-362	18426.4	25898.0	3939.6
125	CHQ-363	18398.2	25950.2	3941.8
126	CHQ-364	18409.4	25649.9	3964.8
127	CHQ-365	18495.4	25749.4	3949.1
128	CHQ-366	18390.6	25854.1	3952.7
129	CHQ-369	18422.8	26095.3	3968.0
130	CHQ-370	18427.5	25997.9	3940.5
131	CHQ-371	18347.9	25800.3	3963.0
132	CHQ-372	17973.9	25798.8	3967.2
133	CHQ-375	18112.1	25900.3	3951.5
134	CHQ-382	18439.6	25750.3	3949.8
135	CHQ-385	18143.3	25800.7	3963.8
136	CHQ-387	18301.7	25649.2	3969.4
137	CHQ-390	18489.7	25700.6	3952.1
138	CHQ-391	18435.3	25700.1	3954.1
139	CHQ-394	18127.7	25698.2	3978.9
140	CHQ-396	18464.2	25650.3	3963.7
141	CHQ-397	18201.3	25649.9	3976.4
142	CHQ-406	18062.5	25749.7	3969.0
143	CHQ-410	18383.0	25600.6	3973.8
144	CHQ-429	17924.1	25955.2	3963.0
145	CHQ-430	18025.2	26057.9	3955.6
146	CHQ-437	18030.3	26059.7	3956.1
147	CHQ-438	18317.1	25699.8	3960.2
148	CHQ-439	18115.9	25949.7	3951.9
149	CHQ-440	18497.7	25704.1	3951.8
150	CHQ-443	18150.4	25949.3	3951.4
151	CHQ-446	18051.7	25948.2	3952.0
152	CHQ-448	18172.1	25683.9	3980.1
153	CHQ-457	18285.8	26157.0	4009.1
154	CHQ-470	17995.7	25800.7	3962.7
155	CHQ-479	18064.9	25975.1	3952.7
156	CHQ-480	18000.9	25973.2	3956.5
157	CHQ-484	18418.1	26090.7	3968.0
158	CHQ-491	18079.6	25769.5	3968.3
159	CHQ-492	18202.7	25649.3	3976.0
160	CHQ-494	17935.1	25961.0	3963.3
161	CHQ-503	17898.3	26038.3	3963.8
162	CHQ-508	18240.8	25886.2	3954.2
163	CHQ-509	18448.0	25855.6	3940.1
164	CHQ-510	18001.3	25970.9	3956.7
165	CHQ-513	18413.3	26001.7	3941.6
166	CHQ-514	18113.8	25699.1	3978.6
167	CHQ-515	18182.9	25840.2	3956.8
168	CHQ-516	17995.2	25801.8	3962.8
169	CHQ-551	17954.6	26017.3	3959.8
170	CHQ-554	18030.3	26004.5	3955.9
171	CHQ-555	17999.4	25959.2	3957.6
172	CHQ-558	18199.9	25648.0	3976.3
173	CHQ-597	18059.8	25862.3	3954.9
174	CHQ-599	18060.0	25859.8	3955.3
175	CHQ-602	18060.1	26003.7	3955.2
176	CHQ-606	18091.5	25925.4	3951.9
177	CHQ-612	18046.6	25979.2	3954.0
178	CHQ-613	18012.1	26031.1	3956.9
179	CHQ-614	18049.5	25952.1	3953.2
180	CHQ-615	18003.6	25980.3	3956.4
181	CHQ-616	18029.4	25925.8	3955.8
182	CHQ-617	18030.3	25899.7	3956.7
183	CHQ-618	18067.4	25980.0	3953.0
184	CHQ-627	17920.4	25882.3	3959.9
185	CHQ-629	17986.3	25877.1	3960.0
186	CHQ-630	17949.7	25860.6	3959.7
187	CHQ-631	17884.5	25912.6	3960.3
188	CHQ-632	18009.0	25853.4	3960.1
189	CHQ-633	18070.1	25900.4	3953.9
190	CHQ-635	17942.8	25958.0	3949.8
191	CHQ-642	17995.9	25964.1	3955.1
192	CHQ-644	18008.2	25925.1	3957.9
193	CHQ-651	17914.1	25950.6	3949.6
194	CHQ-652	17981.3	25921.7	3950.1
195	CHQ-654	18019.6	25949.4	3954.0
196	CHQ-655	18077.4	25945.4	3949.5
197	CHQ-658	18003.7	25898.3	3956.4
198	CHQ-660	18037.0	25880.2	3956.0
199	CHQ-661	18063.9	25880.2	3951.3
200	CHQ-665	18004.0	25941.3	3956.4
201	CHQ-669	18074.7	25944.4	3949.5
202	CHQ-670	17976.0	25901.2	3950.7
203	CHQ-672	17953.0	25909.5	3949.7
204	CHQ-675	18047.1	25859.8	3956.0
205	CHQ-676	18030.3	25843.9	3956.5
206	CHQ-677	17963.9	25819.7	3969.7
207	CHQ-683	18064.4	25755.6	3968.7
208	CHQ-684	18095.4	25836.5	3950.2
209	CHQ-686	18171.9	25950.6	3945.9
210	CHQ-688	18249.8	25851.4	3940.5
211	CHQ-690	18313.8	25723.5	3940.4
212	CHQ-714	18249.9	25648.2	3972.1
213	CHQ-723	18347.5	25650.7	3960.9
214	CHQ-725	18386.9	25876.6	3847.5
215	CHQ-726	18301.2	25904.4	3856.0
216	CHQ-729	17850.1	25961.2	3960.7
217	CHQ-733	17900.0	25912.1	3960.8
218	CHQ-734	17950.1	25860.5	3960.7
219	CHQ-739	18040.1	25915.9	3879.9
220	CHQ-740	17820.0	25998.6	3959.6
221	CHQ-748	17900.5	25913.7	3960.4
222	CHQ-750	17918.6	25898.6	3960.5
223	CHQ-751	18005.9	25817.2	3961.3
224	CHQ-752	17899.9	25915.8	3960.6
225	CHQ-753	18049.7	25773.0	3963.9
226	CHQ-761	18316.7	26124.8	3842.4
227	CHQ-766	17950.0	25859.2	3960.5
228	CHQ-770	18041.4	25751.2	3968.4
229	CHQ-776	18041.4	25752.4	3968.6
230	CHQ-779	17950.1	25857.3	3960.7
231	CHQ-780	17906.2	25910.4	3960.5
232	CHQ-783	18312.9	26148.8	3811.7
233	CHQ-785	17962.3	26054.4	3891.6
234	CHQ-788	17983.0	26025.0	3892.4
235	CHQ-796	17986.3	26018.7	3892.0
236	CHQ-805	18272.4	25919.0	3858.4
237	CHQ-811	18235.9	26077.9	3773.5
238	CHQ-819	18100.0	25926.3	3875.2
239	CHQ-822	18048.5	25958.8	3881.9
240	CHQ-824	18001.4	25993.6	3888.6

Nro	Taladro	Este	Norte	Elevación
241	CHQ-826	18149.3	25917.3	3870.5
242	CHQ-830	18306.1	25875.9	3855.0
243	CHQ-831	18197.6	25875.1	3865.1
244	CHQ-832	18179.9	25913.1	3866.8
245	CHQ-834	18139.4	25875.4	3874.1
246	CHQ-837	18380.1	25974.2	3845.3
247	CHQ-838	18079.8	25934.4	3877.0
248	CHQ-839	17974.8	26029.8	3892.4
249	CHQ-840	18044.8	25958.7	3881.8
250	CHQ-841	18000.3	25988.8	3888.7
251	CHQ-844	18071.2	25905.9	3881.8
252	CHQ-845	18126.0	25890.0	3883.9
253	CHQ-851	17920.7	26040.6	3839.7
254	CHQ-854	18035.6	26031.3	3759.8
255	CHQ-859	18035.6	26031.3	3759.8
256	CHQ-860	18043.2	26041.1	3759.6
257	CHQ-861	18037.6	26034.0	3759.7
258	CHQ-863	18297.0	25980.0	3750.0
259	CHQ-864	18248.0	25974.0	3750.0
260	CHQ-865	18199.0	25970.0	3750.0
261	CHQ-866	18197.0	25928.0	3750.0
262	CHQ-867	18249.8	25925.9	3760.0
263	CHQ-868	18297.2	25925.9	3760.2
264	CHQ-885	18150.9	25973.4	3760.0
265	CHQ-893	18289.5	26224.8	3750.0
266	CHQ-898	18035.3	26032.2	3760.1
267	CHQ-911	18120.6	25975.8	3760.1
268	CHQ-912	18447.3	25713.4	3794.8
269	CHQ-913	18470.6	25735.1	3793.1
270	CHQ-916	18058.8	26048.9	3759.9
271	CHQ-918	18041.4	26039.6	3759.6
272	CHQ-922	18470.3	25734.4	3793.6
273	CHQ-923	18280.9	25901.7	3750.2
274	CHQ-927	18432.4	25746.1	3796.3
275	CHQ-935	18212.3	25938.5	3750.5
276	CHQ-963	18175.2	25972.2	3751.2
277	CHQ-969	18223.7	25931.7	3751.1
278	CHQ-970	18434.7	25747.4	3797.0
279	CHQ-973	18434.7	25747.4	3797.0
280	CHQ-975	18174.3	25972.2	3751.0
281	CHQ-976	18282.3	25942.6	3750.5
282	CHQ-978	18236.2	25946.9	3751.1
283	CHQ-979	18174.4	25972.1	3751.0
284	CHQ-986	18174.5	25972.1	3751.1
285	CHQ-992	18174.8	25971.4	3751.2
286	CHQ-993	18282.1	25942.0	3750.4
287	CHQ-995	18119.4	25964.9	3761.0
288	CHQ-996	18434.8	25747.5	3797.0
289	CHQPZ-0001	18383.2	26113.0	3978.1
290	DST-055	18473.6	25737.3	3793.6
291	DST-056	18209.6	25929.5	3750.5
292	DST-057	18256.8	25899.6	3749.9
293	DST-058	18209.0	25926.8	3750.5

Apéndice 3
Resultados Análisis NCV de Muestras de Desmonte

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1	CHQ-075	88.0	96.0	1120	170	620	0	0.1	INERTE	0.02
2	CHQ-075	96.0	104.0	720	180	1100	0	0.1	INERTE	0.03
3	CHQ-075	104.0	112.0	640	160	950	0	0.1	INERTE	0.01
4	CHQ-075	112.0	120.0	580	150	690	0	0.1	INERTE	0.01
5	CHQ-075	120.0	128.0	590	140	950	10	0.1	INERTE	0.00
6	CHQ-075	128.0	136.0	750	140	1140	10	0.1	INERTE	0.01
7	CHQ-075	136.0	144.0	1160	170	1250	20	0.1	INERTE	0.01
8	CHQ-075	144.0	152.0	700	170	950	60	0.1	INERTE	0.01
9	CHQ-075	152.0	160.0	680	190	860	180	0.0	INERTE	0.02
10	CHQ-075	168.0	176.0	710	220	1100	200	0.1	INERTE	0.06
11	CHQ-075	176.0	184.0	890	170	1010	10	0.1	INERTE	0.04
12	CHQ-075	184.0	192.0	870	220	1160	260	0.0	INERTE	0.08
13	CHQ-075	192.0	200.0	720	170	880	0	0.1	INERTE	0.06
14	CHQ-075	200.0	208.0	770	230	2850	0	0.1	INERTE	0.10
15	CHQ-075	208.0	216.0	860	240	2470	300	0.0	INERTE	0.08
16	CHQ-075	216.0	224.0	890	240	1560	0	0.1	INERTE	0.09
17	CHQ-075	232.0	240.0	680	220	640	0	0.1	INERTE	0.03
18	CHQ-075	240.0	248.0	570	170	680	40	0.1	INERTE	0.02
19	CHQ-075	248.0	256.0	750	180	1100	0	0.1	INERTE	0.03
20	CHQ-075	256.0	264.0	860	180	1280	20	0.1	INERTE	0.05
21	CHQ-075	264.0	272.0	690	170	2580	850	-0.1	INERTE	0.05
22	CHQ-075	272.0	280.0	810	180	2270	0	0.1	INERTE	0.02
23	CHQ-075	280.0	288.0	780	200	2340	160	0.1	INERTE	0.02
24	CHQ-075	288.0	296.0	770	210	1450	0	0.1	INERTE	0.04
25	CHQ-075	296.0	304.0	630	150	1860	10	0.1	INERTE	0.01
26	CHQ-075	304.0	312.0	640	160	1690	0	0.1	INERTE	0.00
27	CHQ-075	312.0	320.0	900	140	1690	70	0.0	INERTE	0.04
28	CHQ-075	320.0	328.0	690	150	860	0	0.1	INERTE	0.04
29	CHQ-075	328.0	336.0	720	160	990	0	0.1	INERTE	0.03
30	CHQ-075	336.0	343.9	650	170	2570	1350	-0.1	LIGERAMENTE ACIDO	0.03
31	CHQ-075	343.9	352.0	610	200	1760	1000	-0.1	INERTE	0.02
32	CHQ-075	352.0	359.3	760	170	2020	780	0.0	INERTE	0.00
33	CHQ-075	359.3	368.3	620	180	1110	0	0.1	INERTE	0.01
34	CHQ-075	368.3	375.3	640	170	1430	210	0.0	INERTE	0.01
35	CHQ-075	375.3	384.0	630	130	94310	74790	-10.2	ACIDO	0.01
36	CHQ-075	384.0	392.0	1830	1050	44030	28870	-3.6	ACIDO	0.01
37	CHQ-075	392.0	400.0	1850	1050	38220	31480	-3.9	ACIDO	0.01
38	CHQ-075	400.0	408.0	1820	530	42390	34910	-4.6	ACIDO	0.01
39	CHQ-075	408.0	416.0	970	180	42680	35400	-4.8	ACIDO	0.01
40	CHQ-075	416.0	420.1	890	110	39450	32090	-4.4	ACIDO	0.01
41	CHQ-1013	61.0	71.5	500	500	70670	70170	-9.4	ACIDO	0.10
42	CHQ-1013	289.5	299.5	500	500	102400	100490	-13.6	ACIDO	0.06
43	CHQ-1013	299.5	309.5	500	500	89700	85530	-11.5	ACIDO	0.07
44	CHQ-1013	309.5	319.5	500	500	55010	52290	-7.0	ACIDO	0.06
45	CHQ-1013	319.5	324.5	500	500	42160	40650	-5.4	ACIDO	0.07
46	CHQ-1014	40.0	49.7	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
47	CHQ-1014	49.7	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
48	CHQ-1014	60.0	70.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
49	CHQ-1014	80.0	90.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
50	CHQ-1015	50.2	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.04
51	CHQ-1015	60.0	70.0	500	500	1920	1420	0.0	INERTE	0.06
52	CHQ-1015	90.0	100.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
53	CHQ-1015	100.0	110.3	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
54	CHQ-1015	110.3	120.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.05
55	CHQ-1015	130.0	140.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
56	CHQ-1015	140.0	150.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.08
57	CHQ-1015	310.0	318.0	500	500	49000	46630	-6.2	ACIDO	0.01
58	CHQ-1015	318.0	322.5	500	500	28550	26550	-3.5	ACIDO	0.00
59	CHQ-1016	30.0	40.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
60	CHQ-1016	170.0	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
61	CHQ-1016	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.10
62	CHQ-1017	12.9	20.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
63	CHQ-1017	20.0	30.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
64	CHQ-1017	30.0	40.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
65	CHQ-1018	8.1	20.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
66	CHQ-1018	20.0	30.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
67	CHQ-1018	68.0	72.4	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
68	CHQ-1019	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
69	CHQ-1020	13.0	19.5	500	500	3290	2110	-0.1	LIGERAMENTE ACIDO	0.00
70	CHQ-1020	19.5	30.0	500	500	2790	1610	0.0	INERTE	0.05
71	CHQ-1021	6.4	12.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
72	CHQ-1021	12.0	20.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
73	CHQ-1021	20.0	30.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
74	CHQ-1021	80.0	90.1	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
75	CHQ-1021	160.5	170.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
76	CHQ-1021	170.0	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.00
77	CHQ-1021	180.0	189.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
78	CHQ-1021	200.6	205.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
79	CHQ-1022	11.9	20.0	500	500	1040	30	0.2	LIGERAMENTE BASICO	0.02
80	CHQ-1022	20.0	30.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
81	CHQ-1023	14.2	19.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.00
82	CHQ-1023	19.5	30.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
83	CHQ-1023	30.0	40.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
84	CHQ-1023	40.0	50.1	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
85	CHQ-1023	120.0	130.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
86	CHQ-1023	130.2	140.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
87	CHQ-1023	140.0	150.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
88	CHQ-1023	210.0	220.3	500	500	1820	20	0.2	LIGERAMENTE BASICO	0.01
89	CHQ-1023	220.3	230.0	1450	1020	40530	35930	-4.5	ACIDO	0.01
90	CHQ-1023	230.0	234.2	4640	3220	39850	34600	-3.6	ACIDO	0.01
91	CHQ-437	184.0	192.0	1670	200	2110	10	0.1	INERTE	0.06
92	CHQ-551	136.0	144.0	600	200	900	100	0.1	INERTE	0.01
93	CHQ-551	144.0	152.0	500	200	700	100	0.1	INERTE	0.01
94	CHQ-551	152.0	160.0	600	200	1100	100	0.1	INERTE	0.03
95	CHQ-554	360.0	368.0	700	200	118000	114200	-15.6	ACIDO	0.05
96	CHQ-554	368.0	376.0	800	200	114000	110700	-15.1	ACIDO	0.09
97	CHQ-554	376.0	384.0	600	200	110000	107000	-14.6	ACIDO	0.06
98	CHQ-554	392.0	400.0	900	200	122000	118900	-16.2	ACIDO	0.06
99	CHQ-554	408.0	414.0	600	200	140000	113200	-15.4	ACIDO	0.08
100	CHQ-555	128.0	136.0	350	200	1800	100	0.1	INERTE	0.08
101	CHQ-555	136.0	144.0	320	200	1120	100	0.1	INERTE	0.08
102	CHQ-555	168.0	176.0	360	200	640	100	0.1	INERTE	0.09
103	CHQ-555	176.0	184.0	260	200	1300	300	0.0	INERTE	0.07
104	CHQ-555	398.0	406.0	200	200	116000	112300	-15.3	ACIDO	0.06
105	CHQ-555	406.0	414.0	200	200	91200	86900	-11.8	ACIDO	0.04
106	CHQ-555	414.0	422.0	200	200	81400	77200	-10.5	ACIDO	0.04
107	CHQ-555	422.0	428.8	210	200	81100	74000	-10.1	ACIDO	0.05
108	CHQ-599	162.0	170.0	280	200	650	100	0.1	INERTE	0.10
109	CHQ-599	362.0	370.0	290	200	14600	13400	-1.8	ACIDO	0.07
110	CHQ-599	378.0	386.0	390	200	8900	6400	-0.8	LIGERAMENTE ACIDO	0.07
111	CHQ-599	434.0	444.5	200	200	92700	89900	-12.2	ACIDO	0.05
112	CHQ-602	354.0	362.0	1210	300	124000	119800	-16.3	ACIDO	0.06
113	CHQ-602	362.0	370.0	1330	200	149000	144700	-19.8	ACIDO	0.00
114	CHQ-602	370.0	378.0	1250	200	152000	146500	-20.0	ACIDO	0.01
115	CHQ-602	402.0	412.6	1820	200	82100	79000	-10.7	ACIDO	0.02
116	CHQ-606	160.0	168.0	970	350	750	240	0.1	INERTE	
117	CHQ-606	168.0	176.0	1130	200	780	780	0.0	INERTE	
118	CHQ-606	176.0	184.0	1400	360	46800	44850	-6.0	ACIDO	
119	CHQ-606	184.0	192.0	2220	280	46700	45450	-6.1	ACIDO	
120	CHQ-606	192.0	197.8	2510	280	50800	49720	-6.7	ACIDO	
122	CHQ-714	64.0	72.1	1440	200	770	180	0.0	INERTE	0.00
123	CHQ-714	72.1	80.0	1430	200	710	160	0.1	INERTE	0.00
124	CHQ-714	80.0	88.0	1510	200	1290	20	0.1	INERTE	0.00
125	CHQ-714	88.0	96.0	1170	200	710	180	0.0	INERTE	0.00
126	CHQ-714	96.0	104.0	700	200	820	190	0.0	INERTE	0.00
127	CHQ-714	104.0	112.0	930	200	930	140	0.1	INERTE	0.06
128	CHQ-723	72.0	80.0	540	200	1210	390	0.0	INERTE	0.00
129	CHQ-723	80.0	88.0	480	200	1190	320	0.0	INERTE	0.00
130	CHQ-723	88.0	90.0	200	200	800	80	0.1	INERTE	0.00
131	CHQ-723	90.0	96.0	200	200	800	80	0.1	INERTE	0.00
132	CHQ-723	96.0	100.0	200	200	1310	150	0.1	INERTE	0.00
133	CHQ-723	100.0	104.0	200	200	1310	150	0.1	INERTE	0.01
134	CHQ-723	104.0	110.0	200	200	1460	270	0.0	INERTE	0.02
135	CHQ-723	110.0	112.0	200	200	1460	270	0.0	INERTE	0.02
136	CHQ-723	112.0	120.0	200	200	1200	500	0.0	INERTE	0.08
137	CHQ-726	112.0	120.0	200	200	33300	32530	-4.4	ACIDO	0.09
138	CHQ-729	50.0	59.6	410	200	1430	260	0.0	INERTE	0.02
139	CHQ-729	59.6	70.0	500	200	1490	1170	-0.1	INERTE	0.03
140	CHQ-729	70.0	80.0	330	200	1320	260	0.0	INERTE	0.02
141	CHQ-729	80.0	90.0	270	200	990	240	0.0	INERTE	0.01
142	CHQ-729	90.0	100.0	310	200	1220	300	0.0	INERTE	0.01
143	CHQ-729	100.0	110.0	360	200	2000	1050	-0.1	INERTE	0.01
144	CHQ-729	110.0	120.4	500	200	1250	200	0.0	INERTE	0.01
145	CHQ-729	120.4	131.0	490	200	1950	520	0.0	INERTE	0.01
146	CHQ-729	131.0	140.0	420	200	5990	4650	-0.6	LIGERAMENTE ACIDO	0.02
147	CHQ-729	140.0	151.2	540	200	2370	1280	-0.1	LIGERAMENTE ACIDO	0.02
148	CHQ-729	151.2	160.5	520	200	1440	160	0.1	INERTE	0.02
149	CHQ-729	160.5	170.0	390	200	730	30	0.1	INERTE	0.02
150	CHQ-729	170.0	179.5	380	200	1380	10	0.1	INERTE	0.02
151	CHQ-729	190.0	195.0	510	200	1470	0	0.1	INERTE	0.04
152	CHQ-729	195.0	196.0	200	200	91080	88580	-12.1	ACIDO	0.04
153	CHQ-729	196.0	200.7	200	200	91080	88580	-12.1	ACIDO	0.03
154	CHQ-729	200.7	204.0	600	200	166600	163640	-22.3	ACIDO	0.06
155	CHQ-729	212.0	219.5	390	200	153800	151190	-20.6	ACIDO	0.08
156	CHQ-729	219.5	220.0	610	200	132800	130960	-17.9	ACIDO	0.04
157	CHQ-733	60.9	70.0	400	200	900	230	0.0	INERTE	0.01
158	CHQ-733	70.0	80.0	330	200	1230	470	0.0	INERTE	0.00
159	CHQ-733	80.0	90.2	380	200	1370	460	0.0	INERTE	0.01
160	CHQ-733	90.2	100.0	370	200	1550	530	0.0	INERTE	0.00
161	CHQ-733	100.0	110.0	400	200	1460	370	0.0	INERTE	0.00
162	CHQ-733	110.0	120.5	400	200	1740	240	0.0	INERTE	0.00
163	CHQ-733	120.5	130.0	450	200	1260	220	0.0	INERTE	0.01
164	CHQ-733	130.0	139.6	680	200	980	250	0.0	INERTE	0.00
165	CHQ-733	139.6	150.0	460	200	910	140	0.1	INERTE	0.01
166	CHQ-733	150.0	159.7	430	200	760	220	0.0	INERTE	0.00
167	CHQ-733	159.7	169.5	510	200	1340	0	0.1	INERTE	0.01
168	CHQ-733	169.5	179.0	430	200	810	510	0.0	INERTE	0.03
169	CHQ-733	179.0	179.1	430	200	810	510	0.0	INERTE	0.02
170	CHQ-733	179.1	189.0	570	200	41100	37640	-5.1	ACIDO	0.09
171	CHQ-733	189.0	190.0	570	200	41100	37640	-5.1	ACIDO	0.04
172	CHQ-733	190.0	199.0	340	200	88010	86320	-11.8	ACIDO	0.05
173	CHQ-733	200.5	209.0	460	200	125800	124650	-17.0	ACIDO	0.09
174	CHQ-733	349.0	350.0	200	200	179850	173570	-23.7	ACIDO	0.03
175	CHQ-733	350.0	359.0	200	200	133220	127340	-17.4	ACIDO	0.01
176	CHQ-733	359.0	360.5	200	200	133220	127340	-17.4	ACIDO	0.01
177	CHQ-733	360.5	367.8	200	200	97520	90980	-12.4	ACIDO	0.00
178	CHQ-734	70.0	80.0	590	200	1670	380	0.0	INERTE	0.00
179	CHQ-734	80.0	90.5	550	200	2530	140	0.1	INERTE	0.01
180	CHQ-734	90.5	101.1	540	200	1790	30	0.1	INERTE	0.01
181	CHQ-734	101.1	110.0	680	200	1580	-260	0.1	INERTE	0.01
182	CHQ-734	110.0	120.0	700	200	2320	0	0.1	INERTE	0.00
183	CHQ-734	120.0	129.5	620	200	1410	220	0.0	INERTE	0.01
184	CHQ-734	129.5	140.0	840	200	710	190	0.0	INERTE	0.01
185	CHQ-734	140.0	150.0	970	200	1270	140	0.1	INERTE	0.01
186	CHQ-734	150.0	159.5	810	200	940	70	0.1	INERTE	0.05
187	CHQ-734	159.5	170.0	710	200	850	0	0.1	INERTE	0.06
188	CHQ-734	180.3	190.0	840	200	223500	222630	-30.4	ACIDO	0.08
189	CHQ-734	190.0	200.0	810	200	219400	218550	-29.9	ACIDO	0.08
190	CHQ-734	340.0	350.0	1770	200	111400	102160	-13.9	ACIDO	0.06
191	CHQ-739	239.0	250.5	410	200	33770	31790	-4.3	ACIDO	0.06
192	CHQ-739	250.5	260.5	630	200	25800	24000	-3.2	ACIDO	0.04
193	CHQ-739	260.5	270.5	470	200	22060	20500	-2.7	ACIDO	0.05
194	CHQ-739	270.5	280.0	400	200	19400	17880	-2.4	ACIDO	0.09
195	CHQ-739	280.0	289.1	400	200	99610	89470	-12.2	ACIDO	0.04
196	CHQ-739	289.1	300.0	370	370	60270	54400	-7.3	ACIDO	0.03
197	CHQ-739	300.0	310.0	2090	1510	45140	38910	-4.8	ACIDO	0.00
198	CHQ-739	310.0	320.5	1050	450	36390	28790	-3.8	ACIDO	0.00
199	CHQ-739	320.5	329.7	1910	1540	33860	27040	-3.1	ACIDO	0.00
200	CHQ-740	50.5	60.0	260	200	1730	850	0.0	INERTE	0.03
201	CHQ-740	60.0	70.0	240	200	1730	800	0.0	INERTE	0.01
202	CHQ-740	70.0	80.1	200	200	1230	230	0.0	INERTE	0.01
203	CHQ-740	80.1	90.0	200	200	1820	1290	-0.1	LIGERAMENTE ACIDO	0.02
204	CHQ-740	90.0	100.5	210	200	2870	2020	-0.2	LIGERAMENTE ACIDO	0.02
205	CHQ-740	100.5	109.1	200	200	2000	1010	-0.1	INERTE	0.02
206	CHQ-740	109.1	120.5	220	200	3620	2280	-0.2	LIGERAMENTE ACIDO	0.02
207	CHQ-740	120.5	130.0	240	200	1780	10	0.1	INERTE	0.01
208	CHQ-740	130.0	140.9	200	200	4670	3550	-0.4	LIGERAMENTE ACIDO	0.01
209	CHQ-740	140.9	150.0	210	200	5120	2730	-0.3	LIGERAMENTE ACIDO	0.08
210	CHQ-740	150.0	160.0	210	200	2340	1350	-0.1	LIGERAMENTE ACIDO	0.03
211	CHQ-740	160.0	170.0	200	200	1100	0	0.1	INERTE	0.03
212	CHQ-740	170.0	170.5	200	200	1100	0	0.1	INERTE	0.03
213	CHQ-740	170.5	180.0	340	200	1670	0	0.1	INERTE	0.02
214	CHQ-740	180.0	180.3	340	200	1670	0	0.1	INERTE	0.02
215	CHQ-740	180.3	190.0	360	200	12950	10330	-1.3	ACIDO	0.08
216	CHQ-740	190.0	190.5	360	200	12950	10330	-1.3	ACIDO	0.02
217	CHQ-740	190.5	200.0	220	200	5050	3760	-0.4	LIGERAMENTE ACIDO	0.04
218	CHQ-740	200.0	200.8	220	200	5050	3760	-0.4	LIGERAMENTE ACIDO	0.05
219	CHQ-740	390.5	401.5	200	200	80110	45050	-6.1	ACIDO	0.03
220	CHQ-740	401.5	411.3	200	200	109200	68800	-9.4	ACIDO	0.04
221	CHQ-748	140.9	150.0	290	200	1460	250	0.0	INERTE	0.05
222	CHQ-748	150.0	160.0	260	200	1420	210	0.0	INERTE	0.06
223	CHQ-750	150.0	160.0	650	200	820	0	0.1	INERTE	0.01
224	CHQ-750	160.0	170.1	520	200	2530	220	0.0	INERTE	0.03
225	CHQ-750	170.1	180.0	1180	200	2260	130	0.1	INERTE	0.07
226	CHQ-750	190.8	196.3	370	200	1500	740	0.0	INERTE	0.06
227	CHQ-750	201.0	210.7	590	460	530	0	0.2	LIGERAMENTE BASICO	0.05
228	CHQ-750	210.7	221.0	660	200	42940	40880	-5.5	ACIDO	0.04
229	CHQ-750	221.0	231.1	560	200	118600	116120	-15.8	ACIDO	0.09
230	CHQ-750	231.1	240.0	600	200	71260	69130	-9.4	ACIDO	0.05
231	CHQ-750	240.0	250.0	700	200	82960	80910	-11.0	ACIDO	0.09
232	CHQ-751	400.3	400.4	730	200	117600	111690	-15.2	ACIDO	0.02
233	CHQ-751	400.4	410.0	730	200	117600	111690	-15.2	ACIDO	0.02
234	CHQ-751	410.0	420.0	660	200	121000	115250	-15.7	ACIDO	0.04
235	CHQ-752	60.0	70.8	520	200	1450	30	0.1	INERTE	0.00
236	CHQ-752	70.8	80.0	520	200	1650	190	0.0	INERTE	0.00
237	CHQ-752	80.0	90.0	550	200	1360	320	0.0	INERTE	0.01
238	CHQ-752	90.0	100.9	400	200	830	230	0.0	INERTE	0.00
239	CHQ-752	100.9	110.0	470	200	2130	330	0.0	INERTE	0.00
240	CHQ-752	110.0	120.0	490	200	1750	240	0.0	INERTE	0.00
241	CHQ-752	120.0	130.0	500	200	930	0	0.1	INERTE	0.00
242	CHQ-752	130.0	140.5	560	200	820	0	0.1	INERTE	0.01
243	CHQ-752	140.5	150.0	470	200	720	40	0.1	INERTE	0.00
244	CHQ-752	150.0	160.0	620	200	570	30	0.1	INERTE	0.00
245	CHQ-752	160.0	170.0	610	200	560	50	0.1	INERTE	0.01
246	CHQ-752	170.0	179.8	490	200	350	0	0.1	INERTE	0.02
247	CHQ-752	179.8	189.5	630	200	29500	28490	-3.8	ACIDO	0.03
248	CHQ-752	189.5	200.0	670	200	55920	54660	-7.4	ACIDO	0.04
249	CHQ-752	350.5	360.5	610	200	120200	116860	-15.9	ACIDO	0.10
250	CHQ-752	370.0	379.5	730	200	101600	93090	-12.7	ACIDO	0.01
251	CHQ-752	379.5	390.0	920	200	89360	81720	-11.1	ACIDO	0.02
252	CHQ-752	390.0	400.5	660	200	91470	83530	-11.4	ACIDO	0.03
253	CHQ-780	70.0	80.0	620	200	710	30	0.1	INERTE	0.00
254	CHQ-780	80.0	90.0	1040	200	580	130	0.1	INERTE	0.01
255	CHQ-780	90.0	100.0	500	200	1180	400	0.0	INERTE	0.01
256	CHQ-780	100.0	110.0	510	200	1290	40	0.1	INERTE	0.01
257	CHQ-780	110.0	120.0	530	200	1230	250	0.0	INERTE	0.03
258	CHQ-780	120.0	128.0	670	200	1240	260	0.0	INERTE	0.02
259	CHQ-785	272.0	282.0	360	200	113900	112760	-15.4	ACIDO	0.10
260	CHQ-785	282.0	292.0	330	200	84870	82620	-11.2	ACIDO	0.06
261	CHQ-785	292.0	302.3	350	200	86580	85600	-11.7	ACIDO	0.02
262	CHQ-785	302.3	312.4	280	200	47500	46850	-6.3	ACIDO	0.02
263	CHQ-785	312.4	322.0	330	200	54470	52380	-7.1	ACIDO	0.02
264	CHQ-785	331.6	341.7	200	200	85290	82470	-11.2	ACIDO	0.03
265	CHQ-785	352.4	361.9	230	200	171800	169320	-23.1	ACIDO	0.03
266	CHQ-796	320.6	329.0	330	200	155400	132480	-18.1	ACIDO	0.01
267	CHQ-796	329.0	340.0	400	200	145900	131520	-17.9	ACIDO	0.00
268	CHQ-811	70.0	80.0	1130	200	173500	159960	-21.8	ACIDO	0.07
269	CHQ-822	70.0	80.0	250	200	1170	130	0.1	INERTE	0.06
270	CHQ-822	80.0	90.0	250	200	1310	230	0.0	INERTE	0.10
271	CHQ-826	250.1	260.0	310	200	75280	69840	-9.5	ACIDO	0.02
272	CHQ-826	260.0	270.0	600	200	130500	124730	-17.0	ACIDO	0.01
273	CHQ-826	280.0	290.0	280	200	35410	33730	-4.5	ACIDO	0.05
274	CHQ-838	309.7	315.0	200	200	10400	9340	-1.2	ACIDO	0.10
275	CHQ-898	30.0	40.0	500	500	72810	72310	-9.7	ACIDO	0.10
276	CHQ-898	40.0	50.0	500	500	87130	86630	-11.7	ACIDO	0.07
277	CHQ-898	50.0	60.9	500	500	96610	95610	-12.9	ACIDO	0.08
278	CHQ-898	60.9	70.0	500	500	83130	82630	-11.1	ACIDO	0.07
279	CHQ-898	100.0	110.5	500	500	42680	42180	-5.6	ACIDO	0.09
280	CHQ-898	369.0	380.0	500	500	575000	569610	-77.9	ACIDO	0.03
281	CHQ-898	380.0	389.0	500	500	598200	594210	-81.2	ACIDO	0.01
282	CHQ-898	389.0	399.0	500	500	406200	399900	-54.6	ACIDO	0.00
283	CHQ-898	399.0	408.5	500	500	143700	89670	-12.1	ACIDO	0.00
284	CHQ-898	408.5	413.5	500	500	108300	57470	-7.7	ACIDO	0.00
285	CHQ-911	186.0	188.0	1190	500	199700	193900	-26.4	ACIDO	0.05
286	CHQ-911	214.0	216.0	1110	500	97860	95550	-12.9	ACIDO	0.07
287	CHQ-911	216.0	218.0	1110	500	97860	95550	-12.9	ACIDO	0.05
288	CHQ-911	238.0	240.0	500	500	33260	32760	-4.3	ACIDO	0.10
289	CHQ-911	240.0	242.0	500	500	11110	10610	-1.3	ACIDO	0.02
290	CHQ-911	242.0	244.0	500	500	11110	10610	-1.3	ACIDO	0.04
291	CHQ-911	244.0	246.0	500	500	11110	10610	-1.3	ACIDO	0.06
292	CHQ-911	246.0	248.0	500	500	11110	10610	-1.3	ACIDO	0.08
293	CHQ-911	248.0	250.0	500	500	11110	10610	-1.3	ACIDO	0.08
294	CHQ-911	250.0	250.5	500	500	11110	10610	-1.3	ACIDO	0.08
295	CHQ-911	256.0	258.0	1130	500	7880	6870	-0.8	LIGERAMENTE ACIDO	0.07
296	CHQ-911	258.0	260.0	1130	500	7880	6870	-0.8	LIGERAMENTE ACIDO	0.04
297	CHQ-911	262.0	264.0	500	500	52060	49810	-6.6	ACIDO	0.09
298	CHQ-911	264.0	266.0	500	500	52060	49810	-6.6	ACIDO	0.04
299	CHQ-911	266.0	268.0	500	500	52060	49810	-6.6	ACIDO	0.03
300	CHQ-911	268.0	270.0	500	500	52060	49810	-6.6	ACIDO	0.02
301	CHQ-911	270.0	272.0	500	500	81930	76500	-10.3	ACIDO	0.03
302	CHQ-911	272.0	274.0	500	500	81930	76500	-10.3	ACIDO	0.04
303	CHQ-911	274.0	276.0	500	500	81930	76500	-10.3	ACIDO	0.01
304	CHQ-911	276.0	278.0	500	500	81930	76500	-10.3	ACIDO	0.01
305	CHQ-911	278.0	280.0	500	500	81930	76500	-10.3	ACIDO	0.03
306	CHQ-911	280.0	282.0	500	500	120200	115730	-15.7	ACIDO	0.00
307	CHQ-911	282.0	284.0	500	500	120200	115730	-15.7	ACIDO	0.03
308	CHQ-911	284.0	286.0	500	500	120200	115730	-15.7	ACIDO	0.01
309	CHQ-911	286.0	288.0	500	500	120200	115730	-15.7	ACIDO	0.00
310	CHQ-911	288.0	290.0	500	500	120200	115730	-15.7	ACIDO	0.00
311	CHQ-911	290.0	292.0	500	500	129900	122380	-16.6	ACIDO	0.00
312	CHQ-911	292.0	294.0	500	500	129900	122380	-16.6	ACIDO	0.00
313	CHQ-911	294.0	296.0	500	500	129900	122380	-16.6	ACIDO	0.01
314	CHQ-911	296.0	298.0	500	500	129900	122380	-16.6	ACIDO	0.03
315	CHQ-911	298.0	299.5	500	500	129900	122380	-16.6	ACIDO	0.02
316	CHQ-911	299.5	300.0	500	500	168500	162660	-22.1	ACIDO	0.01
317	CHQ-911	300.0	302.0	500	500	168500	162660	-22.1	ACIDO	0.01
318	CHQ-911	302.0	304.0	500	500	168500	162660	-22.1	ACIDO	0.01
319	CHQ-911	304.0	306.0	500	500	168500	162660	-22.1	ACIDO	0.00
320	CHQ-911	306.0	308.0	500	500	168500	162660	-22.1	ACIDO	0.00
321	CHQ-911	308.0	310.0	500	500	168500	162660	-22.1	ACIDO	0.03
322	CHQ-911	310.0	312.0	500	500	195600	191070	-26.0	ACIDO	0.02
323	CHQ-911	312.0	314.0	500	500	195600	191070	-26.0	ACIDO	0.01
324	CHQ-911	314.0	316.0	500	500	195600	191070	-26.0	ACIDO	0.00
325	CHQ-911	316.0	318.0	500	500	195600	191070	-26.0	ACIDO	0.00
326	CHQ-911	318.0	320.0	500	500	195600	191070	-26.0	ACIDO	0.03
327	CHQ-911	320.0	322.0	3710	500	235000	230070	-31.3	ACIDO	0.04
328	CHQ-911	322.0	324.0	3710	500	235000	230070	-31.3	ACIDO	0.03
329	CHQ-911	324.0	326.0	3710	500	235000	230070	-31.3	ACIDO	0.05
330	CHQ-911	326.0	328.0	3710	500	235000	230070	-31.3	ACIDO	0.05
331	CHQ-911	328.0	330.0	3710	500	235000	230070	-31.3	ACIDO	0.06
332	CHQ-911	330.0	332.0	2630	500	286800	278600	-38.0	ACIDO	0.07
333	CHQ-911	332.0	334.0	2630	500	286800	278600	-38.0	ACIDO	0.05
334	CHQ-911	334.0	336.0	2630	500	286800	278600	-38.0	ACIDO	0.04
335	CHQ-911	336.0	338.0	2630	500	286800	278600	-38.0	ACIDO	0.06
336	CHQ-911	338.0	340.0	2630	500	286800	278600	-38.0	ACIDO	0.04
337	CHQ-911	340.0	342.0	2330	500	288700	281460	-38.4	ACIDO	0.05
338	CHQ-911	342.0	344.0	2330	500	288700	281460	-38.4	ACIDO	0.05
339	CHQ-911	344.0	346.0	2330	500	288700	281460	-38.4	ACIDO	0.05
340	CHQ-911	346.0	348.0	2330	500	288700	281460	-38.4	ACIDO	0.05
341	CHQ-911	348.0	350.0	2330	500	288700	281460	-38.4	ACIDO	0.05
342	CHQ-911	350.0	352.0	4770	500	297500	291370	-39.7	ACIDO	0.07
343	CHQ-911	352.0	354.0	4770	500	297500	291370	-39.7	ACIDO	0.10
344	CHQ-911	354.0	356.0	4770	500	297500	291370	-39.7	ACIDO	0.03
345	CHQ-911	356.0	358.0	4770	500	297500	291370	-39.7	ACIDO	0.06
346	CHQ-911	358.0	359.5	4770	500	297500	291370	-39.7	ACIDO	0.02
347	CHQ-911	359.5	360.0	####	500	396200	390740	-53.3	ACIDO	0.07
348	CHQ-911	360.0	362.0	####	500	396200	390740	-53.3	ACIDO	0.06
349	CHQ-911	362.0	364.0	####	500	396200	390740	-53.3	ACIDO	0.06
350	CHQ-911	364.0	366.0	####	500	396200	390740	-53.3	ACIDO	0.06
351	CHQ-911	366.0	368.0	####	500	396200	390740	-53.3	ACIDO	0.07
352	CHQ-912	16.5	18.0	500	500	2060	460	0.1	LIGERAMENTE BASICO	0.04
353	CHQ-912	18.0	20.0	500	500	2060	460	0.1	LIGERAMENTE BASICO	0.02
354	CHQ-912	20.0	22.0	500	500	1370	870	0.1	INERTE	0.02
355	CHQ-912	22.0	24.3	500	500	1370	870	0.1	INERTE	0.06
356	CHQ-912	29.8	32.0	500	500	1020	520	0.1	LIGERAMENTE BASICO	0.08
357	CHQ-912	32.0	34.0	500	500	1020	520	0.1	LIGERAMENTE BASICO	0.05
358	CHQ-912	34.0	36.0	500	500	1020	520	0.1	LIGERAMENTE BASICO	0.05
359	CHQ-912	36.0	38.0	500	500	1020	520	0.1	LIGERAMENTE BASICO	0.08
360	CHQ-912	42.0	44.0	500	500	1290	790	0.1	INERTE	0.04
361	CHQ-912	46.5	48.6	500	500	1290	790	0.1	INERTE	0.07

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
362	CHQ-912	54.0	56.0	500	500	1310	810	0.1	INERTE	0.05
363	CHQ-912	64.0	66.0	500	500	1310	810	0.1	INERTE	0.05
364	CHQ-912	66.0	68.0	500	500	1310	810	0.1	INERTE	0.01
365	CHQ-912	68.0	70.0	500	500	1310	810	0.1	INERTE	0.02
366	CHQ-912	70.0	72.0	500	500	1570	1070	0.0	INERTE	0.04
367	CHQ-912	72.0	73.5	500	500	1570	1070	0.0	INERTE	0.07
368	CHQ-912	86.0	88.0	500	500	1260	760	0.1	INERTE	0.10
369	CHQ-912	90.0	92.0	500	500	1320	820	0.1	INERTE	0.09
370	CHQ-912	98.0	100.0	500	500	1320	820	0.1	INERTE	0.08
371	CHQ-912	336.7	338.5	1700	500	272500	269360	-36.7	ACIDO	0.10
372	CHQ-912	338.5	340.0	1700	500	272500	269360	-36.7	ACIDO	0.02
373	CHQ-912	340.0	342.0	1200	500	404800	390730	-53.3	ACIDO	0.01
374	CHQ-912	342.0	344.0	1200	500	404800	390730	-53.3	ACIDO	0.02
375	CHQ-912	344.0	346.0	1200	500	404800	390730	-53.3	ACIDO	0.01
376	CHQ-912	346.0	348.0	1200	500	404800	390730	-53.3	ACIDO	0.02
377	CHQ-912	348.0	350.0	1200	500	404800	390730	-53.3	ACIDO	0.02
378	CHQ-912	350.0	351.5	1020	500	248200	245000	-33.4	ACIDO	0.10
379	CHQ-912	351.5	353.2	1020	500	248200	245000	-33.4	ACIDO	0.07
380	CHQ-912	357.9	360.3	1020	500	248200	245000	-33.4	ACIDO	0.03
381	CHQ-912	360.3	362.4	500	500	190200	187440	-25.5	ACIDO	0.01
382	CHQ-912	362.4	364.5	500	500	190200	187440	-25.5	ACIDO	0.00
383	CHQ-912	364.5	366.0	500	500	190200	187440	-25.5	ACIDO	0.00
384	CHQ-912	366.0	368.5	500	500	190200	187440	-25.5	ACIDO	0.03
385	CHQ-912	368.5	370.0	500	500	190200	187440	-25.5	ACIDO	0.01
386	CHQ-912	370.0	372.0	1090	500	104400	101920	-13.8	ACIDO	0.00
387	CHQ-912	372.0	374.5	1090	500	104400	101920	-13.8	ACIDO	0.00
388	CHQ-913	40.0	50.5	500	500	1850	1350	0.0	INERTE	0.02
389	CHQ-913	54.0	56.0	500	500	40120	36900	-4.9	ACIDO	0.09
390	CHQ-913	59.1	60.0	500	500	69010	67860	-9.1	ACIDO	0.06
391	CHQ-913	60.0	62.0	500	500	69010	67860	-9.1	ACIDO	0.08
392	CHQ-913	74.0	76.0	500	500	46780	46280	-6.2	ACIDO	0.07
393	CHQ-913	76.0	78.0	500	500	46780	46280	-6.2	ACIDO	0.05
394	CHQ-913	78.0	80.0	500	500	46780	46280	-6.2	ACIDO	0.02
395	CHQ-913	80.0	82.0	500	500	61250	60750	-8.1	ACIDO	0.04
396	CHQ-913	82.0	84.0	500	500	61250	60750	-8.1	ACIDO	0.02
397	CHQ-913	84.0	86.0	500	500	61250	60750	-8.1	ACIDO	0.04
398	CHQ-913	86.0	88.0	500	500	61250	60750	-8.1	ACIDO	0.02
399	CHQ-913	88.0	90.0	500	500	61250	60750	-8.1	ACIDO	0.04
400	CHQ-913	100.0	102.0	500	500	58860	57670	-7.7	ACIDO	0.09
401	CHQ-913	214.0	216.0	500	500	138300	135180	-18.3	ACIDO	0.03
402	CHQ-913	216.0	218.0	500	500	138300	135180	-18.3	ACIDO	0.05
403	CHQ-913	218.0	220.0	500	500	138300	135180	-18.3	ACIDO	0.03
404	CHQ-913	220.0	222.0	500	500	127200	124740	-16.9	ACIDO	0.03
405	CHQ-913	222.0	224.0	500	500	127200	124740	-16.9	ACIDO	0.04
406	CHQ-913	224.0	226.0	500	500	127200	124740	-16.9	ACIDO	0.03
407	CHQ-913	226.0	228.0	500	500	127200	124740	-16.9	ACIDO	0.03
408	CHQ-913	228.0	230.0	500	500	127200	124740	-16.9	ACIDO	0.04
409	CHQ-913	230.0	230.5	500	500	127200	124740	-16.9	ACIDO	0.04
410	CHQ-913	230.5	232.0	500	500	132100	129380	-17.5	ACIDO	0.04
411	CHQ-913	232.0	234.0	500	500	132100	129380	-17.5	ACIDO	0.04
412	CHQ-913	234.0	236.0	500	500	132100	129380	-17.5	ACIDO	0.01
413	CHQ-913	236.0	238.0	500	500	132100	129380	-17.5	ACIDO	0.00
414	CHQ-913	238.0	239.5	500	500	132100	129380	-17.5	ACIDO	0.00
415	CHQ-913	239.5	240.0	500	500	82720	80850	-10.9	ACIDO	0.00
416	CHQ-913	240.0	242.0	500	500	82720	80850	-10.9	ACIDO	0.00
417	CHQ-913	242.0	244.0	500	500	82720	80850	-10.9	ACIDO	0.00
418	CHQ-913	244.0	246.0	500	500	82720	80850	-10.9	ACIDO	0.00
419	CHQ-913	246.0	248.0	500	500	82720	80850	-10.9	ACIDO	0.00
420	CHQ-913	248.0	249.5	500	500	82720	80850	-10.9	ACIDO	0.00
421	CHQ-913	249.5	250.0	500	500	111300	107420	-14.5	ACIDO	0.01
422	CHQ-913	250.0	252.0	500	500	111300	107420	-14.5	ACIDO	0.01
423	CHQ-913	252.0	254.0	500	500	111300	107420	-14.5	ACIDO	0.00
424	CHQ-913	254.0	256.0	500	500	111300	107420	-14.5	ACIDO	0.00
425	CHQ-913	256.0	258.0	500	500	111300	107420	-14.5	ACIDO	0.00
426	CHQ-913	258.0	260.0	500	500	111300	107420	-14.5	ACIDO	0.00
427	CHQ-913	260.0	262.0	2000	500	67390	64900	-8.7	ACIDO	0.00
428	CHQ-913	262.0	264.0	2000	500	67390	64900	-8.7	ACIDO	0.01
429	CHQ-913	264.0	266.0	2000	500	67390	64900	-8.7	ACIDO	0.02
430	CHQ-913	266.0	268.0	2000	500	67390	64900	-8.7	ACIDO	0.03
431	CHQ-913	268.0	270.0	2000	500	67390	64900	-8.7	ACIDO	0.01
432	CHQ-913	270.0	270.5	2000	500	67390	64900	-8.7	ACIDO	0.01
433	CHQ-913	270.5	272.0	500	500	34040	32770	-4.3	ACIDO	0.01
434	CHQ-913	272.0	274.0	500	500	34040	32770	-4.3	ACIDO	0.00
435	CHQ-913	274.0	276.0	500	500	34040	32770	-4.3	ACIDO	0.00
436	CHQ-913	276.0	278.0	500	500	34040	32770	-4.3	ACIDO	0.00
437	CHQ-913	278.0	280.0	500	500	34040	32770	-4.3	ACIDO	0.01
438	CHQ-913	280.0	280.5	500	500	34040	32770	-4.3	ACIDO	0.01
439	CHQ-913	280.5	282.0	500	500	34140	32290	-4.2	ACIDO	0.00
440	CHQ-913	282.0	284.0	500	500	34140	32290	-4.2	ACIDO	0.01
441	CHQ-913	284.0	286.0	500	500	34140	32290	-4.2	ACIDO	0.01
442	CHQ-913	286.0	288.0	500	500	34140	32290	-4.2	ACIDO	0.01
443	CHQ-913	288.0	290.0	500	500	34140	32290	-4.2	ACIDO	0.01
444	CHQ-913	290.0	292.0	500	500	30580	29340	-3.8	ACIDO	0.01
445	CHQ-913	292.0	294.0	500	500	30580	29340	-3.8	ACIDO	0.01
446	CHQ-913	294.0	296.0	500	500	30580	29340	-3.8	ACIDO	0.01
447	CHQ-913	296.0	298.0	500	500	30580	29340	-3.8	ACIDO	0.01
448	CHQ-913	298.0	300.0	500	500	30580	29340	-3.8	ACIDO	0.01
449	CHQ-913	300.0	302.0	500	500	30050	28390	-3.7	ACIDO	0.01
450	CHQ-913	302.0	304.0	500	500	30050	28390	-3.7	ACIDO	0.02
451	CHQ-913	304.0	306.0	500	500	30050	28390	-3.7	ACIDO	0.03
452	CHQ-913	306.0	308.0	500	500	30050	28390	-3.7	ACIDO	0.00
453	CHQ-913	308.0	310.0	500	500	30050	28390	-3.7	ACIDO	0.01
454	CHQ-913	310.0	310.1	500	500	30050	28390	-3.7	ACIDO	0.01
455	CHQ-913	310.1	312.0	500	500	83230	80750	-10.9	ACIDO	0.01
456	CHQ-913	312.0	314.0	500	500	83230	80750	-10.9	ACIDO	0.01
457	CHQ-913	314.0	316.0	500	500	83230	80750	-10.9	ACIDO	0.00
458	CHQ-913	316.0	318.0	500	500	83230	80750	-10.9	ACIDO	0.00
459	CHQ-913	318.0	320.0	500	500	83230	80750	-10.9	ACIDO	0.03
460	CHQ-913	320.0	322.0	1330	500	78680	76420	-10.3	ACIDO	0.03
461	CHQ-913	322.0	324.0	1330	500	78680	76420	-10.3	ACIDO	0.03
462	CHQ-913	324.0	326.0	1330	500	78680	76420	-10.3	ACIDO	0.03
463	CHQ-913	326.0	328.0	1330	500	78680	76420	-10.3	ACIDO	0.01
464	CHQ-913	328.0	330.0	1330	500	78680	76420	-10.3	ACIDO	0.03
465	CHQ-913	330.0	332.0	500	500	75320	73580	-9.9	ACIDO	0.01
466	CHQ-913	332.0	334.0	500	500	75320	73580	-9.9	ACIDO	0.01
467	CHQ-913	334.0	336.0	500	500	75320	73580	-9.9	ACIDO	0.01
468	CHQ-913	336.0	338.0	500	500	75320	73580	-9.9	ACIDO	0.01
469	CHQ-913	338.0	340.0	500	500	75320	73580	-9.9	ACIDO	0.01
470	CHQ-913	340.0	340.1	500	500	75320	73580	-9.9	ACIDO	0.01
471	CHQ-913	340.1	342.0	1080	500	20410	19090	-2.4	ACIDO	0.00
472	CHQ-913	342.0	344.0	1080	500	20410	19090	-2.4	ACIDO	0.00
473	CHQ-913	344.0	346.0	1080	500	20410	19090	-2.4	ACIDO	0.00
474	CHQ-913	346.0	349.0	1080	500	20410	19090	-2.4	ACIDO	0.01
475	CHQ-916	59.8	62.0	500	500	62940	61280	-8.2	ACIDO	0.07
476	CHQ-916	62.0	64.5	500	500	62940	61280	-8.2	ACIDO	0.05
477	CHQ-916	64.5	66.7	500	500	62940	61280	-8.2	ACIDO	0.06
478	CHQ-916	84.0	85.5	500	500	77260	75550	-10.2	ACIDO	0.09
479	CHQ-916	94.7	96.5	500	500	112100	108850	-14.7	ACIDO	0.09
480	CHQ-916	96.5	98.0	500	500	112100	108850	-14.7	ACIDO	0.09
481	CHQ-916	98.0	100.0	500	500	112100	108850	-14.7	ACIDO	0.08
482	CHQ-916	100.0	101.5	500	500	90450	88750	-12.0	ACIDO	0.08
483	CHQ-916	105.0	106.5	500	500	90450	88750	-12.0	ACIDO	0.09
484	CHQ-916	106.5	108.0	500	500	90450	88750	-12.0	ACIDO	0.09
485	CHQ-916	148.6	150.2	500	500	28480	27980	-3.6	ACIDO	0.09
486	CHQ-916	160.8	163.0	500	500	17470	16290	-2.0	ACIDO	0.09
487	CHQ-918	360.0	362.0	500	500	327500	321320	-43.8	ACIDO	0.09
488	CHQ-918	363.8	365.5	500	500	327500	321320	-43.8	ACIDO	0.07
489	CHQ-918	365.5	367.1	500	500	327500	321320	-43.8	ACIDO	0.06
490	CHQ-918	372.0	374.0	500	500	363700	355990	-48.6	ACIDO	0.10
491	CHQ-918	394.0	396.0	500	500	479100	472940	-64.6	ACIDO	0.04
492	CHQ-918	396.0	398.0	500	500	479100	472940	-64.6	ACIDO	0.01
493	CHQ-918	398.0	400.0	500	500	613900	609480	-83.3	ACIDO	0.02
494	CHQ-918	400.0	402.0	500	500	613900	609480	-83.3	ACIDO	0.00
495	CHQ-918	402.0	404.5	500	500	613900	609480	-83.3	ACIDO	0.01
496	CHQ-922	18.0	20.0	500	500	1750	350	0.1	LIGERAMENTE BASICO	0.09
497	CHQ-922	20.0	22.0	500	500	1640	1140	0.0	INERTE	0.09
498	CHQ-922	22.0	24.5	500	500	1640	1140	0.0	INERTE	0.07
499	CHQ-922	24.5	27.0	500	500	1640	1140	0.0	INERTE	0.05
500	CHQ-922	27.0	28.5	500	500	1640	1140	0.0	INERTE	0.02
501	CHQ-922	30.0	32.0	500	500	1190	690	0.1	INERTE	0.01
502	CHQ-922	32.0	34.0	500	500	1190	690	0.1	INERTE	0.08
503	CHQ-922	38.0	39.5	500	500	1190	690	0.1	INERTE	0.05
504	CHQ-922	39.5	41.0	500	500	1730	1230	0.0	INERTE	0.03
505	CHQ-922	41.0	43.3	500	500	1730	1230	0.0	INERTE	0.01
506	CHQ-922	45.0	46.5	500	500	1730	1230	0.0	INERTE	0.05
507	CHQ-922	46.5	48.5	500	500	1730	1230	0.0	INERTE	0.02
508	CHQ-922	48.5	50.7	500	500	1730	1230	0.0	INERTE	0.01
509	CHQ-922	50.7	52.5	500	500	1610	1110	0.0	INERTE	0.01
510	CHQ-922	52.5	54.0	500	500	1610	1110	0.0	INERTE	0.01
511	CHQ-922	54.0	56.0	500	500	1610	1110	0.0	INERTE	0.02
512	CHQ-922	56.0	58.0	500	500	1900	1400	0.0	INERTE	0.03
513	CHQ-922	58.0	60.0	500	500	1900	1400	0.0	INERTE	0.06
514	CHQ-922	180.0	182.0	500	500	60410	59130	-7.9	ACIDO	0.02
515	CHQ-922	182.0	184.0	500	500	60410	59130	-7.9	ACIDO	0.00
516	CHQ-922	184.0	186.0	500	500	60410	59130	-7.9	ACIDO	0.01
517	CHQ-922	186.0	188.0	500	500	60410	59130	-7.9	ACIDO	0.04
518	CHQ-922	192.0	194.0	500	500	74540	73150	-9.8	ACIDO	0.01
519	CHQ-922	194.0	196.0	500	500	74540	73150	-9.8	ACIDO	0.00
520	CHQ-922	196.0	198.0	500	500	74540	73150	-9.8	ACIDO	0.02
521	CHQ-922	198.0	200.0	500	500	74540	73150	-9.8	ACIDO	0.02
522	CHQ-922	200.0	202.0	500	500	83450	82030	-11.1	ACIDO	0.00
523	CHQ-922	202.0	204.0	500	500	83450	82030	-11.1	ACIDO	0.01
524	CHQ-922	204.0	206.0	500	500	83450	82030	-11.1	ACIDO	0.01
525	CHQ-922	206.0	208.0	500	500	83450	82030	-11.1	ACIDO	0.01
526	CHQ-922	208.0	210.5	500	500	83450	82030	-11.1	ACIDO	0.01
527	CHQ-922	210.5	212.6	500	500	111500	109370	-14.8	ACIDO	0.00
528	CHQ-922	212.6	214.5	500	500	111500	109370	-14.8	ACIDO	0.00
529	CHQ-922	214.5	216.0	500	500	111500	109370	-14.8	ACIDO	0.01
530	CHQ-922	216.0	218.0	500	500	111500	109370	-14.8	ACIDO	0.02
531	CHQ-922	218.0	219.9	500	500	111500	109370	-14.8	ACIDO	0.01
532	CHQ-922	219.9	222.0	500	500	73720	71860	-9.7	ACIDO	0.00
533	CHQ-922	222.0	223.9	500	500	73720	71860	-9.7	ACIDO	0.01
534	CHQ-922	223.9	226.0	500	500	73720	71860	-9.7	ACIDO	0.00
535	CHQ-922	226.0	228.0	500	500	73720	71860	-9.7	ACIDO	0.01
536	CHQ-922	228.0	230.5	500	500	73720	71860	-9.7	ACIDO	0.00
537	CHQ-922	230.5	233.0	500	500	65390	63360	-8.5	ACIDO	0.00
538	CHQ-922	233.0	234.5	500	500	65390	63360	-8.5	ACIDO	0.00
539	CHQ-922	234.5	236.0	500	500	65390	63360	-8.5	ACIDO	0.00
540	CHQ-922	236.0	238.0	500	500	65390	63360	-8.5	ACIDO	0.00
541	CHQ-922	238.0	239.5	500	500	65390	63360	-8.5	ACIDO	0.01
542	CHQ-922	239.5	241.5	500	500	108000	105540	-14.3	ACIDO	0.00
543	CHQ-922	241.5	243.0	500	500	108000	105540	-14.3	ACIDO	0.00
544	CHQ-922	243.0	244.5	500	500	108000	105540	-14.3	ACIDO	0.00
545	CHQ-922	244.5	246.0	500	500	108000	105540	-14.3	ACIDO	0.01
546	CHQ-922	246.0	248.2	500	500	108000	105540	-14.3	ACIDO	0.01
547	CHQ-922	248.2	250.0	500	500	108000	105540	-14.3	ACIDO	0.01
548	CHQ-922	250.0	252.0	500	500	73690	71510	-9.6	ACIDO	0.01
549	CHQ-922	252.0	253.8	500	500	73690	71510	-9.6	ACIDO	0.00
550	CHQ-922	253.8	256.0	500	500	73690	71510	-9.6	ACIDO	0.00
551	CHQ-922	256.0	257.5	500	500	73690	71510	-9.6	ACIDO	0.01
552	CHQ-922	257.5	260.0	500	500	73690	71510	-9.6	ACIDO	0.01
553	CHQ-922	260.0	262.5	500	500	67320	65430	-8.8	ACIDO	0.01
554	CHQ-922	262.5	264.7	500	500	67320	65430	-8.8	ACIDO	0.01
555	CHQ-922	264.7	266.8	500	500	67320	65430	-8.8	ACIDO	0.00
556	CHQ-922	266.8	268.5	500	500	67320	65430	-8.8	ACIDO	0.00
557	CHQ-922	268.5	270.0	500	500	67320	65430	-8.8	ACIDO	0.01
558	CHQ-922	270.0	271.5	500	500	45970	44410	-5.9	ACIDO	0.00
559	CHQ-922	271.5	273.1	500	500	45970	44410	-5.9	ACIDO	0.01
560	CHQ-922	273.1	275.0	500	500	45970	44410	-5.9	ACIDO	0.00
561	CHQ-922	275.0	276.5	500	500	45970	44410	-5.9	ACIDO	0.00
562	CHQ-922	276.5	278.0	500	500	45970	44410	-5.9	ACIDO	0.00
563	CHQ-922	278.0	279.8	500	500	45970	44410	-5.9	ACIDO	0.00
564	CHQ-922	279.8	282.0	500	500	67060	64460	-8.6	ACIDO	0.01
565	CHQ-922	282.0	284.0	500	500	67060	64460	-8.6	ACIDO	0.01
566	CHQ-922	284.0	285.5	500	500	67060	64460	-8.6	ACIDO	0.01
567	CHQ-922	285.5	287.0	500	500	67060	64460	-8.6	ACIDO	0.01
568	CHQ-922	287.0	288.6	500	500	67060	64460	-8.6	ACIDO	0.01
569	CHQ-922	288.6	290.5	500	500	67060	64460	-8.6	ACIDO	0.01
570	CHQ-922	290.5	292.0	500	500	74490	72420	-9.7	ACIDO	0.01
571	CHQ-922	292.0	293.5	500	500	74490	72420	-9.7	ACIDO	0.00
572	CHQ-922	293.5	295.4	500	500	74490	72420	-9.7	ACIDO	0.01
573	CHQ-922	295.4	297.0	500	500	74490	72420	-9.7	ACIDO	0.01
574	CHQ-922	297.0	298.5	500	500	74490	72420	-9.7	ACIDO	0.02
575	CHQ-922	298.5	300.0	500	500	74490	72420	-9.7	ACIDO	0.03
576	CHQ-922	300.0	302.0	1000	500	96600	94080	-12.7	ACIDO	0.03
577	CHQ-922	302.0	304.5	1000	500	96600	94080	-12.7	ACIDO	0.03
578	CHQ-922	304.5	306.0	1000	500	96600	94080	-12.7	ACIDO	0.03
579	CHQ-922	306.0	307.9	1000	500	96600	94080	-12.7	ACIDO	0.03
580	CHQ-922	307.9	309.6	500	500	131500	121730	-16.5	ACIDO	0.01
581	CHQ-922	309.6	311.4	500	500	131500	121730	-16.5	ACIDO	0.00
582	CHQ-922	311.4	313.4	500	500	131500	121730	-16.5	ACIDO	0.02
583	CHQ-922	313.4	315.0	500	500	131500	121730	-16.5	ACIDO	0.02
584	CHQ-922	315.0	316.5	500	500	140300	132400	-18.0	ACIDO	0.01
585	CHQ-922	316.5	318.4	500	500	140300	132400	-18.0	ACIDO	0.02
586	CHQ-922	318.4	318.5	500	500	140300	132400	-18.0	ACIDO	0.02
587	CHQ-922	318.5	320.4	500	500	140300	132400	-18.0	ACIDO	0.01
588	CHQ-922	320.4	320.8	500	500	140300	132400	-18.0	ACIDO	0.01
589	CHQ-922	320.8	323.0	500	500	86570	83530	-11.3	ACIDO	0.01
590	CHQ-922	323.0	324.6	500	500	86570	83530	-11.3	ACIDO	0.00
591	CHQ-922	324.6	326.3	500	500	86570	83530	-11.3	ACIDO	0.01
592	CHQ-922	326.3	328.0	500	500	86570	83530	-11.3	ACIDO	0.00
593	CHQ-922	328.0	329.5	500	500	86570	83530	-11.3	ACIDO	0.00
594	CHQ-922	329.5	331.0	500	500	62940	60550	-8.1	ACIDO	0.00
595	CHQ-922	331.0	332.6	500	500	62940	60550	-8.1	ACIDO	0.00
596	CHQ-922	332.6	334.5	500	500	62940	60550	-8.1	ACIDO	0.00
597	CHQ-922	334.5	336.0	500	500	62940	60550	-8.1	ACIDO	0.01
598	CHQ-922	336.0	338.0	500	500	62940	60550	-8.1	ACIDO	0.00
599	CHQ-922	338.0	340.0	500	500	62940	60550	-8.1	ACIDO	0.00
600	CHQ-922	340.0	342.0	500	500	100800	97620	-13.2	ACIDO	0.00
601	CHQ-922	342.0	344.0	500	500	100800	97620	-13.2	ACIDO	0.00
602	CHQ-922	344.0	346.5	500	500	100800	97620	-13.2	ACIDO	0.00
603	CHQ-922	346.5	348.9	500	500	100800	97620	-13.2	ACIDO	0.00
604	CHQ-922	348.9	350.5	500	500	100800	97620	-13.2	ACIDO	0.00
605	CHQ-922	350.5	352.0	500	500	128500	124720	-16.9	ACIDO	0.00
606	CHQ-922	352.0	354.0	500	500	128500	124720	-16.9	ACIDO	0.00
607	CHQ-922	354.0	356.0	500	500	128500	124720	-16.9	ACIDO	0.00
608	CHQ-922	356.0	357.9	500	500	130800	126340	-17.1	ACIDO	0.00
609	CHQ-922	357.9	360.0	500	500	130800	126340	-17.1	ACIDO	0.01
610	CHQ-922	360.0	362.4	500	500	130800	126340	-17.1	ACIDO	0.00
611	CHQ-922	362.4	364.0	500	500	77370	75110	-10.1	ACIDO	0.01
612	CHQ-922	364.0	366.0	500	500	77370	75110	-10.1	ACIDO	0.01
613	CHQ-922	366.0	368.1	500	500	77370	75110	-10.1	ACIDO	0.00
614	CHQ-922	368.1	370.0	500	500	77370	75110	-10.1	ACIDO	0.00
615	CHQ-922	370.0	371.6	500	500	74320	71870	-9.7	ACIDO	0.00
616	CHQ-922	371.6	373.4	500	500	74320	71870	-9.7	ACIDO	0.00
617	CHQ-922	373.4	375.0	500	500	74320	71870	-9.7	ACIDO	0.01
618	CHQ-922	375.0	377.0	500	500	74320	71870	-9.7	ACIDO	0.00
619	CHQ-922	377.0	378.7	500	500	74320	71870	-9.7	ACIDO	0.00
620	CHQ-922	378.7	380.1	500	500	74320	71870	-9.7	ACIDO	0.00
621	CHQ-922	380.1	386.0	1130	500	144400	134350	-18.2	ACIDO	0.00
622	CHQ-922	386.0	388.0	1130	500	144400	134350	-18.2	ACIDO	0.00
623	CHQ-922	401.5	403.0	1440	500	304100	290610	-39.6	ACIDO	0.00
624	CHQ-922	403.0	405.5	1440	500	304100	290610	-39.6	ACIDO	0.01
625	CHQ-922	405.5	407.9	1440	500	304100	290610	-39.6	ACIDO	0.03
626	CHQ-922	407.9	410.0	1440	500	304100	290610	-39.6	ACIDO	0.03
627	CHQ-922	410.0	412.0	1500	500	100900	92890	-12.5	ACIDO	0.03
628	CHQ-922	412.0	413.8	1500	500	100900	92890	-12.5	ACIDO	0.03
629	CHQ-922	413.8	416.9	1500	500	100900	92890	-12.5	ACIDO	0.03
630	CHQ-923	98.0	100.0	500	500	33260	31820	-4.2	ACIDO	0.08
631	CHQ-923	108.0	110.5	500	500	43650	41620	-5.5	ACIDO	0.08
632	CHQ-923	110.5	112.9	500	500	33350	31400	-4.1	ACIDO	0.08
633	CHQ-923	114.5	116.0	500	500	33350	31400	-4.1	ACIDO	0.10
634	CHQ-923	116.0	118.0	500	500	33350	31400	-4.1	ACIDO	0.09
635	CHQ-923	214.0	216.0	500	500	186900	182430	-24.8	ACIDO	0.04
636	CHQ-923	216.0	218.0	500	500	186900	182430	-24.8	ACIDO	0.02
637	CHQ-923	218.0	219.5	500	500	186900	182430	-24.8	ACIDO	0.01
638	CHQ-923	219.5	221.3	500	500	186900	182430	-24.8	ACIDO	0.00
639	CHQ-923	221.3	223.0	500	500	200400	195510	-26.6	ACIDO	0.02
640	CHQ-923	223.0	224.5	500	500	200400	195510	-26.6	ACIDO	0.02
641	CHQ-923	224.5	226.8	500	500	200400	195510	-26.6	ACIDO	0.00
642	CHQ-923	226.8	228.5	500	500	200400	195510	-26.6	ACIDO	0.02
643	CHQ-923	228.5	230.0	500	500	200400	195510	-26.6	ACIDO	0.02
644	CHQ-923	230.0	232.0	500	500	132900	130030	-17.6	ACIDO	0.02
645	CHQ-923	232.0	234.0	500	500	132900	130030	-17.6	ACIDO	0.02
646	CHQ-923	234.0	236.0	500	500	132900	130030	-17.6	ACIDO	0.02
647	CHQ-923	236.0	238.0	500	500	132900	130030	-17.6	ACIDO	0.01
648	CHQ-923	238.0	240.1	500	500	132900	130030	-17.6	ACIDO	0.01
649	CHQ-923	240.1	242.0	1160	500	106500	103490	-14.0	ACIDO	0.02
650	CHQ-923	242.0	244.0	1160	500	106500	103490	-14.0	ACIDO	0.01
651	CHQ-923	244.0	245.5	1160	500	106500	103490	-14.0	ACIDO	0.02
652	CHQ-923	245.5	247.1	1160	500	106500	103490	-14.0	ACIDO	0.01
653	CHQ-923	247.1	249.5	1160	500	106500	103490	-14.0	ACIDO	0.02
654	CHQ-923	249.5	252.0	1310	500	163300	156730	-21.3	ACIDO	0.02
655	CHQ-923	252.0	254.0	1310	500	163300	156730	-21.3	ACIDO	0.01
656	CHQ-923	254.0	256.0	1310	500	163300	156730	-21.3	ACIDO	0.02
657	CHQ-923	256.0	257.5	1310	500	163300	156730	-21.3	ACIDO	0.02
658	CHQ-923	257.5	259.3	1310	500	163300	156730	-21.3	ACIDO	0.02
659	CHQ-923	259.3	261.0	500	500	48480	47980	-6.4	ACIDO	0.00
660	CHQ-923	261.0	262.5	500	500	48480	47980	-6.4	ACIDO	0.00
661	CHQ-923	262.5	264.0	500	500	48480	47980	-6.4	ACIDO	0.02
662	CHQ-923	264.0	266.0	500	500	48480	47980	-6.4	ACIDO	0.01
663	CHQ-923	266.0	268.0	500	500	48480	47980	-6.4	ACIDO	0.02
664	CHQ-923	268.0	270.0	500	500	48480	47980	-6.4	ACIDO	0.01
665	CHQ-923	270.0	272.0	500	500	48480	47980	-6.4	ACIDO	0.01
666	CHQ-923	272.0	274.0	500	500	22070	21570	-2.8	ACIDO	0.01
667	CHQ-923	274.0	276.0	500	500	22070	21570	-2.8	ACIDO	0.01
668	CHQ-923	276.0	278.2	500	500	22070	21570	-2.8	ACIDO	0.00
669	CHQ-923	278.2	280.0	500	500	22070	21570	-2.8	ACIDO	0.03
670	CHQ-923	280.0	281.5	500	500	22070	21570	-2.8	ACIDO	0.01
671	CHQ-923	281.5	283.2	500	500	22070	21570	-2.8	ACIDO	0.01
672	CHQ-927	230.0	240.0	500	500	84690	83140	-11.2	ACIDO	0.04
673	CHQ-927	240.0	250.0	2240	500	89650	87840	-11.9	ACIDO	0.01
674	CHQ-927	250.0	254.0	500	500	64130	62780	-8.4	ACIDO	0.01
675	CHQ-927	254.0	260.1	500	500	44800	43660	-5.8	ACIDO	0.02
676	CHQ-927	299.4	310.0	500	500	106400	102290	-13.8	ACIDO	0.03
677	CHQ-927	310.0	320.0	500	500	144800	140840	-19.1	ACIDO	0.04
678	CHQ-927	320.0	330.0	500	500	117900	113350	-15.3	ACIDO	0.01
679	CHQ-927	330.0	340.0	500	500	105800	102110	-13.8	ACIDO	0.01
680	CHQ-927	340.0	350.9	500	500	62280	61070	-8.2	ACIDO	0.00
681	CHQ-927	350.9	360.4	1170	500	75080	73130	-9.8	ACIDO	0.01
682	CHQ-927	360.4	370.0	1470	500	114000	108000	-14.6	ACIDO	0.01
683	CHQ-927	370.0	381.9	500	500	144700	135300	-18.4	ACIDO	0.04
684	CHQ-927	384.9	390.0	500	500	143500	129010	-17.5	ACIDO	0.05
685	CHQ-927	390.0	400.5	1140	500	211100	197980	-26.9	ACIDO	0.05
686	CHQ-927	400.5	411.0	1390	500	124300	118630	-16.1	ACIDO	0.01
687	CHQ-935	186.6	191.5	500	500	106600	102140	-13.8	ACIDO	0.05
688	CHQ-935	191.5	200.5	500	500	123000	118530	-16.1	ACIDO	0.04
689	CHQ-935	210.0	220.0	500	500	34070	31050	-4.1	ACIDO	0.01
690	CHQ-935	220.0	230.0	2560	1500	43950	31240	-3.7	ACIDO	0.01
691	CHQ-935	230.0	241.1	500	500	12790	7440	-0.8	LIGERAMENTE ACIDO	0.03
692	CHQ-963	412.0	423.8	500	500	130800	128080	-17.4	ACIDO	0.02
693	CHQ-963	433.1	436.1	500	500	261200	258610	-35.2	ACIDO	0.00
694	CHQ-969	389.9	398.9	500	500	158200	144890	-19.7	ACIDO	0.04
695	CHQ-969	398.9	408.5	500	500	44300	38610	-5.1	ACIDO	0.01
696	CHQ-970	39.4	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
697	CHQ-973	40.5	45.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
698	CHQ-973	169.5	180.5	500	500	32660	32160	-4.2	ACIDO	0.05
699	CHQ-973	180.5	190.0	500	500	69550	68010	-9.1	ACIDO	0.00
700	CHQ-973	190.0	200.4	500	500	42980	41900	-5.6	ACIDO	0.01
701	CHQ-973	200.4	209.5	500	500	73950	72930	-9.8	ACIDO	0.02
702	CHQ-973	209.5	221.0	500	500	78190	75780	-10.2	ACIDO	0.01
703	CHQ-973	221.0	230.7	500	500	42360	41860	-5.6	ACIDO	0.01
704	CHQ-973	230.7	239.0	500	500	74480	72400	-9.7	ACIDO	0.00
705	CHQ-973	239.0	249.5	500	500	39480	38440	-5.1	ACIDO	0.06
706	CHQ-973	249.5	260.5	500	500	38320	37820	-5.0	ACIDO	0.05
707	CHQ-973	270.5	279.5	500	500	71530	70500	-9.5	ACIDO	0.03
708	CHQ-973	320.1	329.5	500	500	113300	111570	-15.1	ACIDO	0.04
709	CHQ-973	329.5	340.0	500	500	81140	79070	-10.6	ACIDO	0.01
710	CHQ-973	340.0	350.5	500	500	80360	76000	-10.2	ACIDO	0.01
711	CHQ-973	350.5	360.0	1210	500	93290	87400	-11.8	ACIDO	0.01
712	CHQ-973	360.0	370.3	1590	500	111800	103290	-14.0	ACIDO	0.02
713	CHQ-973	370.3	380.8	1650	500	83780	77710	-10.5	ACIDO	0.02
714	CHQ-973	380.8	390.9	1490	500	90620	85000	-11.5	ACIDO	0.01
715	CHQ-973	390.9	400.8	500	500	183800	174190	-23.7	ACIDO	0.01
716	CHQ-973	400.8	408.8	500	500	231800	213150	-29.0	ACIDO	0.01
717	CHQ-973	408.8	416.5	500	500	156100	150580	-20.4	ACIDO	0.01
718	CHQ-976	20.8	31.0	500	500	27850	26410	-3.4	ACIDO	0.08
719	CHQ-976	250.5	260.0	500	500	142600	135390	-18.4	ACIDO	0.01
720	CHQ-976	260.0	270.5	500	500	144400	137300	-18.6	ACIDO	0.01
721	CHQ-976	270.5	280.5	500	500	54140	47550	-6.3	ACIDO	0.05

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
722	CHQ-976	280.5	284.9	500	500	79170	66910	-9.0	ACIDO	0.02
723	CHQ-976	284.9	297.2	500	500	42940	39190	-5.2	ACIDO	0.07
724	CHQ-976	297.2	306.7	500	500	131300	127750	-17.3	ACIDO	0.01
725	CHQ-976	306.7	313.3	1420	500	182200	177660	-24.2	ACIDO	0.01
726	CHQ-976	316.4	321.5	500	500	117500	112380	-15.2	ACIDO	0.01
727	CHQ-976	321.5	330.5	500	500	69500	66110	-8.9	ACIDO	0.00
728	CHQ-976	330.5	336.0	500	500	76080	72720	-9.8	ACIDO	0.01
729	CHQ-976	336.0	345.1	500	500	410000	397430	-54.3	ACIDO	0.00
730	CHQ-976	355.9	363.1	1220	500	119400	115010	-15.6	ACIDO	0.01
731	CHQ-978	39.4	49.5	500	500	14760	13680	-1.7	ACIDO	0.09
732	CHQ-978	49.5	60.0	500	500	29960	29460	-3.9	ACIDO	0.09
733	CHQ-978	60.0	70.0	500	500	28340	27840	-3.6	ACIDO	0.07
734	CHQ-978	209.5	218.0	500	500	78990	77130	-10.4	ACIDO	0.05
735	CHQ-978	240.0	250.0	500	500	108700	105660	-14.3	ACIDO	0.07
736	CHQ-978	250.0	262.5	500	500	93580	89160	-12.0	ACIDO	0.04
737	CHQ-978	262.5	270.6	500	500	63980	60880	-8.2	ACIDO	0.06
738	CHQ-978	270.6	280.5	500	500	39160	36440	-4.8	ACIDO	0.07
739	CHQ-978	280.5	290.8	500	500	57650	54370	-7.3	ACIDO	0.03
740	CHQ-978	290.8	298.0	500	500	47340	45340	-6.0	ACIDO	0.01
741	CHQ-978	298.0	303.8	500	500	50210	47930	-6.4	ACIDO	0.01
742	CHQ-978	303.8	310.0	500	500	39910	38110	-5.0	ACIDO	0.03
743	CHQ-978	310.0	314.8	500	500	57100	54830	-7.3	ACIDO	0.03
744	CHQ-992	10.0	20.0	500	500	64240	63080	-8.5	ACIDO	0.04
745	CHQ-992	360.0	369.9	500	500	133700	129360	-17.5	ACIDO	0.10
746	CHQ-992	409.5	418.1	500	500	98500	81770	-11.0	ACIDO	0.04
747	CHQ-993	260.6	270.5	500	500	250900	245470	-33.4	ACIDO	0.02
748	CHQ-993	270.5	281.5	500	500	224000	220150	-30.0	ACIDO	0.01
749	CHQ-993	281.5	291.0	500	500	84540	80040	-10.8	ACIDO	0.01
750	CHQ-993	291.0	301.1	500	500	92500	89260	-12.0	ACIDO	0.01
751	CHQ-993	301.1	310.0	500	500	102700	97610	-13.2	ACIDO	0.01
752	CHQ-993	310.0	320.9	500	500	132400	123820	-16.8	ACIDO	0.01
753	CHQ-993	320.9	330.0	500	500	65180	63630	-8.5	ACIDO	0.00
754	CHQ-993	330.0	340.2	500	500	99880	97560	-13.2	ACIDO	0.00
755	CHQ-993	340.2	350.0	500	500	63160	61790	-8.3	ACIDO	0.01
756	CHQ-993	350.0	360.0	500	500	46520	45340	-6.0	ACIDO	0.00
757	CHQ-993	360.0	370.0	500	500	75380	69670	-9.4	ACIDO	0.00
758	CHQ-993	370.0	380.0	500	500	39020	37880	-5.0	ACIDO	0.00
759	CHQ-993	380.0	388.0	500	500	22400	21900	-2.8	ACIDO	0.00
760	CHQ-993	388.0	392.1	500	500	19900	19400	-2.5	ACIDO	0.00
761	CHQ-995	340.5	349.1	500	500	56730	54210	-7.2	ACIDO	0.04
762	CHQ-995	349.1	357.6	500	500	197300	193160	-26.3	ACIDO	0.02
763	CHQ-995	357.6	367.2	500	500	182000	178830	-24.3	ACIDO	0.01
764	CHQ-995	367.2	378.0	500	500	122400	119830	-16.2	ACIDO	0.01
765	CHQ-995	378.0	383.7	500	500	155700	151760	-20.6	ACIDO	0.01
766	CHQ-996	51.0	60.0	500	500	1560	1060	0.0	INERTE	0.05
767	CHQ-996	60.0	70.0	500	500	1190	690	0.1	INERTE	0.04
768	CHQ-996	70.0	74.0	500	500	7070	6570	-0.7	LIGERAMENTE ACIDO	0.06
769	CHQ-996	74.0	81.1	500	500	62550	61300	-8.2	ACIDO	0.07
770	CHQ-996	210.0	220.0	500	500	43970	42480	-5.6	ACIDO	0.01
771	CHQ-996	220.0	230.0	500	500	50360	48240	-6.4	ACIDO	0.01
772	CHQ-996	251.5	260.0	500	500	86260	83080	-11.2	ACIDO	0.01
773	CHQ-996	260.0	270.0	500	500	86610	83020	-11.2	ACIDO	0.00
774	CHQ-996	270.0	281.0	500	500	97990	92750	-12.5	ACIDO	0.01
775	CHQ-996	281.0	291.5	500	500	92180	87370	-11.8	ACIDO	0.01
776	CHQ-996	291.5	300.0	500	500	76820	73400	-9.9	ACIDO	0.01
777	CHQ-996	300.0	310.0	500	500	70260	67960	-9.1	ACIDO	0.01
778	CHQ-996	310.0	320.0	500	500	92900	89870	-12.1	ACIDO	0.01
779	CHQ-996	320.0	331.4	500	500	81860	79070	-10.6	ACIDO	0.01
780	CHQ-996	331.4	340.0	500	500	88950	85370	-11.5	ACIDO	0.00
781	CHQ-996	340.0	350.0	500	500	50080	48250	-6.4	ACIDO	0.01
782	CHQ-996	350.0	360.0	500	500	66300	63270	-8.5	ACIDO	0.01
783	CHQ-996	360.0	370.5	500	500	41930	39940	-5.3	ACIDO	0.02
784	CHQ-996	370.5	380.5	500	500	73350	69590	-9.4	ACIDO	0.01
785	CHQ-996	380.5	385.8	500	500	50360	47810	-6.4	ACIDO	0.00
786	CHQ-996	385.8	392.0	500	500	55250	53200	-7.1	ACIDO	0.00
787	CHQ-996	392.0	401.0	500	500	58850	56000	-7.5	ACIDO	0.00
788	CHQ-996	401.0	411.5	500	500	81280	78010	-10.5	ACIDO	0.00
789	CHQ-996	411.5	421.5	500	500	83430	79160	-10.7	ACIDO	0.00
790	CHQ-996	421.5	431.1	500	500	67180	64780	-8.7	ACIDO	0.00
791	CHQ-996	431.1	436.1	500	500	52390	51290	-6.8	ACIDO	0.00
792	CHQPZ-	248.0	256.0	200	200	102000	101060	-13.8	ACIDO	0.04
793	CHQPZ-	256.0	264.0	200	200	94900	93890	-12.8	ACIDO	0.03
794	CHQPZ-	272.0	280.0	200	200	36300	34780	-4.7	ACIDO	0.08
795	CHQPZ-	280.0	288.0	200	200	65600	61540	-8.4	ACIDO	0.05
796	CHQPZ-	296.0	304.0	200	200	109000	100580	-13.7	ACIDO	0.02
797	CHQPZ-	304.0	312.0	200	200	95900	84000	-11.4	ACIDO	0.02
798	CHQPZ-	312.0	318.0	200	200	71400	64810	-8.8	ACIDO	0.00
799	DST-055	10.0	19.8	500	500	2840	1790	-0.1	INERTE	0.09
800	DST-055	19.8	30.7	500	500	1690	530	0.1	LIGERAMENTE BASICO	0.06
801	DST-055	70.0	80.0	500	500	1570	540	0.1	LIGERAMENTE BASICO	0.09
802	DST-056	220.1	230.4	500	500	85780	82660	-11.1	ACIDO	0.02
803	DST-056	265.5	275.4	500	500	69390	67020	-9.0	ACIDO	0.03
804	DST-056	275.4	282.4	500	500	71250	68630	-9.2	ACIDO	0.02
805	DST-056	282.4	290.6	500	500	97350	93730	-12.7	ACIDO	0.01
806	DST-056	293.3	300.0	500	500	104700	100330	-13.6	ACIDO	0.00
807	DST-056	300.0	310.0	500	500	67310	63680	-8.5	ACIDO	0.00
808	DST-056	310.0	320.0	500	500	32440	30190	-4.0	ACIDO	0.00
809	DST-056	320.0	330.0	1760	500	36930	32070	-4.2	ACIDO	0.00
810	DST-056	330.0	338.7	500	500	37190	33200	-4.4	ACIDO	0.00
811	DST-057	310.5	319.5	1290	500	154200	148300	-20.1	ACIDO	0.04
812	DST-057	372.6	383.8	500	500	218100	211500	-28.8	ACIDO	0.04
813	DST-057	385.8	387.2	500	500	437600	428690	-58.5	ACIDO	0.01
814	DST-057	388.2	398.0	3210	1160	40910	37890	-4.8	ACIDO	0.01
815	DST-057	398.0	402.5	4930	1940	25660	21350	-2.2	ACIDO	0.00
816	DST-058	338.2	349.7	500	500	129600	127600	-17.3	ACIDO	0.03
817	DST-058	349.7	360.5	500	500	240500	235710	-32.1	ACIDO	0.01
818	DST-058	360.5	378.0	500	500	199700	195380	-26.6	ACIDO	0.00

Apéndice 4
Resultados Análisis NCV de Muestras de Mineral

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
819	CHQ-075	160.0	168.0	780	220	1570	350	0.0	INERTE	0.13
820	CHQ-075	224.0	232.0	710	200	1000	10	0.1	INERTE	0.16
821	CHQ-1001	10.0	20.0	500	500	78470	76510	-10.3	ACIDO	4.02
822	CHQ-1001	20.0	29.3	500	500	65330	64140	-8.6	ACIDO	1.91
823	CHQ-1001	29.3	40.0	500	500	76170	74520	-10.0	ACIDO	2.18
824	CHQ-1001	40.0	50.5	500	500	82400	81900	-11.0	ACIDO	0.75
825	CHQ-1001	50.5	60.0	500	500	96270	95190	-12.9	ACIDO	1.63
826	CHQ-1001	60.0	70.0	500	500	76940	75560	-10.2	ACIDO	1.77
827	CHQ-1001	70.0	80.7	500	500	85270	82980	-11.2	ACIDO	4.32
828	CHQ-1001	80.7	88.0	500	500	77190	75640	-10.2	ACIDO	1.44
829	CHQ-1001	88.0	92.5	500	500	49960	49460	-6.6	ACIDO	0.68
830	CHQ-1002	19.5	29.0	500	500	88820	87380	-11.8	ACIDO	2.63
831	CHQ-1002	29.0	40.9	500	500	82900	81120	-10.9	ACIDO	1.74
832	CHQ-1002	40.9	49.0	500	500	97730	97230	-13.1	ACIDO	0.74
833	CHQ-1002	49.0	60.0	500	500	102000	100820	-13.6	ACIDO	1.03
834	CHQ-1002	60.0	69.0	500	500	69210	68160	-9.2	ACIDO	1.29
835	CHQ-1002	69.0	80.0	500	500	60800	58920	-7.9	ACIDO	2.59
836	CHQ-1002	80.0	90.0	500	500	68300	67120	-9.0	ACIDO	1.03
837	CHQ-1002	90.0	100.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.64
838	CHQ-1002	100.6	110.5	500	500	24240	22480	-2.9	ACIDO	0.90
839	CHQ-1002	110.5	120.0	500	500	14750	13650	-1.7	ACIDO	1.07
840	CHQ-1002	120.0	130.0	500	500	64150	62250	-8.3	ACIDO	2.14
841	CHQ-1002	130.0	140.0	500	500	107800	106460	-14.4	ACIDO	2.22
842	CHQ-1002	140.0	150.0	500	500	28240	27140	-3.5	ACIDO	0.78
843	CHQ-1002	150.0	160.0	500	500	10120	9100	-1.1	ACIDO	1.13
844	CHQ-1002	160.0	170.0	500	500	5460	4960	-0.5	LIGERAMENTE ACIDO	1.00
845	CHQ-1002	170.0	178.5	500	500	30690	29610	-3.9	ACIDO	0.62
846	CHQ-1002	181.1	191.2	500	500	56530	55130	-7.4	ACIDO	1.11
847	CHQ-1002	191.2	200.0	500	500	2450	1950	-0.1	INERTE	0.30
848	CHQ-1002	200.0	210.6	500	500	4030	3530	-0.3	LIGERAMENTE ACIDO	0.27
849	CHQ-1002	210.6	220.0	500	500	19910	18430	-2.3	ACIDO	1.44
850	CHQ-1002	220.0	229.5	500	500	25850	24440	-3.2	ACIDO	2.55
851	CHQ-1002	229.5	240.0	500	500	60560	60060	-8.0	ACIDO	2.44
852	CHQ-1002	240.0	250.0	500	500	60160	59660	-8.0	ACIDO	1.25
853	CHQ-1002	250.0	260.1	500	500	52070	49990	-6.7	ACIDO	3.51
854	CHQ-1002	260.1	265.6	500	500	29460	28960	-3.8	ACIDO	0.90
855	CHQ-1011	29.5	39.5	500	500	63770	62620	-8.4	ACIDO	1.03
856	CHQ-1011	39.5	50.0	500	500	51610	50390	-6.7	ACIDO	0.62
857	CHQ-1011	50.0	60.3	500	500	71770	70390	-9.5	ACIDO	1.28
858	CHQ-1011	60.3	70.0	500	500	72170	70700	-9.5	ACIDO	1.96
859	CHQ-1011	70.0	80.0	500	500	58580	58080	-7.8	ACIDO	0.86
860	CHQ-1011	80.0	89.6	500	500	64020	63520	-8.5	ACIDO	1.92
861	CHQ-1011	89.6	100.0	500	500	69450	68950	-9.3	ACIDO	1.44
862	CHQ-1011	100.0	101.0	500	500	63060	62560	-8.4	ACIDO	1.08
863	CHQ-1011	101.0	120.0	500	500	61030	60530	-8.1	ACIDO	1.18
864	CHQ-1011	120.0	130.0	500	500	69770	69270	-9.3	ACIDO	0.92
865	CHQ-1011	130.0	138.0	500	500	64190	63690	-8.5	ACIDO	1.16
866	CHQ-1011	138.0	143.1	500	500	44760	44260	-5.9	ACIDO	1.04
867	CHQ-1011	143.1	151.7	500	500	56850	55260	-7.4	ACIDO	2.37
868	CHQ-1011	151.7	160.0	500	500	41930	41430	-5.5	ACIDO	1.20
869	CHQ-1011	160.0	169.1	500	500	16800	16300	-2.0	ACIDO	0.44
870	CHQ-1011	169.1	179.5	500	500	14810	14310	-1.8	ACIDO	0.35
871	CHQ-1011	179.5	189.0	500	500	12890	11410	-1.4	ACIDO	0.65
872	CHQ-1011	189.0	200.0	500	500	31940	30570	-4.0	ACIDO	1.03
873	CHQ-1011	200.0	210.0	500	500	27100	25800	-3.4	ACIDO	1.18
874	CHQ-1011	210.0	220.0	500	500	23910	21230	-2.7	ACIDO	3.59
875	CHQ-1011	220.0	226.0	500	500	27370	25210	-3.3	ACIDO	0.65
876	CHQ-1011	226.0	230.0	500	500	30030	27600	-3.6	ACIDO	2.31
877	CHQ-1011	230.0	239.0	500	500	65240	63460	-8.5	ACIDO	1.79
878	CHQ-1011	239.0	249.0	500	500	85400	84170	-11.3	ACIDO	0.50
879	CHQ-1011	249.0	259.0	500	500	101400	99300	-13.4	ACIDO	1.79
880	CHQ-1011	259.0	270.5	500	500	88220	86090	-11.6	ACIDO	1.78
881	CHQ-1011	270.5	280.0	500	500	73430	71370	-9.6	ACIDO	1.10
882	CHQ-1011	280.0	290.0	500	500	48390	46830	-6.2	ACIDO	1.27
883	CHQ-1011	290.0	300.0	500	500	50720	48190	-6.4	ACIDO	1.86
884	CHQ-1011	300.0	304.0	500	500	46130	42700	-5.7	ACIDO	1.98
885	CHQ-1011	304.0	309.5	500	500	75010	67990	-9.1	ACIDO	2.35
886	CHQ-1011	309.5	319.5	500	500	107400	98180	-13.3	ACIDO	0.91
887	CHQ-1011	319.5	329.5	1210	500	144900	133420	-18.1	ACIDO	0.97
888	CHQ-1011	329.5	339.4	500	500	166000	152260	-20.7	ACIDO	1.71
889	CHQ-1011	339.4	347.5	500	500	167200	153240	-20.8	ACIDO	2.06
890	CHQ-1011	347.5	352.6	500	500	182700	168930	-23.0	ACIDO	0.39
891	CHQ-1012	5.1	10.5	500	500	35470	34970	-4.6	ACIDO	0.89
892	CHQ-1012	10.5	20.4	500	500	36530	35490	-4.7	ACIDO	1.26
893	CHQ-1012	20.4	30.5	500	500	19640	18470	-2.3	ACIDO	0.97
894	CHQ-1012	30.5	40.0	500	500	21840	21340	-2.7	ACIDO	0.40
895	CHQ-1012	40.0	51.0	500	500	32160	29030	-3.8	ACIDO	3.35
896	CHQ-1012	51.0	61.0	500	500	24890	24390	-3.2	ACIDO	0.78
897	CHQ-1012	61.0	70.5	500	500	33750	33250	-4.4	ACIDO	0.60
898	CHQ-1012	70.5	80.0	500	500	48690	47120	-6.3	ACIDO	1.15
899	CHQ-1012	80.0	90.0	500	500	74170	71650	-9.6	ACIDO	0.81
900	CHQ-1012	90.0	100.0	500	500	51530	49000	-6.5	ACIDO	1.44
901	CHQ-1012	100.0	110.5	500	500	72880	68990	-9.3	ACIDO	2.09
902	CHQ-1012	110.5	119.5	500	500	72360	69690	-9.4	ACIDO	5.31
903	CHQ-1012	119.5	130.0	500	500	62740	60020	-8.0	ACIDO	2.26
904	CHQ-1012	130.0	141.0	500	500	109000	107110	-14.5	ACIDO	10.06
905	CHQ-1012	141.0	151.0	500	500	91750	89300	-12.1	ACIDO	2.58
906	CHQ-1012	151.0	161.0	500	500	77740	75010	-10.1	ACIDO	2.55
907	CHQ-1012	161.0	170.5	500	500	54270	51940	-6.9	ACIDO	2.36
908	CHQ-1012	170.5	180.1	500	500	95060	91530	-12.4	ACIDO	3.62
909	CHQ-1012	180.1	189.5	500	500	18530	16920	-2.1	ACIDO	1.75
910	CHQ-1012	189.5	199.0	500	500	6870	6370	-0.7	LIGERAMENTE ACIDO	1.77
911	CHQ-1012	199.0	210.0	500	500	27210	25960	-3.4	ACIDO	2.83
912	CHQ-1012	210.0	219.2	500	500	39720	39220	-5.2	ACIDO	1.99
913	CHQ-1012	219.2	229.0	500	500	109600	106790	-14.4	ACIDO	2.65
914	CHQ-1012	229.0	237.8	500	500	106000	103590	-14.0	ACIDO	1.55
915	CHQ-1013	1.9	10.8	500	500	3640	3140	-0.2	LIGERAMENTE ACIDO	0.99
916	CHQ-1013	10.8	20.0	500	500	36210	34060	-4.5	ACIDO	0.44
917	CHQ-1013	20.0	29.5	500	500	45210	44710	-5.9	ACIDO	0.51
918	CHQ-1013	29.5	39.5	500	500	46320	45820	-6.1	ACIDO	0.37
919	CHQ-1013	39.5	49.5	500	500	72820	72320	-9.7	ACIDO	0.26
920	CHQ-1013	49.5	61.0	500	500	108800	107770	-14.6	ACIDO	0.32
921	CHQ-1013	71.5	80.7	500	500	39770	37670	-5.0	ACIDO	1.07
922	CHQ-1013	80.7	90.9	500	500	8130	6240	-0.7	LIGERAMENTE ACIDO	2.95
923	CHQ-1013	90.9	100.0	500	500	68160	65420	-8.8	ACIDO	14.54
924	CHQ-1013	100.0	110.0	500	500	28690	28190	-3.7	ACIDO	4.29
925	CHQ-1013	110.0	120.0	500	500	23420	21210	-2.7	ACIDO	5.20
926	CHQ-1013	120.0	130.0	500	500	24280	22990	-3.0	ACIDO	0.74
927	CHQ-1013	130.0	139.5	500	500	73000	71620	-9.6	ACIDO	0.42
928	CHQ-1013	139.5	149.5	500	500	56930	55210	-7.4	ACIDO	9.12
929	CHQ-1013	149.5	159.6	500	500	77670	75480	-10.2	ACIDO	11.16
930	CHQ-1013	159.6	170.5	500	500	42580	40560	-5.4	ACIDO	3.43
931	CHQ-1013	170.5	180.5	500	500	44140	39840	-5.3	ACIDO	1.01
932	CHQ-1013	180.5	190.0	500	500	66470	57980	-7.8	ACIDO	7.88
933	CHQ-1013	190.0	199.9	500	500	60140	54100	-7.2	ACIDO	6.64
934	CHQ-1013	199.9	209.0	500	500	64120	61430	-8.2	ACIDO	0.83
935	CHQ-1013	209.0	219.0	500	500	102800	97970	-13.2	ACIDO	0.27
936	CHQ-1013	219.0	229.0	500	500	126800	122410	-16.6	ACIDO	0.85
937	CHQ-1013	229.0	239.0	500	500	89560	85850	-11.6	ACIDO	9.92
938	CHQ-1013	239.0	249.5	500	500	78930	75750	-10.2	ACIDO	3.73

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
939	CHQ-1013	249.5	259.0	500	500	21200	19980	-2.6	ACIDO	0.36
940	CHQ-1013	259.0	269.5	500	500	19100	18090	-2.3	ACIDO	0.31
941	CHQ-1013	269.5	279.5	500	500	91710	89730	-12.1	ACIDO	0.22
942	CHQ-1013	279.5	289.5	500	500	83290	80420	-10.8	ACIDO	0.22
943	CHQ-1014	12.4	20.0	500	500	1020	0	0.2	LIGERAMENTE BASICO	0.20
944	CHQ-1014	20.0	30.0	500	500	1860	0	0.2	LIGERAMENTE BASICO	0.56
945	CHQ-1014	30.0	40.0	500	500	1260	0	0.2	LIGERAMENTE BASICO	0.16
946	CHQ-1014	70.0	80.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.29
947	CHQ-1014	90.0	100.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.83
948	CHQ-1014	100.0	110.0	500	500	1400	0	0.2	LIGERAMENTE BASICO	0.62
949	CHQ-1014	110.0	120.0	500	500	1930	270	0.1	LIGERAMENTE BASICO	0.23
950	CHQ-1014	120.0	130.0	500	500	3010	530	0.1	LIGERAMENTE BASICO	0.37
951	CHQ-1014	130.0	140.0	500	500	2820	710	0.1	INERTE	0.88
952	CHQ-1014	140.0	150.0	500	500	1180	60	0.2	LIGERAMENTE BASICO	0.87
953	CHQ-1014	150.0	160.2	500	500	1030	0	0.2	LIGERAMENTE BASICO	0.16
954	CHQ-1014	160.2	169.7	500	500	3030	580	0.1	LIGERAMENTE BASICO	0.11
955	CHQ-1014	169.7	180.0	500	500	2160	350	0.1	LIGERAMENTE BASICO	0.21
956	CHQ-1014	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.17
957	CHQ-1014	190.0	200.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
958	CHQ-1014	200.0	210.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
959	CHQ-1014	210.0	219.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.11
960	CHQ-1014	219.0	230.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.26
961	CHQ-1014	230.0	240.0	500	500	1600	1100	0.0	INERTE	0.14
962	CHQ-1014	240.0	250.0	500	500	17100	16600	-2.1	ACIDO	0.12
963	CHQ-1014	250.0	260.0	500	500	101800	101300	-13.7	ACIDO	0.34
964	CHQ-1014	260.0	270.0	500	500	117200	115920	-15.7	ACIDO	0.84
965	CHQ-1014	270.0	280.0	500	500	14790	12090	-1.5	ACIDO	1.91
966	CHQ-1014	280.0	290.0	500	500	7340	1900	-0.1	INERTE	1.51
967	CHQ-1014	290.0	300.0	500	500	5760	2310	-0.1	LIGERAMENTE ACIDO	1.86
968	CHQ-1014	300.0	308.0	500	500	7600	7100	-0.8	LIGERAMENTE ACIDO	1.21
969	CHQ-1014	308.0	312.6	500	500	6460	3160	-0.2	LIGERAMENTE ACIDO	1.71
970	CHQ-1015	0.0	10.0	500	500	1400	30	0.2	LIGERAMENTE BASICO	0.52
971	CHQ-1015	10.0	20.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.31
972	CHQ-1015	20.0	30.0	500	500	1170	0	0.2	LIGERAMENTE BASICO	0.84
973	CHQ-1015	30.0	40.0	1000	500	2740	0	0.2	LIGERAMENTE BASICO	0.57
974	CHQ-1015	40.0	50.2	500	500	2500	0	0.2	LIGERAMENTE BASICO	0.13
975	CHQ-1015	70.0	80.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.17
976	CHQ-1015	80.0	90.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.12
977	CHQ-1015	120.0	130.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.12
978	CHQ-1015	150.0	160.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.13
979	CHQ-1015	160.0	169.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.17
980	CHQ-1015	169.8	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.34
981	CHQ-1015	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.90
982	CHQ-1015	190.0	200.0	500	500	500	0	0.2	LIGERAMENTE BASICO	2.22
983	CHQ-1015	200.0	210.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.51
984	CHQ-1015	210.0	220.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.56
985	CHQ-1015	220.2	230.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.01
986	CHQ-1015	230.0	240.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.79
987	CHQ-1015	240.0	249.6	500	500	500	0	0.2	LIGERAMENTE BASICO	1.16
988	CHQ-1015	249.6	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.85
989	CHQ-1015	260.0	270.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.79
990	CHQ-1015	270.0	280.0	500	500	1970	910	0.1	INERTE	1.58
991	CHQ-1015	280.0	290.7	500	500	500	0	0.2	LIGERAMENTE BASICO	2.53
992	CHQ-1015	290.7	300.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.75
993	CHQ-1015	300.0	310.0	500	500	36620	34750	-4.6	ACIDO	0.49
994	CHQ-1016	20.0	30.0	500	500	1770	0	0.2	LIGERAMENTE BASICO	0.11
995	CHQ-1016	40.0	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
996	CHQ-1016	50.0	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.13
997	CHQ-1016	60.0	70.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.18
998	CHQ-1016	70.0	80.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
999	CHQ-1016	80.0	90.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.80
1000	CHQ-1016	90.0	100.0	500	500	2310	0	0.2	LIGERAMENTE BASICO	0.29
1001	CHQ-1016	100.0	110.0	500	500	1200	0	0.2	LIGERAMENTE BASICO	0.46
1002	CHQ-1016	110.0	120.2	500	500	2190	0	0.2	LIGERAMENTE BASICO	0.38
1003	CHQ-1016	120.2	130.0	500	500	1510	0	0.2	LIGERAMENTE BASICO	0.35
1004	CHQ-1016	130.0	140.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.79
1005	CHQ-1016	140.0	150.0	500	500	1170	70	0.2	LIGERAMENTE BASICO	0.17
1006	CHQ-1016	150.0	160.1	500	500	1420	20	0.2	LIGERAMENTE BASICO	0.13
1007	CHQ-1016	160.1	170.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.29
1008	CHQ-1016	190.0	200.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.10
1009	CHQ-1016	200.0	210.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.29
1010	CHQ-1016	210.0	219.2	500	500	102000	100580	-13.6	ACIDO	0.43
1011	CHQ-1016	219.2	230.0	500	500	233600	231010	-31.5	ACIDO	1.13
1012	CHQ-1016	230.0	240.0	500	500	139300	136430	-18.5	ACIDO	1.18
1013	CHQ-1016	240.0	249.6	500	500	27060	26560	-3.5	ACIDO	0.24
1014	CHQ-1016	249.6	260.0	500	500	1960	1460	0.0	INERTE	0.96
1015	CHQ-1016	260.0	270.0	500	500	8220	7200	-0.8	LIGERAMENTE ACIDO	0.34
1016	CHQ-1016	270.0	280.6	500	500	4020	3000	-0.2	LIGERAMENTE ACIDO	1.61
1017	CHQ-1016	280.6	290.0	500	500	3610	3110	-0.2	LIGERAMENTE ACIDO	0.78
1018	CHQ-1016	290.0	296.3	500	500	6240	5740	-0.6	LIGERAMENTE ACIDO	0.72
1019	CHQ-1017	40.0	50.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.30
1020	CHQ-1017	50.2	60.0	500	500	1050	0	0.2	LIGERAMENTE BASICO	1.04
1021	CHQ-1017	60.0	70.0	500	500	1240	0	0.2	LIGERAMENTE BASICO	0.90
1022	CHQ-1017	70.0	80.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.54
1023	CHQ-1017	80.0	90.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.86
1024	CHQ-1017	90.2	100.4	500	500	500	0	0.2	LIGERAMENTE BASICO	0.62
1025	CHQ-1017	100.4	110.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.82
1026	CHQ-1017	110.0	120.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.80
1027	CHQ-1017	120.0	129.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.82
1028	CHQ-1017	129.8	140.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.71
1029	CHQ-1017	140.0	150.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.38
1030	CHQ-1017	150.0	160.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.37
1031	CHQ-1017	160.0	170.4	500	500	500	0	0.2	LIGERAMENTE BASICO	0.61
1032	CHQ-1017	170.4	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.03
1033	CHQ-1017	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.56
1034	CHQ-1017	190.0	201.7	500	500	2180	1680	0.0	INERTE	0.26
1035	CHQ-1018	30.0	40.0	500	500	1250	0	0.2	LIGERAMENTE BASICO	0.42
1036	CHQ-1018	40.0	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.47
1037	CHQ-1018	50.0	60.0	500	500	1070	0	0.2	LIGERAMENTE BASICO	0.62
1038	CHQ-1018	60.0	68.0	500	500	1170	50	0.2	LIGERAMENTE BASICO	0.16
1039	CHQ-1019	72.4	80.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.70
1040	CHQ-1019	80.0	90.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.37
1041	CHQ-1019	90.0	100.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
1042	CHQ-1019	100.0	110.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
1043	CHQ-1019	110.0	120.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.48
1044	CHQ-1019	120.0	130.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.40
1045	CHQ-1019	130.0	140.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.21
1046	CHQ-1019	140.0	150.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.17
1047	CHQ-1019	150.0	160.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
1048	CHQ-1019	160.0	170.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
1049	CHQ-1019	170.0	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.23
1050	CHQ-1019	190.0	200.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
1051	CHQ-1019	200.0	205.4	500	500	500	0	0.2	LIGERAMENTE BASICO	0.18
1052	CHQ-1020	30.0	40.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
1053	CHQ-1020	40.0	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.25
1054	CHQ-1020	50.0	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
1055	CHQ-1020	60.0	70.3	500	500	1270	770	0.1	INERTE	0.21
1056	CHQ-1020	70.3	81.4	500	500	500	0	0.2	LIGERAMENTE BASICO	0.28
1057	CHQ-1020	82.4	90.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.26
1058	CHQ-1020	90.0	100.3	500	500	1840	1340	0.0	INERTE	0.37

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1059	CHQ-1020	100.3	110.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.65
1060	CHQ-1020	110.0	120.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.55
1061	CHQ-1020	120.0	130.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.94
1062	CHQ-1020	130.0	140.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.96
1063	CHQ-1020	140.0	150.5	500	500	500	0	0.2	LIGERAMENTE BASICO	1.63
1064	CHQ-1020	150.5	160.0	500	500	1850	590	0.1	LIGERAMENTE BASICO	4.46
1065	CHQ-1020	160.0	170.0	500	500	1500	0	0.2	LIGERAMENTE BASICO	3.78
1066	CHQ-1020	170.0	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	2.86
1067	CHQ-1021	30.0	40.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.22
1068	CHQ-1021	40.0	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.51
1069	CHQ-1021	50.0	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.62
1070	CHQ-1021	60.0	70.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.33
1071	CHQ-1021	70.0	80.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.19
1072	CHQ-1021	90.1	100.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.22
1073	CHQ-1021	100.8	110.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.33
1074	CHQ-1021	110.0	119.7	500	500	1250	0	0.2	LIGERAMENTE BASICO	0.38
1075	CHQ-1021	119.7	130.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.99
1076	CHQ-1021	130.0	140.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.42
1077	CHQ-1021	140.2	150.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.54
1078	CHQ-1021	150.0	160.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
1079	CHQ-1021	189.8	200.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.10
1080	CHQ-1022	30.0	40.7	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
1081	CHQ-1022	40.7	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.35
1082	CHQ-1022	50.0	60.0	500	500	1050	550	0.1	LIGERAMENTE BASICO	0.75
1083	CHQ-1022	60.0	70.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.16
1084	CHQ-1022	70.0	80.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.28
1085	CHQ-1022	80.0	88.0	500	500	1180	680	0.1	INERTE	0.40
1086	CHQ-1022	88.0	93.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.89
1087	CHQ-1022	94.0	100.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.95
1088	CHQ-1022	100.0	110.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.81
1089	CHQ-1022	110.0	120.0	500	500	2810	0	0.2	LIGERAMENTE BASICO	5.81
1090	CHQ-1022	120.0	129.9	500	500	1850	0	0.2	LIGERAMENTE BASICO	4.28
1091	CHQ-1022	129.9	140.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.58
1092	CHQ-1022	140.0	150.3	500	500	500	0	0.2	LIGERAMENTE BASICO	2.05
1093	CHQ-1022	150.3	160.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.21
1094	CHQ-1022	160.0	170.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.75
1095	CHQ-1022	170.0	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.54
1096	CHQ-1022	180.0	187.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.30
1097	CHQ-1023	50.1	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
1098	CHQ-1023	60.0	70.0	500	500	1420	920	0.1	INERTE	0.26
1099	CHQ-1023	70.0	79.5	500	500	2380	1880	-0.1	INERTE	0.20
1100	CHQ-1023	79.5	90.0	500	500	3680	2600	-0.2	LIGERAMENTE ACIDO	0.25
1101	CHQ-1023	90.0	100.3	500	500	6140	4200	-0.4	LIGERAMENTE ACIDO	0.40
1102	CHQ-1023	100.3	110.0	500	500	2470	990	0.0	INERTE	0.72
1103	CHQ-1023	110.0	120.0	500	500	1230	40	0.2	LIGERAMENTE BASICO	0.48
1104	CHQ-1023	150.0	160.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.26
1105	CHQ-1023	160.5	170.0	500	500	1070	70	0.2	LIGERAMENTE BASICO	0.63
1106	CHQ-1023	170.0	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.74
1107	CHQ-1023	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.67
1108	CHQ-1023	190.0	200.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.41
1109	CHQ-1023	200.6	210.0	500	500	1590	570	0.1	LIGERAMENTE BASICO	0.11
1110	CHQ-437	176.0	184.0	1800	30	1420	170	0.0	INERTE	0.15
1111	CHQ-437	192.0	200.0	2290	190	1680	80	0.1	INERTE	0.11
1112	CHQ-437	200.0	208.0	4940	100	1660	60	0.0	INERTE	0.12
1113	CHQ-437	208.0	216.0	1560	200	2090	430	0.0	INERTE	0.15
1114	CHQ-437	216.0	224.0	1880	70	5760	3980	-0.5	LIGERAMENTE ACIDO	0.18
1115	CHQ-437	224.0	232.0	630	200	258670	252500	-34.5	ACIDO	0.21
1116	CHQ-437	232.0	240.0	470	200	186180	176690	-24.1	ACIDO	0.71
1117	CHQ-437	240.0	248.0	1130	5	37220	31120	-4.3	ACIDO	0.25
1118	CHQ-437	248.0	256.0	600	200	114870	111450	-15.2	ACIDO	7.41
1119	CHQ-437	256.0	264.0	660	200	50320	47460	-6.4	ACIDO	3.80
1120	CHQ-437	264.0	272.0	1050	200	34430	32690	-4.4	ACIDO	21.76
1121	CHQ-437	272.0	280.0	940	20	20770	18560	-2.5	ACIDO	10.15
1122	CHQ-437	280.0	288.0	750	200	24520	22080	-3.0	ACIDO	11.51
1123	CHQ-437	288.0	296.0	2310	200	16610	13710	-1.8	ACIDO	6.09
1124	CHQ-437	296.0	300.0	1080	200	29480	27520	-3.7	ACIDO	4.53
1125	CHQ-551	128.0	136.0	500	200	2800	300	0.0	INERTE	0.16
1126	CHQ-551	160.0	168.0	800	200	4100	1400	-0.1	LIGERAMENTE ACIDO	0.13
1127	CHQ-551	168.0	176.0	800	200	1700	600	0.0	INERTE	0.27
1128	CHQ-551	176.0	184.0	800	200	400	100	0.1	INERTE	0.13
1129	CHQ-551	184.0	192.0	600	200	600	100	0.1	INERTE	0.66
1130	CHQ-554	172.0	180.3	800	200	1200	700	0.0	INERTE	0.45
1131	CHQ-554	180.3	188.0	200	200	30900	29300	-3.9	ACIDO	0.38
1132	CHQ-554	188.0	196.0	300	200	36800	35400	-4.8	ACIDO	0.30
1133	CHQ-554	196.0	204.0	1100	200	66400	65100	-8.8	ACIDO	0.30
1134	CHQ-554	204.0	212.0	500	200	62000	59700	-8.1	ACIDO	0.15
1135	CHQ-554	212.0	220.0	600	200	70400	68100	-9.3	ACIDO	0.14
1136	CHQ-554	220.0	228.0	600	200	59300	56500	-7.7	ACIDO	0.40
1137	CHQ-554	228.0	236.3	600	200	60900	59000	-8.0	ACIDO	0.63
1138	CHQ-554	236.3	244.6	400	200	39300	37600	-5.1	ACIDO	0.60
1139	CHQ-554	304.1	312.0	300	200	900	100	0.1	INERTE	0.44
1140	CHQ-554	312.0	320.0	300	200	800	100	0.1	INERTE	0.47
1141	CHQ-554	320.0	328.0	200	200	400	100	0.1	INERTE	1.10
1142	CHQ-554	328.0	336.0	200	200	1200	700	0.0	INERTE	0.58
1143	CHQ-554	336.0	344.0	2100	200	122000	121000	-16.5	ACIDO	0.12
1144	CHQ-554	344.0	352.0	600	200	86800	82700	-11.3	ACIDO	0.47
1145	CHQ-554	352.0	360.0	500	200	99700	97400	-13.3	ACIDO	0.20
1146	CHQ-554	384.0	392.0	800	200	120000	117100	-16.0	ACIDO	0.17
1147	CHQ-554	400.0	408.0	500	200	150000	136300	-18.6	ACIDO	0.15
1148	CHQ-554	414.0	419.1	600	200	116000	104700	-14.3	ACIDO	0.48
1149	CHQ-555	120.0	128.0	480	200	2510	100	0.1	INERTE	1.04
1150	CHQ-555	144.0	152.0	440	200	1490	100	0.1	INERTE	0.10
1151	CHQ-555	152.0	160.0	560	200	1050	100	0.1	INERTE	0.24
1152	CHQ-555	160.0	168.0	740	200	900	100	0.1	INERTE	0.23
1153	CHQ-555	184.0	192.0	200	200	65200	62700	-8.5	ACIDO	0.19
1154	CHQ-555	192.0	200.4	510	200	23400	20700	-2.8	ACIDO	0.11
1155	CHQ-555	200.4	208.0	200	200	69600	66900	-9.1	ACIDO	0.23
1156	CHQ-555	208.0	216.0	320	200	42800	40300	-5.4	ACIDO	0.36
1157	CHQ-555	216.0	224.0	330	200	54500	51700	-7.0	ACIDO	0.44
1158	CHQ-555	224.0	232.0	360	200	22800	20400	-2.7	ACIDO	0.67
1159	CHQ-555	232.0	238.0	280	200	16200	13700	-1.8	ACIDO	2.34
1160	CHQ-555	238.0	243.6	380	200	25700	23500	-3.1	ACIDO	1.49
1161	CHQ-555	284.2	292.0	450	200	19300	16500	-2.2	ACIDO	2.37
1162	CHQ-555	292.0	300.0	370	200	35900	32600	-4.4	ACIDO	3.94
1163	CHQ-555	300.0	304.0	450	200	41000	37200	-5.0	ACIDO	3.78
1164	CHQ-555	350.0	358.0	200	200	63500	60300	-8.2	ACIDO	0.68
1165	CHQ-555	358.0	366.0	230	200	61800	57400	-7.8	ACIDO	0.84
1166	CHQ-555	366.0	374.0	510	200	48800	46300	-6.3	ACIDO	0.19
1167	CHQ-555	374.0	382.0	220	200	73100	69900	-9.5	ACIDO	0.81
1168	CHQ-555	382.0	390.0	220	200	75800	71800	-9.8	ACIDO	0.12
1169	CHQ-555	390.0	398.0	200	200	75600	71300	-9.7	ACIDO	0.26
1170	CHQ-599	130.0	138.0	200	200	330	100	0.1	INERTE	0.18
1171	CHQ-599	138.0	146.0	200	200	280	100	0.1	INERTE	0.16
1172	CHQ-599	146.0	154.0	330	200	720	100	0.1	INERTE	0.12
1173	CHQ-599	154.0	162.0	420	200	520	100	0.1	INERTE	0.15
1174	CHQ-599	170.0	178.0	250	200	720	100	0.1	INERTE	0.12
1175	CHQ-599	178.0	186.3	230	200	550	100	0.1	INERTE	0.14
1176	CHQ-599	186.3	194.0	310	200	410	100	0.1	INERTE	0.25
1177	CHQ-599	194.0	202.0	480	200	40900	39300	-5.3	ACIDO	0.51
1178	CHQ-599	202.0	210.0	870	200	31100	29000	-3.9	ACIDO	0.46

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1179	CHQ-599	210.0	218.0	200	200	47000	44900	-6.1	ACIDO	0.51
1180	CHQ-599	218.0	226.0	200	200	62200	59900	-8.1	ACIDO	0.84
1181	CHQ-599	226.0	234.0	200	200	34300	32500	-4.4	ACIDO	1.21
1182	CHQ-599	234.0	242.0	450	200	22400	20700	-2.8	ACIDO	1.11
1183	CHQ-599	242.0	250.0	200	200	30700	28800	-3.9	ACIDO	0.74
1184	CHQ-599	250.0	258.0	250	200	25300	23300	-3.1	ACIDO	1.32
1185	CHQ-599	258.0	266.0	450	200	18400	15900	-2.1	ACIDO	2.05
1186	CHQ-599	266.0	274.0	410	200	45000	40900	-5.5	ACIDO	4.11
1187	CHQ-599	274.0	282.0	480	200	20800	17300	-2.3	ACIDO	5.77
1188	CHQ-599	282.0	290.0	420	200	21900	18700	-2.5	ACIDO	9.63
1189	CHQ-599	290.0	298.0	520	200	12300	6100	-0.8	LIGERAMENTE ACIDO	6.60
1190	CHQ-599	298.0	306.0	610	200	3100	1200	-0.1	INERTE	6.07
1191	CHQ-599	306.0	314.0	350	200	14500	12100	-1.6	ACIDO	12.58
1192	CHQ-599	314.0	322.0	330	200	22200	20300	-2.7	ACIDO	2.17
1193	CHQ-599	322.0	330.0	440	200	12400	9900	-1.3	ACIDO	5.57
1194	CHQ-599	330.0	338.0	200	200	59700	55100	-7.5	ACIDO	2.51
1195	CHQ-599	338.0	346.0	440	200	36100	33400	-4.5	ACIDO	2.46
1196	CHQ-599	346.0	354.0	430	200	39500	37500	-5.1	ACIDO	1.12
1197	CHQ-599	354.0	362.0	650	200	19100	16800	-2.2	ACIDO	0.45
1198	CHQ-599	370.0	378.0	490	200	5780	4680	-0.6	LIGERAMENTE ACIDO	0.19
1199	CHQ-599	386.0	394.0	570	200	13000	9900	-1.3	ACIDO	0.15
1200	CHQ-599	394.0	402.0	620	200	14400	11700	-1.5	ACIDO	0.31
1201	CHQ-599	402.0	410.0	510	200	57700	54700	-7.4	ACIDO	1.92
1202	CHQ-599	410.0	418.0	470	200	35600	33600	-4.5	ACIDO	0.26
1203	CHQ-599	418.0	426.0	310	200	54000	49000	-6.6	ACIDO	0.19
1204	CHQ-599	426.0	434.0	200	200	98400	95300	-13.0	ACIDO	0.21
1205	CHQ-602	162.0	170.0	670	200	1270	100	0.1	INERTE	1.59
1206	CHQ-602	170.0	178.0	550	200	890	100	0.1	INERTE	5.00
1207	CHQ-602	178.0	186.0	550	200	930	100	0.1	INERTE	1.28
1208	CHQ-602	186.0	194.0	860	200	96300	93600	-12.7	ACIDO	0.43
1209	CHQ-602	194.0	202.0	770	200	54500	52500	-7.1	ACIDO	0.34
1210	CHQ-602	202.0	210.0	800	200	61300	58700	-8.0	ACIDO	0.99
1211	CHQ-602	210.0	218.0	730	200	49200	47000	-6.4	ACIDO	0.39
1212	CHQ-602	218.0	226.0	660	200	42500	39700	-5.4	ACIDO	2.51
1213	CHQ-602	226.0	234.0	720	200	50800	48400	-6.6	ACIDO	3.42
1214	CHQ-602	234.0	242.0	740	200	54500	52300	-7.1	ACIDO	1.51
1215	CHQ-602	242.0	250.0	850	200	34400	32300	-4.4	ACIDO	1.17
1216	CHQ-602	250.0	257.6	640	200	29400	26900	-3.6	ACIDO	3.34
1217	CHQ-602	257.6	266.0	770	200	24700	22100	-3.0	ACIDO	2.23
1218	CHQ-602	266.0	274.0	800	200	22500	20300	-2.7	ACIDO	6.00
1219	CHQ-602	274.0	282.0	860	200	35000	32600	-4.4	ACIDO	4.04
1220	CHQ-602	282.0	290.0	620	200	200	100	0.1	INERTE	2.40
1221	CHQ-602	290.0	298.1	1000	200	51300	48300	-6.5	ACIDO	5.64
1222	CHQ-602	298.1	306.0	960	200	51500	48400	-6.6	ACIDO	23.53
1223	CHQ-602	306.0	314.0	980	200	43500	40200	-5.4	ACIDO	4.76
1224	CHQ-602	314.0	322.0	990	200	53900	50700	-6.9	ACIDO	9.41
1225	CHQ-602	322.0	330.0	1220	200	51900	46500	-6.3	ACIDO	3.18
1226	CHQ-602	330.0	338.0	910	200	92000	86600	-11.8	ACIDO	15.93
1227	CHQ-602	338.0	346.0	1160	200	83100	76300	-10.4	ACIDO	0.54
1228	CHQ-602	346.0	354.0	1380	200	105000	98500	-13.4	ACIDO	0.17
1229	CHQ-602	378.0	386.0	1740	200	118000	113600	-15.5	ACIDO	0.85
1230	CHQ-602	386.0	394.0	1760	200	105000	100400	-13.7	ACIDO	3.62
1231	CHQ-602	394.0	402.0	1650	300	93800	89800	-12.2	ACIDO	0.14
1232	CHQ-606	198.0	206.0	4210	200	86600	84010	-11.4	ACIDO	6.24
1233	CHQ-606	206.0	214.0	4540	200	86100	83010	-11.3	ACIDO	0.94
1234	CHQ-606	214.0	222.0	3880	200	62600	60260	-8.2	ACIDO	1.09
1235	CHQ-606	222.0	230.0	3940	200	43400	41340	-5.6	ACIDO	1.33
1236	CHQ-606	230.0	238.4	4000	200	67400	65000	-8.8	ACIDO	0.80
1237	CHQ-606	238.4	246.0	4100	200	74100	71360	-9.7	ACIDO	0.87
1238	CHQ-606	246.0	254.0	4590	200	73900	71350	-9.7	ACIDO	8.38
1239	CHQ-606	254.0	262.0	3910	200	50700	47670	-6.5	ACIDO	4.94
1240	CHQ-606	262.0	270.0	4700	200	65800	61830	-8.4	ACIDO	8.59
1241	CHQ-606	270.0	277.7	5310	200	81700	75130	-10.2	ACIDO	12.48
1242	CHQ-606	277.7	286.0	790	200	7470	3770	-0.4	LIGERAMENTE ACIDO	21.92
1243	CHQ-606	286.0	294.0	790	200	2770	1030	-0.1	INERTE	10.36
1244	CHQ-606	294.0	302.0	620	200	15400	13330	-1.8	ACIDO	66.58
1245	CHQ-606	302.0	310.0	4310	200	51200	47060	-6.4	ACIDO	44.77
1246	CHQ-606	310.0	318.0	4330	200	108000	103770	-14.1	ACIDO	7.29
1247	CHQ-606	318.0	326.0	4500	200	101000	95770	-13.0	ACIDO	2.64
1248	CHQ-606	326.0	334.0	4280	200	100000	94940	-12.9	ACIDO	4.02
1249	CHQ-606	334.0	342.0	4740	200	83300	79080	-10.8	ACIDO	1.38
1250	CHQ-606	350.0	358.0	4790	200	148000	143900	-19.6	ACIDO	1.07
1251	CHQ-606	358.0	366.0	4610	200	94500	90580	-12.3	ACIDO	0.93
1252	CHQ-606	366.0	376.0	550	250	40400	36680	-4.9	ACIDO	0.76
1253	CHQ-714	112.0	120.0	1490	200	1520	260	0.0	INERTE	0.33
1254	CHQ-714	120.0	128.0	1250	200	950	130	0.1	INERTE	0.24
1255	CHQ-714	128.0	136.0	1690	200	830	180	0.0	INERTE	0.53
1256	CHQ-714	136.0	144.2	1130	200	1150	350	0.0	INERTE	0.34
1257	CHQ-714	144.2	150.0	660	200	1280	80	0.1	INERTE	0.74
1258	CHQ-723	120.0	128.0	200	200	1560	290	0.0	INERTE	0.92
1259	CHQ-723	128.0	130.0	200	200	430	0	0.1	INERTE	0.74
1260	CHQ-723	130.0	136.0	200	200	430	0	0.1	INERTE	0.82
1261	CHQ-723	136.0	140.0	200	200	1560	350	0.0	INERTE	0.72
1262	CHQ-723	140.0	144.0	200	200	1560	350	0.0	INERTE	0.21
1263	CHQ-723	144.0	150.0	1830	200	1480	690	0.0	INERTE	0.13
1264	CHQ-725	40.0	48.0	380	200	5130	850	0.0	INERTE	1.40
1265	CHQ-725	48.0	56.0	640	200	4420	650	0.0	INERTE	1.04
1266	CHQ-725	56.0	64.0	380	200	1500	60	0.1	INERTE	0.29
1267	CHQ-725	64.0	72.0	200	200	890	120	0.1	INERTE	0.17
1268	CHQ-725	72.0	80.0	600	200	1100	190	0.0	INERTE	0.40
1269	CHQ-725	80.0	88.0	200	200	1940	190	0.0	INERTE	0.95
1270	CHQ-725	88.0	96.0	600	200	4180	2000	-0.2	LIGERAMENTE ACIDO	0.56
1271	CHQ-725	96.0	100.0	260	200	30800	25590	-3.4	ACIDO	0.47
1272	CHQ-726	120.0	130.0	200	200	26800	26600	-3.6	ACIDO	0.11
1273	CHQ-729	179.5	190.0	400	200	1350	0	0.1	INERTE	0.17
1274	CHQ-729	204.0	210.0	600	200	166600	163640	-22.3	ACIDO	0.21
1275	CHQ-729	210.0	212.0	390	200	153800	151190	-20.6	ACIDO	0.14
1276	CHQ-729	220.0	228.0	610	200	132800	130960	-17.9	ACIDO	0.45
1277	CHQ-729	228.0	230.0	610	200	132800	130960	-17.9	ACIDO	0.11
1278	CHQ-729	230.0	236.0	250	200	168400	165940	-22.7	ACIDO	0.45
1279	CHQ-729	236.0	240.5	250	200	168400	165940	-22.7	ACIDO	1.28
1280	CHQ-729	240.5	244.0	460	200	153800	151640	-20.7	ACIDO	1.98
1281	CHQ-729	244.0	249.4	460	200	153800	151640	-20.7	ACIDO	1.16
1282	CHQ-729	249.4	252.0	500	200	97390	95030	-12.9	ACIDO	4.06
1283	CHQ-729	252.0	260.0	500	200	97390	95030	-12.9	ACIDO	1.65
1284	CHQ-729	260.0	260.5	500	200	97390	95030	-12.9	ACIDO	0.64
1285	CHQ-729	260.5	268.0	530	200	117700	116310	-15.9	ACIDO	1.87
1286	CHQ-729	268.0	269.5	530	200	117700	116310	-15.9	ACIDO	14.43
1287	CHQ-729	269.5	276.0	760	200	128400	126870	-17.3	ACIDO	9.69
1288	CHQ-729	276.0	280.5	760	200	128400	126870	-17.3	ACIDO	12.77
1289	CHQ-729	280.5	284.0	210	200	96520	95370	-13.0	ACIDO	6.47
1290	CHQ-729	284.0	289.7	210	200	96520	95370	-13.0	ACIDO	4.37
1291	CHQ-729	289.7	292.0	250	200	124700	121830	-16.6	ACIDO	47.69
1292	CHQ-729	292.0	300.0	250	200	124700	121830	-16.6	ACIDO	3.26
1293	CHQ-729	300.0	300.2	250	200	124700	121830	-16.6	ACIDO	1.03
1294	CHQ-729	300.2	308.0	260	200	113400	111090	-15.1	ACIDO	0.67
1295	CHQ-729	308.0	310.0	260	200	113400	111090	-15.1	ACIDO	0.70
1296	CHQ-729	310.0	316.0	350	200	165700	163790	-22.4	ACIDO	1.03
1297	CHQ-729	316.0	320.0	350	200	165700	163790	-22.4	ACIDO	1.11
1298	CHQ-729	320.0	324.0	250	200	154200	152600	-20.8	ACIDO	0.65
1299	CHQ-729	324.0	330.2	250	200	154200	152600	-20.8	ACIDO	0.75
1300	CHQ-729	330.2	332.0	300	200	187600	182930	-25.0	ACIDO	0.95
1301	CHQ-729	332.0	340.0	300	200	187600	182930	-25.0	ACIDO	2.54
1302	CHQ-729	340.0	340.5	300	200	187600	182930	-25.0	ACIDO	4.14
1303	CHQ-729	340.5	348.0	320	200	201500	195930	-26.8	ACIDO	2.14
1304	CHQ-729	348.0	350.6	320	200	201500	195930	-26.8	ACIDO	1.22
1305	CHQ-729	350.6	356.0	290	200	226600	222990	-30.5	ACIDO	0.82
1306	CHQ-729	356.0	361.0	290	200	226600	222990	-30.5	ACIDO	2.26
1307	CHQ-729	361.0	364.0	310	200	248600	245260	-33.5	ACIDO	0.41
1308	CHQ-729	364.0	367.3	310	200	248600	245260	-33.5	ACIDO	0.54
1309	CHQ-733	199.0	200.5	340	200	88010	86320	-11.8	ACIDO	0.20
1310	CHQ-733	209.0	210.7	460	200	125800	124650	-17.0	ACIDO	0.15
1311	CHQ-733	210.7	219.0	200	200	191090	187520	-25.6	ACIDO	0.45
1312	CHQ-733	219.0	220.5	200	200	191090	187520	-25.6	ACIDO	0.38
1313	CHQ-733	220.5	229.0	200	200	134540	130420	-17.8	ACIDO	0.92
1314	CHQ-733	229.0	230.5	200	200	134540	130420	-17.8	ACIDO	0.77
1315	CHQ-733	230.5	239.0	200	200	234850	230420	-31.5	ACIDO	4.01
1316	CHQ-733	239.0	240.8	200	200	234850	230420	-31.5	ACIDO	2.17
1317	CHQ-733	240.8	249.0	200	200	236990	233420	-31.9	ACIDO	2.01
1318	CHQ-733	249.0	250.0	200	200	236990	233420	-31.9	ACIDO	1.26
1319	CHQ-733	250.0	259.0	200	200	103320	99810	-13.6	ACIDO	3.23
1320	CHQ-733	259.0	261.0	200	200	103320	99810	-13.6	ACIDO	3.98
1321	CHQ-733	261.0	269.0	200	200	23870	20600	-2.7	ACIDO	2.18
1322	CHQ-733	269.0	270.0	200	200	23870	20600	-2.7	ACIDO	1.75
1323	CHQ-733	270.0	279.0	200	200	46200	42710	-5.8	ACIDO	5.91
1324	CHQ-733	279.0	280.7	200	200	46200	42710	-5.8	ACIDO	6.87
1325	CHQ-733	280.7	289.0	200	200	79830	74470	-10.1	ACIDO	4.00
1326	CHQ-733	289.0	290.0	200	200	79830	74470	-10.1	ACIDO	2.80
1327	CHQ-733	290.0	299.0	200	200	76400	69230	-9.4	ACIDO	3.29
1328	CHQ-733	299.0	299.5	200	200	76400	69230	-9.4	ACIDO	3.11
1329	CHQ-733	299.5	309.0	200	200	73110	67660	-9.2	ACIDO	1.86
1330	CHQ-733	309.0	310.5	200	200	73110	67660	-9.2	ACIDO	2.20
1331	CHQ-733	310.5	319.0	200	200	17590	13850	-1.8	ACIDO	2.82
1332	CHQ-733	319.0	320.2	200	200	17590	13850	-1.8	ACIDO	1.45
1333	CHQ-733	320.2	329.0	200	200	43430	39940	-5.4	ACIDO	1.36
1334	CHQ-733	329.0	339.0	420	200	108140	103360	-14.1	ACIDO	0.73
1335	CHQ-733	339.0	339.7	420	200	108140	103360	-14.1	ACIDO	0.51
1336	CHQ-733	339.7	349.0	200	200	179850	173570	-23.7	ACIDO	0.17
1337	CHQ-734	170.0	180.0	910	200	3350	2450	-0.3	LIGERAMENTE ACIDO	0.55
1338	CHQ-734	180.0	180.3	910	200	3350	2450	-0.3	LIGERAMENTE ACIDO	0.98
1339	CHQ-734	200.0	200.5	810	200	219400	218550	-29.9	ACIDO	0.13
1340	CHQ-734	200.5	209.5	920	200	98810	97690	-13.3	ACIDO	0.47
1341	CHQ-734	209.5	210.0	780	200	67480	66760	-9.1	ACIDO	0.42
1342	CHQ-734	210.0	219.0	780	200	67480	66760	-9.1	ACIDO	1.15
1343	CHQ-734	219.0	220.0	830	200	54270	52950	-7.2	ACIDO	2.62
1344	CHQ-734	220.0	229.8	830	200	54270	52950	-7.2	ACIDO	3.12
1345	CHQ-734	229.8	230.0	2160	200	72560	65560	-8.9	ACIDO	7.10
1346	CHQ-734	230.0	240.0	2160	200	72560	65560	-8.9	ACIDO	5.33
1347	CHQ-734	240.0	240.3	2160	200	72560	65560	-8.9	ACIDO	10.07
1348	CHQ-734	240.3	250.0	840	200	68980	65990	-9.0	ACIDO	8.70
1349	CHQ-734	250.0	250.7	840	200	68980	65990	-9.0	ACIDO	1.99
1350	CHQ-734	250.7	260.0	780	200	105900	104430	-14.2	ACIDO	2.53
1351	CHQ-734	260.0	269.5	880	200	19500	18630	-2.5	ACIDO	2.80
1352	CHQ-734	269.5	270.0	580	200	57630	56850	-7.7	ACIDO	7.04
1353	CHQ-734	270.0	280.0	580	200	57630	56850	-7.7	ACIDO	2.56
1354	CHQ-734	280.0	290.0	910	200	54030	48290	-6.5	ACIDO	4.73
1355	CHQ-734	290.0	300.0	1330	200	57240	53430	-7.2	ACIDO	5.03
1356	CHQ-734	300.0	310.0	870	200	28110	26390	-3.5	ACIDO	0.24
1357	CHQ-734	310.0	310.5	870	200	28110	26390	-3.5	ACIDO	0.61
1358	CHQ-734	310.5	320.0	1200	200	71180	68130	-9.3	ACIDO	0.61
1359	CHQ-734	320.0	330.0	1070	200	100600	98060	-13.4	ACIDO	0.39
1360	CHQ-734	330.0	340.0	1000	200	76450	72590	-9.9	ACIDO	0.16
1361	CHQ-739	120.0	129.1	200	200	220	20	0.1	INERTE	0.11
1362	CHQ-739	129.1	130.0	200	200	30440	29930	-4.0	ACIDO	0.20
1363	CHQ-739	130.0	140.0	200	200	30440	29930	-4.0	ACIDO	0.28
1364	CHQ-739	140.0	140.5	200	200	30440	29930	-4.0	ACIDO	0.58
1365	CHQ-739	140.5	150.0	200	200	62150	61590	-8.4	ACIDO	0.25
1366	CHQ-739	150.0	151.0	200	200	62150	61590	-8.4	ACIDO	0.37
1367	CHQ-739	151.0	160.0	200	200	20500	19480	-2.6	ACIDO	0.77
1368	CHQ-739	160.0	169.8	200	200	22000	21330	-2.8	ACIDO	0.58
1369	CHQ-739	169.8	170.0	200	200	31900	31010	-4.2	ACIDO	0.48
1370	CHQ-739	170.0	180.0	200	200	31900	31010	-4.2	ACIDO	0.63
1371	CHQ-739	180.0	190.0	200	200	10460	8540	-1.1	ACIDO	0.63
1372	CHQ-739	190.0	199.5	200	200	6930	5780	-0.7	LIGERAMENTE ACIDO	1.58
1373	CHQ-739	199.5	200.0	210	200	30190	27780	-3.7	ACIDO	0.66
1374	CHQ-739	200.0	210.0	210	200	30190	27780	-3.7	ACIDO	2.45
1375	CHQ-739	210.0	210.5	210	200	30190	27780	-3.7	ACIDO	0.51
1376	CHQ-739	210.5	220.0	250	200	16670	15120	-2.0	ACIDO	0.78
1377	CHQ-739	220.0	229.8	320	200	44810	41560	-5.6	ACIDO	0.54
1378	CHQ-739	229.8	230.0	270	200	20410	18680	-2.5	ACIDO	0.24
1379	CHQ-739	230.0	239.0	270	200	20410	18680	-2.5	ACIDO	0.25
1380	CHQ-740	200.8	210.0	200	200	5740	4460	-0.5	LIGERAMENTE ACIDO	0.27
1381	CHQ-740	210.0	220.0	230	200	54520	52550	-7.1	ACIDO	0.28
1382	CHQ-740	220.0	220.6	230	200	54520	52550	-7.1	ACIDO	1.46
1383	CHQ-740	220.6	229.5	200	200	114300	110060	-15.0	ACIDO	5.80
1384	CHQ-740	229.5	230.0	240	200	81090	79530	-10.8	ACIDO	4.48
1385	CHQ-740	230.0	240.8	240	200	81090	79530	-10.8	ACIDO	2.27
1386	CHQ-740	240.8	250.0	630	200	119100	117190	-16.0	ACIDO	5.36
1387	CHQ-740	250.0	259.0	230	200	46080	44610	-6.0	ACIDO	0.41
1388	CHQ-740	259.0	269.8	210	200	42660	40140	-5.4	ACIDO	4.24
1389	CHQ-740	269.8	280.0	230	200	73010	69570	-9.5	ACIDO	2.01
1390	CHQ-740	280.0	290.0	230	200	96910	94850	-12.9	ACIDO	2.02
1391	CHQ-740	290.0	300.0	200	200	154200	152920	-20.9	ACIDO	0.50
1392	CHQ-740	300.0	310.0	200	200	156100	153050	-20.9	ACIDO	0.37
1393	CHQ-740	310.0	320.0	310	200	166600	163010	-22.3	ACIDO	0.30
1394	CHQ-740	320.0	330.5	210	200	73680	70230	-9.5	ACIDO	0.14
1395	CHQ-740	330.5	340.5	200	200	61830	57930	-7.9	ACIDO	0.20
1396	CHQ-740	340.5	351.0	270	200	180700	174760	-23.9	ACIDO	0.61
1397	CHQ-740	351.0	360.5	420	200	175100	167770	-22.9	ACIDO	0.24
1398	CHQ-740	360.5	370.0	470	200	145000	138280	-18.9	ACIDO	0.18
1399	CHQ-740	370.0	379.8	560	200	93930	87670	-11.9	ACIDO	0.14
1400	CHQ-740	379.8	390.5	220	200	165600	155330	-21.2	ACIDO	0.18
1401	CHQ-748	120.0	129.5	320	200	1570	990	-0.1	INERTE	0.14
1402	CHQ-748	129.5	140.9	310	270	2500	1020	0.0	INERTE	0.10
1403	CHQ-748	160.0	169.9	430	200	1800	250	0.0	INERTE	0.12
1404	CHQ-748	169.9	180.0	310	200	8320	110	0.1	INERTE	1.19
1405	CHQ-748	180.0	190.0	330	200	26700	24940	-3.3	ACIDO	2.03
1406	CHQ-748	190.0	200.5	500	290	89200	87610	-11.9	ACIDO	0.63
1407	CHQ-748	200.5	210.0	240	200	120700	119710	-16.3	ACIDO	0.70
1408	CHQ-748	210.0	220.5	250	200	102300	101100	-13.8	ACIDO	0.97
1409	CHQ-748	220.5	230.0	220	200	72610	71560	-9.7	ACIDO	1.05
1410	CHQ-748	230.0	239.2	320	200	56550	54920	-7.5	ACIDO	1.23
1411	CHQ-748	239.2	249.8	500	330	95190	93430	-12.7	ACIDO	0.86
1412	CHQ-748	249.8	260.3	200	200	87960	86870	-11.8	ACIDO	1.38
1413	CHQ-748	260.3	270.5	1430	200	70800	69300	-9.4	ACIDO	1.89
1414	CHQ-748	270.5	279.3	370	260	43140	40730	-5.5	ACIDO	4.05
1415	CHQ-748	279.3	289.2	330	200	52620	48680	-6.6	ACIDO	73.37
1416	CHQ-748	289.2	300.0	320	200	29780	26660	-3.6	ACIDO	19.15
1417	CHQ-750	140.9	150.0	340	200	4660	1600	-0.1	LIGERAMENTE ACIDO	1.94
1418	CHQ-750	180.0	190.8	680	200	2570	450	0.0	INERTE	0.21
1419	CHQ-750	196.3	201.0	820	200	5390	180	0.0	INERTE	0.25
1420	CHQ-750	250.0	259.5	780	200	87730	85190	-11.6	ACIDO	0.13
1421	CHQ-750	259.5	269.0	860	200	79000	73810	-10.0	ACIDO	4.19
1422	CHQ-750	269.0	280.5	700	200	33790	31250	-4.2	ACIDO	0.74
1423	CHQ-750	280.5	289.3	900	200	48800	46810	-6.3	ACIDO	1.40
1424	CHQ-750	289.3	300.5	930	200	13170	10770	-1.4	ACIDO	12.44
1425	CHQ-750	300.5	310.0	690	200	31370	27880	-3.7	ACIDO	24.87
1426	CHQ-750	310.0	320.0	650	200	20000	17340	-2.3	ACIDO	3.04
1427	CHQ-750	320.0	330.3	580	200	20810	18730	-2.5	ACIDO	0.99
1428	CHQ-750	330.3	340.0	790	200	3380	2250	-0.2	LIGERAMENTE ACIDO	0.67
1429	CHQ-750	340.0	349.4	740	200	3420	1920	-0.2	LIGERAMENTE ACIDO	0.67
1430	CHQ-750	349.4	359.8	820	200	36260	32980	-4.4	ACIDO	1.03
1431	CHQ-750	359.8	370.8	510	200	37810	34980	-4.7	ACIDO	1.00
1432	CHQ-750	370.8	380.5	640	200	5630	1080	-0.1	INERTE	1.53
1433	CHQ-750	380.5	390.0	530	200	4980	0	0.1	INERTE	0.41
1434	CHQ-750	390.0	400.0	730	200	400	20	0.1	INERTE	0.27
1435	CHQ-751	180.6	189.2	390	200	530	0	0.1	INERTE	0.16
1436	CHQ-751	189.2	200.5	410	200	560	0	0.1	INERTE	0.15
1437	CHQ-751	200.5	210.5	390	200	13020	12190	-1.6	ACIDO	0.12
1438	CHQ-751	210.5	220.5	590	320	75930	75010	-10.2	ACIDO	0.21
1439	CHQ-751	220.5	229.5	550	230	480	0	0.1	INERTE	1.35
1440	CHQ-751	229.5	240.0	380	200	68940	66370	-9.0	ACIDO	1.71
1441	CHQ-751	240.0	250.0	410	200	74630	73800	-10.0	ACIDO	0.78
1442	CHQ-751	250.0	260.0	470	200	71410	70460	-9.6	ACIDO	0.59
1443	CHQ-751	260.0	270.0	300	200	86160	85340	-11.6	ACIDO	0.34
1444	CHQ-751	270.0	280.5	430	200	47690	46690	-6.3	ACIDO	0.19
1445	CHQ-751	280.5	290.7	430	200	55540	53820	-7.3	ACIDO	1.50
1446	CHQ-751	290.7	300.0	400	200	16200	15080	-2.0	ACIDO	0.35
1447	CHQ-751	300.0	310.0	440	200	21460	19990	-2.7	ACIDO	1.79
1448	CHQ-751	310.0	320.4	370	200	59030	57740	-7.8	ACIDO	3.09
1449	CHQ-751	320.4	330.0	490	200	39950	38410	-5.2	ACIDO	6.38
1450	CHQ-751	330.0	332.0	1100	200	76310	73280	-10.0	ACIDO	4.46
1451	CHQ-751	332.0	340.0	1100	200	76310	73280	-10.0	ACIDO	9.87
1452	CHQ-751	340.0	342.0	1040	200	158800	151400	-20.7	ACIDO	0.22
1453	CHQ-751	342.0	350.0	1040	200	158800	151400	-20.7	ACIDO	0.73
1454	CHQ-751	350.0	352.0	970	200	148700	138170	-18.9	ACIDO	0.26
1455	CHQ-751	352.0	360.0	970	200	148700	138170	-18.9	ACIDO	0.50
1456	CHQ-751	360.0	362.0	600	200	65490	61830	-8.4	ACIDO	1.21
1457	CHQ-751	362.0	370.0	600	200	65490	61830	-8.4	ACIDO	0.69
1458	CHQ-751	370.0	372.0	510	200	57470	55100	-7.5	ACIDO	0.29
1459	CHQ-751	372.0	380.0	510	200	57470	55100	-7.5	ACIDO	0.47
1460	CHQ-751	380.0	383.9	570	200	92450	79240	-10.8	ACIDO	0.23
1461	CHQ-751	383.9	386.0	570	200	92450	79240	-10.8	ACIDO	1.00
1462	CHQ-751	386.0	388.0	570	200	92450	79240	-10.8	ACIDO	1.00
1463	CHQ-751	388.0	390.0	570	200	92450	79240	-10.8	ACIDO	1.05
1464	CHQ-751	390.0	390.8	570	200	92450	79240	-10.8	ACIDO	1.06
1465	CHQ-751	390.8	392.0	760	200	122500	103410	-14.1	ACIDO	1.06
1466	CHQ-751	392.0	394.0	760	200	122500	103410	-14.1	ACIDO	1.05
1467	CHQ-751	394.0	396.0	760	200	122500	103410	-14.1	ACIDO	1.05
1468	CHQ-751	396.0	398.0	760	200	122500	103410	-14.1	ACIDO	1.05
1469	CHQ-751	398.0	400.3	760	200	122500	103410	-14.1	ACIDO	0.96
1470	CHQ-752	200.0	210.9	790	200	123600	122570	-16.7	ACIDO	0.13
1471	CHQ-752	210.9	219.1	680	200	112500	107700	-14.7	ACIDO	0.50
1472	CHQ-752	219.1	230.0	610	200	136000	134750	-18.4	ACIDO	0.46
1473	CHQ-752	230.0	240.0	780	200	212600	209780	-28.7	ACIDO	2.86
1474	CHQ-752	240.0	240.3	780	200	212600	209780	-28.7	ACIDO	1.05
1475	CHQ-752	240.3	250.0	680	200	177300	174630	-23.9	ACIDO	7.26
1476	CHQ-752	250.0	260.0	560	200	168000	165390	-22.6	ACIDO	14.65
1477	CHQ-752	260.0	261.0	560	200	168000	165390	-22.6	ACIDO	2.30
1478	CHQ-752	261.0	270.0	570	200	105800	104140	-14.2	ACIDO	9.04
1479	CHQ-752	270.0	280.0	940	200	69790	64810	-8.8	ACIDO	10.40
1480	CHQ-752	280.0	290.0	560	200	90030	86680	-11.8	ACIDO	2.87
1481	CHQ-752	290.0	291.0	560	200	90030	86680	-11.8	ACIDO	1.79
1482	CHQ-752	291.0	300.0	970	200	78410	76910	-10.5	ACIDO	1.92
1483	CHQ-752	300.0	310.0	750	200	43770	42430	-5.7	ACIDO	1.16
1484	CHQ-752	310.0	310.4	750	200	43770	42430	-5.7	ACIDO	1.13
1485	CHQ-752	310.4	320.0	620	200	77420	74160	-10.1	ACIDO	2.83
1486	CHQ-752	320.0	320.7	620	200	77420	74160	-10.1	ACIDO	4.12
1487	CHQ-752	320.7	329.7	810	200	190600	186530	-25.5	ACIDO	4.47
1488	CHQ-752	329.7	330.0	710	200	123400	121230	-16.5	ACIDO	2.02
1489	CHQ-752	330.0	340.0	710	200	123400	121230	-16.5	ACIDO	1.43
1490	CHQ-752	340.0	340.5	710	200	123400	121230	-16.5	ACIDO	1.02
1491	CHQ-752	340.5	350.5	760	200	106000	99950	-13.6	ACIDO	0.44
1492	CHQ-752	360.5	370.0	750	200	68700	65260	-8.9	ACIDO	0.19
1493	CHQ-753	130.0	140.0	590	200	630	200	0.0	INERTE	0.28
1494	CHQ-753	140.0	149.6	640	200	940	290	0.0	INERTE	1.21
1495	CHQ-753	149.6	160.5	770	200	620	320	0.0	INERTE	1.61
1496	CHQ-753	160.5	170.0	680	200	430	230	0.0	INERTE	1.90
1497	CHQ-753	170.0	180.0	700	200	720	440	0.0	INERTE	0.81
1498	CHQ-753	180.0	190.5	710	200	500	280	0.0	INERTE	0.18
1499	CHQ-753	190.5	201.9	750	200	690	220	0.0	INERTE	0.21
1500	CHQ-753	201.9	210.0	790	200	71470	70170	-9.5	ACIDO	0.59
1501	CHQ-753	210.0	220.4	540	200	89440	88470	-12.0	ACIDO	0.34
1502	CHQ-753	220.4	230.0	700	200	27320	26360	-3.5	ACIDO	1.11
1503	CHQ-753	230.0	240.0	850	200	56960	56120	-7.6	ACIDO	1.15
1504	CHQ-753	240.0	250.0	1010	200	69190	68720	-9.3	ACIDO	0.49
1505	CHQ-753	250.0	259.5	850	200	42240	41180	-5.6	ACIDO	1.05
1506	CHQ-753	259.5	270.0	750	200	27330	26090	-3.5	ACIDO	2.56
1507	CHQ-753	270.0	280.0	840	200	33450	32440	-4.4	ACIDO	0.93
1508	CHQ-753	280.0	290.5	880	200	33560	31770	-4.3	ACIDO	0.61
1509	CHQ-753	290.5	300.5	1020	200	24610	22900	-3.1	ACIDO	0.95
1510	CHQ-753	300.5	310.5	740	200	20940	18990	-2.5	ACIDO	3.34
1511	CHQ-753	310.5	320.7	720	200	38870	34790	-4.7	ACIDO	6.75
1512	CHQ-753	320.7	330.5	1070	200	32360	24680	-3.3	ACIDO	11.02
1513	CHQ-753	330.5	340.0	750	200	28340	26490	-3.6	ACIDO	26.28
1514	CHQ-753	340.0	350.1	1050	200	39290	36420	-4.9	ACIDO	54.62
1515	CHQ-753	350.1	360.7	950	200	9430	8560	-1.1	ACIDO	32.07
1516	CHQ-753	360.7	370.7	660	200	26350	24240	-3.2	ACIDO	5.98
1517	CHQ-753	370.7	380.0	830	200	46130	41850	-5.7	ACIDO	2.93
1518	CHQ-753	380.0	384.5	760	200	30650	29670	-4.0	ACIDO	0.54
1519	CHQ-753	384.5	389.5	760	200	30650	29670	-4.0	ACIDO	0.46
1520	CHQ-753	389.5	400.9	920	200	10960	10320	-1.3	ACIDO	1.16
1521	CHQ-753	400.9	410.6	940	200	1210	370	0.0	INERTE	0.19
1522	CHQ-766	179.2	189.6	210	200	110800	108010	-14.7	ACIDO	3.55
1523	CHQ-766	189.6	200.0	200	200	172200	170230	-23.2	ACIDO	0.62
1524	CHQ-766	200.0	210.5	200	200	100900	98740	-13.5	ACIDO	0.56
1525	CHQ-766	210.5	219.4	200	200	33390	30660	-4.1	ACIDO	0.96
1526	CHQ-766	219.4	230.4	200	200	59840	54500	-7.4	ACIDO	2.70
1527	CHQ-766	230.4	240.0	200	200	33630	32270	-4.3	ACIDO	2.33
1528	CHQ-766	240.0	250.8	200	200	44210	40890	-5.5	ACIDO	3.21
1529	CHQ-766	250.8	260.0	1380	200	21780	19900	-2.7	ACIDO	2.93
1530	CHQ-766	260.0	270.0	450	200	38570	35090	-4.7	ACIDO	5.43
1531	CHQ-766	270.0	274.9	790	200	32510	28350	-3.8	ACIDO	4.86
1532	CHQ-779	232.0	236.5	360	200	31210	28370	-3.8	ACIDO	6.43
1533	CHQ-785	121.3	131.5	350	200	69560	68110	-9.3	ACIDO	0.25
1534	CHQ-785	131.5	140.0	300	200	69600	68420	-9.3	ACIDO	0.22
1535	CHQ-785	140.0	150.0	320	200	80930	79640	-10.8	ACIDO	0.23
1536	CHQ-785	150.0	160.0	210	200	61980	61130	-8.3	ACIDO	0.49
1537	CHQ-785	160.0	169.5	200	200	59550	58440	-7.9	ACIDO	0.83
1538	CHQ-785	169.5	180.0	270	200	47910	46810	-6.3	ACIDO	0.52

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1539	CHQ-785	180.0	190.0	330	240	38630	36080	-4.9	ACIDO	2.12
1540	CHQ-785	190.0	200.0	320	200	85100	83630	-11.4	ACIDO	6.30
1541	CHQ-785	200.0	210.0	280	200	48570	46670	-6.3	ACIDO	3.05
1542	CHQ-785	210.0	220.0	300	200	36410	33930	-4.6	ACIDO	3.09
1543	CHQ-785	220.0	230.0	200	200	54410	52560	-7.1	ACIDO	2.93
1544	CHQ-785	230.0	240.0	400	200	35780	34210	-4.6	ACIDO	1.77
1545	CHQ-785	240.0	250.6	300	200	71940	69860	-9.5	ACIDO	0.29
1546	CHQ-785	250.6	261.5	330	200	45420	40680	-5.5	ACIDO	0.26
1547	CHQ-785	261.5	272.0	200	200	98150	93690	-12.8	ACIDO	0.14
1548	CHQ-785	322.0	331.6	330	200	92200	91650	-12.5	ACIDO	0.13
1549	CHQ-785	341.7	352.4	430	200	178100	176450	-24.1	ACIDO	0.11
1550	CHQ-796	120.0	130.0	250	200	2870	1950	-0.2	LIGERAMENTE ACIDO	0.39
1551	CHQ-796	130.0	140.0	210	200	36740	34630	-4.7	ACIDO	0.38
1552	CHQ-796	140.0	150.0	420	200	32250	30660	-4.1	ACIDO	0.47
1553	CHQ-796	150.0	160.0	460	200	64620	63410	-8.6	ACIDO	0.62
1554	CHQ-796	160.0	170.7	320	200	87140	85760	-11.7	ACIDO	0.73
1555	CHQ-796	170.7	180.8	380	200	91570	89980	-12.3	ACIDO	0.87
1556	CHQ-796	180.8	189.5	320	200	86650	85230	-11.6	ACIDO	1.30
1557	CHQ-796	189.5	200.0	300	200	48100	46370	-6.3	ACIDO	0.65
1558	CHQ-796	200.0	210.5	440	200	57630	56000	-7.6	ACIDO	1.81
1559	CHQ-796	210.5	220.5	580	200	46150	44990	-6.1	ACIDO	2.28
1560	CHQ-796	220.5	229.3	470	200	18340	17230	-2.3	ACIDO	2.21
1561	CHQ-796	229.3	239.9	410	200	32590	29250	-3.9	ACIDO	5.15
1562	CHQ-796	239.9	250.1	490	200	40620	39190	-5.3	ACIDO	8.12
1563	CHQ-796	250.1	260.0	460	200	27330	24190	-3.2	ACIDO	11.07
1564	CHQ-796	260.0	270.0	440	200	16360	15010	-2.0	ACIDO	6.03
1565	CHQ-796	270.0	280.0	500	200	580	120	0.1	INERTE	1.48
1566	CHQ-796	280.0	290.0	350	200	7520	6210	-0.8	LIGERAMENTE ACIDO	6.49
1567	CHQ-796	290.0	300.0	300	200	8370	6730	-0.8	LIGERAMENTE ACIDO	11.55
1568	CHQ-796	300.0	309.5	280	200	19610	16890	-2.2	ACIDO	2.67
1569	CHQ-796	309.5	320.6	350	200	76190	63940	-8.7	ACIDO	0.39
1570	CHQ-796	340.0	349.7	320	200	58430	55130	-7.5	ACIDO	0.31
1571	CHQ-805	110.0	119.9	990	200	5150	3260	-0.4	LIGERAMENTE ACIDO	0.92
1572	CHQ-805	119.9	125.0	330	200	2500	0	0.1	INERTE	0.31
1573	CHQ-811	80.0	90.0	490	200	43090	36360	-4.9	ACIDO	0.39
1574	CHQ-811	90.0	98.5	580	200	23120	16860	-2.2	ACIDO	0.89
1575	CHQ-819	150.0	160.0	200	200	62040	60630	-8.2	ACIDO	0.85
1576	CHQ-819	160.0	169.5	200	200	45690	44290	-6.0	ACIDO	0.93
1577	CHQ-819	169.5	180.3	200	200	59040	56540	-7.7	ACIDO	4.25
1578	CHQ-819	180.3	189.7	200	200	13410	8900	-1.1	ACIDO	5.74
1579	CHQ-819	189.7	200.0	200	200	56850	46380	-6.3	ACIDO	17.56
1580	CHQ-819	200.0	211.0	660	200	61570	51310	-7.0	ACIDO	16.36
1581	CHQ-819	211.0	218.9	870	200	30580	23940	-3.2	ACIDO	10.42
1582	CHQ-819	218.9	221.5	870	200	30580	23940	-3.2	ACIDO	7.87
1583	CHQ-819	221.5	223.0	390	200	31040	26430	-3.5	ACIDO	3.76
1584	CHQ-819	223.0	225.5	390	200	31040	26430	-3.5	ACIDO	15.65
1585	CHQ-819	225.5	227.9	390	200	31040	26430	-3.5	ACIDO	2.27
1586	CHQ-819	227.9	230.0	390	200	31040	26430	-3.5	ACIDO	1.58
1587	CHQ-819	230.0	232.0	300	200	10460	8030	-1.0	ACIDO	1.65
1588	CHQ-819	232.0	240.0	300	200	10460	8030	-1.0	ACIDO	6.18
1589	CHQ-819	240.0	249.8	260	200	26830	24380	-3.3	ACIDO	2.42
1590	CHQ-819	249.8	260.0	200	200	59520	55220	-7.5	ACIDO	1.76
1591	CHQ-819	260.0	270.0	240	200	93070	88590	-12.1	ACIDO	0.45
1592	CHQ-819	270.0	281.0	440	200	110700	107290	-14.6	ACIDO	3.63
1593	CHQ-819	281.0	290.0	200	200	33520	31840	-4.3	ACIDO	0.47
1594	CHQ-822	90.0	100.0	280	200	1200	230	0.0	INERTE	0.13
1595	CHQ-822	100.0	110.0	400	200	950	50	0.1	INERTE	0.14
1596	CHQ-822	110.0	120.0	480	200	14760	13190	-1.7	ACIDO	0.55
1597	CHQ-822	120.0	130.0	560	200	23220	22130	-3.0	ACIDO	0.36
1598	CHQ-822	130.0	140.0	620	200	24470	23280	-3.1	ACIDO	0.66
1599	CHQ-822	140.0	150.0	1330	200	23150	22030	-2.9	ACIDO	0.51
1600	CHQ-822	150.0	160.0	230	200	46870	45540	-6.2	ACIDO	0.93
1601	CHQ-822	160.0	170.6	200	200	39860	38770	-5.2	ACIDO	0.78
1602	CHQ-822	170.6	180.0	200	200	28090	26880	-3.6	ACIDO	0.63
1603	CHQ-822	180.0	190.0	200	200	24560	23070	-3.1	ACIDO	2.14
1604	CHQ-822	190.0	200.0	200	200	31180	28980	-3.9	ACIDO	2.56
1605	CHQ-822	200.0	210.0	200	200	7540	3390	-0.4	LIGERAMENTE ACIDO	6.41
1606	CHQ-822	210.0	219.3	200	200	19020	12970	-1.7	ACIDO	9.53
1607	CHQ-822	219.3	230.0	200	200	27190	24800	-3.3	ACIDO	3.96
1608	CHQ-822	230.0	240.0	240	200	28640	24080	-3.2	ACIDO	7.68
1609	CHQ-822	240.0	249.5	330	200	54840	51650	-7.0	ACIDO	15.59
1610	CHQ-822	249.5	259.7	410	200	94450	86020	-11.7	ACIDO	18.67
1611	CHQ-822	259.7	270.0	370	200	133900	126770	-17.3	ACIDO	4.02
1612	CHQ-822	270.0	279.5	470	200	167400	161530	-22.1	ACIDO	0.40
1613	CHQ-822	279.5	291.0	210	200	126200	121080	-16.5	ACIDO	2.46
1614	CHQ-822	291.0	301.0	400	200	40010	37670	-5.1	ACIDO	3.44
1615	CHQ-822	301.0	310.9	410	200	32250	30780	-4.1	ACIDO	1.39
1616	CHQ-824	120.0	130.0	550	200	10780	7900	-1.0	ACIDO	0.41
1617	CHQ-824	130.0	140.0	230	200	22650	18730	-2.5	ACIDO	1.46
1618	CHQ-824	140.0	150.5	200	200	10330	8930	-1.2	ACIDO	0.40
1619	CHQ-824	150.5	160.5	200	200	45060	43980	-6.0	ACIDO	0.60
1620	CHQ-824	160.5	170.3	200	200	45250	43960	-5.9	ACIDO	0.51
1621	CHQ-824	170.3	180.0	200	200	41300	39950	-5.4	ACIDO	1.11
1622	CHQ-824	180.0	190.0	260	200	43400	42090	-5.7	ACIDO	1.55
1623	CHQ-824	190.0	200.0	200	200	44440	43110	-5.8	ACIDO	2.08
1624	CHQ-824	200.0	209.9	200	200	33180	31420	-4.2	ACIDO	2.16
1625	CHQ-824	209.9	220.7	200	200	20200	17680	-2.3	ACIDO	1.06
1626	CHQ-824	220.7	230.5	200	200	3210	1270	-0.1	LIGERAMENTE ACIDO	1.99
1627	CHQ-824	230.5	240.2	220	200	1220	220	0.0	INERTE	0.71
1628	CHQ-824	240.2	250.4	200	200	1300	10	0.1	INERTE	0.76
1629	CHQ-824	250.4	260.0	310	200	25920	21760	-2.9	ACIDO	4.43
1630	CHQ-824	260.0	270.6	520	200	65560	64150	-8.7	ACIDO	0.47
1631	CHQ-824	270.6	278.0	200	200	141900	140770	-19.2	ACIDO	0.13
1632	CHQ-826	120.0	128.0	210	200	59300	57920	-7.9	ACIDO	0.80
1633	CHQ-826	128.0	140.0	200	200	58530	56590	-7.7	ACIDO	0.38
1634	CHQ-826	140.0	150.0	200	200	46200	44040	-6.0	ACIDO	0.43
1635	CHQ-826	150.0	160.0	200	200	51230	49970	-6.8	ACIDO	1.65
1636	CHQ-826	160.0	170.2	200	200	18740	17740	-2.4	ACIDO	1.22
1637	CHQ-826	170.2	180.0	200	200	26060	25040	-3.4	ACIDO	0.48
1638	CHQ-826	180.0	190.0	220	200	49960	47490	-6.4	ACIDO	2.93
1639	CHQ-826	190.0	200.0	340	200	62930	56700	-7.7	ACIDO	3.33
1640	CHQ-826	200.0	210.0	390	200	90430	83710	-11.4	ACIDO	3.82
1641	CHQ-826	210.0	220.0	410	200	80290	75950	-10.3	ACIDO	3.79
1642	CHQ-826	220.0	229.8	200	200	49920	46540	-6.3	ACIDO	2.03
1643	CHQ-826	229.8	240.0	320	200	53800	48740	-6.6	ACIDO	3.72
1644	CHQ-826	240.0	250.1	340	200	61380	56280	-7.6	ACIDO	1.49
1645	CHQ-826	270.0	280.0	240	200	46470	44190	-6.0	ACIDO	0.11
1646	CHQ-826	290.0	300.8	200	200	12680	11780	-1.5	ACIDO	0.15
1647	CHQ-830	90.0	100.0	520	200	23720	19810	-2.6	ACIDO	2.01
1648	CHQ-831	80.0	90.0	250	200	1940	470	0.0	INERTE	0.81
1649	CHQ-831	90.0	100.4	290	200	6920	5210	-0.6	LIGERAMENTE ACIDO	0.99
1650	CHQ-832	120.4	125.2	360	200	1310	340	0.0	INERTE	1.13
1651	CHQ-834	90.0	100.6	240	200	1280	120	0.1	INERTE	0.99
1652	CHQ-837	120.0	130.0	290	200	43900	42690	-5.8	ACIDO	1.11
1653	CHQ-837	130.0	140.0	310	200	40680	39600	-5.4	ACIDO	0.18
1654	CHQ-837	140.0	150.0	200	200	41270	39360	-5.3	ACIDO	0.30
1655	CHQ-837	150.0	157.0	260	200	27080	25150	-3.4	ACIDO	0.39
1656	CHQ-838	150.0	160.5	200	200	57160	55830	-7.6	ACIDO	0.86
1657	CHQ-838	160.5	170.5	200	200	56250	54740	-7.4	ACIDO	0.95
1658	CHQ-838	170.5	180.3	200	200	32560	30850	-4.2	ACIDO	1.95

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1659	CHQ-838	180.3	189.8	200	200	18560	17280	-2.3	ACIDO	0.87
1660	CHQ-838	189.8	199.5	200	200	48410	44300	-6.0	ACIDO	3.74
1661	CHQ-838	199.5	210.0	200	200	22340	19310	-2.6	ACIDO	1.62
1662	CHQ-838	210.0	220.0	200	200	11580	9850	-1.3	ACIDO	5.84
1663	CHQ-838	220.0	229.6	200	200	4400	2610	-0.3	LIGERAMENTE ACIDO	1.03
1664	CHQ-838	229.6	240.0	200	200	15320	12600	-1.7	ACIDO	5.70
1665	CHQ-838	240.0	250.0	320	200	38640	34350	-4.6	ACIDO	21.24
1666	CHQ-838	250.0	260.4	200	200	46780	42750	-5.8	ACIDO	2.14
1667	CHQ-838	260.4	270.0	200	200	76430	67350	-9.2	ACIDO	0.47
1668	CHQ-838	270.0	280.5	290	200	140100	131200	-17.9	ACIDO	0.70
1669	CHQ-838	280.5	290.0	200	200	110500	105190	-14.3	ACIDO	1.35
1670	CHQ-838	290.0	300.0	200	200	38840	37110	-5.0	ACIDO	0.36
1671	CHQ-838	300.0	309.7	200	200	13640	11550	-1.5	ACIDO	0.22
1672	CHQ-839	140.5	150.0	200	200	47720	46430	-6.3	ACIDO	0.22
1673	CHQ-839	150.0	160.0	200	200	23850	22820	-3.1	ACIDO	3.42
1674	CHQ-839	160.0	169.5	270	200	22300	20430	-2.7	ACIDO	13.31
1675	CHQ-839	169.5	180.2	200	200	37110	35950	-4.9	ACIDO	1.23
1676	CHQ-839	180.2	189.5	220	200	47340	46320	-6.3	ACIDO	2.83
1677	CHQ-839	189.5	200.5	220	200	34420	33190	-4.5	ACIDO	4.08
1678	CHQ-839	200.5	210.0	200	200	39450	37790	-5.1	ACIDO	1.06
1679	CHQ-839	210.0	220.0	200	200	19530	18260	-2.4	ACIDO	0.98
1680	CHQ-839	220.0	230.0	200	200	16770	14650	-1.9	ACIDO	0.94
1681	CHQ-839	230.0	239.8	230	200	2790	1780	-0.2	LIGERAMENTE ACIDO	0.90
1682	CHQ-839	239.8	249.5	200	200	6250	4420	-0.5	LIGERAMENTE ACIDO	0.73
1683	CHQ-839	249.5	260.9	240	200	23350	21560	-2.9	ACIDO	1.46
1684	CHQ-839	260.9	270.2	200	200	110800	109480	-14.9	ACIDO	0.66
1685	CHQ-840	138.0	150.0	360	200	37900	36590	-4.9	ACIDO	0.92
1686	CHQ-840	150.0	160.0	340	200	50890	48840	-6.6	ACIDO	0.69
1687	CHQ-840	160.0	170.5	250	200	48980	46760	-6.3	ACIDO	5.89
1688	CHQ-840	170.5	180.2	250	200	26740	24890	-3.3	ACIDO	5.69
1689	CHQ-840	180.2	190.1	360	200	36770	33770	-4.6	ACIDO	4.66
1690	CHQ-840	190.1	200.3	350	200	56810	51110	-6.9	ACIDO	14.52
1691	CHQ-840	200.3	210.5	200	200	45780	43010	-5.8	ACIDO	2.25
1692	CHQ-840	210.5	219.2	320	200	61790	57030	-7.7	ACIDO	7.29
1693	CHQ-840	219.2	229.1	210	200	83870	80060	-10.9	ACIDO	15.39
1694	CHQ-840	229.1	240.9	290	200	94250	91310	-12.4	ACIDO	10.53
1695	CHQ-840	240.9	249.5	300	200	97350	94110	-12.8	ACIDO	2.13
1696	CHQ-840	249.5	260.0	310	200	104300	101170	-13.8	ACIDO	1.56
1697	CHQ-840	260.0	270.0	250	200	223300	220200	-30.1	ACIDO	2.22
1698	CHQ-840	270.0	280.0	240	200	87840	85890	-11.7	ACIDO	0.34
1699	CHQ-851	70.0	80.0	500	500	85100	84600	-11.4	ACIDO	0.16
1700	CHQ-851	80.0	80.1	500	500	85100	84600	-11.4	ACIDO	0.11
1701	CHQ-851	80.1	90.0	500	500	73410	72910	-9.8	ACIDO	0.57
1702	CHQ-851	90.0	90.5	500	500	73410	72910	-9.8	ACIDO	1.40
1703	CHQ-851	90.5	100.0	500	500	68200	67700	-9.1	ACIDO	1.93
1704	CHQ-851	100.0	110.0	500	500	98730	98230	-13.3	ACIDO	0.72
1705	CHQ-851	110.0	120.0	500	500	115400	114900	-15.6	ACIDO	0.98
1706	CHQ-851	120.0	120.2	500	500	115400	114900	-15.6	ACIDO	0.98
1707	CHQ-851	120.2	130.0	500	500	70350	68840	-9.2	ACIDO	3.64
1708	CHQ-851	130.0	130.9	500	500	70350	68840	-9.2	ACIDO	2.39
1709	CHQ-851	130.9	140.0	500	500	64070	63570	-8.5	ACIDO	3.35
1710	CHQ-851	140.0	150.0	500	500	45290	43360	-5.8	ACIDO	13.36
1711	CHQ-851	150.0	160.0	500	500	37010	31960	-4.2	ACIDO	14.05
1712	CHQ-851	160.0	170.0	500	500	89370	86620	-11.7	ACIDO	36.67
1713	CHQ-851	170.0	180.0	500	500	96830	95690	-12.9	ACIDO	29.68
1714	CHQ-851	180.0	190.0	500	500	90620	88820	-12.0	ACIDO	18.03
1715	CHQ-851	190.0	190.5	500	500	90620	88820	-12.0	ACIDO	2.73
1716	CHQ-851	190.5	200.0	500	500	121800	120780	-16.4	ACIDO	1.22
1717	CHQ-851	200.0	209.7	500	500	152700	151210	-20.5	ACIDO	5.77
1718	CHQ-851	209.7	210.0	500	500	111100	107200	-14.5	ACIDO	2.82
1719	CHQ-851	210.0	220.0	500	500	111100	107200	-14.5	ACIDO	2.29
1720	CHQ-851	220.0	230.0	500	500	61410	60200	-8.1	ACIDO	0.63
1721	CHQ-851	230.0	240.0	500	500	86780	81110	-10.9	ACIDO	0.74
1722	CHQ-851	240.0	250.0	500	500	81010	80510	-10.8	ACIDO	1.03
1723	CHQ-851	250.0	260.0	500	500	71450	70950	-9.5	ACIDO	2.03
1724	CHQ-851	260.0	270.0	500	500	125100	122070	-16.5	ACIDO	5.52
1725	CHQ-851	270.0	270.4	500	500	125100	122070	-16.5	ACIDO	13.82
1726	CHQ-851	270.4	280.0	500	500	104900	79390	-10.7	ACIDO	0.49
1727	CHQ-851	280.0	280.7	500	500	104900	79390	-10.7	ACIDO	0.40
1728	CHQ-851	280.7	291.8	500	500	91650	78530	-10.6	ACIDO	0.83
1729	CHQ-859	20.0	30.0	500	500	71820	71320	-9.6	ACIDO	0.58
1730	CHQ-859	30.0	40.5	500	500	39220	35700	-4.7	ACIDO	1.16
1731	CHQ-859	40.5	50.0	500	500	82750	82250	-11.1	ACIDO	0.46
1732	CHQ-859	50.0	59.6	500	500	66280	65270	-8.8	ACIDO	0.19
1733	CHQ-859	59.6	70.0	500	500	79380	78880	-10.6	ACIDO	0.12
1734	CHQ-859	70.0	80.6	500	500	34170	32890	-4.3	ACIDO	0.37
1735	CHQ-859	80.6	90.5	500	500	68280	66780	-9.0	ACIDO	0.77
1736	CHQ-859	90.5	100.0	2260	500	43790	43290	-5.7	ACIDO	0.79
1737	CHQ-859	100.0	109.4	500	500	44960	43960	-5.8	ACIDO	3.55
1738	CHQ-859	109.4	120.0	500	500	68780	67390	-9.0	ACIDO	1.39
1739	CHQ-859	120.0	130.5	500	500	33880	31390	-4.1	ACIDO	2.45
1740	CHQ-859	130.5	140.0	500	500	69330	63290	-8.5	ACIDO	3.08
1741	CHQ-859	140.0	150.2	500	500	58630	57530	-7.7	ACIDO	3.94
1742	CHQ-859	150.2	160.5	500	500	72250	70140	-9.4	ACIDO	1.62
1743	CHQ-859	160.5	170.7	500	500	72840	64890	-8.7	ACIDO	18.56
1744	CHQ-859	170.7	180.5	500	500	92940	91800	-12.4	ACIDO	3.22
1745	CHQ-859	180.5	189.2	500	500	47150	45550	-6.1	ACIDO	2.58
1746	CHQ-859	189.2	200.4	500	500	71350	69570	-9.3	ACIDO	3.56
1747	CHQ-859	200.4	210.0	500	500	107000	104530	-14.1	ACIDO	3.81
1748	CHQ-859	210.0	220.0	500	500	72650	68720	-9.2	ACIDO	2.82
1749	CHQ-859	220.0	230.0	500	500	116200	114350	-15.5	ACIDO	1.96
1750	CHQ-859	230.0	237.6	500	500	154900	153430	-20.8	ACIDO	1.52
1751	CHQ-860	20.0	30.5	500	500	40570	38780	-5.1	ACIDO	0.76
1752	CHQ-860	30.5	40.0	500	500	55170	53600	-7.2	ACIDO	0.60
1753	CHQ-860	40.0	50.5	500	500	37220	33920	-4.5	ACIDO	1.02
1754	CHQ-860	50.5	60.5	500	500	73150	71890	-9.7	ACIDO	2.23
1755	CHQ-860	60.5	70.5	500	500	37200	35560	-4.7	ACIDO	0.37
1756	CHQ-860	70.5	80.5	500	500	80400	79350	-10.7	ACIDO	1.59
1757	CHQ-860	80.5	90.0	500	500	45030	43930	-5.8	ACIDO	2.40
1758	CHQ-860	90.0	100.8	500	500	43250	42050	-5.6	ACIDO	5.75
1759	CHQ-860	100.8	110.0	500	500	32520	31230	-4.1	ACIDO	2.85
1760	CHQ-860	110.0	120.0	500	500	56180	54720	-7.3	ACIDO	8.18
1761	CHQ-860	120.0	130.0	500	500	79600	75940	-10.2	ACIDO	10.50
1762	CHQ-860	130.0	140.0	500	500	75580	71620	-9.6	ACIDO	5.03
1763	CHQ-860	140.0	150.0	500	500	56020	52090	-7.0	ACIDO	0.88
1764	CHQ-860	150.0	160.0	500	500	63070	61700	-8.3	ACIDO	2.45
1765	CHQ-860	160.0	170.0	500	500	63540	58840	-7.9	ACIDO	3.37
1766	CHQ-860	170.0	179.5	500	500	47620	45840	-6.1	ACIDO	3.03
1767	CHQ-860	179.5	190.9	500	500	66310	64520	-8.7	ACIDO	2.78
1768	CHQ-860	190.9	200.0	500	500	62830	60650	-8.1	ACIDO	3.70
1769	CHQ-860	200.0	210.6	500	500	57060	55130	-7.4	ACIDO	3.42
1770	CHQ-860	210.6	218.9	500	500	88230	85900	-11.6	ACIDO	8.93
1771	CHQ-860	218.9	229.0	500	500	130800	128260	-17.4	ACIDO	2.47
1772	CHQ-860	229.0	240.0	500	500	71080	66960	-9.0	ACIDO	3.50
1773	CHQ-860	240.0	249.5	500	500	116700	112610	-15.2	ACIDO	3.55
1774	CHQ-860	249.5	260.0	500	500	205200	200490	-27.3	ACIDO	2.07
1775	CHQ-860	260.0	270.0	500	500	210700	206930	-28.2	ACIDO	3.53
1776	CHQ-860	270.0	280.0	500	500	182100	178930	-24.3	ACIDO	0.20
1777	CHQ-860	280.0	290.0	500	500	243700	240690	-32.8	ACIDO	0.22
1778	CHQ-860	290.0	300.7	500	500	218900	215670	-29.4	ACIDO	0.82

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1779	CHQ-860	300.7	310.0	500	500	168500	165930	-22.5	ACIDO	0.28
1780	CHQ-860	310.0	320.0	500	500	282300	280320	-38.2	ACIDO	0.25
1781	CHQ-860	320.0	330.0	500	500	293300	289530	-39.5	ACIDO	0.32
1782	CHQ-860	330.0	336.7	500	500	259100	254410	-34.7	ACIDO	0.14
1783	CHQ-861	19.5	30.0	500	500	53780	52680	-7.0	ACIDO	0.70
1784	CHQ-861	30.0	40.0	500	500	37470	36370	-4.8	ACIDO	0.34
1785	CHQ-861	40.0	50.0	500	500	41500	39590	-5.2	ACIDO	1.87
1786	CHQ-861	50.0	59.5	500	500	21130	17530	-2.2	ACIDO	0.67
1787	CHQ-861	59.5	69.8	500	500	18470	17060	-2.2	ACIDO	0.46
1788	CHQ-861	69.8	80.0	500	500	38940	37690	-5.0	ACIDO	2.41
1789	CHQ-861	80.0	90.0	500	500	42490	41260	-5.5	ACIDO	2.62
1790	CHQ-861	90.0	100.0	500	500	25390	24290	-3.1	ACIDO	2.70
1791	CHQ-861	100.0	110.8	500	500	41950	40040	-5.3	ACIDO	1.52
1792	CHQ-861	110.8	120.0	1590	500	47710	45690	-6.1	ACIDO	4.86
1793	CHQ-861	120.0	130.0	500	500	55160	52740	-7.0	ACIDO	4.54
1794	CHQ-861	130.0	140.0	1520	500	27310	24950	-3.2	ACIDO	1.06
1795	CHQ-861	140.0	150.0	500	500	46250	43530	-5.8	ACIDO	1.74
1796	CHQ-861	150.0	160.9	1210	500	72620	68830	-9.2	ACIDO	2.12
1797	CHQ-861	160.9	170.0	500	500	84860	81790	-11.0	ACIDO	5.03
1798	CHQ-861	170.0	180.0	500	500	69820	68520	-9.2	ACIDO	0.61
1799	CHQ-861	180.0	190.0	500	500	44840	42480	-5.6	ACIDO	0.50
1800	CHQ-861	190.0	200.0	500	500	42100	38400	-5.1	ACIDO	0.44
1801	CHQ-861	200.0	209.2	500	500	54090	52400	-7.0	ACIDO	1.13
1802	CHQ-861	209.2	219.0	500	500	74450	73950	-9.9	ACIDO	0.34
1803	CHQ-861	219.0	230.0	500	500	64410	63170	-8.5	ACIDO	0.65
1804	CHQ-861	230.0	240.0	500	500	68800	68300	-9.2	ACIDO	0.18
1805	CHQ-861	240.0	251.0	500	500	64360	63860	-8.6	ACIDO	0.33
1806	CHQ-898	20.5	30.0	500	500	79310	78810	-10.6	ACIDO	0.26
1807	CHQ-898	70.0	80.7	500	500	77390	76090	-10.2	ACIDO	0.15
1808	CHQ-898	80.7	90.0	500	500	66470	65270	-8.8	ACIDO	0.27
1809	CHQ-898	90.0	100.0	500	500	56700	56200	-7.5	ACIDO	0.19
1810	CHQ-898	110.5	120.0	500	500	63510	62190	-8.3	ACIDO	0.12
1811	CHQ-898	120.0	130.0	500	500	15680	15180	-1.9	ACIDO	0.41
1812	CHQ-898	130.0	139.3	500	500	12980	11680	-1.4	ACIDO	0.53
1813	CHQ-898	139.3	150.0	500	500	39220	37870	-5.0	ACIDO	3.03
1814	CHQ-898	150.0	159.5	500	500	11200	9160	-1.1	ACIDO	0.96
1815	CHQ-898	159.5	169.5	500	500	30160	28390	-3.7	ACIDO	1.15
1816	CHQ-898	169.5	180.0	500	500	109600	107350	-14.5	ACIDO	1.40
1817	CHQ-898	180.0	190.0	500	500	123900	122040	-16.5	ACIDO	1.30
1818	CHQ-898	190.0	200.2	500	500	101500	99670	-13.5	ACIDO	3.56
1819	CHQ-898	200.2	210.0	500	500	108300	105840	-14.3	ACIDO	0.74
1820	CHQ-898	210.0	220.0	500	500	93830	91460	-12.3	ACIDO	0.34
1821	CHQ-898	220.0	230.0	500	500	139500	137150	-18.6	ACIDO	0.52
1822	CHQ-898	230.0	239.0	500	500	116800	114840	-15.5	ACIDO	0.56
1823	CHQ-898	239.0	250.5	500	500	88640	86660	-11.7	ACIDO	2.77
1824	CHQ-898	250.5	260.0	500	500	107000	105060	-14.2	ACIDO	4.01
1825	CHQ-898	260.0	270.0	500	500	173000	170470	-23.2	ACIDO	10.04
1826	CHQ-898	270.0	280.8	500	500	188000	184830	-25.1	ACIDO	3.08
1827	CHQ-898	280.8	290.0	500	500	103900	101880	-13.8	ACIDO	6.16
1828	CHQ-898	290.0	300.0	500	500	109100	107580	-14.6	ACIDO	3.15
1829	CHQ-898	300.0	310.4	500	500	194700	191970	-26.1	ACIDO	3.63
1830	CHQ-898	310.4	320.0	500	500	137200	130610	-17.7	ACIDO	8.48
1831	CHQ-898	320.0	330.0	500	500	120000	118350	-16.0	ACIDO	1.67
1832	CHQ-898	330.0	339.5	500	500	87350	86030	-11.6	ACIDO	0.58
1833	CHQ-898	339.5	350.0	500	500	104100	102540	-13.9	ACIDO	0.18
1834	CHQ-898	350.0	360.2	500	500	110300	108610	-14.7	ACIDO	0.14
1835	CHQ-898	360.2	369.0	500	500	191000	186250	-25.3	ACIDO	0.35
1836	CHQ-911	12.0	14.0	500	500	73870	72710	-9.8	ACIDO	3.13
1837	CHQ-911	14.0	16.0	500	500	73870	72710	-9.8	ACIDO	3.74
1838	CHQ-911	16.0	18.0	500	500	73870	72710	-9.8	ACIDO	2.22
1839	CHQ-911	18.0	20.0	500	500	73870	72710	-9.8	ACIDO	1.32
1840	CHQ-911	20.0	22.0	500	500	45520	45020	-6.0	ACIDO	0.76
1841	CHQ-911	22.0	24.0	500	500	45520	45020	-6.0	ACIDO	0.86
1842	CHQ-911	24.0	26.0	500	500	45520	45020	-6.0	ACIDO	4.17
1843	CHQ-911	26.0	28.0	500	500	45520	45020	-6.0	ACIDO	1.09
1844	CHQ-911	28.0	30.0	500	500	45520	45020	-6.0	ACIDO	2.01
1845	CHQ-911	30.0	32.0	500	500	91080	89780	-12.1	ACIDO	0.36
1846	CHQ-911	32.0	34.0	500	500	91080	89780	-12.1	ACIDO	0.36
1847	CHQ-911	34.0	36.0	500	500	91080	89780	-12.1	ACIDO	0.62
1848	CHQ-911	36.0	38.0	500	500	91080	89780	-12.1	ACIDO	1.10
1849	CHQ-911	38.0	40.0	500	500	91080	89780	-12.1	ACIDO	0.47
1850	CHQ-911	40.0	40.5	500	500	91080	89780	-12.1	ACIDO	0.45
1851	CHQ-911	40.5	42.0	500	500	71880	70810	-9.5	ACIDO	0.96
1852	CHQ-911	42.0	44.0	500	500	71880	70810	-9.5	ACIDO	0.79
1853	CHQ-911	44.0	46.0	500	500	71880	70810	-9.5	ACIDO	7.33
1854	CHQ-911	46.0	48.0	500	500	71880	70810	-9.5	ACIDO	0.62
1855	CHQ-911	48.0	50.0	500	500	71880	70810	-9.5	ACIDO	0.55
1856	CHQ-911	50.0	52.0	500	500	56600	55210	-7.4	ACIDO	0.42
1857	CHQ-911	52.0	54.0	500	500	56600	55210	-7.4	ACIDO	2.67
1858	CHQ-911	54.0	56.0	500	500	56600	55210	-7.4	ACIDO	5.42
1859	CHQ-911	56.0	58.0	500	500	56600	55210	-7.4	ACIDO	1.29
1860	CHQ-911	58.0	60.0	500	500	56600	55210	-7.4	ACIDO	2.43
1861	CHQ-911	60.0	60.5	500	500	56600	55210	-7.4	ACIDO	2.62
1862	CHQ-911	60.5	62.0	500	500	53740	50260	-6.7	ACIDO	2.13
1863	CHQ-911	62.0	64.0	500	500	53740	50260	-6.7	ACIDO	3.79
1864	CHQ-911	64.0	66.0	500	500	53740	50260	-6.7	ACIDO	9.31
1865	CHQ-911	66.0	68.0	500	500	53740	50260	-6.7	ACIDO	6.26
1866	CHQ-911	68.0	70.0	500	500	53740	50260	-6.7	ACIDO	9.92
1867	CHQ-911	70.0	70.2	500	500	53740	50260	-6.7	ACIDO	9.92
1868	CHQ-911	70.2	72.0	500	500	28260	27760	-3.6	ACIDO	1.70
1869	CHQ-911	72.0	74.0	500	500	28260	27760	-3.6	ACIDO	0.56
1870	CHQ-911	74.0	76.0	500	500	28260	27760	-3.6	ACIDO	1.27
1871	CHQ-911	76.0	78.0	500	500	28260	27760	-3.6	ACIDO	2.36
1872	CHQ-911	78.0	80.0	500	500	28260	27760	-3.6	ACIDO	1.14
1873	CHQ-911	80.0	80.7	500	500	28260	27760	-3.6	ACIDO	0.73
1874	CHQ-911	80.7	82.0	500	500	16650	16150	-2.0	ACIDO	0.75
1875	CHQ-911	82.0	84.0	500	500	16650	16150	-2.0	ACIDO	0.37
1876	CHQ-911	84.0	86.0	500	500	16650	16150	-2.0	ACIDO	1.22
1877	CHQ-911	86.0	88.0	500	500	16650	16150	-2.0	ACIDO	2.74
1878	CHQ-911	88.0	90.0	500	500	16650	16150	-2.0	ACIDO	2.70
1879	CHQ-911	90.0	92.0	500	500	59120	52110	-7.0	ACIDO	7.30
1880	CHQ-911	92.0	94.0	500	500	59120	52110	-7.0	ACIDO	18.89
1881	CHQ-911	94.0	96.0	500	500	59120	52110	-7.0	ACIDO	8.42
1882	CHQ-911	96.0	98.0	500	500	59120	52110	-7.0	ACIDO	12.45
1883	CHQ-911	98.0	100.0	500	500	59120	52110	-7.0	ACIDO	6.44
1884	CHQ-911	100.0	102.0	500	500	11790	11290	-1.4	ACIDO	1.20
1885	CHQ-911	102.0	104.0	500	500	11790	11290	-1.4	ACIDO	3.75
1886	CHQ-911	104.0	106.0	500	500	11790	11290	-1.4	ACIDO	7.39
1887	CHQ-911	106.0	108.0	500	500	11790	11290	-1.4	ACIDO	1.59
1888	CHQ-911	108.0	110.0	500	500	11790	11290	-1.4	ACIDO	81.47
1889	CHQ-911	110.0	112.0	500	500	23820	22240	-2.9	ACIDO	58.70
1890	CHQ-911	112.0	114.0	500	500	23820	22240	-2.9	ACIDO	39.88
1891	CHQ-911	114.0	116.0	500	500	23820	22240	-2.9	ACIDO	15.23
1892	CHQ-911	116.0	118.0	500	500	23820	22240	-2.9	ACIDO	2.68
1893	CHQ-911	118.0	120.0	500	500	23820	22240	-2.9	ACIDO	0.81
1894	CHQ-911	120.0	122.0	500	500	5940	5440	-0.6	LIGERAMENTE ACIDO	2.19
1895	CHQ-911	122.0	124.0	500	500	5940	5440	-0.6	LIGERAMENTE ACIDO	2.72
1896	CHQ-911	124.0	126.0	500	500	5940	5440	-0.6	LIGERAMENTE ACIDO	0.73
1897	CHQ-911	126.0	128.0	500	500	5940	5440	-0.6	LIGERAMENTE ACIDO	2.70
1898	CHQ-911	128.0	130.0	500	500	5940	5440	-0.6	LIGERAMENTE ACIDO	2.88

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1899	CHQ-911	130.0	130.1	500	500	5940	5440	-0.6	LIGERAMENTE ACIDO	2.88
1900	CHQ-911	130.1	132.0	500	500	87780	83240	-11.2	ACIDO	4.65
1901	CHQ-911	132.0	134.0	500	500	87780	83240	-11.2	ACIDO	3.53
1902	CHQ-911	134.0	136.0	500	500	87780	83240	-11.2	ACIDO	4.87
1903	CHQ-911	136.0	138.0	500	500	87780	83240	-11.2	ACIDO	9.86
1904	CHQ-911	138.0	140.0	500	500	87780	83240	-11.2	ACIDO	6.05
1905	CHQ-911	140.0	142.0	500	500	95640	91090	-12.3	ACIDO	2.52
1906	CHQ-911	142.0	144.0	500	500	95640	91090	-12.3	ACIDO	0.86
1907	CHQ-911	144.0	146.0	500	500	95640	91090	-12.3	ACIDO	0.51
1908	CHQ-911	146.0	148.0	500	500	95640	91090	-12.3	ACIDO	0.60
1909	CHQ-911	148.0	150.0	500	500	95640	91090	-12.3	ACIDO	1.00
1910	CHQ-911	150.0	152.0	500	500	148000	143660	-19.5	ACIDO	2.32
1911	CHQ-911	152.0	154.0	500	500	148000	143660	-19.5	ACIDO	2.96
1912	CHQ-911	154.0	156.0	500	500	148000	143660	-19.5	ACIDO	2.11
1913	CHQ-911	156.0	158.0	500	500	148000	143660	-19.5	ACIDO	2.80
1914	CHQ-911	158.0	160.0	500	500	148000	143660	-19.5	ACIDO	5.77
1915	CHQ-911	160.0	162.0	500	500	140700	136880	-18.6	ACIDO	2.22
1916	CHQ-911	162.0	164.0	500	500	140700	136880	-18.6	ACIDO	2.62
1917	CHQ-911	164.0	166.0	500	500	140700	136880	-18.6	ACIDO	1.40
1918	CHQ-911	166.0	168.0	500	500	140700	136880	-18.6	ACIDO	0.83
1919	CHQ-911	168.0	170.0	500	500	140700	136880	-18.6	ACIDO	0.67
1920	CHQ-911	170.0	172.0	1900	500	154100	150200	-20.4	ACIDO	0.50
1921	CHQ-911	172.0	174.0	1900	500	154100	150200	-20.4	ACIDO	0.95
1922	CHQ-911	174.0	176.0	1900	500	154100	150200	-20.4	ACIDO	0.55
1923	CHQ-911	176.0	178.0	1900	500	154100	150200	-20.4	ACIDO	0.44
1924	CHQ-911	178.0	180.0	1900	500	154100	150200	-20.4	ACIDO	0.24
1925	CHQ-911	180.0	180.7	1900	500	154100	150200	-20.4	ACIDO	0.17
1926	CHQ-911	180.7	182.0	1190	500	199700	193900	-26.4	ACIDO	0.36
1927	CHQ-911	182.0	184.0	1190	500	199700	193900	-26.4	ACIDO	0.66
1928	CHQ-911	184.0	186.0	1190	500	199700	193900	-26.4	ACIDO	0.15
1929	CHQ-911	188.0	190.0	1190	500	199700	193900	-26.4	ACIDO	0.92
1930	CHQ-911	190.0	190.5	1190	500	199700	193900	-26.4	ACIDO	0.92
1931	CHQ-911	190.5	192.0	2860	1270	110400	105060	-13.9	ACIDO	1.48
1932	CHQ-911	192.0	194.0	2860	1270	110400	105060	-13.9	ACIDO	2.30
1933	CHQ-911	194.0	196.0	2860	1270	110400	105060	-13.9	ACIDO	4.20
1934	CHQ-911	196.0	198.0	2860	1270	110400	105060	-13.9	ACIDO	6.55
1935	CHQ-911	198.0	200.0	2860	1270	110400	105060	-13.9	ACIDO	3.72
1936	CHQ-911	200.0	200.6	2860	1270	110400	105060	-13.9	ACIDO	2.78
1937	CHQ-911	200.6	202.0	500	1130	60350	58120	-7.5	ACIDO	1.20
1938	CHQ-911	202.0	204.0	500	1130	60350	58120	-7.5	ACIDO	1.35
1939	CHQ-911	204.0	206.0	500	1130	60350	58120	-7.5	ACIDO	0.97
1940	CHQ-911	206.0	208.0	500	1130	60350	58120	-7.5	ACIDO	2.02
1941	CHQ-911	208.0	210.0	500	1130	60350	58120	-7.5	ACIDO	1.92
1942	CHQ-911	210.0	212.0	1110	500	97860	95550	-12.9	ACIDO	0.82
1943	CHQ-911	212.0	214.0	1110	500	97860	95550	-12.9	ACIDO	0.36
1944	CHQ-911	218.0	220.0	1110	500	97860	95550	-12.9	ACIDO	0.21
1945	CHQ-911	220.0	222.0	500	500	70870	68940	-9.3	ACIDO	0.35
1946	CHQ-911	222.0	224.0	500	500	70870	68940	-9.3	ACIDO	0.39
1947	CHQ-911	224.0	226.0	500	500	70870	68940	-9.3	ACIDO	0.27
1948	CHQ-911	226.0	228.0	500	500	70870	68940	-9.3	ACIDO	0.18
1949	CHQ-911	228.0	230.0	500	500	70870	68940	-9.3	ACIDO	0.77
1950	CHQ-911	230.0	232.0	500	500	33260	32760	-4.3	ACIDO	0.22
1951	CHQ-911	232.0	234.0	500	500	33260	32760	-4.3	ACIDO	0.20
1952	CHQ-911	234.0	236.0	500	500	33260	32760	-4.3	ACIDO	0.27
1953	CHQ-911	236.0	238.0	500	500	33260	32760	-4.3	ACIDO	0.16
1954	CHQ-911	250.5	252.0	1130	500	7880	6870	-0.8	LIGERAMENTE ACIDO	0.15
1955	CHQ-911	252.0	254.0	1130	500	7880	6870	-0.8	LIGERAMENTE ACIDO	0.34
1956	CHQ-911	254.0	256.0	1130	500	7880	6870	-0.8	LIGERAMENTE ACIDO	0.15
1957	CHQ-911	260.0	262.0	500	500	52060	49810	-6.6	ACIDO	0.22
1958	CHQ-912	0.0	2.0	500	500	2510	90	0.2	LIGERAMENTE BASICO	0.63
1959	CHQ-912	2.0	4.0	500	500	2510	90	0.2	LIGERAMENTE BASICO	0.43
1960	CHQ-912	4.0	6.0	500	500	2510	90	0.2	LIGERAMENTE BASICO	0.17
1961	CHQ-912	6.0	8.0	500	500	2510	90	0.2	LIGERAMENTE BASICO	0.19
1962	CHQ-912	8.0	10.0	500	500	2510	90	0.2	LIGERAMENTE BASICO	0.31
1963	CHQ-912	10.0	12.0	500	500	2060	460	0.1	LIGERAMENTE BASICO	0.28
1964	CHQ-912	12.0	14.0	500	500	2060	460	0.1	LIGERAMENTE BASICO	0.17
1965	CHQ-912	14.0	16.5	500	500	2060	460	0.1	LIGERAMENTE BASICO	0.11
1966	CHQ-912	24.3	26.0	500	500	1370	870	0.1	INERTE	0.35
1967	CHQ-912	26.0	28.0	500	500	1370	870	0.1	INERTE	1.07
1968	CHQ-912	28.0	29.8	500	500	1370	870	0.1	INERTE	0.20
1969	CHQ-912	38.0	40.0	500	500	1020	520	0.1	LIGERAMENTE BASICO	0.12
1970	CHQ-912	40.0	42.0	500	500	1290	790	0.1	INERTE	0.12
1971	CHQ-912	44.0	46.5	500	500	1290	790	0.1	INERTE	0.17
1972	CHQ-912	48.6	50.5	500	500	1290	790	0.1	INERTE	0.28
1973	CHQ-912	50.5	52.0	500	500	1310	810	0.1	INERTE	0.19
1974	CHQ-912	52.0	54.0	500	500	1310	810	0.1	INERTE	0.10
1975	CHQ-912	56.0	57.5	500	500	1310	810	0.1	INERTE	0.27
1976	CHQ-912	57.5	59.4	500	500	1310	810	0.1	INERTE	0.41
1977	CHQ-912	59.4	61.0	500	500	1310	810	0.1	INERTE	0.11
1978	CHQ-912	61.0	62.5	500	500	1310	810	0.1	INERTE	0.12
1979	CHQ-912	62.5	64.0	500	500	1310	810	0.1	INERTE	0.15
1980	CHQ-912	73.5	75.0	500	500	1570	1070	0.0	INERTE	0.15
1981	CHQ-912	75.0	76.5	500	500	1570	1070	0.0	INERTE	0.13
1982	CHQ-912	76.5	78.0	500	500	1570	1070	0.0	INERTE	0.18
1983	CHQ-912	78.0	80.0	500	500	1570	1070	0.0	INERTE	1.37
1984	CHQ-912	80.0	82.0	500	500	1260	760	0.1	INERTE	0.14
1985	CHQ-912	82.0	84.0	500	500	1260	760	0.1	INERTE	0.17
1986	CHQ-912	84.0	86.0	500	500	1260	760	0.1	INERTE	0.12
1987	CHQ-912	88.0	90.0	500	500	1260	760	0.1	INERTE	0.17
1988	CHQ-912	92.0	94.0	500	500	1320	820	0.1	INERTE	0.12
1989	CHQ-912	94.0	96.0	500	500	1320	820	0.1	INERTE	0.22
1990	CHQ-912	96.0	98.0	500	500	1320	820	0.1	INERTE	0.12
1991	CHQ-912	100.0	102.1	500	500	1490	230	0.2	LIGERAMENTE BASICO	0.40
1992	CHQ-912	102.1	104.0	500	500	1490	230	0.2	LIGERAMENTE BASICO	0.55
1993	CHQ-912	104.0	106.0	500	500	1490	230	0.2	LIGERAMENTE BASICO	0.56
1994	CHQ-912	106.0	108.0	500	500	1490	230	0.2	LIGERAMENTE BASICO	0.49
1995	CHQ-912	108.0	110.0	500	500	1490	230	0.2	LIGERAMENTE BASICO	0.66
1996	CHQ-912	110.0	112.0	500	500	1410	250	0.1	LIGERAMENTE BASICO	0.98
1997	CHQ-912	112.0	114.0	500	500	1410	250	0.1	LIGERAMENTE BASICO	1.00
1998	CHQ-912	114.0	116.0	500	500	1410	250	0.1	LIGERAMENTE BASICO	0.98
1999	CHQ-912	116.0	118.0	500	500	1410	250	0.1	LIGERAMENTE BASICO	1.05
2000	CHQ-912	118.0	120.4	500	500	1410	250	0.1	LIGERAMENTE BASICO	1.31
2001	CHQ-912	120.4	122.0	500	500	1630	270	0.1	LIGERAMENTE BASICO	1.16
2002	CHQ-912	122.0	124.0	500	500	1630	270	0.1	LIGERAMENTE BASICO	1.07
2003	CHQ-912	124.0	126.0	500	500	1630	270	0.1	LIGERAMENTE BASICO	0.82
2004	CHQ-912	126.0	128.0	500	500	1630	270	0.1	LIGERAMENTE BASICO	0.54
2005	CHQ-912	128.0	130.0	500	500	1630	270	0.1	LIGERAMENTE BASICO	0.93
2006	CHQ-912	130.0	132.0	500	500	1980	20	0.2	LIGERAMENTE BASICO	1.15
2007	CHQ-912	132.0	134.0	500	500	1980	20	0.2	LIGERAMENTE BASICO	1.20
2008	CHQ-912	134.0	136.0	500	500	1980	20	0.2	LIGERAMENTE BASICO	1.28
2009	CHQ-912	136.0	137.5	500	500	1980	20	0.2	LIGERAMENTE BASICO	1.52
2010	CHQ-912	137.5	139.4	500	500	1980	20	0.2	LIGERAMENTE BASICO	1.20
2011	CHQ-912	139.4	141.5	500	500	2050	20	0.2	LIGERAMENTE BASICO	0.72
2012	CHQ-912	141.5	144.0	500	500	2050	20	0.2	LIGERAMENTE BASICO	0.53
2013	CHQ-912	144.0	146.0	500	500	2050	20	0.2	LIGERAMENTE BASICO	0.42
2014	CHQ-912	146.0	148.0	500	500	2050	20	0.2	LIGERAMENTE BASICO	0.68
2015	CHQ-912	148.0	150.0	500	500	2050	20	0.2	LIGERAMENTE BASICO	0.60
2016	CHQ-912	150.0	152.0	500	500	1870	330	0.1	LIGERAMENTE BASICO	0.78
2017	CHQ-912	152.0	154.0	500	500	1870	330	0.1	LIGERAMENTE BASICO	0.51
2018	CHQ-912	154.0	156.5	500	500	1870	330	0.1	LIGERAMENTE BASICO	0.36
2019	CHQ-912	156.5	158.8	500	500	1870	330	0.1	LIGERAMENTE BASICO	0.48
2020	CHQ-912	158.8	160.5	500	500	1870	330	0.1	LIGERAMENTE BASICO	0.71
2021	CHQ-912	160.5	162.0	500	500	3710	1850	-0.1	INERTE	0.26
2022	CHQ-912	162.0	164.0	500	500	3710	1850	-0.1	INERTE	0.29
2023	CHQ-912	164.0	166.0	500	500	3710	1850	-0.1	INERTE	0.66
2024	CHQ-912	166.0	168.0	500	500	3710	1850	-0.1	INERTE	0.32
2025	CHQ-912	168.0	170.5	500	500	3710	1850	-0.1	INERTE	0.34
2026	CHQ-912	170.5	173.0	500	500	8130	2790	-0.2	LIGERAMENTE ACIDO	0.71
2027	CHQ-912	173.0	174.5	500	500	8130	2790	-0.2	LIGERAMENTE ACIDO	2.36
2028	CHQ-912	174.5	176.0	500	500	8130	2790	-0.2	LIGERAMENTE ACIDO	1.77
2029	CHQ-912	176.0	178.0	500	500	8130	2790	-0.2	LIGERAMENTE ACIDO	0.57
2030	CHQ-912	178.0	180.0	500	500	8130	2790	-0.2	LIGERAMENTE ACIDO	0.58
2031	CHQ-912	180.0	182.0	500	500	2000	310	0.1	LIGERAMENTE BASICO	0.65
2032	CHQ-912	182.0	184.0	500	500	2000	310	0.1	LIGERAMENTE BASICO	0.20
2033	CHQ-912	184.0	186.0	500	500	2000	310	0.1	LIGERAMENTE BASICO	0.24
2034	CHQ-912	186.0	188.0	500	500	2000	310	0.1	LIGERAMENTE BASICO	0.36
2035	CHQ-912	188.0	190.0	500	500	2000	310	0.1	LIGERAMENTE BASICO	0.46
2036	CHQ-912	190.0	192.0	500	500	1670	250	0.1	LIGERAMENTE BASICO	0.30
2037	CHQ-912	192.0	194.0	500	500	1670	250	0.1	LIGERAMENTE BASICO	0.22
2038	CHQ-912	194.0	196.0	500	500	1670	250	0.1	LIGERAMENTE BASICO	0.31
2039	CHQ-912	196.0	198.4	500	500	1670	250	0.1	LIGERAMENTE BASICO	0.69
2040	CHQ-912	198.4	200.0	500	500	1670	250	0.1	LIGERAMENTE BASICO	0.93
2041	CHQ-912	200.0	202.0	500	500	1810	1310	0.0	INERTE	0.53
2042	CHQ-912	202.0	203.7	500	500	1810	1310	0.0	INERTE	0.27
2043	CHQ-912	203.7	206.0	500	500	1810	1310	0.0	INERTE	0.56
2044	CHQ-912	206.0	208.0	500	500	1810	1310	0.0	INERTE	1.05
2045	CHQ-912	208.0	210.0	500	500	1810	1310	0.0	INERTE	0.95
2046	CHQ-912	210.0	212.0	500	500	1550	460	0.1	LIGERAMENTE BASICO	2.91
2047	CHQ-912	212.0	213.5	500	500	1550	460	0.1	LIGERAMENTE BASICO	2.11
2048	CHQ-912	213.5	215.0	500	500	1550	460	0.1	LIGERAMENTE BASICO	1.56
2049	CHQ-912	215.0	217.3	500	500	1550	460	0.1	LIGERAMENTE BASICO	1.97
2050	CHQ-912	217.3	219.0	500	500	1550	460	0.1	LIGERAMENTE BASICO	6.05
2051	CHQ-912	219.0	220.5	500	500	1550	460	0.1	LIGERAMENTE BASICO	11.86
2052	CHQ-912	220.5	222.0	500	500	3300	2180	-0.1	LIGERAMENTE ACIDO	2.19
2053	CHQ-912	222.0	224.0	500	500	3300	2180	-0.1	LIGERAMENTE ACIDO	4.50
2054	CHQ-912	224.0	226.0	500	500	3300	2180	-0.1	LIGERAMENTE ACIDO	63.81
2055	CHQ-912	226.0	228.3	500	500	3300	2180	-0.1	LIGERAMENTE ACIDO	3.40
2056	CHQ-912	228.3	230.0	500	500	3300	2180	-0.1	LIGERAMENTE ACIDO	5.03
2057	CHQ-912	230.0	232.0	500	500	3850	2770	-0.2	LIGERAMENTE ACIDO	1.47
2058	CHQ-912	232.0	234.0	500	500	3850	2770	-0.2	LIGERAMENTE ACIDO	0.94
2059	CHQ-912	234.0	236.0	500	500	3850	2770	-0.2	LIGERAMENTE ACIDO	0.70
2060	CHQ-912	236.0	237.5	500	500	3850	2770	-0.2	LIGERAMENTE ACIDO	0.79
2061	CHQ-912	237.5	239.0	500	500	3850	2770	-0.2	LIGERAMENTE ACIDO	1.46
2062	CHQ-912	239.0	240.5	500	500	3850	2770	-0.2	LIGERAMENTE ACIDO	4.15
2063	CHQ-912	240.5	242.8	500	500	2500	2000	-0.1	INERTE	9.31
2064	CHQ-912	242.8	244.4	500	500	2500	2000	-0.1	INERTE	4.86
2065	CHQ-912	244.4	245.9	500	500	2500	2000	-0.1	INERTE	3.87
2066	CHQ-912	245.9	248.0	500	500	2500	2000	-0.1	INERTE	2.27
2067	CHQ-912	248.0	250.0	500	500	2500	2000	-0.1	INERTE	1.60
2068	CHQ-912	250.0	252.1	500	500	2130	640	0.1	INERTE	2.97
2069	CHQ-912	252.1	254.0	500	500	2130	640	0.1	INERTE	1.45
2070	CHQ-912	254.0	256.0	500	500	2130	640	0.1	INERTE	0.72
2071	CHQ-912	256.0	258.2	500	500	2130	640	0.1	INERTE	0.32
2072	CHQ-912	258.2	260.0	500	500	2130	640	0.1	INERTE	0.76
2073	CHQ-912	260.0	262.0	500	500	2130	640	0.1	INERTE	0.57
2074	CHQ-912	262.0	264.1	500	500	2420	820	0.1	INERTE	0.27
2075	CHQ-912	264.1	266.0	500	500	2420	820	0.1	INERTE	0.27
2076	CHQ-912	266.0	267.6	500	500	2420	820	0.1	INERTE	0.16
2077	CHQ-912	267.6	270.0	500	500	2420	820	0.1	INERTE	0.56
2078	CHQ-912	270.0	271.5	500	500	2420	820	0.1	INERTE	0.17
2079	CHQ-912	271.5	273.1	500	500	2420	820	0.1	INERTE	0.14
2080	CHQ-912	273.1	275.0	500	500	2610	1100	0.0	INERTE	0.28
2081	CHQ-912	275.0	276.5	500	500	2610	1100	0.0	INERTE	0.28
2082	CHQ-912	276.5	278.0	500	500	2610	1100	0.0	INERTE	0.29
2083	CHQ-912	278.0	280.0	500	500	2610	1100	0.0	INERTE	0.39
2084	CHQ-912	280.0	282.0	500	500	6080	4830	-0.5	LIGERAMENTE ACIDO	0.32
2085	CHQ-912	282.0	284.0	500	500	6080	4830	-0.5	LIGERAMENTE ACIDO	0.44
2086	CHQ-912	284.0	286.5	500	500	6080	4830	-0.5	LIGERAMENTE ACIDO	0.30
2087	CHQ-912	286.5	288.8	500	500	6080	4830	-0.5	LIGERAMENTE ACIDO	0.32
2088	CHQ-912	288.8	290.3	500	500	6080	4830	-0.5	LIGERAMENTE ACIDO	1.14
2089	CHQ-912	290.3	291.8	500	500	38760	34890	-4.6	ACIDO	0.67
2090	CHQ-912	291.8	294.0	500	500	38760	34890	-4.6	ACIDO	1.13
2091	CHQ-912	294.0	296.5	500	500	38760	34890	-4.6	ACIDO	0.77
2092	CHQ-912	296.5	298.7	500	500	38760	34890	-4.6	ACIDO	1.14
2093	CHQ-912	298.7	300.5	500	500	38760	34890	-4.6	ACIDO	0.86
2094	CHQ-912	300.5	302.0	500	500	46470	43940	-5.8	ACIDO	1.07
2095	CHQ-912	302.0	304.0	500	500	46470	43940	-5.8	ACIDO	1.19
2096	CHQ-912	304.0	305.5	500	500	46470	43940	-5.8	ACIDO	1.65
2097	CHQ-912	305.5	307.3	500	500	46470	43940	-5.8	ACIDO	1.40
2098	CHQ-912	307.3	309.0	500	500	46470	43940	-5.8	ACIDO	1.60
2099	CHQ-912	309.0	310.5	500	500	46470	43940	-5.8	ACIDO	1.30
2100	CHQ-912	310.5	312.2	500	500	89450	84090	-11.3	ACIDO	0.98
2101	CHQ-912	312.2	313.7	500	500	89450	84090	-11.3	ACIDO	2.27
2102	CHQ-912	313.7	315.2	500	500	89450	84090	-11.3	ACIDO	1.22
2103	CHQ-912	315.2	317.0	500	500	89450	84090	-11.3	ACIDO	1.90
2104	CHQ-912	317.0	318.6	500	500	89450	84090	-11.3	ACIDO	1.29
2105	CHQ-912	318.6	320.5	500	500	87040	84890	-11.4	ACIDO	1.14
2106	CHQ-912	320.5	322.0	500	500	87040	84890	-11.4	ACIDO	0.93
2107	CHQ-912	322.0	324.5	500	500	87040	84890	-11.4	ACIDO	0.94
2108	CHQ-912	324.5	326.0	500	500	87040	84890	-11.4	ACIDO	0.77
2109	CHQ-912	326.0	328.0	500	500	87040	84890	-11.4	ACIDO	1.70
2110	CHQ-912	328.0	330.0	500	500	87040	84890	-11.4	ACIDO	0.70
2111	CHQ-912	330.0	332.0	1700	500	272500	269360	-36.7	ACIDO	0.87
2112	CHQ-912	332.0	334.5	1700	500	272500	269360	-36.7	ACIDO	1.89
2113	CHQ-912	334.5	336.7	1700	500	272500	269360	-36.7	ACIDO	2.62
2114	CHQ-912	353.2	355.5	1020	500	248200	245000	-33.4	ACIDO	0.13
2115	CHQ-912	355.5	357.9	1020	500	248200	245000	-33.4	ACIDO	0.13
2116	CHQ-913	0.0	10.0	500	500	7240	5660	-0.6	LIGERAMENTE ACIDO	0.44
2117	CHQ-913	10.0	20.0	500	500	1660	90	0.2	LIGERAMENTE BASICO	0.25
2118	CHQ-913	20.0	30.0	500	500	1650	480	0.1	LIGERAMENTE BASICO	0.12
2119	CHQ-913	30.0	40.0	500	500	1510	1010	0.0	INERTE	0.10
2120	CHQ-913	50.5	54.0	500	500	40120	36900	-4.9	ACIDO	0.12
2121	CHQ-913	56.0	58.0	500	500	40120	36900	-4.9	ACIDO	0.19
2122	CHQ-913	58.0	59.1	500	500	40120	36900	-4.9	ACIDO	0.31
2123	CHQ-913	62.0	64.0	500	500	69010	67860	-9.1	ACIDO	0.12
2124	CHQ-913	64.0	66.0	500	500	69010	67860	-9.1	ACIDO	0.12
2125	CHQ-913	66.0	68.0	500	500	69010	67860	-9.1	ACIDO	0.30
2126	CHQ-913	68.0	70.0	500	500	69010	67860	-9.1	ACIDO	0.35
2127	CHQ-913	70.0	72.0	500	500	46780	46280	-6.2	ACIDO	0.30
2128	CHQ-913	72.0	74.0	500	500	46780	46280	-6.2	ACIDO	0.14
2129	CHQ-913	90.0	92.0	500	500	82540	81030	-10.9	ACIDO	0.17
2130	CHQ-913	92.0	94.0	500	500	82540	81030	-10.9	ACIDO	0.11
2131	CHQ-913	94.0	96.0	500	500	82540	81030	-10.9	ACIDO	0.22
2132	CHQ-913	96.0	98.0	500	500	82540	81030	-10.9	ACIDO	0.20
2133	CHQ-913	98.0	100.0	500	500	82540	81030	-10.9	ACIDO	0.12
2134	CHQ-913	102.0	104.0	500	500	58860	57670	-7.7	ACIDO	0.11
2135	CHQ-913	104.0	106.0	500	500	58860	57670	-7.7	ACIDO	0.54
2136	CHQ-913	106.0	108.0	500	500	58860	57670	-7.7	ACIDO	0.98
2137	CHQ-913	108.0	109.4	500	500	58860	57670	-7.7	ACIDO	1.20
2138	CHQ-913	109.4	110.0	500	500	118700	116980	-15.8	ACIDO	0.67
2139	CHQ-913	110.0	112.0	500	500	118700	116980	-15.8	ACIDO	1.63
2140	CHQ-913	112.0	114.0	500	500	118700	116980	-15.8	ACIDO	2.76
2141	CHQ-913	114.0	116.0	500	500	118700	116980	-15.8	ACIDO	2.84
2142	CHQ-913	116.0	118.0	500	500	118700	116980	-15.8	ACIDO	2.59
2143	CHQ-913	118.0	120.0	500	500	118700	116980	-15.8	ACIDO	2.50
2144	CHQ-913	120.0	120.5	500	500	118700	116980	-15.8	ACIDO	2.50
2145	CHQ-913	120.5	122.0	500	500	99200	97520	-13.2	ACIDO	1.44
2146	CHQ-913	122.0	124.0	500	500	99200	97520	-13.2	ACIDO	0.74
2147	CHQ-913	124.0	126.0	500	500	99200	97520	-13.2	ACIDO	0.16
2148	CHQ-913	126.0	128.0	500	500	99200	97520	-13.2	ACIDO	0.53
2149	CHQ-913	128.0	130.0	500	500	99200	97520	-13.2	ACIDO	0.60
2150	CHQ-913	130.0	132.0	500	500	58280	57080	-7.6	ACIDO	0.68
2151	CHQ-913	132.0	134.0	500	500	58280	57080	-7.6	ACIDO	0.62
2152	CHQ-913	134.0	136.0	500	500	58280	57080	-7.6	ACIDO	0.53
2153	CHQ-913	136.0	138.0	500	500	58280	57080	-7.6	ACIDO	1.00
2154	CHQ-913	138.0	139.5	500	500	58280	57080	-7.6	ACIDO	1.50
2155	CHQ-913	139.5	140.0	500	500	51220	49930	-6.7	ACIDO	1.13
2156	CHQ-913	140.0	142.0	500	500	51220	49930	-6.7	ACIDO	1.07
2157	CHQ-913	142.0	144.0	500	500	51220	49930	-6.7	ACIDO	0.72
2158	CHQ-913	144.0	146.0	500	500	51220	49930	-6.7	ACIDO	0.51
2159	CHQ-913	146.0	148.0	500	500	51220	49930	-6.7	ACIDO	1.15
2160	CHQ-913	148.0	149.2	500	500	51220	49930	-6.7	ACIDO	1.36
2161	CHQ-913	149.2	150.0	500	500	71550	67600	-9.1	ACIDO	2.30
2162	CHQ-913	150.0	152.0	500	500	71550	67600	-9.1	ACIDO	1.93
2163	CHQ-913	152.0	154.0	500	500	71550	67600	-9.1	ACIDO	1.74
2164	CHQ-913	154.0	156.0	500	500	71550	67600	-9.1	ACIDO	2.39
2165	CHQ-913	156.0	158.0	500	500	71550	67600	-9.1	ACIDO	3.39
2166	CHQ-913	158.0	159.5	500	500	71550	67600	-9.1	ACIDO	1.96
2167	CHQ-913	159.5	160.0	500	500	89040	86780	-11.7	ACIDO	1.56
2168	CHQ-913	160.0	162.0	500	500	89040	86780	-11.7	ACIDO	1.59
2169	CHQ-913	162.0	164.0	500	500	89040	86780	-11.7	ACIDO	1.58
2170	CHQ-913	164.0	166.0	500	500	89040	86780	-11.7	ACIDO	1.11
2171	CHQ-913	166.0	168.0	500	500	89040	86780	-11.7	ACIDO	0.61
2172	CHQ-913	168.0	170.0	500	500	89040	86780	-11.7	ACIDO	0.62
2173	CHQ-913	170.0	172.0	500	500	94660	92560	-12.5	ACIDO	0.86
2174	CHQ-913	172.0	174.0	500	500	94660	92560	-12.5	ACIDO	1.55
2175	CHQ-913	174.0	176.0	500	500	94660	92560	-12.5	ACIDO	2.12
2176	CHQ-913	176.0	178.0	500	500	94660	92560	-12.5	ACIDO	0.84
2177	CHQ-913	178.0	180.0	500	500	94660	92560	-12.5	ACIDO	1.57
2178	CHQ-913	180.0	182.0	500	500	78300	75550	-10.2	ACIDO	1.35
2179	CHQ-913	182.0	184.0	500	500	78300	75550	-10.2	ACIDO	1.09
2180	CHQ-913	184.0	186.0	500	500	78300	75550	-10.2	ACIDO	1.02
2181	CHQ-913	186.0	188.0	500	500	78300	75550	-10.2	ACIDO	1.49
2182	CHQ-913	188.0	190.0	500	500	78300	75550	-10.2	ACIDO	1.78
2183	CHQ-913	190.0	190.5	500	500	78300	75550	-10.2	ACIDO	1.83
2184	CHQ-913	190.5	192.0	500	500	88610	83210	-11.2	ACIDO	1.54
2185	CHQ-913	192.0	194.0	500	500	88610	83210	-11.2	ACIDO	1.62
2186	CHQ-913	194.0	196.0	500	500	88610	83210	-11.2	ACIDO	1.51
2187	CHQ-913	196.0	198.0	500	500	88610	83210	-11.2	ACIDO	1.49
2188	CHQ-913	198.0	200.0	500	500	88610	83210	-11.2	ACIDO	1.47
2189	CHQ-913	200.0	202.0	500	500	159800	155050	-21.1	ACIDO	1.47
2190	CHQ-913	202.0	204.0	500	500	159800	155050	-21.1	ACIDO	1.22
2191	CHQ-913	204.0	206.0	500	500	159800	155050	-21.1	ACIDO	1.24
2192	CHQ-913	206.0	208.0	500	500	159800	155050	-21.1	ACIDO	1.46
2193	CHQ-913	208.0	210.0	500	500	159800	155050	-21.1	ACIDO	1.64
2194	CHQ-913	210.0	210.5	500	500	159800	155050	-21.1	ACIDO	1.64
2195	CHQ-913	210.5	212.0	500	500	138300	135180	-18.3	ACIDO	0.54
2196	CHQ-913	212.0	214.0	500	500	138300	135180	-18.3	ACIDO	0.30
2197	CHQ-916	42.0	44.0	500	500	55900	54840	-7.3	ACIDO	0.15
2198	CHQ-916	44.0	46.0	500	500	55900	54840	-7.3	ACIDO	0.15
2199	CHQ-916	46.0	48.0	500	500	55900	54840	-7.3	ACIDO	0.18
2200	CHQ-916	48.0	50.5	500	500	55900	54840	-7.3	ACIDO	0.13
2201	CHQ-916	50.5	52.6	500	500	38190	35720	-4.7	ACIDO	0.14
2202	CHQ-916	52.6	54.5	500	500	38190	35720	-4.7	ACIDO	0.48
2203	CHQ-916	54.5	56.0	500	500	38190	35720	-4.7	ACIDO	0.27
2204	CHQ-916	56.0	58.0	500	500	38190	35720	-4.7	ACIDO	0.29
2205	CHQ-916	58.0	59.8	500	500	38190	35720	-4.7	ACIDO	0.41
2206	CHQ-916	66.7	68.5	500	500	62940	61280	-8.2	ACIDO	0.11
2207	CHQ-916	68.5	70.0	500	500	62940	61280	-8.2	ACIDO	0.13
2208	CHQ-916	70.0	72.0	500	500	111100	110600	-15.0	ACIDO	0.19
2209	CHQ-916	72.0	74.5	500	500	111100	110600	-15.0	ACIDO	0.12
2210	CHQ-916	74.5	76.9	500	500	111100	110600	-15.0	ACIDO	0.17
2211	CHQ-916	76.9	78.5	500	500	111100	110600	-15.0	ACIDO	0.53
2212	CHQ-916	78.5	81.0	500	500	111100	110600	-15.0	ACIDO	0.17
2213	CHQ-916	81.0	82.5	500	500	77260	75550	-10.2	ACIDO	0.14
2214	CHQ-916	82.5	84.0	500	500	77260	75550	-10.2	ACIDO	0.22
2215	CHQ-916	85.5	87.4	500	500	77260	75550	-10.2	ACIDO	0.12
2216	CHQ-916	87.4	89.0	500	500	77260	75550	-10.2	ACIDO	0.95
2217	CHQ-916	89.0	90.5	500	500	77260	75550	-10.2	ACIDO	0.36
2218	CHQ-916	90.5	92.5	500	500	112100	108850	-14.7	ACIDO	0.11
2219	CHQ-916	92.5	94.7	500	500	112100	108850	-14.7	ACIDO	0.14
2220	CHQ-916	101.5	103.3	500	500	90450	88750	-12.0	ACIDO	0.12
2221	CHQ-916	103.3	105.0	500	500	90450	88750	-12.0	ACIDO	0.14
2222	CHQ-916	108.0	110.5	500	500	90450	88750	-12.0	ACIDO	0.11
2223	CHQ-916	110.5	112.5	500	500	77170	75840	-10.2	ACIDO	0.12
2224	CHQ-916	112.5	114.6	500	500	77170	75840	-10.2	ACIDO	0.21
2225	CHQ-916	114.6	117.1	500	500	77170	75840	-10.2	ACIDO	0.16
2226	CHQ-916	117.1	119.0	500	500	77170	75840	-10.2	ACIDO	0.14
2227	CHQ-916	119.0	120.5	500	500	77170	75840	-10.2	ACIDO	0.15
2228	CHQ-916	120.5	122.5	500	500	43480	42030	-5.6	ACIDO	0.32
2229	CHQ-916	122.5	124.9	500	500	43480	42030	-5.6	ACIDO	0.36
2230	CHQ-916	124.9	126.5	500	500	43480	42030	-5.6	ACIDO	0.11
2231	CHQ-916	126.5	128.0	500	500	43480	42030	-5.6	ACIDO	0.26
2232	CHQ-916	128.0	130.3	500	500	43480	42030	-5.6	ACIDO	0.17
2233	CHQ-916	130.3	131.8	500	500	59980	58600	-7.8	ACIDO	0.29
2234	CHQ-916	131.8	133.5	500	500	59980	58600	-7.8	ACIDO	0.13
2235	CHQ-916	133.5	135.1	500	500	59980	58600	-7.8	ACIDO	0.20
2236	CHQ-916	135.1	137.0	500	500	59980	58600	-7.8	ACIDO	0.12
2237	CHQ-916	137.0	138.5	500	500	59980	58600	-7.8	ACIDO	0.26
2238	CHQ-916	138.5	140.7	500	500	59980	58600	-7.8	ACIDO	0.26
2239	CHQ-916	140.7	142.8	500	500	28480	27980	-3.6	ACIDO	0.34
2240	CHQ-916	142.8	145.0	500	500	28480	27980	-3.6	ACIDO	0.35
2241	CHQ-916	145.0	147.1	500	500	28480	27980	-3.6	ACIDO	0.20
2242	CHQ-916	147.1	148.6	500	500	28480	27980	-3.6	ACIDO	0.14
2243	CHQ-916	150.2	152.0	500	500	26120	24730	-3.2	ACIDO	0.10
2244	CHQ-916	152.0	154.3	500	500	26120	24730	-3.2	ACIDO	0.38
2245	CHQ-916	154.3	156.0	500	500	26120	24730	-3.2	ACIDO	0.23
2246	CHQ-916	156.0	158.5	500	500	26120	24730	-3.2	ACIDO	0.14
2247	CHQ-916	158.5	160.8	500	500	26120	24730	-3.2	ACIDO	0.10
2248	CHQ-916	163.0	164.9	500	500	17470	16290	-2.0	ACIDO	0.10
2249	CHQ-916	164.9	166.5	500	500	17470	16290	-2.0	ACIDO	3.88
2250	CHQ-916	166.5	169.0	500	500	17470	16290	-2.0	ACIDO	5.64
2251	CHQ-916	169.0	171.0	1890	500	47700	44480	-5.9	ACIDO	0.57
2252	CHQ-916	171.0	173.4	1890	500	47700	44480	-5.9	ACIDO	8.78
2253	CHQ-916	173.4	174.9	1890	500	47700	44480	-5.9	ACIDO	3.39
2254	CHQ-916	174.9	176.4	1890	500	47700	44480	-5.9	ACIDO	1.74
2255	CHQ-916	176.4	177.9	1890	500	47700	44480	-5.9	ACIDO	3.91
2256	CHQ-916	177.9	179.9	1890	500	47700	44480	-5.9	ACIDO	11.39
2257	CHQ-916	179.9	182.0	500	500	72580	70970	-9.5	ACIDO	1.20
2258	CHQ-916	182.0	184.0	500	500	72580	70970	-9.5	ACIDO	0.40

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2259	CHQ-916	184.0	186.0	500	500	72580	70970	-9.5	ACIDO	0.82
2260	CHQ-916	186.0	188.0	500	500	72580	70970	-9.5	ACIDO	0.53
2261	CHQ-916	188.0	190.2	500	500	72580	70970	-9.5	ACIDO	0.27
2262	CHQ-916	190.2	192.0	500	500	49220	48090	-6.4	ACIDO	0.16
2263	CHQ-916	192.0	193.6	500	500	49220	48090	-6.4	ACIDO	0.18
2264	CHQ-916	193.6	196.0	500	500	49220	48090	-6.4	ACIDO	1.88
2265	CHQ-916	196.0	197.5	500	500	49220	48090	-6.4	ACIDO	0.53
2266	CHQ-916	197.5	199.3	500	500	49220	48090	-6.4	ACIDO	0.49
2267	CHQ-916	199.3	201.0	500	500	36250	35010	-4.6	ACIDO	2.99
2268	CHQ-916	201.0	203.0	500	500	36250	35010	-4.6	ACIDO	1.92
2269	CHQ-916	203.0	204.5	500	500	36250	35010	-4.6	ACIDO	1.07
2270	CHQ-916	204.5	206.0	500	500	36250	35010	-4.6	ACIDO	0.41
2271	CHQ-916	206.0	208.3	500	500	36250	35010	-4.6	ACIDO	0.46
2272	CHQ-916	208.3	210.4	500	500	36250	35010	-4.6	ACIDO	23.89
2273	CHQ-916	210.4	211.9	1630	500	138700	131690	-17.9	ACIDO	1.37
2274	CHQ-916	211.9	213.4	1630	500	138700	131690	-17.9	ACIDO	1.49
2275	CHQ-916	213.4	215.0	1630	500	138700	131690	-17.9	ACIDO	0.48
2276	CHQ-916	215.0	216.5	1630	500	138700	131690	-17.9	ACIDO	2.03
2277	CHQ-916	256.0	258.5	500	500	53940	51420	-6.9	ACIDO	4.84
2278	CHQ-916	258.5	260.4	500	500	53940	51420	-6.9	ACIDO	2.05
2279	CHQ-916	260.4	262.0	500	500	68660	62280	-8.3	ACIDO	4.11
2280	CHQ-916	262.0	264.0	500	500	68660	62280	-8.3	ACIDO	7.82
2281	CHQ-916	264.0	266.0	500	500	68660	62280	-8.3	ACIDO	13.30
2282	CHQ-916	266.0	267.5	500	500	68660	62280	-8.3	ACIDO	8.89
2283	CHQ-916	267.5	269.0	500	500	68660	62280	-8.3	ACIDO	9.19
2284	CHQ-916	269.0	270.5	500	500	68660	62280	-8.3	ACIDO	15.10
2285	CHQ-916	270.5	272.0	500	500	116600	104770	-14.2	ACIDO	18.04
2286	CHQ-916	272.0	274.0	500	500	116600	104770	-14.2	ACIDO	57.60
2287	CHQ-916	274.0	276.0	500	500	116600	104770	-14.2	ACIDO	39.72
2288	CHQ-916	276.0	278.0	500	500	103300	97730	-13.2	ACIDO	70.66
2289	CHQ-916	278.0	280.0	500	500	103300	97730	-13.2	ACIDO	49.77
2290	CHQ-916	280.0	282.2	500	500	91610	87180	-11.8	ACIDO	74.46
2291	CHQ-916	282.2	284.0	500	500	91610	87180	-11.8	ACIDO	20.55
2292	CHQ-916	284.0	286.0	500	500	91610	87180	-11.8	ACIDO	9.52
2293	CHQ-916	286.0	287.6	500	500	91610	87180	-11.8	ACIDO	39.83
2294	CHQ-916	287.6	290.0	500	500	91610	87180	-11.8	ACIDO	29.87
2295	CHQ-916	290.0	292.0	500	500	108300	103370	-14.0	ACIDO	20.63
2296	CHQ-916	292.0	293.8	500	500	108300	103370	-14.0	ACIDO	26.74
2297	CHQ-916	293.8	296.0	500	500	108300	103370	-14.0	ACIDO	21.69
2298	CHQ-916	296.0	297.5	500	500	108300	103370	-14.0	ACIDO	46.58
2299	CHQ-916	297.5	299.3	500	500	108300	103370	-14.0	ACIDO	12.19
2300	CHQ-916	299.3	301.5	500	500	103100	100150	-13.5	ACIDO	63.47
2301	CHQ-916	301.5	304.0	500	500	103100	100150	-13.5	ACIDO	33.07
2302	CHQ-916	304.0	306.2	500	500	103100	100150	-13.5	ACIDO	43.41
2303	CHQ-916	306.2	308.0	500	500	103100	100150	-13.5	ACIDO	14.08
2304	CHQ-916	308.0	310.0	500	500	103100	100150	-13.5	ACIDO	11.62
2305	CHQ-916	310.0	311.5	500	500	119300	115400	-15.6	ACIDO	11.16
2306	CHQ-916	311.5	313.0	500	500	119300	115400	-15.6	ACIDO	2.21
2307	CHQ-916	313.0	314.5	500	500	119300	115400	-15.6	ACIDO	1.67
2308	CHQ-916	314.5	316.0	500	500	119300	115400	-15.6	ACIDO	1.91
2309	CHQ-916	316.0	318.0	500	500	119300	115400	-15.6	ACIDO	2.22
2310	CHQ-916	318.0	320.0	500	500	119300	115400	-15.6	ACIDO	0.84
2311	CHQ-916	320.0	322.5	500	500	99330	96840	-13.1	ACIDO	1.05
2312	CHQ-916	322.5	324.9	500	500	99330	96840	-13.1	ACIDO	0.68
2313	CHQ-916	324.9	326.5	500	500	99330	96840	-13.1	ACIDO	0.84
2314	CHQ-916	326.5	328.0	500	500	99330	96840	-13.1	ACIDO	0.52
2315	CHQ-916	328.0	330.0	500	500	99330	96840	-13.1	ACIDO	0.47
2316	CHQ-916	330.0	332.0	500	500	90850	88490	-11.9	ACIDO	0.17
2317	CHQ-916	332.0	333.6	500	500	90850	88490	-11.9	ACIDO	0.24
2318	CHQ-916	333.6	336.0	500	500	90850	88490	-11.9	ACIDO	3.46
2319	CHQ-916	336.0	338.0	500	500	90850	88490	-11.9	ACIDO	0.69
2320	CHQ-916	338.0	340.0	500	500	90850	88490	-11.9	ACIDO	1.12
2321	CHQ-916	340.0	341.8	500	500	130000	126870	-17.2	ACIDO	1.46
2322	CHQ-916	341.8	344.0	500	500	130000	126870	-17.2	ACIDO	1.72
2323	CHQ-916	344.0	346.5	500	500	130000	126870	-17.2	ACIDO	1.15
2324	CHQ-916	346.5	348.7	500	500	130000	126870	-17.2	ACIDO	0.47
2325	CHQ-916	348.7	350.5	500	500	130000	126870	-17.2	ACIDO	4.05
2326	CHQ-916	350.5	352.0	500	500	176600	173240	-23.6	ACIDO	1.53
2327	CHQ-916	352.0	354.0	500	500	176600	173240	-23.6	ACIDO	1.19
2328	CHQ-916	354.0	355.9	500	500	176600	173240	-23.6	ACIDO	2.02
2329	CHQ-916	355.9	358.0	500	500	176600	173240	-23.6	ACIDO	1.67
2330	CHQ-916	358.0	360.2	500	500	176600	173240	-23.6	ACIDO	1.44
2331	CHQ-916	360.2	362.1	500	500	182700	177740	-24.2	ACIDO	1.32
2332	CHQ-916	362.1	364.0	500	500	182700	177740	-24.2	ACIDO	1.71
2333	CHQ-916	364.0	366.0	500	500	182700	177740	-24.2	ACIDO	1.73
2334	CHQ-918	30.0	40.0	500	500	72490	71990	-9.7	ACIDO	0.26
2335	CHQ-918	40.0	50.0	500	500	42700	40680	-5.4	ACIDO	0.45
2336	CHQ-918	50.0	60.5	500	500	67360	65630	-8.8	ACIDO	0.37
2337	CHQ-918	60.5	70.0	500	500	67300	65780	-8.8	ACIDO	0.30
2338	CHQ-918	70.0	80.0	500	500	107200	106170	-14.4	ACIDO	0.54
2339	CHQ-918	80.0	90.0	500	500	97130	95830	-12.9	ACIDO	0.21
2340	CHQ-918	90.0	100.0	500	500	80530	79440	-10.7	ACIDO	0.17
2341	CHQ-918	100.0	110.0	500	500	109000	107870	-14.6	ACIDO	0.19
2342	CHQ-918	110.0	120.0	500	500	73090	72590	-9.8	ACIDO	0.28
2343	CHQ-918	120.0	130.0	500	500	39820	39320	-5.2	ACIDO	0.36
2344	CHQ-918	130.0	140.0	500	500	27230	26730	-3.5	ACIDO	5.15
2345	CHQ-918	140.0	141.5	500	500	30280	29780	-3.9	ACIDO	1.09
2346	CHQ-918	141.5	143.1	500	500	30280	29780	-3.9	ACIDO	0.76
2347	CHQ-918	143.1	144.8	500	500	30280	29780	-3.9	ACIDO	0.28
2348	CHQ-918	144.8	146.5	500	500	30280	29780	-3.9	ACIDO	0.66
2349	CHQ-918	146.5	148.5	500	500	30280	29780	-3.9	ACIDO	2.99
2350	CHQ-918	148.5	150.7	500	500	30280	29780	-3.9	ACIDO	2.76
2351	CHQ-918	150.7	152.6	500	500	39340	37750	-5.0	ACIDO	1.53
2352	CHQ-918	152.6	154.5	500	500	39340	37750	-5.0	ACIDO	0.80
2353	CHQ-918	154.5	156.5	500	500	39340	37750	-5.0	ACIDO	0.50
2354	CHQ-918	156.5	158.0	500	500	39340	37750	-5.0	ACIDO	2.25
2355	CHQ-918	158.0	160.0	500	500	39340	37750	-5.0	ACIDO	6.52
2356	CHQ-918	160.0	162.5	500	500	53100	52040	-6.9	ACIDO	0.68
2357	CHQ-918	162.5	164.7	500	500	53100	52040	-6.9	ACIDO	1.50
2358	CHQ-918	164.7	166.5	500	500	53100	52040	-6.9	ACIDO	0.36
2359	CHQ-918	166.5	168.0	500	500	53100	52040	-6.9	ACIDO	0.38
2360	CHQ-918	168.0	170.0	500	500	53100	52040	-6.9	ACIDO	0.39
2361	CHQ-918	170.0	172.0	500	500	47980	45220	-6.0	ACIDO	2.11
2362	CHQ-918	172.0	174.0	500	500	47980	45220	-6.0	ACIDO	2.19
2363	CHQ-918	174.0	176.0	500	500	47980	45220	-6.0	ACIDO	1.31
2364	CHQ-918	176.0	178.0	500	500	47980	45220	-6.0	ACIDO	1.74
2365	CHQ-918	178.0	180.0	500	500	47980	45220	-6.0	ACIDO	2.00
2366	CHQ-918	180.0	182.0	500	500	58740	56900	-7.6	ACIDO	4.70
2367	CHQ-918	182.0	184.0	500	500	58740	56900	-7.6	ACIDO	1.51
2368	CHQ-918	184.0	186.0	500	500	58740	56900	-7.6	ACIDO	0.98
2369	CHQ-918	186.0	188.0	500	500	58740	56900	-7.6	ACIDO	0.95
2370	CHQ-918	188.0	190.0	500	500	58740	56900	-7.6	ACIDO	2.07
2371	CHQ-918	190.0	192.0	500	500	62930	60240	-8.1	ACIDO	0.93
2372	CHQ-918	192.0	194.0	500	500	62930	60240	-8.1	ACIDO	3.66
2373	CHQ-918	194.0	196.0	500	500	62930	60240	-8.1	ACIDO	3.66
2374	CHQ-918	196.0	198.0	500	500	62930	60240	-8.1	ACIDO	3.06
2375	CHQ-918	198.0	199.8	500	500	62930	60240	-8.1	ACIDO	2.06
2376	CHQ-918	199.8	202.0	500	500	68400	64620	-8.7	ACIDO	2.64
2377	CHQ-918	202.0	203.8	500	500	68400	64620	-8.7	ACIDO	11.56
2378	CHQ-918	203.8	206.0	500	500	68400	64620	-8.7	ACIDO	11.83
2379	CHQ-918	206.0	208.5	500	500	68400	64620	-8.7	ACIDO	5.56
2380	CHQ-918	208.5	210.7	500	500	68400	64620	-8.7	ACIDO	6.60
2381	CHQ-918	210.7	212.5	500	500	74110	67510	-9.1	ACIDO	6.36
2382	CHQ-918	212.5	214.0	500	500	74110	67510	-9.1	ACIDO	13.73
2383	CHQ-918	214.0	216.0	500	500	74110	67510	-9.1	ACIDO	2.20
2384	CHQ-918	216.0	218.0	500	500	74110	67510	-9.1	ACIDO	2.51
2385	CHQ-918	218.0	219.5	500	500	74110	67510	-9.1	ACIDO	0.93
2386	CHQ-918	219.5	222.0	500	500	141700	134510	-18.2	ACIDO	61.29
2387	CHQ-918	222.0	223.6	500	500	141700	134510	-18.2	ACIDO	13.16
2388	CHQ-918	223.6	226.0	500	500	141700	134510	-18.2	ACIDO	25.60
2389	CHQ-918	226.0	228.0	500	500	141700	134510	-18.2	ACIDO	20.30
2390	CHQ-918	228.0	230.0	500	500	141700	134510	-18.2	ACIDO	14.29
2391	CHQ-918	230.0	232.0	500	500	142500	138290	-18.8	ACIDO	11.42
2392	CHQ-918	232.0	234.0	500	500	142500	138290	-18.8	ACIDO	7.63
2393	CHQ-918	234.0	236.0	500	500	142500	138290	-18.8	ACIDO	5.97
2394	CHQ-918	236.0	238.0	500	500	142500	138290	-18.8	ACIDO	2.49
2395	CHQ-918	238.0	240.0	500	500	142500	138290	-18.8	ACIDO	4.86
2396	CHQ-918	240.0	242.0	500	500	177800	174070	-23.7	ACIDO	3.28
2397	CHQ-918	242.0	244.0	500	500	177800	174070	-23.7	ACIDO	2.57
2398	CHQ-918	244.0	246.0	500	500	177800	174070	-23.7	ACIDO	6.12
2399	CHQ-918	246.0	248.0	500	500	177800	174070	-23.7	ACIDO	9.91
2400	CHQ-918	248.0	250.0	500	500	177800	174070	-23.7	ACIDO	10.30
2401	CHQ-918	250.0	252.0	500	500	214900	208420	-28.4	ACIDO	40.41
2402	CHQ-918	252.0	254.0	500	500	214900	208420	-28.4	ACIDO	24.83
2403	CHQ-918	254.0	256.0	500	500	214900	208420	-28.4	ACIDO	20.68
2404	CHQ-918	256.0	258.0	500	500	214900	208420	-28.4	ACIDO	14.66
2405	CHQ-918	258.0	260.0	500	500	214900	208420	-28.4	ACIDO	21.19
2406	CHQ-918	260.0	262.2	500	500	155200	149210	-20.3	ACIDO	18.51
2407	CHQ-918	262.2	264.0	500	500	155200	149210	-20.3	ACIDO	28.22
2408	CHQ-918	264.0	266.0	500	500	155200	149210	-20.3	ACIDO	25.24
2409	CHQ-918	266.0	268.0	500	500	155200	149210	-20.3	ACIDO	13.28
2410	CHQ-918	268.0	270.0	500	500	155200	149210	-20.3	ACIDO	25.83
2411	CHQ-918	270.0	271.5	500	500	122100	112950	-15.3	ACIDO	34.69
2412	CHQ-918	271.5	273.0	500	500	122100	112950	-15.3	ACIDO	34.85
2413	CHQ-918	273.0	275.4	500	500	122100	112950	-15.3	ACIDO	34.27
2414	CHQ-918	275.4	277.0	500	500	122100	112950	-15.3	ACIDO	10.42
2415	CHQ-918	277.0	278.5	500	500	122100	112950	-15.3	ACIDO	41.80
2416	CHQ-918	278.5	280.0	500	500	122100	112950	-15.3	ACIDO	28.77
2417	CHQ-918	354.8	356.5	500	500	285700	280050	-38.2	ACIDO	0.81
2418	CHQ-918	356.5	358.0	500	500	285700	280050	-38.2	ACIDO	0.69
2419	CHQ-918	358.0	360.0	500	500	285700	280050	-38.2	ACIDO	0.43
2420	CHQ-918	362.0	363.8	500	500	327500	321320	-43.8	ACIDO	0.12
2421	CHQ-918	367.1	369.0	500	500	327500	321320	-43.8	ACIDO	0.12
2422	CHQ-918	369.0	370.5	500	500	327500	321320	-43.8	ACIDO	0.18
2423	CHQ-918	370.5	372.0	500	500	363700	355990	-48.6	ACIDO	0.13
2424	CHQ-918	374.0	376.0	500	500	363700	355990	-48.6	ACIDO	0.35
2425	CHQ-918	376.0	378.0	500	500	363700	355990	-48.6	ACIDO	0.40
2426	CHQ-918	378.0	380.0	500	500	363700	355990	-48.6	ACIDO	0.42
2427	CHQ-918	380.0	382.0	500	500	243300	237940	-32.4	ACIDO	0.79
2428	CHQ-918	382.0	384.0	500	500	243300	237940	-32.4	ACIDO	0.68
2429	CHQ-918	384.0	386.0	500	500	243300	237940	-32.4	ACIDO	1.45
2430	CHQ-918	386.0	388.0	500	500	243300	237940	-32.4	ACIDO	3.05
2431	CHQ-918	388.0	390.0	500	500	479100	472940	-64.6	ACIDO	0.57
2432	CHQ-918	390.0	392.1	500	500	479100	472940	-64.6	ACIDO	3.30
2433	CHQ-918	392.1	394.0	500	500	479100	472940	-64.6	ACIDO	2.02
2434	CHQ-922	6.1	8.0	500	500	2900	1450	0.0	INERTE	0.11
2435	CHQ-922	8.0	10.0	500	500	2900	1450	0.0	INERTE	0.11
2436	CHQ-922	10.0	12.0	500	500	1750	350	0.1	LIGERAMENTE BASICO	0.10
2437	CHQ-922	12.0	14.0	500	500	1750	350	0.1	LIGERAMENTE BASICO	0.32
2438	CHQ-922	14.0	16.0	500	500	1750	350	0.1	LIGERAMENTE BASICO	0.16
2439	CHQ-922	16.0	18.0	500	500	1750	350	0.1	LIGERAMENTE BASICO	0.39
2440	CHQ-922	28.5	30.0	500	500	1640	1140	0.0	INERTE	0.12
2441	CHQ-922	34.0	36.0	500	500	1190	690	0.1	INERTE	0.10
2442	CHQ-922	36.0	38.0	500	500	1190	690	0.1	INERTE	0.12
2443	CHQ-922	43.3	45.0	500	500	1730	1230	0.0	INERTE	0.11
2444	CHQ-922	60.0	62.0	500	500	45860	45360	-6.0	ACIDO	0.16
2445	CHQ-922	62.0	64.0	500	500	45860	45360	-6.0	ACIDO	0.28
2446	CHQ-922	64.0	66.0	500	500	45860	45360	-6.0	ACIDO	0.34
2447	CHQ-922	66.0	68.0	500	500	45860	45360	-6.0	ACIDO	0.27
2448	CHQ-922	68.0	70.0	500	500	45860	45360	-6.0	ACIDO	0.13
2449	CHQ-922	70.0	70.5	500	500	45860	45360	-6.0	ACIDO	0.13
2450	CHQ-922	70.5	72.0	500	500	89830	88380	-11.9	ACIDO	0.17
2451	CHQ-922	72.0	73.9	500	500	89830	88380	-11.9	ACIDO	0.28
2452	CHQ-922	73.9	74.0	500	500	89830	88380	-11.9	ACIDO	0.17
2453	CHQ-922	74.0	76.0	500	500	89830	88380	-11.9	ACIDO	0.17
2454	CHQ-922	76.0	78.0	500	500	89830	88380	-11.9	ACIDO	0.13
2455	CHQ-922	78.0	79.5	500	500	89830	88380	-11.9	ACIDO	0.16
2456	CHQ-922	79.5	80.0	500	500	144700	141930	-19.3	ACIDO	0.38
2457	CHQ-922	80.0	81.4	500	500	144700	141930	-19.3	ACIDO	0.38
2458	CHQ-922	81.4	82.0	500	500	144700	141930	-19.3	ACIDO	0.29
2459	CHQ-922	82.0	83.0	500	500	144700	141930	-19.3	ACIDO	0.29
2460	CHQ-922	83.0	84.0	500	500	144700	141930	-19.3	ACIDO	0.35
2461	CHQ-922	84.0	85.0	500	500	144700	141930	-19.3	ACIDO	0.35
2462	CHQ-922	85.0	86.0	500	500	144700	141930	-19.3	ACIDO	0.55
2463	CHQ-922	86.0	87.4	500	500	144700	141930	-19.3	ACIDO	0.55
2464	CHQ-922	87.4	88.0	500	500	144700	141930	-19.3	ACIDO	0.47
2465	CHQ-922	88.0	89.0	500	500	144700	141930	-19.3	ACIDO	0.47
2466	CHQ-922	89.0	90.0	500	500	144700	141930	-19.3	ACIDO	0.29
2467	CHQ-922	90.0	90.5	500	500	144700	141930	-19.3	ACIDO	0.29
2468	CHQ-922	90.5	92.0	500	500	172500	169200	-23.0	ACIDO	0.28
2469	CHQ-922	92.0	92.5	500	500	172500	169200	-23.0	ACIDO	0.28
2470	CHQ-922	92.5	94.0	500	500	172500	169200	-23.0	ACIDO	0.34
2471	CHQ-922	94.0	95.0	500	500	172500	169200	-23.0	ACIDO	0.34
2472	CHQ-922	95.0	96.0	500	500	172500	169200	-23.0	ACIDO	1.00
2473	CHQ-922	96.0	96.5	500	500	172500	169200	-23.0	ACIDO	1.00
2474	CHQ-922	96.5	98.0	500	500	172500	169200	-23.0	ACIDO	0.71
2475	CHQ-922	98.0	100.0	500	500	172500	169200	-23.0	ACIDO	0.81
2476	CHQ-922	100.0	102.0	500	500	236100	233580	-31.8	ACIDO	0.85
2477	CHQ-922	102.0	104.0	500	500	236100	233580	-31.8	ACIDO	0.84
2478	CHQ-922	104.0	106.0	500	500	236100	233580	-31.8	ACIDO	0.69
2479	CHQ-922	106.0	107.8	500	500	236100	233580	-31.8	ACIDO	0.63
2480	CHQ-922	107.8	108.0	500	500	236100	233580	-31.8	ACIDO	0.74
2481	CHQ-922	108.0	110.0	500	500	236100	233580	-31.8	ACIDO	0.74
2482	CHQ-922	110.0	112.0	500	500	263100	259250	-35.3	ACIDO	0.61
2483	CHQ-922	112.0	112.5	500	500	263100	259250	-35.3	ACIDO	0.61
2484	CHQ-922	112.5	114.0	500	500	263100	259250	-35.3	ACIDO	0.84
2485	CHQ-922	114.0	114.8	500	500	263100	259250	-35.3	ACIDO	0.84
2486	CHQ-922	114.8	116.0	500	500	263100	259250	-35.3	ACIDO	0.68
2487	CHQ-922	116.0	117.3	500	500	263100	259250	-35.3	ACIDO	0.68
2488	CHQ-922	117.3	118.0	500	500	263100	259250	-35.3	ACIDO	0.79
2489	CHQ-922	118.0	119.0	500	500	263100	259250	-35.3	ACIDO	0.79
2490	CHQ-922	119.0	120.0	500	500	263100	259250	-35.3	ACIDO	0.79
2491	CHQ-922	120.0	120.5	500	500	263100	259250	-35.3	ACIDO	0.79
2492	CHQ-922	120.5	122.0	500	500	329900	326460	-44.5	ACIDO	0.87
2493	CHQ-922	122.0	123.5	500	500	329900	326460	-44.5	ACIDO	0.84
2494	CHQ-922	123.5	124.0	500	500	329900	326460	-44.5	ACIDO	0.59
2495	CHQ-922	124.0	125.2	500	500	329900	326460	-44.5	ACIDO	0.59
2496	CHQ-922	125.2	126.0	500	500	329900	326460	-44.5	ACIDO	0.67
2497	CHQ-922	126.0	127.2	500	500	329900	326460	-44.5	ACIDO	0.67
2498	CHQ-922	127.2	128.0	500	500	329900	326460	-44.5	ACIDO	0.32
2499	CHQ-922	128.0	129.0	500	500	329900	326460	-44.5	ACIDO	0.32
2500	CHQ-922	129.0	130.0	500	500	329900	326460	-44.5	ACIDO	1.06
2501	CHQ-922	130.0	130.5	500	500	329900	326460	-44.5	ACIDO	1.06
2502	CHQ-922	130.5	132.0	1030	500	220100	217360	-29.6	ACIDO	0.95
2503	CHQ-922	132.0	133.6	1030	500	220100	217360	-29.6	ACIDO	0.86
2504	CHQ-922	133.6	134.0	1030	500	220100	217360	-29.6	ACIDO	1.11
2505	CHQ-922	134.0	135.1	1030	500	220100	217360	-29.6	ACIDO	1.11
2506	CHQ-922	135.1	136.0	1030	500	220100	217360	-29.6	ACIDO	0.95
2507	CHQ-922	136.0	137.0	1030	500	220100	217360	-29.6	ACIDO	0.95
2508	CHQ-922	137.0	138.0	1030	500	220100	217360	-29.6	ACIDO	0.55
2509	CHQ-922	138.0	139.5	1030	500	220100	217360	-29.6	ACIDO	0.55
2510	CHQ-922	139.5	140.9	1030	500	220100	217360	-29.6	ACIDO	0.46
2511	CHQ-922	140.9	142.5	500	500	13500	13000	-1.6	ACIDO	0.40
2512	CHQ-922	142.5	144.0	500	500	13500	13000	-1.6	ACIDO	0.45
2513	CHQ-922	144.0	146.0	500	500	13500	13000	-1.6	ACIDO	0.21
2514	CHQ-922	146.0	148.0	500	500	13500	13000	-1.6	ACIDO	0.37
2515	CHQ-922	148.0	150.0	500	500	13500	13000	-1.6	ACIDO	0.64
2516	CHQ-922	150.0	151.6	500	500	25880	24420	-3.2	ACIDO	0.49
2517	CHQ-922	151.6	154.0	500	500	25880	24420	-3.2	ACIDO	1.56
2518	CHQ-922	154.0	156.3	500	500	25880	24420	-3.2	ACIDO	0.99
2519	CHQ-922	156.3	158.9	500	500	25880	24420	-3.2	ACIDO	2.40
2520	CHQ-922	158.9	160.5	500	500	25880	24420	-3.2	ACIDO	0.60
2521	CHQ-922	160.5	162.5	500	500	32320	30920	-4.1	ACIDO	0.59
2522	CHQ-922	162.5	164.8	500	500	32320	30920	-4.1	ACIDO	0.29
2523	CHQ-922	168.5	171.0	500	500	39680	36430	-4.8	ACIDO	0.34
2524	CHQ-922	171.0	173.0	500	500	39680	36430	-4.8	ACIDO	0.50
2525	CHQ-922	173.0	175.2	500	500	39680	36430	-4.8	ACIDO	1.70
2526	CHQ-922	175.2	177.5	500	500	39680	36430	-4.8	ACIDO	0.53
2527	CHQ-922	177.5	180.0	500	500	39680	36430	-4.8	ACIDO	0.17
2528	CHQ-922	188.0	190.0	500	500	60410	59130	-7.9	ACIDO	0.21
2529	CHQ-922	190.0	192.0	500	500	74540	73150	-9.8	ACIDO	0.25
2530	CHQ-923	0.0	2.0	500	500	3030	410	0.1	LIGERAMENTE BASICO	1.24
2531	CHQ-923	2.0	4.0	500	500	3030	410	0.1	LIGERAMENTE BASICO	3.50
2532	CHQ-923	4.0	6.0	500	500	3030	410	0.1	LIGERAMENTE BASICO	3.57
2533	CHQ-923	6.0	8.0	500	500	3030	410	0.1	LIGERAMENTE BASICO	0.60
2534	CHQ-923	8.0	10.0	500	500	3030	410	0.1	LIGERAMENTE BASICO	0.63
2535	CHQ-923	10.0	12.0	500	500	32390	27360	-3.6	ACIDO	0.86
2536	CHQ-923	12.0	14.5	500	500	32390	27360	-3.6	ACIDO	1.01
2537	CHQ-923	14.5	16.8	500	500	32390	27360	-3.6	ACIDO	1.61
2538	CHQ-923	16.8	18.5	500	500	32390	27360	-3.6	ACIDO	1.05
2539	CHQ-923	18.5	20.0	500	500	32390	27360	-3.6	ACIDO	0.89
2540	CHQ-923	20.0	22.0	500	500	26700	22740	-2.9	ACIDO	0.76
2541	CHQ-923	22.0	24.0	500	500	26700	22740	-2.9	ACIDO	0.27
2542	CHQ-923	24.0	25.8	500	500	26700	22740	-2.9	ACIDO	0.16
2543	CHQ-923	25.8	28.0	500	500	26700	22740	-2.9	ACIDO	0.16
2544	CHQ-923	28.0	29.8	500	500	26700	22740	-2.9	ACIDO	0.15
2545	CHQ-923	29.8	32.0	500	500	22220	20330	-2.6	ACIDO	0.11
2546	CHQ-923	32.0	34.5	500	500	22220	20330	-2.6	ACIDO	0.32
2547	CHQ-923	34.5	36.8	500	500	22220	20330	-2.6	ACIDO	0.34
2548	CHQ-923	36.8	38.5	500	500	22220	20330	-2.6	ACIDO	0.13
2549	CHQ-923	38.5	40.0	500	500	22220	20330	-2.6	ACIDO	0.14
2550	CHQ-923	40.0	42.0	500	500	48660	46810	-6.2	ACIDO	0.18
2551	CHQ-923	42.0	44.0	500	500	48660	46810	-6.2	ACIDO	0.26
2552	CHQ-923	44.0	46.0	500	500	48660	46810	-6.2	ACIDO	0.43
2553	CHQ-923	46.0	48.0	500	500	48660	46810	-6.2	ACIDO	0.30
2554	CHQ-923	48.0	50.0	500	500	48660	46810	-6.2	ACIDO	0.51
2555	CHQ-923	50.0	52.0	500	500	53710	51880	-6.9	ACIDO	0.40
2556	CHQ-923	52.0	54.0	500	500	53710	51880	-6.9	ACIDO	0.28
2557	CHQ-923	54.0	56.0	500	500	53710	51880	-6.9	ACIDO	0.31
2558	CHQ-923	56.0	58.0	500	500	53710	51880	-6.9	ACIDO	0.37
2559	CHQ-923	58.0	60.0	500	500	53710	51880	-6.9	ACIDO	0.19
2560	CHQ-923	60.0	62.0	500	500	68270	66740	-9.0	ACIDO	0.79
2561	CHQ-923	62.0	64.0	500	500	68270	66740	-9.0	ACIDO	0.84
2562	CHQ-923	64.0	66.0	500	500	68270	66740	-9.0	ACIDO	0.53
2563	CHQ-923	66.0	68.0	500	500	68270	66740	-9.0	ACIDO	0.80
2564	CHQ-923	68.0	69.5	500	500	68270	66740	-9.0	ACIDO	0.64
2565	CHQ-923	69.5	72.0	500	500	64690	62850	-8.4	ACIDO	0.45
2566	CHQ-923	72.0	74.0	500	500	64690	62850	-8.4	ACIDO	0.94
2567	CHQ-923	74.0	76.0	500	500	64690	62850	-8.4	ACIDO	0.95
2568	CHQ-923	76.0	78.0	500	500	64690	62850	-8.4	ACIDO	1.01
2569	CHQ-923	78.0	80.0	500	500	64690	62850	-8.4	ACIDO	0.69
2570	CHQ-923	80.0	82.0	500	500	55990	54450	-7.3	ACIDO	0.64
2571	CHQ-923	82.0	84.0	500	500	55990	54450	-7.3	ACIDO	1.82
2572	CHQ-923	84.0	85.5	500	500	55990	54450	-7.3	ACIDO	0.58
2573	CHQ-923	85.5	87.2	500	500	55990	54450	-7.3	ACIDO	1.03
2574	CHQ-923	87.2	89.0	500	500	48700	46040	-6.1	ACIDO	0.73
2575	CHQ-923	89.0	90.5	500	500	48700	46040	-6.1	ACIDO	0.47
2576	CHQ-923	90.5	92.0	500	500	48700	46040	-6.1	ACIDO	0.52
2577	CHQ-923	92.0	94.0	500	500	33260	31820	-4.2	ACIDO	0.39
2578	CHQ-923	94.0	96.0	500	500	33260	31820	-4.2	ACIDO	0.24
2579	CHQ-923	96.0	98.0	500	500	33260	31820	-4.2	ACIDO	0.18
2580	CHQ-923	100.0	102.0	500	500	43650	41620	-5.5	ACIDO	0.18
2581	CHQ-923	102.0	104.0	500	500	43650	41620	-5.5	ACIDO	0.21
2582	CHQ-923	104.0	106.0	500	500	43650	41620	-5.5	ACIDO	0.46
2583	CHQ-923	106.0	108.0	500	500	43650	41620	-5.5	ACIDO	0.10
2584	CHQ-923	112.9	114.5	500	500	33350	31400	-4.1	ACIDO	0.18
2585	CHQ-923	118.0	120.0	500	500	33350	31400	-4.1	ACIDO	0.26
2586	CHQ-923	120.0	121.5	500	500	38010	36360	-4.8	ACIDO	0.28
2587	CHQ-923	121.5	123.1	500	500	38010	36360	-4.8	ACIDO	0.66
2588	CHQ-923	123.1	125.0	500	500	38010	36360	-4.8	ACIDO	0.26
2589	CHQ-923	125.0	126.9	500	500	38010	36360	-4.8	ACIDO	0.68
2590	CHQ-923	126.9	128.5	500	500	38010	36360	-4.8	ACIDO	0.97
2591	CHQ-923	128.5	130.0	500	500	38010	36360	-4.8	ACIDO	0.32
2592	CHQ-923	130.0	131.5	500	500	43830	41810	-5.5	ACIDO	0.19
2593	CHQ-923	131.5	133.1	500	500	43830	41810	-5.5	ACIDO	0.36
2594	CHQ-923	133.1	135.0	500	500	43830	41810	-5.5	ACIDO	0.45
2595	CHQ-923	135.0	136.5	500	500	43830	41810	-5.5	ACIDO	0.55
2596	CHQ-923	136.5	138.0	500	500	43830	41810	-5.5	ACIDO	2.81
2597	CHQ-923	138.0	139.8	500	500	43830	41810	-5.5	ACIDO	0.71
2598	CHQ-923	139.8	141.3	500	500	51480	49390	-6.6	ACIDO	0.51
2599	CHQ-923	141.3	142.9	500	500	51480	49390	-6.6	ACIDO	0.33
2600	CHQ-923	142.9	144.5	500	500	51480	49390	-6.6	ACIDO	0.64
2601	CHQ-923	144.5	146.0	500	500	51480	49390	-6.6	ACIDO	0.70
2602	CHQ-923	146.0	148.0	500	500	51480	49390	-6.6	ACIDO	0.41
2603	CHQ-923	148.0	150.0	500	500	51480	49390	-6.6	ACIDO	0.53
2604	CHQ-923	150.0	152.0	500	500	68280	65100	-8.7	ACIDO	0.66
2605	CHQ-923	152.0	153.9	500	500	68280	65100	-8.7	ACIDO	1.04
2606	CHQ-923	153.9	156.0	500	500	68280	65100	-8.7	ACIDO	0.95
2607	CHQ-923	156.0	157.5	500	500	68280	65100	-8.7	ACIDO	0.46
2608	CHQ-923	157.5	159.0	500	500	68280	65100	-8.7	ACIDO	0.48
2609	CHQ-923	159.0	160.5	500	500	68280	65100	-8.7	ACIDO	1.25
2610	CHQ-923	160.5	162.0	1510	500	30220	28370	-3.7	ACIDO	1.10
2611	CHQ-923	162.0	164.5	1510	500	30220	28370	-3.7	ACIDO	0.79
2612	CHQ-923	164.5	168.0	1510	500	30220	28370	-3.7	ACIDO	0.39
2613	CHQ-923	169.5	171.0	500	500	16800	14830	-1.8	ACIDO	0.25
2614	CHQ-923	171.0	174.0	500	500	16800	14830	-1.8	ACIDO	0.76
2615	CHQ-923	174.0	176.5	500	500	16800	14830	-1.8	ACIDO	1.02
2616	CHQ-923	176.5	178.6	500	500	16800	14830	-1.8	ACIDO	1.12
2617	CHQ-923	178.6	180.1	500	500	16800	14830	-1.8	ACIDO	0.24
2618	CHQ-923	180.1	182.6	500	500	51620	48210	-6.4	ACIDO	0.49

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2979	CHQ-996	198.3	210.0	500	500	38540	37390	-4.9	ACIDO	0.15
2980	CHQ-996	230.0	240.0	500	500	45570	44000	-5.8	ACIDO	0.20
2981	CHQ-996	240.0	251.5	500	500	50750	49510	-6.6	ACIDO	0.16
2982	CHQPZ-0001	192.0	200.0	200	200	1130	210	0.0	INERTE	0.50
2983	CHQPZ-0001	200.0	208.0	200	200	12400	11290	-1.5	ACIDO	0.43
2984	CHQPZ-0001	208.0	216.0	200	200	12800	12320	-1.6	ACIDO	0.16
2985	CHQPZ-0001	216.0	224.0	200	200	8780	8220	-1.1	ACIDO	0.23
2986	CHQPZ-0001	224.0	232.0	200	200	10100	9540	-1.2	ACIDO	0.25
2987	CHQPZ-0001	232.0	240.0	200	200	870	190	0.0	INERTE	0.43
2988	CHQPZ-0001	240.0	248.0	200	200	4190	3550	-0.4	LIGERAMENTE ACIDO	0.11
2989	CHQPZ-0001	264.0	272.0	200	200	20800	19800	-2.6	ACIDO	0.20
2990	CHQPZ-0001	288.0	296.0	200	200	80700	75170	-10.2	ACIDO	0.13
2991	DST-055	30.7	40.2	500	500	2080	350	0.1	LIGERAMENTE BASICO	0.19
2992	DST-055	40.2	49.2	500	500	2330	620	0.1	INERTE	0.14
2993	DST-055	49.2	60.0	500	500	4630	3470	-0.3	LIGERAMENTE ACIDO	0.13
2994	DST-055	60.0	70.0	500	500	1740	1240	0.0	INERTE	0.16
2995	DST-055	80.0	90.0	500	500	2460	760	0.1	INERTE	0.43
2996	DST-055	90.0	100.0	500	500	2500	970	0.1	INERTE	0.55
2997	DST-055	100.0	108.3	500	500	2430	1170	0.0	INERTE	0.11
2998	DST-055	108.3	120.0	500	500	1480	0	0.2	LIGERAMENTE BASICO	0.15
2999	DST-055	120.0	130.5	500	500	11440	9780	-1.2	ACIDO	0.20
3000	DST-055	130.5	140.0	500	500	87440	81660	-11.0	ACIDO	0.30
3001	DST-055	140.0	146.3	500	500	141000	138490	-18.8	ACIDO	0.43
3002	DST-056	0.0	10.0	500	500	25580	21990	-2.8	ACIDO	0.91
3003	DST-056	10.0	19.5	500	500	35630	32000	-4.2	ACIDO	0.75
3004	DST-056	19.5	29.2	500	500	24280	18380	-2.3	ACIDO	0.83
3005	DST-056	29.2	40.0	500	500	80480	76450	-10.3	ACIDO	0.68
3006	DST-056	40.0	49.5	500	500	73330	65880	-8.8	ACIDO	0.45
3007	DST-056	49.5	60.0	500	500	96400	95230	-12.9	ACIDO	0.16
3008	DST-056	60.0	69.5	500	500	137000	134060	-18.2	ACIDO	0.69
3009	DST-056	69.5	80.0	500	500	138800	136880	-18.6	ACIDO	1.03
3010	DST-056	80.0	90.9	500	500	75080	74580	-10.0	ACIDO	0.51
3011	DST-056	90.9	100.0	500	500	42900	42400	-5.6	ACIDO	1.22
3012	DST-056	100.0	106.0	500	500	50320	49820	-6.6	ACIDO	0.70
3013	DST-056	106.0	110.0	500	500	65180	64680	-8.7	ACIDO	0.93
3014	DST-056	110.0	120.0	500	500	20430	18390	-2.3	ACIDO	0.38
3015	DST-056	120.0	130.0	1560	500	43470	39080	-5.2	ACIDO	1.98
3016	DST-056	130.0	140.0	500	500	59760	53820	-7.2	ACIDO	4.76
3017	DST-056	140.0	150.0	500	500	55710	53210	-7.1	ACIDO	4.46
3018	DST-056	150.0	160.5	500	500	52930	51170	-6.8	ACIDO	2.58
3019	DST-056	160.5	172.0	500	500	64850	64350	-8.6	ACIDO	0.87
3020	DST-056	172.0	180.0	500	500	12980	12480	-1.5	ACIDO	0.30
3021	DST-056	180.0	190.0	500	500	3410	2910	-0.2	LIGERAMENTE ACIDO	0.80
3022	DST-056	190.0	200.0	500	500	18970	17780	-2.3	ACIDO	1.81
3023	DST-056	200.0	210.0	500	500	45820	42420	-5.6	ACIDO	1.71
3024	DST-056	210.0	220.1	500	500	75660	69530	-9.3	ACIDO	0.19
3025	DST-056	230.4	240.0	500	500	81040	77560	-10.4	ACIDO	0.36
3026	DST-056	240.0	249.9	500	500	69370	67840	-9.1	ACIDO	0.11
3027	DST-056	249.9	256.0	500	500	49410	48310	-6.4	ACIDO	0.17
3028	DST-056	256.0	265.5	500	500	50250	48830	-6.5	ACIDO	0.11
3029	DST-057	0.0	9.5	500	500	2560	1200	0.0	INERTE	1.03
3030	DST-057	9.5	20.0	500	500	1230	0	0.2	LIGERAMENTE BASICO	1.09
3031	DST-057	20.0	30.0	500	500	23310	20240	-2.6	ACIDO	0.61
3032	DST-057	30.0	40.5	500	500	52740	52240	-7.0	ACIDO	0.14
3033	DST-057	40.5	50.0	500	500	77780	76200	-10.3	ACIDO	0.38
3034	DST-057	50.0	60.0	500	500	65560	64480	-8.7	ACIDO	0.20
3035	DST-057	60.0	70.0	500	500	76750	76250	-10.3	ACIDO	0.27
3036	DST-057	70.0	79.0	500	500	70380	69350	-9.3	ACIDO	0.30
3037	DST-057	79.0	90.0	500	500	78370	77210	-10.4	ACIDO	0.66
3038	DST-057	90.0	99.5	500	500	135600	133390	-18.1	ACIDO	1.77
3039	DST-057	99.5	110.0	500	500	113300	111400	-15.1	ACIDO	1.29
3040	DST-057	110.0	120.0	500	500	84450	83290	-11.2	ACIDO	1.54
3041	DST-057	120.0	130.5	500	500	46380	45330	-6.0	ACIDO	0.51
3042	DST-057	130.5	140.0	500	500	131300	129930	-17.6	ACIDO	0.58
3043	DST-057	140.0	150.2	500	500	200000	198580	-27.0	ACIDO	2.57
3044	DST-057	150.2	160.0	500	500	199600	197660	-26.9	ACIDO	3.16
3045	DST-057	160.0	170.0	500	500	159400	157360	-21.4	ACIDO	0.72
3046	DST-057	170.0	180.0	500	500	60610	59580	-8.0	ACIDO	0.75
3047	DST-057	180.0	190.5	500	500	37700	36460	-4.8	ACIDO	3.53
3048	DST-057	190.5	200.1	500	500	29870	29370	-3.8	ACIDO	6.73
3049	DST-057	200.1	210.0	500	500	12360	11860	-1.4	ACIDO	0.52
3050	DST-057	210.0	217.4	500	500	1270	50	0.2	LIGERAMENTE BASICO	0.38
3051	DST-057	217.4	222.5	500	500	2120	1620	0.0	INERTE	0.88
3052	DST-057	222.5	230.0	500	500	22150	20950	-2.7	ACIDO	1.06
3053	DST-057	230.0	240.5	500	500	33060	32560	-4.3	ACIDO	0.76
3054	DST-057	240.5	250.4	500	500	77330	76250	-10.3	ACIDO	0.26
3055	DST-057	250.4	260.0	500	500	115900	114730	-15.5	ACIDO	0.16
3056	DST-057	260.0	269.4	500	500	97010	96510	-13.0	ACIDO	0.17
3057	DST-057	269.4	277.5	500	500	117900	117400	-15.9	ACIDO	0.34
3058	DST-057	277.5	282.9	500	500	64490	63990	-8.6	ACIDO	0.15
3059	DST-057	282.9	290.0	500	500	50910	50410	-6.7	ACIDO	0.40
3060	DST-057	290.0	300.5	500	500	108000	105350	-14.2	ACIDO	0.94
3061	DST-057	300.5	310.5	500	500	127300	121100	-16.4	ACIDO	0.38
3062	DST-057	319.5	327.7	500	500	85770	84560	-11.4	ACIDO	0.12
3063	DST-057	327.7	338.0	500	500	95400	93710	-12.7	ACIDO	0.88
3064	DST-057	338.0	347.2	500	500	160100	158060	-21.5	ACIDO	1.40
3065	DST-057	347.2	355.6	500	500	109900	108430	-14.7	ACIDO	1.98
3066	DST-057	355.6	364.3	500	500	68040	65820	-8.8	ACIDO	0.25
3067	DST-058	0.0	10.8	500	500	2460	1350	0.0	INERTE	0.80
3068	DST-058	10.8	20.5	1060	500	37320	30460	-4.0	ACIDO	1.93
3069	DST-058	20.5	30.0	500	500	1720	1220	0.0	INERTE	1.32
3070	DST-058	30.0	39.5	500	500	49510	41660	-5.5	ACIDO	0.53
3071	DST-058	39.5	49.5	500	500	101500	98570	-13.3	ACIDO	0.38
3072	DST-058	49.5	60.0	500	500	127500	124150	-16.8	ACIDO	1.28
3073	DST-058	60.0	69.6	500	500	124700	122820	-16.6	ACIDO	0.58
3074	DST-058	69.6	79.0	500	500	122500	119130	-16.1	ACIDO	0.42
3075	DST-058	79.0	90.0	500	500	128500	125660	-17.0	ACIDO	0.74
3076	DST-058	90.0	100.0	500	500	138600	134730	-18.3	ACIDO	0.33
3077	DST-058	100.0	110.0	500	500	107800	102940	-13.9	ACIDO	0.45
3078	DST-058	110.0	116.0	500	500	166100	162740	-22.1	ACIDO	0.52
3079	DST-058	116.0	120.0	500	500	186200	184300	-25.1	ACIDO	0.44
3080	DST-058	120.0	130.5	500	500	136300	134910	-18.3	ACIDO	1.47
3081	DST-058	130.5	140.0	500	500	118100	116950	-15.8	ACIDO	1.24
3082	DST-058	140.0	150.2	500	500	116600	116100	-15.7	ACIDO	4.12
3083	DST-058	150.2	160.5	500	500	52950	52450	-7.0	ACIDO	0.45
3084	DST-058	160.5	170.0	500	500	39580	39080	-5.2	ACIDO	5.49
3085	DST-058	170.0	180.9	500	500	64720	64220	-8.6	ACIDO	10.99
3086	DST-058	180.9	190.0	500	500	32940	32440	-4.3	ACIDO	2.08
3087	DST-058	190.0	200.1	500	500	47810	46810	-6.2	ACIDO	1.05
3088	DST-058	200.1	209.1	500	500	50830	50330	-6.7	ACIDO	0.43
3089	DST-058	209.1	220.0	500	500	59600	59100	-7.9	ACIDO	1.49
3090	DST-058	220.0	229.8	500	500	103300	101800	-13.8	ACIDO	0.47
3091	DST-058	229.8	239.3	500	500	47940	47440	-6.3	ACIDO	0.21
3092	DST-058	239.3	246.0	500	500	26590	26090	-3.4	ACIDO	0.18
3093	DST-058	246.0	250.2	500	500	27010	25890	-3.4	ACIDO	0.28
3094	DST-058	250.2	260.0	500	500	73030	72530	-9.8	ACIDO	0.50
3095	DST-058	260.0	270.0	500	500	120700	119120	-16.1	ACIDO	0.75
3096	DST-058	270.0	280.0	500	500	100500	98980	-13.4	ACIDO	0.60
3097	DST-058	280.0	290.5	500	500	53930	52790	-7.0	ACIDO	0.45
3098	DST-058	290.5	300.0	500	500	77220	74360	-10.0	ACIDO	0.84
3099	DST-058	300.0	310.0	500	500	77140	75500	-10.2	ACIDO	0.93
3100	DST-058	310.0	315.7	500	500	59820	58130	-7.8	ACIDO	0.57
3101	DST-058	315.7	320.0	500	500	34300	33800	-4.4	ACIDO	0.13
3102	DST-058	320.0	330.0	500	500	96360	93620	-12.6	ACIDO	0.33
3103	DST-058	330.0	338.2	500	500	153900	148400	-20.1	ACIDO	0.10

Apéndice 5
Resultados Análisis SPLP

Nro		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Código		DS-1383276	DS-1383277	DS-1383281	DS-1383282	DS-1383283	DS-1383290	DS-1383294	DS-1383273	DS-1383274	DS-1383275	DS-1383279	DS-1383280	DS-1383287	DS-1383288	DS-1383289	DS-1383295	DS-1383297
NCV		Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral
Taladro		CHQ-1009	CHQ-1009	CHQ-274	CHQ-276	CHQ-277	CHQ-652	CHQ-750	CHQ-070	CHQ-1007	CHQ-1008	CHQ-248	CHQ-258	CHQ-508	CHQ-515	CHQ-617	CHQ-753	CHQ-831
Desde		29	82.5	120	84	130	110	160	240	10.9	73	180	182	190	156	136	140	80
Hasta		39.5	92.65	132	94	140	120	170.1	250.1	20.8	84	190	192	200	166	146	149.55	90
Alteración		SG	SG	SG	SMV	SG	SM	SG	SMG	SV	SM	SV	SG	SG	SG	SM	SM	SMG
Tipo		Desmonte	Desmonte	Desmonte	Desmonte	Desmonte	Desmonte	Desmonte	Ox Leach	Ox Leach	Ox Leach	Ox Leach	Ox Leach	Ox Leach	Ox Leach	Ox Leach	Ox Leach	Ox Leach
Analito	Unit																	
As	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.057	0.064	0.107	0.013	0.239	0.013	0.013	0.046	0.013
Ba	mg/L	0.531	0.623	0.609	0.606	0.519	0.385	0.298	0.965	0.930	0.795	0.609	0.363	0.588	0.506	0.657	0.405	0.880
Cd	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cr	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Hg	mg/L	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pb	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.007	0.011	0.007	0.003	0.003	0.004	0.004	0.008	0.008	0.003
Se	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.015	0.013	0.013	0.013	0.013
Ag	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
Al	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
B	mg/L	0.530	0.510	0.520	0.600	0.590	0.540	0.570	0.170	0.190	0.160	0.180	0.180	0.200	0.240	0.160	0.200	0.130
Be	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Bi	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
Ce	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Co	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.016	0.001	0.001	0.001
Cs	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Cu	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Fe	mg/L	11.140	10.170	16.460	18.630	19.690	11.880	15.240	2.370	1.250	1.250	1.430	6.240	1.250	1.250	4.010	1.250	6.890
Ga	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ge	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Hf	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
In	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
K	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.480	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.950	1.250	1.250
La	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Li	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.050
Lu	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mg	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Mn	mg/L	0.693	0.439	0.918	0.752	0.859	0.741	0.454	0.245	0.063	0.112	0.222	0.660	0.063	0.407	0.489	0.063	0.954
Mo	mg/L	0.005	0.003	0.018	0.009	0.026	0.009	0.021	0.036	0.036	0.084	0.019	0.015	0.015	0.015	0.048	0.036	0.014
Na	mg/L	5.750	4.030	1.250	1.650	1.280	6.110	5.840	1.250	2.130	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Nb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ni	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.012	0.006	0.006	0.010	0.006	0.006	0.006
P	mg/L	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630
Rb	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Re	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	mg/L	40.170	40.530	37.590	51.090	39.540	41.670	48.700	20.180	23.190	20.440	20.560	23.070	32.170	30.400	33.380	26.990	23.290
Sb	mg/L	0.004	0.002	0.004	0.010	0.016	0.077	0.015	0.035	0.027	0.063	0.057	0.007	0.033	0.005	0.023	0.035	0.001
Sc	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Sn	mg/L	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Sr	mg/L	0.068	0.038	0.186	0.037	0.034	0.093	0.057	0.043	0.053	0.053	0.044	0.304	0.043	0.062	0.107	0.110	0.050
Ta	mg/L	0.005	0.002	0.003	0.004	0.002	0.004	0.004	0.004	0.006	0.004	0.010	0.006	0.005	0.004	0.005	0.006	0.001
Tb	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Te	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Th	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Tl	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.002	0.000	0.000	0.001	0.001	0.000	0.002	0.000
U	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
V	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
W	mg/L	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.005	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
Y	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Yb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Zn	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.020	0.013	0.013	0.013	0.013	0.029	0.018	0.013	0.013	0.015
Zr	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
pH final		6.48	6.50	6.20	6.30	6.31	6.48	6.24	6.80	7.52	7.66	7.05	6.56	7.63	6.62	6.72	7.93	6.99
Conductividad	uS	29.0	35.3	18.6	21.7	18.6	43.4	44.5	42.3	47.1	53.4	35.7	36.1	43.2	33.1	36.3	60.5	32.6
ORP	mV	160	138	180	206	188	161	126	148	133	35	104	144	98	117	120	66	87

Apéndice 6
Resultados Ensayo de Celdas de Humedad (Ciclo Incompleto)

Muestra	DS-1383282	Desmonte		SMV	Inerte/Neutral	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	727.95	965.77	975.9	973.22
pH @ 25° C	0.1	u pH	5.97	6.01	5.61	5.70
Conductividad @ 25°C	0.1	uS/cm	224	29	11	11
Sulfatos	0.01	mg/L	58.75	5.28	2.50	2.56
Nitrogeno amoniacal	0.004	mg/L	0.004	0.02	0.006	0.008
Fluoruro	0.002	mg/L	0.025	0.04	0.015	0.016
Nitrato	0.031	mg/L	<0.071	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	4.00	4.00	3.30	3.30
Acidez (H2SO4)	0.5	mg/L	9.3	2.8	2.0	2.0
Sb	0.0008	mg/L	0.0060	0.0134	0.0075	0.0043
As	0.001	mg/L	0.002	0.006	0.003	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.074	0.044	0.133	0.174
Bo	0.01	mg/L	0.02	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.043	0.009	0.003	0.003
Cd	0.0002	mg/L	0.0166	0.0007	0.0012	0.0008
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.082	0.123	0.037	0.029
Mn	0.0006	mg/L	0.2294	0.0091	0.0093	0.0132
Hg	0.00003	mg/L	0.0002	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0001	0.0003	0.0001	0.0002
Ni	0.0004	mg/L	0.0366	0.0014	0.0020	0.0019
Pb	0.0003	mg/L	0.0021	0.0006	0.0018	0.0032
Se	0.002	mg/L	0.0070	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.1652	0.0183	0.0227	0.0150
Al	0.02	mg/L	0.04	0.03	0.02	0.02
Li	0.0009	mg/L	0.007	0.003	0.002	0.001
Ca	0.003	mg/L	6.36	0.96	0.61	0.49
Mg	0.001	mg/L	0.804	0.148	0.067	0.057
Co	0.00007	mg/L	0.0052	0.0003	0.0003	0.0003
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	27.17	5.77	2.16	1.78
K	0.2	mg/L	1.60	0.20	0.20	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0003	0.0003	0.0000	0.0000
Sr	0.0003	mg/L	0.046	0.006	0.005	0.007
Si	0.04	mg/L	1.21	8.49	6.89	4.97
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1383275	Ox leach (Cola BRT)		SM	Inerte/Neutral	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	901.46	795.45	800.7	798.46
pH @ 25° C	0.1	u pH	8.48	8.49	8.44	8.63
Conductividad @ 25°C	0.1	uS/cm	115	157	96	87
Sulfatos	0.01	mg/L	19.07	32.32	15.93	12.08
Nitrogeno amoniacal	0.004	mg/L	0.004	0.006	0.004	0.004
Fluoruro	0.002	mg/L	0.034	0.027	0.026	0.04
Nitrato	0.031	mg/L	<0.078	<0.308	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	25.60	19.10	25.50	29.60
Acidez (H2SO4)	0.5	mg/L	0.5	0.5	0.5	0.5
Sb	0.0008	mg/L	0.0278	0.0531	0.0464	0.0451
As	0.001	mg/L	0.501	0.599	0.551	0.727
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.322	0.167	0.184	0.209
Bo	0.01	mg/L	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.001	0.001	0.001	0.001
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.089	0.016	0.029	0.051
Mn	0.0006	mg/L	0.0007	0.0006	0.0006	0.0006
Hg	0.00003	mg/L	0.0003	0.0004	0.0000	0.0002
Mo	0.00014	mg/L	0.0048	0.0195	0.0156	0.0168
Ni	0.0004	mg/L	0.0004	0.0004	0.0004	0.0004
Pb	0.0003	mg/L	0.0031	0.0003	0.0019	0.0020
Se	0.002	mg/L	0.0040	0.0040	0.0040	0.0040
Zn	0.0008	mg/L	0.0046	0.0025	0.0038	0.0010
Al	0.02	mg/L	0.03	0.02	0.02	0.02
Li	0.0009	mg/L	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	15.73	21.66	16.05	12.65
Mg	0.001	mg/L	0.252	0.695	0.366	0.391
Co	0.00007	mg/L	0.0007	0.0018	0.0003	0.0004
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	1.35	6.08	3.67	2.89
K	0.2	mg/L	0.40	0.40	0.20	0.30
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0005	0.0004	0.0003	0.0002
Sr	0.0003	mg/L	0.041	0.045	0.035	0.037
Si	0.04	mg/L	5.51	5.49	6.19	7.45
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1383295	Ox leach (Cola BRT)		SM	Inerte/Neutral	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	862.14	844.07	846.5	841.26
pH @ 25° C	0.1	u pH	8.91	8.52	8.45	8.73
Conductividad @ 25°C	0.1	uS/cm	107	224	88	49
Sulfatos	0.01	mg/L	17.02	50.38	13.02	4.77
Nitrogeno amoniacal	0.004	mg/L	0.004	0.015	0.004	0.018
Fluoruro	0.002	mg/L	0.033	0.04	0.032	0.022
Nitrato	0.031	mg/L	<0.046	<0.383	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	25.20	26.40	25.90	19.10
Acidez (H2SO4)	0.5	mg/L	0.5	0.5	0.5	0.5
Sb	0.0008	mg/L	0.0213	0.0293	0.0277	0.0179
As	0.001	mg/L	0.154	0.246	0.193	0.132
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.271	0.192	0.254	0.195
Bo	0.01	mg/L	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.001	0.002	0.004	0.001
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.036	0.019	0.019	0.023
Mn	0.0006	mg/L	0.0006	0.0020	0.0011	0.0006
Hg	0.00003	mg/L	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0009	0.0080	0.0007	0.0010
Ni	0.0004	mg/L	0.0004	0.0004	0.0004	0.0004
Pb	0.0003	mg/L	0.0024	0.0026	0.0024	0.0021
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0028	0.0023	0.0018	0.0014
Al	0.02	mg/L	0.02	0.02	0.02	0.02
Li	0.0009	mg/L	0.001	0.004	0.002	0.001
Ca	0.003	mg/L	15.30	31.53	14.64	7.87
Mg	0.001	mg/L	0.381	1.813	0.746	0.371
Co	0.00007	mg/L	0.0013	0.0018	0.0005	0.0002
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	1.02	6.30	1.76	0.59
K	0.2	mg/L	0.40	0.80	0.30	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0025	0.0015	0.0009	0.0008
Sr	0.0003	mg/L	0.048	0.076	0.040	0.027
Si	0.04	mg/L	8.72	10.53	8.26	5.34
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Apéndice 7
Resultados Calidad de Agua de Proceso

Nro		1	2	3	4	5	6	7	8	9	10
Código DS		DS-1383273	DS-1383274	DS-1383275	DS-1383279	DS-1383280	DS-1383297	DS-1383287	DS-1383288	DS-1383289	DS-1383295
NCV		Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral
Taladro		CHQ-070	CHQ-1007	CHQ-1008	CHQ-248	CHQ-258	CHQ-831	CHQ-508	CHQ-515	CHQ-617	CHQ-753
Desde		240	10.9	73	180	182	80	190	156	136	140
Hasta		250.1	20.8	84	190	192	90	200	166	146	149.55
Tipo		Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT
Tiempo Lix (h)		96	96	96	96	96	96	96	96	96	96
CN Libre / p80		50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M
Analito	**Unidad**										
Cloruro	ppm	7.68	7.84	11.00	8.32	7.65	17.96	7.85	8.02	7.69	12.20
Fluoruro	ppm	1.90	1.94	7.65	0.00	1.92	2.49	2.23	0.00	1.94	7.54
N-NH3	ppm	32.4	32.7	5.1	0.0	32.1	0.0	31.8	37.1	26.8	4.4
N-Nitrato	ppm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N-Nitrito	ppm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sulfato	ppm	202	209	205	235	207	241	232	203	214	313
CN Total	ppm	55.29	53.07	53.98	65.09	62.22	55.83	54.17	53.90	54.53	57.85
CN WAD	ppm	55.29	53.06	53.97	65.09	62.22	55.83	54.17	53.90	54.53	57.85
Cianato	ppm	0.240	0.120	0.540	0.660	1.230	0.090	0.360	0.300	0.210	0.150
Hg	ppb	16.656	16.253	60.304	23.705	24.180	9.137	113.834	33.734	5.374	23.757
Ag	ppm	0.019	0.008	0.012	0.010	0.017	0.014	0.008	0.033	0.014	0.029
Au	ppm	0.312	0.079	0.318	0.417	0.164	0.397	0.813	0.210	0.099	0.541
Cu	ppm	0.908	0.552	1.588	8.349	12.766	1.278	2.104	1.291	0.258	1.529
Al	ppm	2.063	2.075	0.278	1.985	1.672	2.137	1.861	1.969	1.994	0.305
As	ppm	2.171	5.295	2.515	5.843	0.563	0.000	2.511	0.000	1.501	1.209
B	ppm	5.657	5.620	0.218	5.137	4.883	5.016	5.318	5.703	5.402	0.263
Ba	ppm	1.769	1.201	0.910	0.596	1.221	2.942	1.063	3.955	0.529	0.889
Be	ppm	0.001	0.001	0.001	0.002	0.001	0.001	0.000	0.001	0.001	0.001
Bi	ppm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ca	ppm	31.867	32.829	79.317	26.001	35.451	47.077	33.494	54.252	32.676	72.148
Cd	ppm	0.000	0.001	0.000	0.001	0.001	0.007	0.000	0.002	0.001	0.000
Co	ppm	0.072	0.005	0.022	0.000	0.024	0.203	0.000	0.150	0.009	0.023
Cr	ppm	0.000	0.000	0.000	0.000	0.000	0.026	0.000	0.000	0.000	0.000
Fe	ppm	0.000	1.700	0.434	0.000	0.000	0.000	1.410	0.000	0.000	0.606
Ga	ppm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
K	ppm	2.002	2.628	2.145	1.798	1.385	2.972	2.033	2.286	2.087	2.957
Li	ppm	0.003	0.002	0.000	0.002	0.001	0.006	0.002	0.004	0.003	0.008
Mg	ppm	0.892	1.049	1.293	0.713	1.709	1.307	0.559	0.914	1.030	1.325
Mn	ppm	0.019	0.021	0.001	0.019	0.022	0.021	0.022	0.018	0.019	0.001
Mo	ppm	0.055	0.056	0.226	0.103	0.019	0.023	0.067	0.000	0.062	0.065
Na	ppm	43.269	41.892	N/A	82.060	50.417	76.701	50.290	49.399	42.080	N/A
Nb	ppm	0.000	0.030	0.000	0.000	0.000	0.017	0.011	0.022	0.025	0.001
Ni	ppm	0.027	0.028	0.030	0.026	0.033	0.008	0.004	0.000	0.036	0.016
Pb	ppm	0.076	0.123	0.000	0.174	0.088	0.000	0.102	0.060	0.148	0.000
Sb	ppm	0.161	0.075	0.356	0.143	0.186	0.000	0.082	0.075	0.040	0.286
Sc	ppm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Se	ppm	0.054	0.064	0.000	0.136	0.138	0.130	0.371	0.223	0.000	0.006
Sn	ppm	0.000	0.000	0.025	0.010	0.000	0.024	0.000	0.086	0.000	0.029
Sr	ppm	0.056	0.068	0.164	0.089	0.106	0.151	0.063	0.124	0.071	0.169
Te	ppm	0.042	0.095	0.000	0.074	0.137	0.055	0.016	0.110	0.043	0.000
Ti	ppm	0.108	0.097	0.006	0.101	0.134	0.109	0.408	0.018	0.046	0.007
Tl	ppm	0.000	0.000	0.000	0.000	0.000	0.029	0.000	0.000	0.000	0.000
V	ppm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	ppm	0.239	0.133	0.055	0.207	0.150	0.184	0.101	0.166	0.190	0.000
Zn	ppm	0.000	0.000	0.367	0.000	0.000	0.000	0.000	0.000	0.326	0.304
Tiocianato	ppm	3.510	4.390	20.650	6.610	9.600	9.860	3.150	9.390	7.710	27.850
TDS	ppm	315.000	310.000	275.000	470.000	365.000	540.000	300.000	525.000	280.000	385.000
TSS	mg/L	0.000	107.000	0.000	0.000	0.000	27.000	1.000	0.000	0.000	0.000

Yanacocha

Metallurgical Services

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Fecha	:	Julio 22, 2015
Tema	:	Caracterización Geoquímica del Depósito Chaquicocha 3

CARACTERIZACIÓN GEOQUÍMICA DEL DEPÓSITO CHAQUICOCHA ETAPA 3

1. Introducción

La etapa 3 del depósito Chaquicocha está ubicada en la zona central del proyecto y está conformada por las alteraciones Sílice Masiva y Vuggy, Sílice Granular, Sílice Clay y Sílice Alunita. Esta etapa está conformada principalmente por mineral óxido cuyo proceso será el de lixiviación en pilas (leach pads).

2. Métodos de Análisis

Los análisis geoquímicos realizados incluyen pruebas estáticas tales como Valor de Carbonato Neto (NCV, Net Carbonate Value), Procedimiento de Lixiviación por Precipitación Sintética (Synthetic Precipitation Leaching Procedure, SPLP), Generación de Ácido Neto Estático (NAG, Net Acid Generation) y el método cinético de Celdas de Humedad (HCT, Humidity Cell Test).

2.1 Valor de Carbonato Neto (NCV, ASTM E1915-11)

El NCV se determina a través de ensayos químicos de muestras minerales y desmonte para la determinación del Carbón Total y Carbón Residual después de pirólisis, del mismo modo se ensaya el Azufre Total y el Azufre residual después de pirolisis. Con estos resultados se determinará el Potencial de Neutralización Acida (ANP) y el Potencial de Generación de Acido (AGP) y el valor de NCV se calculará mediante las siguientes fórmulas:

$$ANP = 3.67*(Ctotal - Cresidual)$$
$$AGP = -1.37*(Stotal - Sresidual)$$
$$NCV = ANP + AGP$$

El resultado de NCV se clasifica de acuerdo a la Tabla 1 y según esta clasificación se determina si el material tiene potencial de generación de soluciones acidas, neutras o básicas.

Tabla 1 Rangos de clasificación del método NCV

Clasificación NCV	
Altamente ácido	NCV ≤ -5
Ácido	-5 < NCV ≤ -1
Ligeramente ácido	-1 < NCV ≤ -0.1
Inerte/Neutral	-0.1 < NCV < 0.1
Ligeramente básico	0.1 ≤ NCV < 1
Básico	1 ≤ NCV < 5
Altamente básico	NCV ≥ 5

2.2 *Procedimiento de Lixiviación por Precipitación Sintética (SPLP, US EPA 1312)*

El Procedimiento de Lixiviación por Precipitación Sintética (SPLP) es usado para evaluar el potencial de lixiviación de constituyentes inorgánicos (metales) desde materiales mineralizados o no mineralizados y que podrían tener impacto en las aguas superficiales y subterráneas. Este método provee un aseguramiento más realista de la movilidad bajo las actuales condiciones de campo, por ejemplo lo que ocurre cuando llueve o cuando nieva. El pH del fluido de extracción que se usa para esta prueba debe reflejar el pH en condiciones ácidas (el pH empleado fue 4.2), modificado según una mezcla 60/40 de ácidos sulfúrico y nítrico, en el cual el mineral y/o desmonte está siendo ensayado y almacenado.

2.3 *Generación de Ácido Neto Estático (NAG, Net Acid Generation)*

Esta prueba se emplea para determinar el equilibrio entre los componentes productores de ácido y los componentes consumidores de ácido en la roca. El sulfuro total contenido en la muestra se oxida con peróxido de hidrógeno, resultando en iones H^+:

$$S^{2-} \xrightarrow{H_2O_2} SO_4^{2-} + H^+$$

El ácido que produce la oxidación de sulfuros con peróxido de hidrógeno será neutralizado por los componentes neutralizantes, como los carbonatos. El pH de la solución será medido y en caso sea menos a 4.5, el ácido restante será titulado con NaOH y se determinará el contenido de total de H_2SO_4 ácido producido por tonelada de material. En algunos casos, se reportará la cantidad de ácido neutralizada desde el pH NAG hasta pH 4.5 y luego hasta pH 7.0.

2.4 *Ensayo de Celda de Humedad (HCT, ASTM D5744-07$^{\varepsilon 1}$)*

El ensayo de Celda de Humedad simula las condiciones climáticas a escala de laboratorio de forma controlada para promover la mineralización de una muestra mediante ciclos de aire húmedo y seco para simular la precipitación. La solución resultante se filtra y analiza. La prueba determinará el tiempo o la velocidad de generación de soluciones ácidas y la calidad del agua resultante (pH, metales, sulfatos, acidez, alcalinidad, conductividad, entre otros) a lo largo de 20 semanas de prueba.La muestra empleada consiste en un compósito de 2 kg y el tamaño de partícula ha sido modificado de acuerdo al tipo de mineral y proceso.

3. Selección de Muestras

Se seleccionaron compósitos de 488 taladros (ver Apéndice 2) distribuidas en el depósito según se muestra en la Figura 1 en el shape indicado como *Tajo Chaquicocha Etapa 3 (Tajo Quecher Main)*. Las coordenadas de los taladros se encuentran en Datum WGS84.

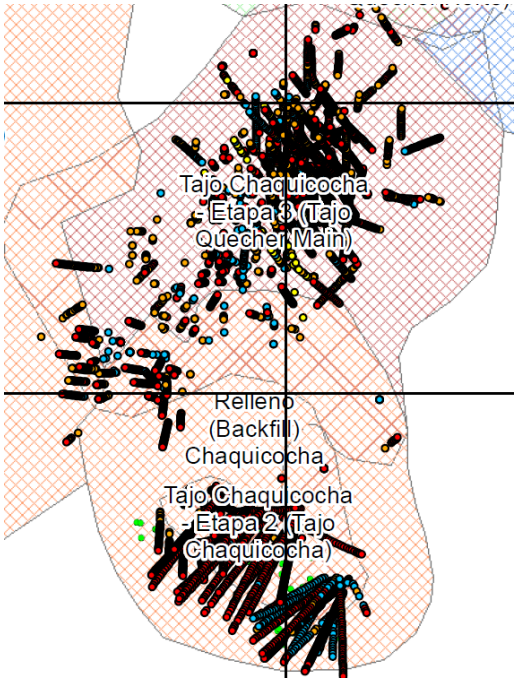


Figura 1 Distribución de muestras para caracterización geoquímica

El tipo de muestra está condicionado al método a realizar. Para el caso del ensayo de Valor de Carbonato Neto se emplearon compósitos de 10 metros obtenidos de muestras de cabeza de taladros tanto para desmonte y mineral. Una ley de oro mayor a 0.1 gpt clasificará una muestra como mineral, caso contrario, será clasificada como desmonte.

Para determinar la calidad de agua mediante los métodos SPLP y el ensayo de Celda de Humedad, se seleccionarán muestras representativas del tratamiento que se le dará al material. Los rechazos de taladros de baja concentración de oro (menor a 0.1 gpt) son las muestras más representativas para el caso de desmonte.

La selección de la muestra de mineral dependerá del proceso (lixiviación en pads o proceso Gold Mill). Para el caso del mineral a lixiviarse en el pad, se tomaron muestras de colas de columna o botella realizadas a condiciones representativas del proceso (un p80 de 10M o 1" y una concentración de cianuro libre de 50 ppm). Para el mineral a procesarse en la planta Gold Mill se tomaron muestras de colas de pruebas de botella a un p80 de 150 µm y a concentración de cianuro de acuerdo al tipo de mineral como se muestra en la Tabla 2.

Tabla 2 Selección de muestra para caracterización mediante SPLP/Celda de Humedad

Proceso	Tipo de Mineral	Muestra	p80	CN- Libre
Leach	Oxido	Cola BRT / CLT	10M o 1"	50 ppm
Gold Mill	Oxido	Cola BRT / CLT	150 µm	150 ppm
	Transitional		150 µm	500 ppm
	Sulfuro		150 µm	1000 ppm
Gold Mill - Flotación	Sulfuro	Cola de BRT con material flotado	150 µm	150 ppm
Desmonte	Desmonte	Muestra de taladro	10M	No aplica

4. Resultados

4.1 Resultados Valor de Carbonato Neto (NCV)

Se analizaron un total de 8803 muestras de tramos de 10 metros pertenecientes a 488 taladros. El criterio empleado para separar el mineral del desmonte fue una ley mínima de 0.1 gpt. Un total 3,510 fueron clasificadas como desmonte y un total de 5,293 fueron clasificadas como mineral. El resultado NCV de las muestras se encuentra en la Tabla 3. La distribución porcentual se muestra en la Figura 2.

Tabla 3 Clasificación de 8803 muestras de acuerdo al método NCV

CHQ 3	Desmonte	Mineral	Total
Ácido	1020	1880	2900
Ligeramente ácido	450	668	1118
Inerte / Neutral	1875	2467	4342
Ligeramente básico	164	277	441
Básico	1	1	2
Total	**3510**	**5293**	**8803**

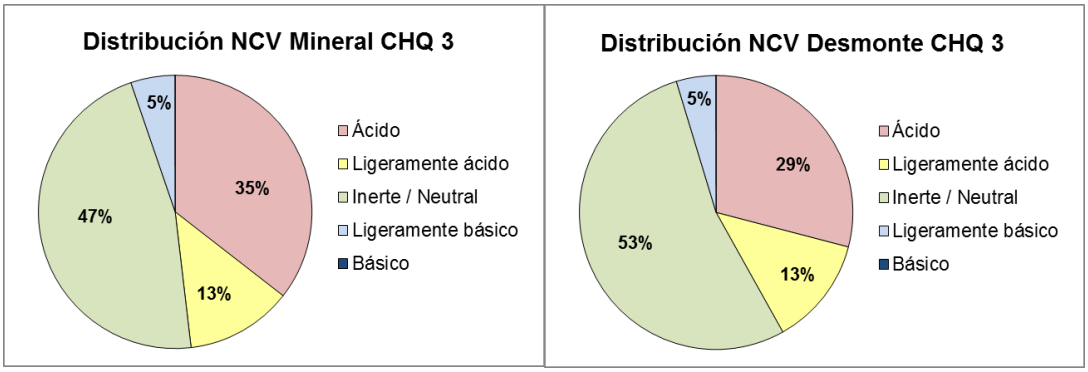


Figura 2 (A) Distribución Mineral (B) Distribución NCV Desmonte

Como se puede observar en la Tabla 3 y Figura 2, la distribución NCV entre mineral y desmonte es bastante similar. Al menos el 50% de muestras fueron clasificadas como inerte o neutral, es decir, sin potencial para producir aguas ácidas. El otro 50% de material está distribuido entre ligeramente básico, ligeramente ácido y ácido, sobre el cual predomina la clasificación acido con alrededor de 30-35%.

4.2 Resultados Procedimiento de Lixiviación por Precipitación Sintética (SPLP)

Se analizaron un total de 47 muestras, de las cuales 36 fueron de desmonte y 11 de mineral según se muestra en la Tabla 4. Las once muestras de mineral pertenecen a colas de pruebas de botella y columna de mineral óxido procesado a las condiciones de lixiviación en pads.

Tabla 4 Muestras de Mineral y Desmonte analizadas por el método SPLP

Nro	Código DS	Taladro	Desde	Hasta	NCV	Alteración	Tipo
1	DS-1378763	QUE-168	51	61	Ligeramente Acido	SC	Desmonte
2	DS-1378764	QUE-168	63	73	Acido	SC	Desmonte
3	DS-1378765	QUE-170	34	46	Inerte/Neutral	SA	Desmonte
4	DS-1378766	QUE-171	37	47	Acido	SC	Desmonte
5	DS-1378768	QUE-175	62	72	Inerte/Neutral	SM	Desmonte
6	DS-1378770	QUE-179	208	218	Inerte/Neutral	SM	Desmonte
7	DS-1378771	QUE-180	121	131	Acido	SA	Desmonte
8	DS-1378773	QUE-183	18	28	Acido	SC	Desmonte
9	DS-1378774	QUE-193	66	76	Inerte/Neutral	SM	Desmonte
10	DS-1378775	QUE-201	60	70	Inerte/Neutral	SM	Desmonte
11	DS-1378767	QUE-175	22	34	Inerte/Neutral	SM	Desmonte
12	DS-1378769	QUE-179	77	87	Inerte/Neutral	SM	Desmonte
13	DS-1378772	QUE-182	30	40	Acido	SC	Desmonte
14	DS-1378776	QUE-201	114	124	Inerte/Neutral	SM	Desmonte
15	DS-1378777	QUE-201	154	164	Inerte/Neutral	SM	Desmonte
16	DS-1310209	QUE-060	198	208	Ligeramente Acido	SM	Desmonte
17	DS-1310210	QUE-153	57	70	Ligeramente Acido	SM	Desmonte
18	DS-1310211	QUE-106	82	94	Acido	SM	Desmonte
19	DS-1310212	QUE-021	42	52	Acido	SM	Desmonte
20	DS-1310213	QUE-020	46	58	Acido	SM	Desmonte
21	DS-1310214	CHQ-607	84	94	Acido	SM	Desmonte
22	DS-1310215	CHQ-755	128	140	Acido	SM	Desmonte
23	DS-1310216	QUE-013	136	149	Acido	SM	Desmonte
24	DS-1310217	CHQ-537	12	22	Acido	SM	Desmonte
25	DS-1310218	QUE-007	182	192	Ligeramente Acido	SG	Desmonte
26	DS-1310219	QUE-007	192	202	Ligeramente Acido	SG	Desmonte
27	DS-1310220	CHQ-003	68	82	Inerte/Neutral	SG	Desmonte
28	DS-1310221	QUE-070	80	92	Inerte/Neutral	SG	Desmonte
29	DS-1310222	QUE-010	52	64	Ligeramente Acido	PRO	Desmonte
30	DS-1310223	QUE-073	46	58	Inerte/Neutral	SC	Desmonte
31	DS-1310224	QUE-163	98	110	Ligeramente Acido	SA	Desmonte
32	DS-1310225	QUE-009	42	56	Ligeramente Acido	SC	Desmonte
33	DS-1310226	QUE-011	113	126	Ligeramente Acido	SA	Desmonte
34	DS-1310227	QUE-153	132	146	Acido	SC	Desmonte
35	DS-1310228	QUE-154	210	222	Acido	SC	Desmonte
36	DS-1310229	QUE-003	112	126	Acido	ARG	Desmonte
37	DS-1364822	QUE-181	81	116	Inerte/Neutral	SG	Mineral
38	DS-1362760	QUE-166	300	345	Inerte/Neutral	SM	Mineral
39	DS-1369841	QUE-196	124	152	Acido	SA	Mineral
40	DS-1369839	QUE-191	210	241	Ligeramente Acido	SC	Mineral
41	DS-1372767	QUE-171	115	126	Acido	CLY1	Mineral
42	DS-1372768	QUE-171	207	216	Ligeramente Acido	CLY2	Mineral
43	DS-1364470	QUE-173	262	290	Ligeramente Acido	SM & SV	Mineral
44	DS-1364813	QUE-168	144	176	Ligeramente Acido	SG 1 &2	Mineral
45	DS-1364818	QUE-178	138	165	Ligeramente Acido	SM & SV	Mineral
46	DS-1362761	QUE-169	378	407	Inerte/Neutral	SM & SV	Mineral
47	DS-1310084	QUE-041	304	314	Inerte/Neutral	SM	Mineral

La mayoría de los parámetros analizados en la solución SPLP, incluyendo el mercurio, se mantuvieron por debajo de los límites de detección. Los valores mínimos, máximos y promedio se muestran en la Tabla 5. Los resultados indican que a las condiciones de la prueba, el material analizado no tiene la capacidad de producir altas concentraciones de los componentes analizados. Las muestras de desmonte presentaron la mayor concentración de metales y aniones. Las muestras de cuyo NCV fue ácido y de alteración argílico (ARG) presentaron una mayor concentración de fierro, sulfatos, conductividad y acidez. Los resultados completos se encuentran en el Apéndice 5.

Tabla 5 Resumen resultados SPLP en mineral y desmonte

Analito	Unidad	DESMONTE (36 SPLP)			MINERAL (11 SPLP)		
		Max	Min	Promedio	Max	Min	Promedio
As	ppm	0.013	0.003	0.006	0.064	0.003	0.013
Hg		0.002	0.000	0.000	0.001	0.000	0.000
Pb		0.078	0.002	0.004	0.003	0.002	0.002
Cd		0.007	0.000	0.003	0.002	0.000	0.001
Cr		0.013	0.002	0.005	0.013	0.002	0.006
Mn		3.507	0.003	0.165	0.063	0.002	0.025
Mo		0.004	0.001	0.003	0.125	0.001	0.014
Co		0.118	0.001	0.014	0.002	0.001	0.002
V		0.056	0.002	0.007	0.013	0.002	0.006
TDS		674	10	59	54	14	33
pH final	-	8.9	2.9	8.1	8.9	8.9	8.9
Conductividad	µs/cm	1375	20	121	110	28	66

La medición de pH en mineral solo se realizó en una muestra por lo que el valor min/max y promedio es igual. Similarmente, la conductividad solo se analizó en 07 de las 11 muestras de mineral.

4.3 *Resultados Ensayo de Celda de Humedad*

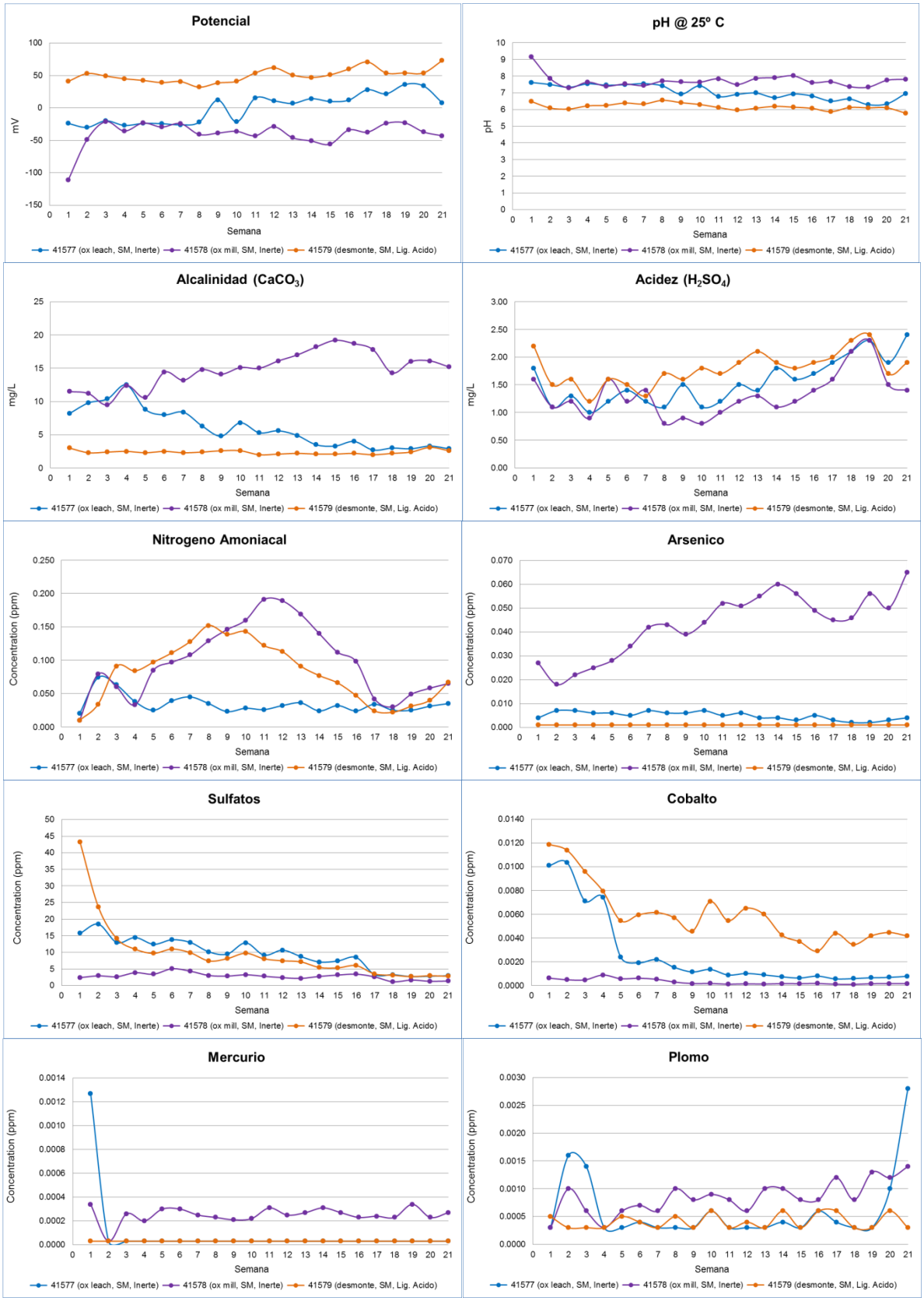
Un total de 17 muestras fueron enviadas a SGS Peru (Lima) para realizar el ensayo de Celda de Humedad. Los ensayos realizados a cada muestra se encuentran en la Tabla 6. De estas muestras solo las tres primeras (41577, 41578 y 41579) han concluido a la fecha el ciclo de 20 semanas. Las 14 muestras restantes se encuentran en el ciclo 10 y los resultados se presentan en el Apéndice 6 y 7.

Tabla 6 Ensayos de cabeza a 17 muestras para el ensayo de Celda de Humedad

Nro	Código	Taladro	Desde	Hasta	NCV	Alteración	Material	Muestra	pH pasta	Sulfuro %	kg H2SO4/ t (pH 4.5)	kg H2SO4/ t (pH 7)	NAG pH	NP/AP	Tipo material
1	41577	QUE-102	325.1	356.8	Inerte/Neutral	SM	Oxido Leach	Cola CLT	8.2	0.05	<0.1	0.8	4.6	5.3	No productor de acido
2	41578	QUE-096 QUE-060 QUE-102 QUE-017	314.1 304.0 294.0 286.2	326.0 314.0 304.0 296.0	Inerte/Neutral	SM	Oxido Mill	Cola BRT	8.1	0.04	<0.1	<0.1	7.4	1.7	Material Incierto
3	41579	QUE-060 QUE-153 QUE-106 QUE-021	198.0 56.8 82.0 42.0	208.0 70.0 94.0 52.0	Ligeramente Acido	SM	Desmonte	Desmonte	7.3	0.92	0.2	2.2	4.4	0.1	Productor de acido
4	DS-1378763	QUE-168	50.5	60.5	Ligeramente Acido	SC	Desmonte	Desmonte	5.7	0.76	0.4	2.3	4.2	0.0	Productor de acido
5	DS-1378764	QUE-168	62.5	73.0	Acido	SC	Desmonte	Desmonte	6	2.86	0.6	2.6	4.1	0.0	Productor de acido
6	DS-1378765	QUE-170	34.2	45.6	Inerte/Neutral	SA	Desmonte	Desmonte	6	2.47	1.9	4	3.5	0.0	Productor de acido
7	DS-1378766	QUE-171	36.5	46.6	Acido	SC	Desmonte	Desmonte	6	2.95	0.2	3.6	4.5	0.0	Productor de acido
8	DS-1378768	QUE-175	62.0	72.0	Inerte/Neutral	SM	Desmonte	Desmonte	7.6	0.04	0.4	1.7	3.8	0.1	Material Incierto
9	DS-1378770	QUE-179	208.0	218.0	Inerte/Neutral	SM	Desmonte	Desmonte	7.6	0.03	0.3	1.9	4.2	0.4	Material Incierto
10	DS-1378771	QUE-180	120.5	131.0	Acido	SA	Desmonte	Desmonte	6.1	4.79	0.3	2	4.1	0.0	Productor de acido
11	DS-1378773	QUE-183	18.0	28.0	Acido	SC	Desmonte	Desmonte	5.3	2.65	15.9	19.8	2.6	0.0	Productor de acido
12	DS-1378774	QUE-193	66.0	76.0	Inerte/Neutral	SM	Desmonte	Desmonte	7.3	0.02	<0.1	1.1	4.6	0.7	Material Incierto
13	DS-1378775	QUE-201	60.0	70.0	Inerte/Neutral	SM	Desmonte	Desmonte	7.4	0.02	0.2	0.9	4.2	2.2	Material Incierto
14	DS-1364822	QUE-181	80.6	115.5	Inerte/Neutral	SG	Oxido Leach	Cola CLT	8.1	0.03	<0.1	<0.1	7.1	4.5	Material Incierto
15	DS-1362760	QUE-166	300.0	344.5	Inerte/Neutral	SM	Oxido Leach	Cola CLT	8	0.04	<0.1	0.5	6.8	2.5	Material Incierto
16	DS-1369841	QUE-196	123.8	152.0	Acido	SA	Oxido Leach	Cola CLT	7.2	4.32	<0.1	2.7	6.3	0.0	Productor de acido
17	DS-1369839	QUE-191	209.6	240.8	Ligeramente Acido	SC	Oxido Leach	Cola CLT	7.2	2.32	<0.1	1.9	4.8	0.1	Productor de acido

Las muestras 41577, 41578 y 41579 representan mineral óxido leach, óxido mill y desmonte respectivamente. Como se puede observar en los siguientes gráficos, durante el ciclo de prueba, el pH se ha mantenido constante, mientras el potencial ha disminuido lentamente. Como se esperaba, la muestra de desmonte fue la más ácida, seguida por la muestra de óxido leach y la muestra de óxido mill. La concentración de metales mostró una tendencia a disminuir hasta llegar al mínimo nivel detectable por los equipos. Sin embargo, en la muestra de óxido mill se observó que las concentraciones de arsénico y plomo aumentaron (probablemente debido al p80 de la muestra, que fue 150 µm). La conductividad de la solución tuvo una relación directa con la concentración de sulfatos. Los niveles de mercurio se mantuvieron en todas las muestras por debajo del límite de detección.

Figura 3 Variación en la concentración de analitos a lo largo del ensayo de celda de humedad



4.4 *Análisis de Solución de Proceso*

El análisis de solución de proceso consistió en analizar los componentes de la solución final de una prueba de botella o columna a condiciones normales del proceso. Los metales totales se analizaron por ICP-34 y los aniones por Cromatografía Iónica.

En este caso el proceso de lixiviación en pilas será representado por la solución final de una BRT con un p80 de 10M realizada a 50 ppm de CN libre y por una CLT con un p80 1" realizara también a 50 ppm de CN libre. Es importante resaltar que una prueba de botella es un sistema cerrado en el que los componentes disueltos se acumularán mientras que en una prueba de columna la solución drenada se retira y la solución final se toma cuando el contenido de oro llegue a cantidades menores a 0.02 ppm de Au en solución.

Para el depósito se presentan los resultados 09 muestras, todas de mineral óxido leach de las cuales 07 son resultados de columna y 02 de botella como se muestra en la Tabla 7.

Tabla 7 Muestras de BRT/CLT para la determinación de calidad de agua de proceso

Código DS	NCV	Taladro	Desde	Hasta	Tipo	Tiempo Lix h	Condiciones Prueba
DS-1362760	Inerte/Neutral	QUE-166	300	344.5	Oxido Leach CLT	240	50 ppm, 1"
DS-1364470	Ligeramente Acido	QUE-173	262	289.5	Oxido Leach CLT	456	50 ppm, 1"
DS-1364813	Ligeramente Acido	QUE-168	144	175.8	Oxido Leach CLT	384	50 ppm, 1"
DS-1364818	Ligeramente Acido	QUE-178	138.3	165	Oxido Leach CLT	336	50 ppm, 1"
DS-1364822	Inerte/Neutral	QUE-181	80.6	115.5	Oxido Leach CLT	336	50 ppm, 1"
DS-1369839	Ligeramente Acido	QUE-191	209.55	240.8	Oxido Leach CLT	168	50 ppm, 1"
DS-1369841	Acido	QUE-196	123.8	152	Oxido Leach CLT	168	50 ppm, 1"
DS-1372767	Acido	QUE-171	115.05	125.5	Oxido Leach BRT	72	50ppm, 10M
DS-1372768	Ligeramente Acido	QUE-171	206.5	216	Oxido Leach BRT	72	50ppm, 10M

El resumen de los resultados se muestra en la Tabla 8. Los valores de mercurio se altos, y esto se debe a que el análisis se realizó únicamente en las BRT (es decir 02 muestras), y la solución empleada es producto de una disolución continua y acumulable. El análisis completo se encuentra en el Apéndice 8.

Tabla 8 Resumen resultados solución de proceso

Analito	Unidad	Oxido Leach (9 muestras)		
		Max	Min	Promedio
CN WAD	ppm	58.1	3.1	28.7
CN Total		35.4	6.2	25.9
Sulfatos		610	397	528
As		1.340	0.000	0.160
Cd		0.005	0.000	0.002
Ni		0.392	0.000	0.062
Hg		36.454	30.935	33.695
Cu		3.187	0.144	1.060
Pb		0.014	0.000	0.005
TDS		955	620	801

5. Conclusiones

- Se analizaron un total de 3,510 muestras de desmonte y 5,293 muestras de mineral por el método NCV. La distribución NCV fue similar para ambos tipos de material, con un 50% aproximadamente de material inerte/neutral y con el 50% de material dividido entre ligeramente ácido y ácido.
- Se analizaron 47 muestras por el método SPLP, de las cuales 36 fueron de desmonte y 11 de mineral. Las concentraciones de la mayoría de parámetros analizados fueron menores al límite de detección, a excepción de las muestras clasificadas cómo ácidas, en especial la muestra de la alteración argílico.
- Se analizaron 17 muestras por el ensayo de Celda de Humedad, de las cuales solo tres han completado los 20 ciclos a la fecha. Los resultados mostraron que los componentes metálicos y aniónicos en solución disminuyen con el tiempo hasta llegar a una concentración mínima y estabilizarse.
- Se analizó la solución final de 09 pruebas BRT/CLT a condiciones óxido leach. Es importante resaltar que la BRT es un sistema cerrado y por tanto los resultados representan la disolución total de la muestra.

Apéndice 1
Tabla de Acrónimos

SPLP	Synthetic Precipitation Leaching Procedure, en español: Procedimiento de Lixiviación por Precipitación Sintética
HCT	Humidity Cell Test, en español: ensayo de Celda de Humedad
NCV	Net Carbonate Value, en español: Valor de Carbonato Neto
PPM	Partes por millón
CLT	Column Leach Test, en español: prueba de lixiviación en columna
BRT	Bottle Roll Test, en español: prueba de lixiviación en botella

Apéndice 2 Identificación de taladros perforados en Chaquicocha 3

Nro	Taladro	Este	Norte	Elevación
1	AZ-019	17997.6	27502.6	4087.7
2	CHG-131	17486.9	27017.7	4053.0
3	CHG-132	17435.2	27123.7	4054.0
4	CHG-133	17348.3	27068.1	4059.3
5	CHG-134	17348.3	27068.1	4059.3
6	CHG-356	17366.7	26704.5	4079.2
7	CHG-406	17445.8	26773.6	4042.7
8	CHG-421	17476.6	27101.0	4050.2
9	CHG-422	17475.1	27048.4	4051.4
10	CHG-423	17447.6	26999.9	4050.5
11	CHG-424	17423.2	27051.8	4052.0
12	CHG-425	17349.6	27000.1	4056.8
13	CHG-426	17400.1	26999.9	4053.3
14	CHG-427	17397.9	26950.5	4052.8
15	CHG-428	17325.6	26949.9	4057.1
16	CHG-452	17275.1	26949.9	4063.2
17	CHG-455	17502.4	27142.0	4053.7
18	CHG-456	17363.7	26898.3	4054.1
19	CHG-457	17314.7	26901.5	4056.6
20	CHG-471	17301.6	27001.2	4062.4
21	CHG-495	17395.7	26850.5	4040.3
22	CHG-496	17475.7	26800.4	4030.3
23	CHG-497	17569.7	26748.4	4007.8
24	CHG-498	17643.1	26692.9	3988.8
25	CHG-579	17299.4	26858.0	3984.1
26	CHG-610	17625.0	27024.4	3968.6
27	CHG-612	17458.1	27035.7	3967.4
28	CHG-613	17387.0	27026.6	3967.7
29	CHG-614	17424.1	26973.4	3968.1
30	CHG-640	17440.4	26597.7	4098.1
31	CHG-646	17412.7	26731.3	4068.5
32	CHG-651	17354.4	26750.6	4072.7
33	CHG-691	17451.2	26574.1	4099.7
34	CHGE-002	17896.3	26516.4	3939.3
35	CHGE-006	18375.2	26691.1	4023.3
36	CHGE-008	18185.2	26669.1	4038.2
37	CHGE-009	18312.3	26598.2	4030.0
38	CHQ-001	17941.9	27372.7	4094.3
39	CHQ-002	17800.9	27183.8	4076.8
40	CHQ-003	18069.0	27176.1	4058.0
41	CHQ-004	18017.1	27079.8	4042.2
42	CHQ-005	17755.9	27063.2	4022.0
43	CHQ-006	17773.4	27061.4	4022.0
44	CHQ-007	17686.9	26986.4	4007.4
45	CHQ-008	18168.0	26975.2	4024.7
46	CHQ-009	18037.1	26779.3	3996.2
47	CHQ-010	17691.5	26586.7	3984.8
48	CHQ-011	17992.1	26581.1	3974.7
49	CHQ-012	17579.2	26538.5	4008.9
50	CHQ-013	17884.0	26531.5	3973.4
51	CHQ-014	17969.4	26531.7	3974.4
52	CHQ-015	18001.7	26532.9	3977.9
53	CHQ-016	17574.6	26490.7	4000.6
54	CHQ-017	17647.9	26490.2	3996.8
55	CHQ-018	18003.7	26483.6	3975.7
56	CHQ-019	18049.9	26484.4	3987.1
57	CHQ-020	17649.6	26439.1	3998.5
58	CHQ-021	18015.2	26434.3	3971.5
59	CHQ-028	17747.0	26609.9	3978.8
60	CHQ-029	17962.4	26501.6	3974.4
61	CHQ-030	17524.9	27087.0	4046.7
62	CHQ-032	17936.7	26627.7	3976.4
63	CHQ-033	17719.4	26884.2	3992.2
64	CHQ-034	17962.3	26506.2	3974.5
65	CHQ-035	17719.1	26881.6	3992.0
66	CHQ-036	17744.3	26609.6	3979.0
67	CHQ-039	17525.4	27082.4	4046.3
68	CHQ-041	18431.3	26748.0	4016.1
69	CHQ-042	17800.0	26821.9	3986.4
70	CHQ-044	17762.4	26929.1	3989.5
71	CHQ-045	17670.7	27039.3	4027.7
72	CHQ-046	18482.7	26372.5	4039.6
73	CHQ-047	17601.4	26935.0	4013.0
74	CHQ-048	17603.7	27141.7	4050.2
75	CHQ-051	17870.7	26633.4	3976.0
76	CHQ-052	17877.8	26640.3	3976.1
77	CHQ-053	17491.3	27079.0	4048.6
78	CHQ-054	17775.2	26720.7	3977.2
79	CHQ-055	17556.0	26970.4	4025.2
80	CHQ-056	17711.2	26817.9	3985.6
81	CHQ-057	17737.4	26515.1	3989.4
82	CHQ-058	17596.5	26800.1	4001.2
83	CHQ-059	17453.5	26931.9	4040.6
84	CHQ-060	17314.5	26848.9	4046.0
85	CHQ-061	17503.4	26990.7	4039.9
86	CHQ-062	17555.1	26865.9	4011.0
87	CHQ-079	17698.3	26374.5	3991.0
88	CHQ-092	18435.8	26176.2	4031.5
89	CHQ-094	18407.7	26319.6	4062.8
90	CHQ-101	17598.6	26799.5	4000.8
91	CHQ-102	17522.2	27087.3	4046.5
92	CHQ-103	17518.4	27044.2	4046.1
93	CHQ-104	17605.3	26932.4	4012.5
94	CHQ-105	17989.4	26580.1	3974.2
95	CHQ-106	17603.6	27095.8	4032.9
96	CHQ-107	17625.0	27050.7	4029.9
97	CHQ-108	17573.7	27053.2	4033.9
98	CHQ-109	17670.7	27039.0	4027.4
99	CHQ-110	17595.4	26996.8	4024.6
100	CHQ-111	17548.8	27005.7	4036.1
101	CHQ-112	17690.9	26985.1	4006.9
102	CHQ-113	17638.6	26998.8	4026.1
103	CHQ-114	17676.4	26950.6	4007.7
104	CHQ-115	17547.1	26901.6	4015.6
105	CHQ-116	17652.5	26895.2	4002.3
106	CHQ-117	17605.2	26897.3	4005.3
107	CHQ-118	17722.2	26848.1	3986.4
108	CHQ-119	17679.9	26853.4	3991.9
109	CHQ-120	17627.6	26852.4	3999.7
110	CHQ-121	17575.8	26850.9	4005.5
111	CHQ-122	17655.6	26797.9	3994.0
112	CHQ-123	17494.8	26956.0	4037.7
113	CHQ-125	17748.4	26749.1	3978.0
114	CHQ-126	17801.2	26749.4	3977.4
115	CHQ-127	17702.4	26749.4	3980.7
116	CHQ-128	17651.6	26750.2	3991.6
117	CHQ-129	17725.0	26697.3	3978.0
118	CHQ-130	17825.7	26700.4	3976.0
119	CHQ-131	17875.2	26700.0	3977.5
120	CHQ-132	17874.7	26636.0	3975.4
121	CHQ-133	17749.6	26649.7	3978.3
122	CHQ-134	17798.3	26649.6	3975.0
123	CHQ-135	17924.9	26600.0	3974.7
124	CHQ-136	17874.5	26600.2	3974.4
125	CHQ-137	17824.6	26600.1	3974.0
126	CHQ-138	17938.2	26629.4	3976.2
127	CHQ-139	17886.7	26531.8	3973.1
128	CHQ-140	17813.3	26549.6	3975.6
129	CHQ-141	18051.6	26600.8	3993.8
130	CHQ-142	17924.6	26549.9	3973.3
131	CHQ-143	17711.5	27004.7	4006.8
132	CHQ-144	17753.8	26973.7	4002.1
133	CHQ-145	17602.2	26950.2	4014.7
134	CHQ-146	17525.9	26923.5	4025.3
135	CHQ-147	17526.1	27098.9	4047.4
136	CHQ-148	17422.8	26899.7	4045.6
137	CHQ-149	17663.2	27084.6	4033.6
138	CHQ-150	17376.0	26974.8	4054.3
139	CHQ-151	17275.0	26950.0	4062.0
140	CHQ-153	17770.0	26900.0	3991.3
141	CHQ-154	18000.0	26500.0	3982.8
142	CHQ-155	17680.0	26650.0	3983.8
143	CHQ-2W	17713.1	26806.2	3985.9
144	CHQ-338	18426.5	26249.9	4050.4
145	CHQ-340	18384.0	26299.7	4059.3
146	CHQ-344	18389.5	26349.2	4069.5
147	CHQ-349	18494.1	26200.4	4020.3
148	CHQ-350	17811.6	26349.0	3974.9
149	CHQ3PZ02	18954.0	27382.5	4061.7
150	CHQ-3W	17895.7	26539.4	3974.0
151	CHQ-402	17805.8	26971.1	3997.9
152	CHQ-403	17846.8	26821.7	3984.4
153	CHQ-404	17647.0	26799.8	3922.3
154	CHQ-405	17818.4	26525.7	3936.1
155	CHQ-412	17769.3	26410.5	3967.3
156	CHQ-413	17823.8	26638.3	3915.3
157	CHQ-420	17659.6	26889.5	3905.4
158	CHQ-458	18076.0	26492.8	4000.4
159	CHQ-461	18115.3	26439.1	4000.3
160	CHQ4PZ01	18842.0	27551.6	4036.7
161	CHQ-4W	17713.1	26806.2	3985.9
162	CHQ-511	17913.8	26416.5	3958.4
163	CHQ-517	17990.0	26552.1	3949.6
164	CHQ-518	17889.6	26500.2	3939.5
165	CHQ-519	18292.6	26400.2	4096.7
166	CHQ-520	17990.0	26552.1	3949.6
167	CHQ-521	17755.1	26350.3	3968.0
168	CHQ-523	18236.3	26497.6	4106.6
169	CHQ-525	18210.0	26543.4	4106.8
170	CHQ-526	18238.3	26496.5	4106.3
171	CHQ-528	17894.3	26401.4	3958.9
172	CHQ-529	18046.1	26453.4	3980.8
173	CHQ-530	18209.3	26541.7	4106.7
174	CHQ-531	18112.8	26443.5	3999.6
175	CHQ-532	18232.1	26497.3	4106.4
176	CHQ-533	17829.8	26398.5	3967.1
177	CHQ-534	17957.3	26399.0	3965.5
178	CHQ-535	18236.0	26495.2	4106.6
179	CHQ-537	18255.2	26742.7	4031.2
180	CHQ-538	18403.2	26301.8	4059.6
181	CHQ-539	18236.1	26464.1	4109.2
182	CHQ-540	18038.2	26672.2	3992.0
183	CHQ-541	18044.4	26453.6	3980.6
184	CHQ-543	18038.1	26672.8	3992.5
185	CHQ-544	18045.4	26453.6	3980.8
186	CHQ-545	18234.9	26468.1	4109.1
187	CHQ-546	17832.3	26450.1	3966.3
188	CHQ-547	17837.7	26507.0	3936.3
189	CHQ-548	17899.9	26446.6	3958.1
190	CHQ-549	17837.7	26507.0	3936.3
191	CHQ-559	17836.0	26513.4	3935.9
192	CHQ-561	17850.1	26350.8	3967.1
193	CHQ-563	17826.8	26449.9	3966.4
194	CHQ-564	17660.0	26352.1	3980.8
195	CHQ-567	17897.8	26400.0	3959.2
196	CHQ-568	17686.0	26450.1	3991.3
197	CHQ-569	17684.7	26551.6	3993.2
198	CHQ-572	17984.4	26447.5	3965.5
199	CHQ-573	17969.7	26499.5	3945.5
200	CHQ-575	17669.4	26800.3	3904.8
201	CHQ-576	17660.0	26922.6	3912.1
202	CHQ-577	18078.8	26494.4	4000.9
203	CHQ-580	17662.6	26498.1	3991.1
204	CHQ-581	17444.7	26600.5	4098.1
205	CHQ-583	17835.7	26505.1	3936.2
206	CHQ-586	18238.7	26457.7	4109.4
207	CHQ-587	17644.8	26412.7	3998.8
208	CHQ-591	18237.1	26457.5	4109.4
209	CHQ-592	17656.6	26582.1	3992.6
210	CHQ-593	17717.2	26499.7	3991.4
211	CHQ-594	17749.6	26444.5	3982.6
212	CHQ-596	17685.7	26550.9	3993.1
213	CHQ-598	17885.5	26593.1	3927.5
214	CHQ-600	18200.5	26768.6	4027.7
215	CHQ-607	18163.6	26788.5	4025.1
216	CHQ-608	18104.1	26702.1	4020.9
217	CHQ-609	18181.5	26906.5	4036.3
218	CHQ-610	17935.0	26750.0	3982.8
219	CHQ-611	17998.6	26703.1	3987.2
220	CHQ-620	17995.2	26760.7	3988.9
221	CHQ-624	18304.4	26866.7	4044.2
222	CHQ-689	17905.9	26476.4	3950.3
223	CHQ-691	17870.2	26393.0	3951.5
224	CHQ-695	17895.5	26517.4	3939.9
225	CHQ-698	17969.3	26431.6	3940.5
226	CHQ-700	17895.5	26517.4	3939.7
227	CHQ-702	17840.5	26352.7	3951.2
228	CHQ-703	18119.1	26750.4	4020.6
229	CHQ-705	18132.7	26850.0	4033.0
230	CHQ-707	17784.7	26598.7	3940.4
231	CHQ-709	17680.9	26389.8	3993.5
232	CHQ-710	18118.4	26749.9	4020.6
233	CHQ-711	18341.5	26650.0	4057.7
234	CHQ-712	17844.7	26350.3	3950.9
235	CHQ-715	18234.7	26631.0	4098.4
236	CHQ-716	17881.6	26436.8	3941.3
237	CHQ-717	17836.9	26344.9	3951.1
238	CHQ-718	17851.9	26421.3	3951.0
239	CHQ-719	18177.8	26647.4	4038.1
240	CHQ-720	18158.5	26450.4	4032.0

Nro	Taladro	Este	Norte	Elevación
241	CHQ-721	18137.2	26550.0	4030.5
242	CHQ-724	17795.1	26404.0	3966.4
243	CHQ-742	18050.0	26976.0	4040.8
244	CHQ-755	18151.2	26859.4	4036.0
245	CHQ-760	17715.1	26514.4	3991.7
246	CHQ-762	17687.3	26552.7	3993.1
247	CHQ-764	17713.8	26514.2	3991.6
248	CHQ-768	17805.5	26463.2	3966.1
249	CHQ-769	17923.9	26960.7	4032.2
250	CHQ-790	17923.6	26958.2	4032.4
251	CHQ-792	18032.7	26724.8	3992.8
252	CHQ-807	18002.7	26424.9	3930.7
253	CHQ-829	18032.3	26725.5	3993.1
254	CHQ-869	17999.1	26424.1	3760.0
255	CHQ-981	17455.7	26928.7	4040.3
256	CHQ-982	17508.1	26992.0	4039.7
257	CHQ-983	17723.7	26880.6	3991.8
258	CHQ-984	17711.7	26818.0	3985.4
259	CHQ-CNX-001	18100.0	26600.0	4019.4
260	CHQ-CNX-002	18209.0	26541.1	4106.0
261	CHQ-CNX-003	18348.7	26773.2	4022.4
262	CHQPZ-0002	18574.0	26350.0	4018.0
263	CHQPZ-0003	18186.8	26649.8	4038.0
264	CHQPZ-0004	17804.3	26548.1	3942.3
265	DST-045	18769.4	26735.9	4027.9
266	DST-064	17484.9	26631.3	4030.0
267	DST-068	17400.5	26834.1	4036.2
268	DST-140	18561.7	27504.1	4055.5
269	DST-145	18476.9	27406.5	4077.9
270	DST-153	17644.7	26611.8	3991.3
271	ESC-002	18132.9	27399.3	4138.7
272	ESC-003	18400.7	27354.9	4077.1
273	ESC-004	17952.1	26807.5	3990.1
274	ESC-005	18204.1	27373.4	4133.5
275	GEO-004	17796.6	26750.1	3977.5
276	GEO-005	17541.5	26800.7	4012.6
277	GEO-006	17539.6	26753.8	4014.6
278	LL-001	17658.3	26450.0	3992.1
279	LL-002	17673.8	26500.1	3991.2
280	LL-003	17679.1	26408.6	3992.3
281	LL-004	17623.5	26628.7	3996.4
282	OCU-001	18436.0	26752.9	4015.1
283	OCU-002	18432.5	26751.3	4002.7
284	QCMYBH1301	18478.4	26764.1	4013.2
285	QCMYBH1302	18783.9	27253.0	4092.7
286	QCMYBH1303	18339.0	27562.9	4095.9
287	QCMYBH1304	17870.8	27247.9	4102.1
288	QCMYBH1406	18622.5	27484.1	4060.3
289	QCMYBH1407	18465.5	27585.9	4075.8
290	QCMYBH1408	18793.3	27407.5	4069.0
291	QCMYBH1501	18465.8	26658.4	4017.1
292	QCMYBH1502	18578.7	26934.5	4052.5
293	QCMYBH1503	18581.5	27049.5	4084.6
294	QCMYBH1504	18405.1	27259.7	4105.8
295	QCMYBH1505	18668.8	27348.5	4085.2
296	QCMYBH1506	18453.1	27405.8	4081.8
297	QCMYBH1507	18676.8	26937.6	4066.9
298	QCMYBH1508	18430.2	27700.2	4071.4
299	QCMYBH1509	18530.4	27055.9	4082.9
300	QCMYBH1510	18352.2	26996.3	4067.4
301	QCMYBH1511	18139.0	27543.6	4122.0
302	QCMYBH1512	18035.2	27499.8	4102.6
303	QCMYBH1513	17857.0	27062.5	4039.0
304	QCMYBH1514	18034.4	27471.6	4103.2
305	QCMYBH1515	18458.7	26860.0	4027.7
306	QCMYBH1516	18708.9	27134.0	4092.8
307	QUE-001	18009.0	27048.4	4042.2
308	QUE-001E	18085.0	26885.0	4033.0
309	QUE-002	18400.7	27354.9	4087.5
310	QUE-003	18300.5	27041.6	4068.7
311	QUE-004	18148.4	27093.9	4064.5
312	QUE-005	18145.1	26835.5	4032.6
313	QUE-006	17770.2	27062.1	4011.8
314	QUE-007	18287.6	27392.1	4120.3
315	QUE-008	18618.2	27482.7	4060.3
316	QUE-009	18458.4	27100.8	4100.9
317	QUE-010	18648.0	27241.0	4100.9
318	QUE-011	18464.0	26950.5	4037.2
319	QUE-013	18149.1	26835.8	4032.7
320	QUE-014	18431.6	26513.3	4036.0
481	QUE-253	18397.8	26772.7	4027.6
482	QUE-254	17715.6	26485.1	3991.1
483	QUE-255	17805.2	26528.4	3944.4

Nro	Taladro	Este	Norte	Elevación
321	QUE-015	18432.6	26512.9	4036.1
322	QUE-016	18191.4	27520.5	4136.3
323	QUE-017	18234.8	27190.5	4102.4
324	QUE-018	18325.2	26486.6	4096.1
325	QUE-020	18151.3	26991.2	4030.1
326	QUE-021	18151.7	26988.8	4030.1
327	QUE-02E	18095.0	26990.0	4026.0
328	QUE-030	18197.7	27027.1	4058.4
329	QUE-032	18100.0	27262.1	4077.4
330	QUE-034	18489.4	27640.5	4069.2
331	QUE-035	18209.7	27007.4	4057.5
332	QUE-041	18251.7	27157.9	4103.6
333	QUE-043	18306.5	26917.0	4032.8
334	QUE-047	18306.5	26918.1	4033.0
335	QUE-048	18300.1	27028.2	4068.2
336	QUE-049	18498.3	27351.5	4080.4
337	QUE-050	18700.9	27019.1	4095.9
338	QUE-052	18433.9	27544.9	4080.0
339	QUE-053	18243.2	27354.2	4126.5
340	QUE-054	18703.3	27599.6	4035.7
341	QUE-057	18549.5	27689.6	4042.6
342	QUE-058	18451.0	27733.8	4067.8
343	QUE-059	18353.8	27646.4	4088.5
344	QUE-060	18260.9	26963.3	4049.3
345	QUE-062	18907.5	27208.9	4075.5
346	QUE-063	18299.9	27195.8	4123.9
347	QUE-064	18791.8	27029.1	4089.1
348	QUE-065	17940.0	27213.2	4083.4
349	QUE-066	18424.6	27122.0	4110.6
350	QUE-067	18394.7	26910.8	4023.1
351	QUE-068	18598.5	26445.7	3986.5
352	QUE-069	17951.7	27107.6	4048.7
353	QUE-070	18053.0	26976.6	4034.4
354	QUE-071	18457.4	26943.2	4035.2
355	QUE-072	18087.9	27126.9	4048.8
356	QUE-073	18599.0	27150.8	4097.5
357	QUE-074	18504.2	27071.8	4089.2
358	QUE-078	18448.2	27734.0	4067.7
359	QUE-079	18935.8	26931.1	4071.4
360	QUE-086	18218.8	27160.2	4089.5
361	QUE-093	17996.5	26789.5	3992.1
362	QUE-094	17889.6	26742.3	3973.3
363	QUE-095	17793.5	26895.0	3991.9
364	QUE-096	18102.6	26701.8	4020.9
365	QUE-097	17901.6	27004.5	4034.5
366	QUE-098	18216.2	26765.6	4028.4
367	QUE-099	18389.9	27017.2	4073.6
368	QUE-100	18200.2	26898.2	4037.3
369	QUE-101	18100.0	26924.4	4033.5
370	QUE-102	18257.7	27039.5	4067.5
371	QUE-103	18124.6	27043.8	4038.3
372	QUE-104	18348.6	27012.0	4071.4
373	QUE-105	18040.0	27110.6	4044.4
374	QUE-106	18149.9	26894.4	4035.0
375	QUE-107	17770.0	26851.1	3989.6
376	QUE-141	18305.0	27196.8	4123.9
377	QUE-144	18326.0	27318.6	4097.9
378	QUE-145	18394.2	27339.0	4090.0
379	QUE-146	18421.9	27604.7	4078.6
380	QUE-152	18366.5	26902.4	4044.4
381	QUE-153	18371.8	26956.0	4043.8
382	QUE-154	18436.1	27322.0	4089.8
383	QUE-155	18431.2	27227.0	4110.2
384	QUE-156	18292.2	27311.9	4105.0
385	QUE-157	18325.1	27421.5	4113.4
386	QUE-158	18384.4	27104.7	4112.3
387	QUE-159	18349.9	27255.3	4107.8
388	QUE-160	18149.9	27199.0	4077.2
389	QUE-161	18200.0	27087.0	4067.0
390	QUE-162	18228.4	27245.0	4108.9
391	QUE-163	18299.9	27200.7	4121.2
392	QUE-164	18252.0	27233.1	4109.3
393	QUE-165	18000.1	26957.4	4035.3
394	QUE-166	18321.7	26881.3	4044.6
395	QUE-167	18230.7	26837.0	4041.9
396	QUE-168	18260.2	27030.2	4068.4
397	QUE-169	18231.5	26835.8	4042.0
398	QUE-170	18350.2	26993.4	4066.7
399	QUE-171	18430.9	27083.6	4096.5
400	QUE-172	18276.0	26954.9	4048.6
484	QUE-256	17831.5	26634.7	3942.8
485	QUE-257	17788.2	26563.7	3942.1
486	QUE-258	17891.5	26591.1	3942.5

Nro	Taladro	Este	Norte	Elevación
401	QUE-173	18447.6	26963.0	4040.8
402	QUE-174	18482.4	27174.9	4104.8
403	QUE-175	18016.1	26766.8	3992.4
404	QUE-176	18358.2	26916.2	4045.2
405	QUE-177	18350.2	26993.4	4066.7
406	QUE-178	18313.5	27093.6	4089.0
407	QUE-179	18207.7	26695.3	4036.4
408	QUE-180	18354.1	26834.9	4039.6
409	QUE-181	18351.5	27361.8	4094.5
410	QUE-182	18493.6	26980.1	4052.6
411	QUE-183	18404.7	26937.1	4044.4
412	QUE-184	18201.9	26878.1	4042.4
413	QUE-185	18387.6	26874.5	4042.5
414	QUE-186	18122.5	26904.5	4037.8
415	QUE-187	18083.0	26960.9	4040.9
416	QUE-188	18123.1	26903.4	4037.8
417	QUE-189	18201.9	26878.1	4042.3
418	QUE-190	18368.9	27106.1	4111.3
419	QUE-191	18373.1	27156.5	4131.4
420	QUE-192	18091.1	26857.0	4033.6
421	QUE-193	18272.7	26850.2	4043.4
422	QUE-194	18368.9	27106.1	4111.3
423	QUE-195	18232.7	27269.9	4115.5
424	QUE-196	18248.5	27160.0	4104.1
425	QUE-197	18368.9	27106.1	4111.3
426	QUE-198	18423.9	27120.4	4110.7
427	QUE-199	18494.1	27245.1	4094.7
428	QUE-200	18494.1	27245.1	4094.7
429	QUE-201	18036.2	26855.5	4034.2
430	QUE-202	18373.1	27156.5	4131.4
431	QUE-203	18210.4	26953.5	4052.1
432	QUE-204	18065.8	26916.1	4034.6
433	QUE-205	18184.8	27166.3	4079.0
434	QUE-206	18188.8	27071.3	4066.0
435	QUE-207	18093.6	27207.1	4072.7
436	QUE-208	18036.2	26855.5	4034.2
437	QUE-209	18094.1	27206.4	4072.7
438	QUE-210	18315.2	27174.4	4133.2
439	QUE-211	18417.9	27354.1	4086.1
440	QUE-212	18016.2	27056.3	4048.3
441	QUE-213	18344.1	27285.1	4100.5
442	QUE-214	18016.2	27056.3	4048.3
443	QUE-215	18417.9	27354.1	4086.1
444	QUE-216	18517.8	27124.4	4102.5
445	QUE-217	18261.4	26780.5	4033.3
446	QUE-218	18345.6	26585.7	4019.1
447	QUE-219	18411.4	27034.3	4080.1
448	QUE-220	18236.8	27078.5	4074.7
449	QUE-221	18411.4	27034.3	4080.1
450	QUE-222	18126.1	27160.7	4070.2
451	QUE-223	18225.0	27019.7	4059.9
452	QUE-224	18417.5	27174.9	4119.8
453	QUE-225	18141.7	27205.0	4076.9
454	QUE-226	18297.3	26794.3	4034.6
455	QUE-227	18130.3	27067.6	4063.1
456	QUE-228	18297.3	26794.3	4034.6
457	QUE-229	18209.8	26780.0	4033.7
458	QUE-230	18122.5	26817.3	4034.1
459	QUE-231	18479.1	27048.7	4079.7
460	QUE-232	18209.8	26780.0	4033.7
461	QUE-233	18184.3	26832.9	4037.2
462	QUE-234	18202.7	27318.0	4121.2
463	QUE-235	18295.4	26588.4	4024.5
464	QUE-236	18344.2	27198.0	4128.1
465	QUE-237	18079.8	27052.6	4049.2
466	QUE-238	18059.3	27178.6	4072.5
467	QUE-239	18344.2	27198.0	4128.1
468	QUE-240	18295.6	26588.4	4024.4
469	QUE-241	18128.9	26664.3	4031.8
470	QUE-242	18059.3	27178.6	4072.5
471	QUE-243	18079.8	27052.6	4049.2
472	QUE-244	18295.6	26588.4	4024.4
473	QUE-245	18295.6	26588.4	4024.4
474	QUE-246	18489.4	27077.6	4091.4
475	QUE-247	18344.2	27198.0	4128.1
476	QUE-248	18296.2	26685.8	4042.6
477	QUE-249	18296.9	26684.3	4042.7
478	QUE-250	18418.9	26829.6	4030.3
479	QUE-251	18418.9	26829.6	4030.3
480	QUE-252	18296.9	26684.3	4042.7
487	QUE-259	17643.5	26611.8	3991.3
488	STZ-091	18638.5	27579.4	4044.2

Apéndice 3
Resultados Análisis NCV de Muestras de Desmonte

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1	CHG-691	0.0	2.0	1320	200	560	50	0.1	INERTE	0.00
2	CHG-691	2.0	4.0	1610	200	510	0	0.1	INERTE	0.00
3	CHG-691	4.0	6.0	1370	200	500	0	0.1	INERTE	0.00
4	CHG-691	6.0	8.0	1800	200	370	60	0.1	INERTE	0.00
5	CHG-691	8.0	10.0	250	200	440	40	0.1	INERTE	0.00
6	CHG-691	10.0	12.0	3410	200	570	120	0.1	INERTE	0.00
7	CHG-691	12.0	14.0	330	200	920	10	0.1	INERTE	0.00
8	CHG-691	14.0	16.0	260	200	950	0	0.1	INERTE	0.00
9	CHG-691	16.0	18.0	380	200	370	0	0.1	INERTE	0.00
10	CHG-691	18.0	20.0	200	200	330	30	0.1	INERTE	0.00
11	CHG-691	20.0	22.0	420	200	310	110	0.1	INERTE	0.00
12	CHG-691	22.0	24.0	200	200	350	120	0.1	INERTE	0.00
13	CHG-691	24.0	26.0	200	200	340	60	0.1	INERTE	0.00
14	CHG-691	26.0	28.0	200	200	370	40	0.1	INERTE	0.00
15	CHG-691	28.0	30.0	210	200	290	20	0.1	INERTE	0.00
16	CHG-691	30.0	32.0	580	200	460	20	0.1	INERTE	0.00
17	CHG-691	32.0	34.0	770	200	860	30	0.1	INERTE	0.00
18	CHG-691	34.0	36.0	200	200	1010	20	0.1	INERTE	0.00
19	CHG-691	36.0	38.0	200	200	1880	0	0.1	INERTE	0.00
20	CHG-691	38.0	40.0	200	200	1180	20	0.1	INERTE	0.00
21	CHG-691	40.0	42.0	200	200	2320	0	0.1	INERTE	0.00
22	CHG-691	42.0	44.0	250	200	1630	60	0.1	INERTE	0.00
23	CHG-691	44.0	46.0	200	200	520	130	0.1	INERTE	0.00
24	CHG-691	46.0	48.0	200	200	450	110	0.1	INERTE	0.00
25	CHG-691	48.0	50.0	200	200	1700	10	0.1	INERTE	0.00
26	CHG-691	50.0	52.0	200	200	530	30	0.1	INERTE	0.00
27	CHG-691	52.0	54.0	200	200	640	100	0.1	INERTE	0.00
28	CHG-691	54.0	56.0	200	200	940	50	0.1	INERTE	0.00
29	CHG-691	56.0	58.0	200	200	850	110	0.1	INERTE	0.00
30	CHG-691	58.0	60.0	230	200	590	130	0.1	INERTE	0.00
31	CHG-691	60.0	62.0	200	200	820	70	0.1	INERTE	0.00
32	CHG-691	62.0	64.0	200	200	1120	90	0.1	INERTE	0.00
33	CHG-691	64.0	65.0	50850	200	6820	5610	-0.7	LIGERAMENTE ACIDO	0.00
34	CHQ-002	8.0	20.0	400	50	200	0	0.0	INERTE	0.01
35	CHQ-002	20.0	30.0	300	50	200	150	0.0	INERTE	0.01
36	CHQ-002	30.0	40.0	300	50	100	50	0.0	INERTE	0.01
37	CHQ-002	40.0	50.0	50	50	50	0	0.0	INERTE	0.01
38	CHQ-002	50.0	60.0	300	50	300	200	0.0	INERTE	0.01
39	CHQ-002	60.0	70.0	300	50	300	250	0.0	INERTE	0.01
40	CHQ-002	70.0	80.0	500	50	200	150	0.0	INERTE	0.01
41	CHQ-002	80.0	88.0	400	50	200	150	0.0	INERTE	0.01
42	CHQ-002	88.0	90.0	200	50	300	250	0.0	INERTE	0.01
43	CHQ-002	90.0	94.0	300	50	300	100	0.0	INERTE	0.01
44	CHQ-002	94.0	100.8	300	50	300	100	0.0	INERTE	0.01
45	CHQ-003	0.0	10.0	800	100	300	100	0.0	INERTE	0.06
46	CHQ-003	10.0	20.0	700	50	200	100	0.0	INERTE	0.05
47	CHQ-003	30.0	40.0	800	50	200	100	0.0	INERTE	0.10
48	CHQ-003	70.0	80.0	500	50	200	0	0.0	INERTE	0.08
49	CHQ-003	80.0	90.0	700	50	200	0	0.0	INERTE	0.09
50	CHQ-004	20.0	30.0	600	200	12900	2000	-0.2	LIGERAMENTE ACIDO	0.07
51	CHQ-004	40.0	50.0	500	100	300	100	0.0	INERTE	0.06
52	CHQ-004	50.0	60.0	800	50	200	0	0.0	INERTE	0.03
53	CHQ-004	60.0	70.0	700	50	100	0	0.0	INERTE	0.08
54	CHQ-004	70.0	80.0	500	50	300	100	0.0	INERTE	0.04
55	CHQ-004	80.0	90.0	500	50	200	100	0.0	INERTE	0.07
56	CHQ-004	90.0	100.1	400	100	200	0	0.0	INERTE	0.09
57	CHQ-005	0.0	10.0	400	50	200	100	0.0	INERTE	0.02
58	CHQ-005	10.0	20.0	600	50	200	100	0.0	INERTE	0.01
59	CHQ-005	20.0	30.0	300	50	300	200	0.0	INERTE	0.01
60	CHQ-006	2.0	10.0	300	200	200	0	0.1	INERTE	0.01
61	CHQ-006	10.0	20.0	200	100	200	0	0.0	INERTE	0.01
62	CHQ-006	20.0	30.0	200	100	100	0	0.0	INERTE	0.01
63	CHQ-006	30.0	40.0	100	50	100	0	0.0	INERTE	0.01
64	CHQ-006	40.0	50.0	300	50	100	0	0.0	INERTE	0.01
65	CHQ-006	50.0	60.0	300	100	100	0	0.0	INERTE	0.02
66	CHQ-006	60.0	70.0	300	300	200	0	0.1	LIGERAMENTE BASICO	0.01
67	CHQ-006	70.0	80.0	300	50	200	100	0.0	INERTE	0.01
68	CHQ-006	80.0	90.0	400	50	200	0	0.0	INERTE	0.02
69	CHQ-006	90.0	100.8	100	50	100	0	0.0	INERTE	0.01
70	CHQ-008	0.0	10.0	900	50	600	0	0.0	INERTE	0.06
71	CHQ-008	10.0	20.0	300	50	100	50	0.0	INERTE	0.04
72	CHQ-008	20.0	30.0	400	50	300	100	0.0	INERTE	0.08
73	CHQ-008	30.0	40.0	200	50	200	0	0.0	INERTE	0.06
74	CHQ-008	60.0	70.0	300	100	200	100	0.0	INERTE	0.08
75	CHQ-008	80.0	90.0	400	100	700	200	0.0	INERTE	0.09
76	CHQ-008	90.0	100.4	400	50	4900	1700	-0.2	LIGERAMENTE ACIDO	0.09
77	CHQ-009	0.0	10.0	800	100	2200	700	-0.1	INERTE	0.02
78	CHQ-009	10.0	20.0	300	50	200	0	0.0	INERTE	0.02
79	CHQ-009	20.0	30.0	400	50	200	0	0.0	INERTE	0.02
80	CHQ-009	30.0	40.0	400	50	200	0	0.0	INERTE	0.04
81	CHQ-009	40.0	50.0	500	50	200	0	0.0	INERTE	0.03
82	CHQ-009	50.0	60.0	100	50	200	0	0.0	INERTE	0.02
83	CHQ-009	60.0	70.0	300	50	200	0	0.0	INERTE	0.04
84	CHQ-009	70.0	80.0	400	50	300	0	0.0	INERTE	0.05
85	CHQ-009	80.0	90.0	200	50	300	100	0.0	INERTE	0.03
86	CHQ-009	90.0	100.3	300	100	300	0	0.0	INERTE	0.07
87	CHQ-011	70.0	80.0	400	50	200	100	0.0	INERTE	0.09
88	CHQ-011	80.0	90.0	400	50	100	50	0.0	INERTE	0.06
89	CHQ-011	90.0	100.0	400	50	200	100	0.0	INERTE	0.06
90	CHQ-011	100.0	110.0	400	100	300	200	0.0	INERTE	0.04
91	CHQ-011	110.0	120.0	300	50	300	100	0.0	INERTE	0.06
92	CHQ-011	120.0	130.0	300	200	300	100	0.1	INERTE	0.04
93	CHQ-011	130.0	140.0	400	50	300	100	0.0	INERTE	0.02
94	CHQ-015	140.0	150.0	400	50	400	200	0.0	INERTE	0.07
95	CHQ-028	110.0	120.0	800	200	8400	4400	-0.5	LIGERAMENTE ACIDO	0.07
96	CHQ-028	120.0	130.0	700	50	30100	21400	-2.9	ACIDO	0.06
97	CHQ-028	130.0	140.0	1200	100	16000	8800	-1.2	ACIDO	0.06
98	CHQ-028	140.0	150.0	1700	100	5200	1700	-0.2	LIGERAMENTE ACIDO	0.08
99	CHQ-028	160.0	170.0	1400	100	9300	4600	-0.6	LIGERAMENTE ACIDO	0.08
100	CHQ-028	170.0	180.0	400	50	200	100	0.0	INERTE	0.09
101	CHQ-028	189.9	200.0	700	50	1500	1000	-0.1	LIGERAMENTE ACIDO	0.05
102	CHQ-028	210.0	220.0	500	100	1300	800	-0.1	INERTE	0.03
103	CHQ-028	220.0	230.0	700	50	400	100	0.0	INERTE	0.05
104	CHQ-028	239.8	250.0	600	500	200	0	0.2	LIGERAMENTE BASICO	0.08
105	CHQ-028	250.0	260.4	600	500	200	0	0.2	LIGERAMENTE BASICO	0.05
106	CHQ-028	260.4	269.7	500	200	200	0	0.1	INERTE	0.07
107	CHQ-032	80.0	90.0	200	50	200	100	0.0	INERTE	0.09
108	CHQ-032	120.0	130.0	200	100	200	100	0.0	INERTE	0.10
109	CHQ-032	130.0	140.0	200	100	300	200	0.0	INERTE	0.07
110	CHQ-032	140.0	150.0	400	100	300	100	0.0	INERTE	0.08
111	CHQ-032	150.0	160.0	300	50	200	100	0.0	INERTE	0.09
112	CHQ-032	160.0	170.0	100	50	200	100	0.0	INERTE	0.06
113	CHQ-032	170.0	180.0	200	50	200	100	0.0	INERTE	0.07
114	CHQ-032	180.0	190.0	200	50	200	100	0.0	INERTE	0.08
115	CHQ-032	190.0	200.0	200	100	200	100	0.0	INERTE	0.09
116	CHQ-032	350.0	360.0	600	50	300	100	0.0	INERTE	0.07
117	CHQ-032	380.0	390.0	600	50	200	100	0.0	INERTE	0.09
118	CHQ-032	390.0	400.0	300	50	100	50	0.0	INERTE	0.06
119	CHQ-032	400.0	410.0	50	50	300	100	0.0	INERTE	0.06
120	CHQ-032	410.0	420.0	500	50	4000	3800	-0.5	LIGERAMENTE ACIDO	0.08
121	CHQ-032	420.0	430.0	50	50	5700	5500	-0.7	LIGERAMENTE ACIDO	0.04
122	CHQ-032	430.0	440.0	900	50	300	200	0.0	INERTE	0.04
123	CHQ-032	440.0	450.0	500	50	200	100	0.0	INERTE	0.04
124	CHQ-032	450.0	460.0	700	100	400	200	0.0	INERTE	0.05
125	CHQ-041	8.0	10.0	2600	100	41500	2200	-0.3	LIGERAMENTE ACIDO	0.00
126	CHQ-041	10.0	20.0	600	50	38100	6100	-0.8	LIGERAMENTE ACIDO	0.01
127	CHQ-041	20.0	30.0	400	50	35500	5500	-0.7	LIGERAMENTE ACIDO	0.01
128	CHQ-041	30.0	40.0	600	100	8900	2700	-0.3	LIGERAMENTE ACIDO	0.00
129	CHQ-041	40.0	50.1	700	50	47300	9400	-1.3	ACIDO	0.00
130	CHQ-041	50.1	60.0	300	50	22700	19800	-2.7	ACIDO	0.01
131	CHQ-041	60.0	66.0	600	50	36800	33500	-4.6	ACIDO	0.01
132	CHQ-041	70.0	82.0	1000	50	47500	41800	-5.7	ACIDO	0.01
133	CHQ-041	82.0	90.0	1000	100	36500	32900	-4.5	ACIDO	0.01
134	CHQ-041	90.0	100.0	1000	50	21300	17200	-2.3	ACIDO	0.01
135	CHQ-041	100.0	109.7	900	100	19600	9300	-1.2	ACIDO	0.00
136	CHQ-041	109.7	120.0	900	100	32500	8300	-1.1	ACIDO	0.01
137	CHQ-041	120.0	130.4	700	200	17900	7600	-1.0	LIGERAMENTE ACIDO	0.00
138	CHQ-041	130.4	140.5	800	50	19200	8000	-1.1	ACIDO	0.00
139	CHQ-041	140.5	150.0	900	50	24600	10900	-1.5	ACIDO	0.00
140	CHQ-041	150.0	160.0	500	100	400	200	0.0	INERTE	0.00
141	CHQ-042	1.0	10.0	600	100	62100	11500	-1.5	ACIDO	0.03
142	CHQ-042	10.0	20.0	1000	100	62000	14700	-2.0	ACIDO	0.02
143	CHQ-042	20.0	30.0	1100	100	53200	14000	-1.9	ACIDO	0.04
144	CHQ-042	90.0	100.0	1700	50	19400	3900	-0.5	LIGERAMENTE ACIDO	0.08
145	CHQ-042	100.0	110.5	1200	50	19600	5200	-0.7	LIGERAMENTE ACIDO	0.06
146	CHQ-044	10.0	14.0	600	100	17800	5700	-0.7	LIGERAMENTE ACIDO	0.07
147	CHQ-044	14.0	20.0	600	100	17800	5700	-0.7	LIGERAMENTE ACIDO	0.09
148	CHQ-044	30.0	40.0	600	50	33500	7000	-0.9	LIGERAMENTE ACIDO	0.08
149	CHQ-052	50.5	60.0	500	100	1800	1100	-0.1	LIGERAMENTE ACIDO	0.10
150	CHQ-052	90.0	100.0	600	200	100	0	0.1	INERTE	0.06
151	CHQ-052	100.0	109.8	500	300	300	0	0.1	LIGERAMENTE BASICO	0.08
152	CHQ-052	160.0	169.7	500	50	300	200	0.0	INERTE	0.10
153	CHQ-052	180.0	190.6	400	50	300	200	0.0	INERTE	0.07
154	CHQ-079	16.0	24.0	450	200	630	200	0.1	INERTE	0.02
155	CHQ-079	24.0	32.0	470	200	890	200	0.1	INERTE	0.03
156	CHQ-079	32.0	40.0	300	200	600	200	0.1	INERTE	0.02
157	CHQ-079	40.0	48.1	460	200	1120	200	0.1	INERTE	0.04
158	CHQ-079	48.1	55.7	330	200	1530	690	0.0	INERTE	0.04
159	CHQ-079	55.7	64.0	310	200	910	200	0.1	INERTE	0.04
160	CHQ-079	64.0	72.0	220	200	1090	200	0.1	INERTE	0.02
161	CHQ-079	72.0	80.0	270	200	1210	200	0.1	INERTE	0.02
162	CHQ-079	80.0	88.0	410	200	1200	200	0.1	INERTE	0.01
163	CHQ-079	88.0	96.0	380	200	1170	200	0.1	INERTE	0.01
164	CHQ-079	96.0	104.0	320	200	2310	260	0.0	INERTE	0.01
165	CHQ-079	104.0	112.0	460	200	3810	380	0.0	INERTE	0.03
166	CHQ-079	112.0	120.1	270	200	3580	350	0.0	INERTE	0.04
167	CHQ-079	120.1	128.0	340	200	1480	200	0.1	INERTE	0.03
168	CHQ-079	160.0	168.0	350	200	620	200	0.1	INERTE	0.02
169	CHQ-079	168.0	176.0	290	200	770	200	0.1	INERTE	0.04
170	CHQ-079	176.0	184.0	360	200	1060	200	0.1	INERTE	0.10
171	CHQ-079	184.0	191.7	400	200	960	200	0.1	INERTE	0.02
172	CHQ-079	200.0	208.0	490	200	1240	200	0.1	INERTE	0.08
173	CHQ-079	208.0	216.0	380	200	1160	200	0.1	INERTE	0.07
174	CHQ-079	216.0	224.0	440	200	1500	200	0.1	INERTE	0.03
175	CHQ-079	224.0	232.0	450	200	2860	200	0.1	INERTE	0.10
176	CHQ-079	248.0	256.0	260	200	3780	490	0.0	INERTE	0.09
177	CHQ-079	256.0	264.5	360	200	3470	300	0.0	INERTE	0.09
178	CHQ-118	40.0	50.0	700	50	18400	9800	-1.3	ACIDO	0.09
179	CHQ-118	70.0	80.0	300	200	5100	2700	-0.3	LIGERAMENTE ACIDO	0.04
180	CHQ-126	18.0	20.0	600	50	10600	5100	-0.7	LIGERAMENTE ACIDO	0.09
181	CHQ-131	20.0	30.0	1300	50	6000	4600	-0.6	LIGERAMENTE ACIDO	0.08
182	CHQ-131	30.0	40.0	1200	50	10500	7200	-1.0	LIGERAMENTE ACIDO	0.09
183	CHQ-131	40.0	50.0	1100	200	25600	16600	-2.2	ACIDO	0.09
184	CHQ-137	50.0	60.0	1200	200	5800	2700	-0.3	LIGERAMENTE ACIDO	0.09
185	CHQ-138	50.0	60.0	1300	100	22300	5700	-0.7	LIGERAMENTE ACIDO	0.04
186	CHQ-142	40.0	50.0	900	100	500	200	0.0	INERTE	0.07
187	CHQ-144	20.0	22.0	600	200	500	200	0.0	INERTE	0.05
188	CHQ-144	22.0	30.0	600	200	500	200	0.0	INERTE	0.06
189	CHQ-144	30.0	40.0	600	200	200	0	0.1	INERTE	0.04
190	CHQ-349	70.0	80.0	100	100	500	300	0.0	INERTE	0.01
191	CHQ-349	80.0	90.0	600	50	200	0	0.0	INERTE	0.01
192	CHQ-402	0.0	10.0	700	50	8500	3600	-0.5	LIGERAMENTE ACIDO	0.08
193	CHQ-402	10.0	20.0	400	50	100	0	0.0	INERTE	0.05
194	CHQ-402	20.0	30.0	300	50	200	100	0.0	INERTE	0.04
195	CHQ-402	30.0	40.0	400	50	200	100	0.0	INERTE	0.03
196	CHQ-402	40.0	50.0	300	50	200	100	0.0	INERTE	0.02
197	CHQ-402	50.0	60.0	1000	50	200	100	0.0	INERTE	0.03
198	CHQ-402	60.0	70.0	500	50	200	0	0.0	INERTE	0.02
199	CHQ-402	70.0	80.0	500	50	200	100	0.0	INERTE	0.03
200	CHQ-402	80.0	90.0	600	50	200	0	0.0	INERTE	0.04
201	CHQ-402	90.0	100.0	500	50	200	0	0.0	INERTE	0.01
202	CHQ-402	100.0	110.0	700	50	100	50	0.0	INERTE	0.01
203	CHQ-402	110.0	120.0	1000	50	100	50	0.0	INERTE	0.03
204	CHQ-402	120.0	128.0	300	50	200	0	0.0	INERTE	0.03
205	CHQ-402	128.0	130.0	800	50	200	100	0.0	INERTE	0.05
206	CHQ-402	130.0	134.0	300	200	200	0	0.1	INERTE	0.04
207	CHQ-402	134.0	140.0	300	200	200	0	0.1	INERTE	0.05
208	CHQ-402	140.0	150.0	1900	100	200	100	0.0	INERTE	0.04
209	CHQ-402	150.0	160.0	700	100	200	0	0.0	INERTE	0.03
210	CHQ-402	160.0	170.0	300	100	300	100	0.0	INERTE	0.05
211	CHQ-402	170.0	180.0	1700	200	200	0	0.1	INERTE	0.05
212	CHQ-402	180.0	190.0	1400	100	500	100	0.0	INERTE	0.06
213	CHQ-403	4.0	10.0	600	50	400	0	0.0	INERTE	0.02
214	CHQ-403	10.0	20.0	400	50	200	100	0.0	INERTE	0.02
215	CHQ-403	20.0	30.0	600	50	200	0	0.0	INERTE	0.02
216	CHQ-403	30.0	40.0	300	50	200	100	0.0	INERTE	0.02
217	CHQ-403	40.0	50.0	300	50	200	100	0.0	INERTE	0.02
218	CHQ-403	50.0	60.0	300	50	200	0	0.0	INERTE	0.03
219	CHQ-403	60.0	70.0	300	50	200	100	0.0	INERTE	0.04
220	CHQ-403	70.0	80.0	200	50	200	0	0.0	INERTE	0.04
221	CHQ-403	80.0	90.0	300	50	200	100	0.0	INERTE	0.04
222	CHQ-403	90.0	100.0	500	50	200	100	0.0	INERTE	0.02
223	CHQ-403	100.0	110.0	800	50	200	0	0.0	INERTE	0.02
224	CHQ-403	110.0	120.0	300	50	300	100	0.0	INERTE	0.02
225	CHQ-403	120.0	130.0	600	50	300	200	0.0	INERTE	0.03
226	CHQ-403	130.0	140.0	200	50	200	0	0.0	INERTE	0.03
227	CHQ-403	140.0	150.0	600	50	200	100	0.0	INERTE	0.04
228	CHQ-403	150.0	160.0	700	50	200	100	0.0	INERTE	0.06
229	CHQ-403	160.0	170.0	700	50	300	200	0.0	INERTE	0.05
230	CHQ-403	170.0	180.0	400	50	300	100	0.0	INERTE	0.03
231	CHQ-403	180.0	190.0	700	50	400	200	0.0	INERTE	0.05
232	CHQ-403	190.0	192.0	800	50	700	200	0.0	INERTE	0.04
233	CHQ-403	192.0	200.0	800	50	700	200	0.0	INERTE	0.07
234	CHQ-403	200.0	210.0	500	50	600	200	0.0	INERTE	0.06
235	CHQ-403	210.0	220.0	1000	50	6000	5700	-0.8	LIGERAMENTE ACIDO	0.04
236	CHQ-403	220.0	230.0	400	50	600	200	0.0	INERTE	0.04
237	CHQ-403	230.0	240.0	500	50	600	300	0.0	INERTE	0.04
238	CHQ-403	240.0	250.0	500	50	400	200	0.0	INERTE	0.05
239	CHQ-403	250.0	260.0	400	50	400	100	0.0	INERTE	0.07
240	CHQ-413	10.0	20.0	1700	100	11800	2800	-0.3	LIGERAMENTE ACIDO	0.09
241	CHQ-517	60.0	70.0	900	50	3000	100	0.005	INERTE	0.05
242	CHQ-517	70.0	80.0	600	50	9400	6600	-0.9	LIGERAMENTE ACIDO	0.06
243	CHQ-520	40.0	50.1	800	50	400	100	0.0	INERTE	0.09
244	CHQ-530	140.0	150.0	200	200	1000	100	0.1	INERTE	0.02
245	CHQ-530	150.0	160.0	50	50	800	400	0.0	INERTE	0.01
246	CHQ-530	160.0	170.0	50	50	700	400	0.0	INERTE	0.01
247	CHQ-530	170.0	180.0	50	50	700	400	0.0	INERTE	0.02
248	CHQ-530	180.0	186.0	100	50	800	500	-0.1	INERTE	0.02
249	CHQ-530	190.0	200.0	200	200	900	0	0.1	INERTE	0.07
250	CHQ-530	250.0	260.0	400	200	500	100	0.1	INERTE	0.06
251	CHQ-530	260.0	270.0	500	100	400	0	0.0	INERTE	0.02
252	CHQ-535	170.0	180.0	400	50	600	100	0.0	INERTE	0.01
253	CHQ-535	180.0	190.0	600	50	700	100	0.0	INERTE	0.02
254	CHQ-535	190.0	200.0	400	50	800	200	0.0	INERTE	0.02
255	CHQ-535	200.0	210.5	1000	50	800	100	0.0	INERTE	0.07
256	CHQ-535	210.5	220.0	500	50	400	100	0.0	INERTE	0.03
257	CHQ-535	220.0	230.0	700	50	800	100	0.0	INERTE	0.03
258	CHQ-535	230.0	240.0	300	50	1400	300	0.0	INERTE	0.01
259	CHQ-537	2.5	10.0	200	50	200	150	0.0	INERTE	0.00
260	CHQ-537	10.0	20.0	100	50	200	150	0.0	INERTE	0.00
261	CHQ-537	20.0	30.0	100	50	200	150	0.0	INERTE	0.00
262	CHQ-537	30.0	40.0	200	200	300	0	0.1	INERTE	0.00
263	CHQ-537	40.0	50.0	100	50	300	100	0.0	INERTE	0.02
264	CHQ-537	50.0	59.9	50	50	300	0	0.0	INERTE	0.01
265	CHQ-537	59.9	70.0	100	100	300	0	0.0	INERTE	0.01
266	CHQ-537	70.0	80.3	100	100	300	0	0.0	INERTE	0.02
267	CHQ-537	80.3	90.0	100	100	200	150	0.0	INERTE	0.02
268	CHQ-537	90.0	100.0	50	50	300	0	0.0	INERTE	0.02
269	CHQ-537	100.0	110.3	50	50	200	0	0.0	INERTE	0.03
270	CHQ-537	110.3	120.0	100	100	300	0	0.0	INERTE	0.03
271	CHQ-537	120.0	130.1	200	200	300	0	0.1	INERTE	0.07
272	CHQ-537	130.1	140.0	200	200	300	0	0.1	INERTE	0.06
273	CHQ-537	140.0	150.0	100	100	300	0	0.0	INERTE	0.08
274	CHQ-537	150.0	160.0	600	50	200	100	0.0	INERTE	0.06
275	CHQ-537	160.0	170.4	900	50	300	100	0.0	INERTE	0.03
276	CHQ-537	170.4	180.0	400	50	300	100	0.0	INERTE	0.02
277	CHQ-537	180.0	190.0	400	50	7700	2500	-0.3	LIGERAMENTE ACIDO	0.02
278	CHQ-537	190.0	200.0	500	50	200	100	0.0	INERTE	0.02
279	CHQ-537	200.0	210.0	500	50	200	100	0.0	INERTE	0.02
280	CHQ-537	210.0	220.0	300	50	200	100	0.0	INERTE	0.02
281	CHQ-537	220.0	230.2	400	50	300	100	0.0	INERTE	0.05
282	CHQ-537	230.2	240.0	1100	50	300	100	0.0	INERTE	0.04
283	CHQ-537	240.0	250.0	400	50	200	100	0.0	INERTE	0.03
284	CHQ-537	250.0	260.0	500	50	300	100	0.0	INERTE	0.05
285	CHQ-537	260.0	270.0	400	50	300	100	0.0	INERTE	0.05
286	CHQ-537	270.0	280.0	300	50	300	100	0.0	INERTE	0.07
287	CHQ-537	280.0	289.7	400	50	700	100	0.0	INERTE	0.07
288	CHQ-538	140.0	150.0	900	200	500	100	0.1	INERTE	0.00
289	CHQ-540	90.0	100.0	100	50	3600	3200	-0.4	LIGERAMENTE ACIDO	0.04
290	CHQ-540	100.0	110.0	100	50	3700	3100	-0.4	LIGERAMENTE ACIDO	0.03
291	CHQ-540	110.0	112.0	500	200	200	0	0.1	INERTE	0.03
292	CHQ-540	112.0	120.0	500	200	200	0	0.1	INERTE	0.04
293	CHQ-540	120.0	130.0	500	100	400	100	0.0	INERTE	0.04
294	CHQ-540	130.0	140.0	700	100	300	0	0.0	INERTE	0.08
295	CHQ-540	140.0	150.0	300	100	400	0	0.0	INERTE	0.05
296	CHQ-540	150.0	160.0	300	100	200	0	0.0	INERTE	0.05
297	CHQ-540	160.0	170.2	300	100	400	100	0.0	INERTE	0.09
298	CHQ-540	170.2	180.0	900	100	400	0	0.0	INERTE	0.09
299	CHQ-540	180.0	190.0	500	100	800	0	0.0	INERTE	0.09
300	CHQ-543	90.0	99.6	100	50	1000	600	-0.1	INERTE	0.06
301	CHQ-543	110.0	120.0	400	50	400	0	0.0	INERTE	0.08
302	CHQ-543	150.0	160.0	400	50	300	100	0.0	INERTE	0.08
303	CHQ-543	160.0	162.0	700	50	300	100	0.0	INERTE	0.08
304	CHQ-543	162.0	169.6	700	50	300	100	0.0	INERTE	0.09
305	CHQ-543	169.6	180.0	800	50	200	100	0.0	INERTE	0.08
306	CHQ-543	180.0	190.0	400	50	200	100	0.0	INERTE	0.06
307	CHQ-543	190.0	200.0	500	50	200	100	0.0	INERTE	0.10
308	CHQ-543	200.0	210.0	700	50	200	100	0.0	INERTE	0.05
309	CHQ-543	210.0	220.0	400	50	500	100	0.0	INERTE	0.08
310	CHQ-543	220.0	230.0	800	50	600	100	0.0	INERTE	0.06
311	CHQ-546	112.0	120.0	200	200	200	100	0.1	INERTE	0.08
312	CHQ-546	128.0	136.0	400	200	800	200	0.0	INERTE	0.06
313	CHQ-546	216.0	224.0	360	200	390	100	0.1	INERTE	0.10
314	CHQ-547	32.0	40.0	220	200	650	100	0.1	INERTE	0.06
315	CHQ-547	72.0	80.0	240	200	670	100	0.1	INERTE	0.10
316	CHQ-547	104.0	112.0	270	200	3730	330	0.0	INERTE	0.09
317	CHQ-547	143.0	152.0	200	200	310	100	0.1	INERTE	0.03
318	CHQ-547	152.0	160.0	550	200	580	100	0.1	INERTE	0.06
319	CHQ-547	160.0	164.9	200	200	340	100	0.1	INERTE	0.04
320	CHQ-548	216.0	224.2	270	200	200	100	0.1	INERTE	0.05
321	CHQ-548	224.2	232.0	280	200	210	100	0.1	INERTE	0.08
322	CHQ-549	142.0	150.0	500	200	400	100	0.1	INERTE	0.06
323	CHQ-549	150.0	158.0	300	200	200	100	0.1	INERTE	0.06
324	CHQ-549	158.0	166.0	300	200	300	100	0.1	INERTE	0.04
325	CHQ-549	166.0	174.0	300	200	300	100	0.1	INERTE	0.04
326	CHQ-549	174.0	182.0	700	200	300	100	0.1	INERTE	0.06
327	CHQ-549	182.0	190.0	400	200	400	100	0.1	INERTE	0.06
328	CHQ-549	190.0	198.0	300	200	500	100	0.1	INERTE	0.06
329	CHQ-549	198.0	206.0	400	200	400	100	0.1	INERTE	0.05
330	CHQ-549	214.0	222.0	400	200	200	100	0.1	INERTE	0.08
331	CHQ-549	238.0	246.0	700	200	3400	2000	-0.2	LIGERAMENTE ACIDO	0.08
332	CHQ-549	246.0	254.0	500	200	8200	6800	-0.9	LIGERAMENTE ACIDO	0.08
333	CHQ-549	254.0	262.0	600	200	7200	5800	-0.7	LIGERAMENTE ACIDO	0.09
334	CHQ-559	132.0	140.0	470	200	240	100	0.1	INERTE	0.08
335	CHQ-559	140.0	148.0	410	200	230	100	0.1	INERTE	0.04
336	CHQ-559	148.0	156.0	370	200	320	100	0.1	INERTE	0.07
337	CHQ-559	156.0	163.8	380	200	530	100	0.1	INERTE	0.05
338	CHQ-559	163.8	172.4	420	200	480	100	0.1	INERTE	0.04
339	CHQ-559	172.4	180.0	350	200	740	100	0.1	INERTE	0.05
340	CHQ-559	180.0	188.0	600	200	760	100	0.1	INERTE	0.05
341	CHQ-559	196.0	204.0	360	200	1040	100	0.1	INERTE	0.06
342	CHQ-559	204.0	212.0	430	200	5270	3770	-0.4	LIGERAMENTE ACIDO	0.06
343	CHQ-559	212.0	220.0	350	200	1140	100	0.1	INERTE	0.09
344	CHQ-559	220.0	228.0	350	200	2200	100	0.1	INERTE	0.08
345	CHQ-559	228.0	236.0	360	200	2440	340	0.0	INERTE	0.09
346	CHQ-559	468.0	476.0	1460	200	81700	36300	-4.9	ACIDO	0.09
347	CHQ-559	484.0	492.0	200	200	59300	38900	-5.3	ACIDO	0.07
348	CHQ-561	243.8	252.0	410	200	96300	89500	-12.2	ACIDO	0.03
349	CHQ-561	252.0	260.0	500	200	39900	34000	-4.6	ACIDO	0.01
350	CHQ-561	260.0	268.0	430	200	35400	31500	-4.2	ACIDO	0.00
351	CHQ-561	268.0	276.0	770	200	42600	38200	-5.2	ACIDO	0.02
352	CHQ-561	300.0	308.0	340	200	114000	105500	-14.4	ACIDO	0.09
353	CHQ-561	308.0	316.0	940	200	179000	169200	-23.1	ACIDO	0.04
354	CHQ-561	340.2	348.0	720	200	46900	36500	-4.9	ACIDO	0.09
355	CHQ-563	189.2	196.0	200	200	1110	100	0.1	INERTE	0.09
356	CHQ-563	196.0	204.2	210	200	200	100	0.1	INERTE	0.05
357	CHQ-563	204.2	212.0	200	200	380	100	0.0	INERTE	0.08
358	CHQ-563	212.0	220.0	200	200	200	100	0.1	INERTE	0.06
359	CHQ-563	220.0	228.0	200	200	200	100	0.1	INERTE	0.06
360	CHQ-563	228.0	236.0	200	200	200	100	0.1	INERTE	0.10

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
361	CHQ-563	236.0	244.0	200	200	930	530	0.0	INERTE	0.06
362	CHQ-563	244.0	252.2	200	200	5610	5210	-0.6	LIGERAMENTE ACIDO	0.05
363	CHQ-563	300.0	308.2	320	200	2760	660	0.0	INERTE	0.10
364	CHQ-563	308.2	316.0	730	200	1780	100	0.1	INERTE	0.00
365	CHQ-563	476.0	484.0	230	200	55700	28700	-3.9	ACIDO	0.09
366	CHQ-564	99.0	105.9	1310	200	1640	340	0.0	INERTE	0.04
367	CHQ-564	105.9	114.3	1270	200	870	100	0.1	INERTE	0.10
368	CHQ-564	154.0	162.0	1750	400	4620	720	0.0	INERTE	0.08
369	CHQ-564	162.0	169.7	1030	200	1850	250	0.0	INERTE	0.06
370	CHQ-564	169.7	178.0	880	200	1630	100	0.1	INERTE	0.05
371	CHQ-564	178.0	186.0	1030	300	1090	100	0.1	INERTE	0.05
372	CHQ-564	264.0	272.0	680	400	74300	55600	-7.5	ACIDO	0.08
373	CHQ-567	147.0	156.0	1800	200	2200	2000	-0.2	LIGERAMENTE ACIDO	0.05
374	CHQ-567	156.0	164.0	200	200	600	100	0.1	INERTE	0.07
375	CHQ-567	196.0	204.0	800	200	1300	100	0.1	INERTE	0.00
376	CHQ-567	212.0	220.0	300	200	1000	100	0.1	INERTE	0.06
377	CHQ-567	220.0	228.0	200	200	1000	100	0.0	INERTE	0.08
378	CHQ-567	228.0	236.0	200	200	1900	1200	-0.1	INERTE	0.07
379	CHQ-567	236.0	244.0	200	200	4500	3400	-0.4	LIGERAMENTE ACIDO	0.09
380	CHQ-567	252.0	260.0	680	300	12600	8300	-1.0	ACIDO	0.10
381	CHQ-567	260.0	268.0	1300	300	14100	11300	-1.4	ACIDO	0.09
382	CHQ-567	268.0	276.0	1120	400	17200	15800	-2.0	ACIDO	0.10
383	CHQ-568	0.0	8.4	900	200	1000	200	0.0	INERTE	0.08
384	CHQ-568	8.4	16.0	700	200	1300	100	0.1	INERTE	0.06
385	CHQ-568	16.0	24.0	600	200	1500	100	0.1	INERTE	0.10
386	CHQ-568	24.0	32.0	1000	200	1800	300	0.0	INERTE	0.05
387	CHQ-568	48.0	56.0	1000	200	900	300	0.0	INERTE	0.09
388	CHQ-568	56.0	64.0	900	200	800	100	0.1	INERTE	0.06
389	CHQ-568	64.0	72.0	1700	400	500	100	0.1	LIGERAMENTE BASICO	0.07
390	CHQ-568	72.0	80.3	600	200	700	300	0.0	INERTE	0.05
391	CHQ-568	80.3	88.1	800	200	900	200	0.0	INERTE	0.04
392	CHQ-568	88.1	96.0	1100	200	700	100	0.1	INERTE	0.04
393	CHQ-568	120.0	128.0	1000	200	1000	100	0.1	INERTE	0.07
394	CHQ-568	128.0	136.0	600	200	1400	200	0.0	INERTE	0.04
395	CHQ-568	144.0	152.0	1100	200	1000	100	0.1	INERTE	0.02
396	CHQ-568	152.0	160.0	700	200	1900	100	0.1	INERTE	0.03
397	CHQ-568	160.0	168.0	900	200	1300	100	0.1	INERTE	0.06
398	CHQ-568	168.0	176.0	900	200	800	100	0.1	INERTE	0.07
399	CHQ-568	192.0	200.0	800	200	1300	200	0.0	INERTE	0.03
400	CHQ-568	304.0	312.0	500	200	7400	4500	-0.5	LIGERAMENTE ACIDO	0.10
401	CHQ-568	336.0	344.0	300	200	2300	500	0.0	INERTE	0.08
402	CHQ-568	344.0	352.0	300	200	3900	1900	-0.2	LIGERAMENTE ACIDO	0.08
403	CHQ-568	352.0	360.0	300	200	5800	4000	-0.5	LIGERAMENTE ACIDO	0.08
404	CHQ-568	488.0	492.3	300	200	5400	2500	-0.3	LIGERAMENTE ACIDO	0.09
405	CHQ-569	270.6	282.0	500	200	7700	2500	-0.3	LIGERAMENTE ACIDO	0.00
406	CHQ-569	394.0	402.0	800	200	41700	37700	-5.1	ACIDO	0.09
407	CHQ-573	144.2	150.0	600	200	400	100	0.1	INERTE	0.09
408	CHQ-575	32.0	40.0	700	200	600	100	0.1	INERTE	0.09
409	CHQ-575	56.0	64.0	1000	200	400	100	0.1	INERTE	0.09
410	CHQ-575	64.0	72.0	700	200	400	100	0.1	INERTE	0.09
411	CHQ-575	120.0	128.0	700	200	10400	6500	-0.8	LIGERAMENTE ACIDO	0.08
412	CHQ-575	128.0	136.0	800	300	7300	4100	-0.5	LIGERAMENTE ACIDO	0.08
413	CHQ-575	144.0	152.0	800	200	3800	2600	-0.3	LIGERAMENTE ACIDO	0.09
414	CHQ-575	152.0	160.0	900	200	4200	3700	-0.4	LIGERAMENTE ACIDO	0.09
415	CHQ-575	160.0	166.5	800	200	600	300	0.0	INERTE	0.08
416	CHQ-575	168.0	174.0	300	200	500	100	0.1	INERTE	0.10
417	CHQ-575	174.0	182.4	300	200	4000	3500	-0.4	LIGERAMENTE ACIDO	0.09
418	CHQ-575	246.0	254.0	500	200	47100	44600	-6.0	ACIDO	0.08
419	CHQ-575	262.0	270.0	300	200	67300	64400	-8.7	ACIDO	0.10
420	CHQ-575	310.0	318.0	240	200	33100	31000	-4.2	ACIDO	0.07
421	CHQ-575	318.0	326.0	260	200	26700	24500	-3.3	ACIDO	0.06
422	CHQ-575	326.0	334.0	290	200	2540	1640	-0.2	LIGERAMENTE ACIDO	0.07
423	CHQ-575	334.0	342.4	280	200	550	100	0.1	INERTE	0.06
424	CHQ-575	342.4	350.0	200	200	4780	4080	-0.5	LIGERAMENTE ACIDO	0.08
425	CHQ-575	350.0	358.0	370	200	4840	3940	-0.5	LIGERAMENTE ACIDO	0.10
426	CHQ-576	0.0	8.0	900	200	500	100	0.1	INERTE	0.07
427	CHQ-576	8.0	16.0	1000	200	600	300	0.0	INERTE	0.06
428	CHQ-576	16.0	24.0	900	200	1100	400	0.0	INERTE	0.09
429	CHQ-576	24.0	32.0	700	200	900	100	0.0	INERTE	0.07
430	CHQ-576	32.0	40.0	600	200	1000	100	0.0	INERTE	0.06
431	CHQ-576	40.0	48.0	600	200	600	400	0.0	INERTE	0.09
432	CHQ-576	48.0	56.0	500	200	800	100	0.0	INERTE	0.07
433	CHQ-576	56.0	64.0	700	200	400	100	0.0	INERTE	0.05
434	CHQ-576	64.0	72.0	600	200	400	100	0.1	INERTE	0.07
435	CHQ-576	72.0	80.0	800	200	500	100	0.1	INERTE	0.09
436	CHQ-576	80.0	88.0	800	200	500	100	0.1	INERTE	0.07
437	CHQ-576	88.0	96.0	2400	200	500	100	0.1	INERTE	0.09
438	CHQ-576	96.0	104.0	800	200	400	100	0.1	INERTE	0.09
439	CHQ-576	104.0	112.0	800	200	400	100	0.1	INERTE	0.07
440	CHQ-576	128.0	136.0	900	200	1100	100	0.0	INERTE	0.07
441	CHQ-580	40.0	48.0	460	200	1280	380	0.0	INERTE	0.05
442	CHQ-580	128.0	136.4	600	200	290	100	0.1	INERTE	0.01
443	CHQ-580	136.4	144.0	590	200	580	100	0.1	INERTE	0.03
444	CHQ-580	144.0	152.0	1220	200	1200	100	0.1	INERTE	0.02
445	CHQ-580	152.0	160.0	1400	200	1470	100	0.1	INERTE	0.05
446	CHQ-580	168.0	176.0	610	200	1130	100	0.1	INERTE	0.03
447	CHQ-580	176.0	184.0	280	200	4270	270	0.0	INERTE	0.08
448	CHQ-580	200.0	208.0	970	200	3730	100	0.1	INERTE	0.10
449	CHQ-580	208.0	216.0	580	200	1580	100	0.1	INERTE	0.07
450	CHQ-580	216.0	224.0	820	200	1470	100	0.1	INERTE	0.03
451	CHQ-580	232.0	240.0	860	200	1950	100	0.1	INERTE	0.03
452	CHQ-580	296.0	304.0	710	200	44500	36000	-4.9	ACIDO	0.08
453	CHQ-580	344.0	352.0	370	200	29400	25700	-3.4	ACIDO	0.10
454	CHQ-581	0.0	8.0	2540	200	2440	100	0.1	INERTE	0.03
455	CHQ-581	8.0	16.0	7300	200	880	100	0.1	INERTE	0.02
456	CHQ-581	16.0	24.0	100	200	2720	720	0.0	INERTE	0.02
457	CHQ-581	24.0	32.0	610	200	2270	370	0.0	INERTE	0.02
458	CHQ-581	32.0	40.0	1010	200	1990	100	0.1	INERTE	0.02
459	CHQ-581	40.0	48.0	480	200	960	100	0.1	INERTE	0.02
460	CHQ-581	48.0	56.0	460	200	1590	100	0.1	INERTE	0.01
461	CHQ-581	56.0	64.0	450	200	390	100	0.1	INERTE	0.02
462	CHQ-581	64.0	72.0	1860	200	480	100	0.1	INERTE	0.01
463	CHQ-581	72.0	80.0	340	200	960	360	0.0	INERTE	0.02
464	CHQ-581	80.0	88.0	440	200	2820	2020	-0.2	LIGERAMENTE ACIDO	0.07
465	CHQ-581	96.0	104.0	710	200	630	100	0.1	INERTE	0.05
466	CHQ-581	104.0	112.0	1080	200	1410	100	0.1	INERTE	0.03
467	CHQ-581	112.0	120.0	1150	200	5690	2190	-0.2	LIGERAMENTE ACIDO	0.01
468	CHQ-581	120.0	128.0	1130	200	6150	1650	-0.2	LIGERAMENTE ACIDO	0.03
469	CHQ-581	128.0	136.0	1360	200	3170	570	0.0	INERTE	0.02
470	CHQ-581	136.0	144.0	1400	200	6160	1060	-0.1	INERTE	0.03
471	CHQ-581	144.0	152.0	1010	200	23100	5900	-0.7	LIGERAMENTE ACIDO	0.02
472	CHQ-581	152.0	160.0	1060	200	24300	5800	-0.7	LIGERAMENTE ACIDO	0.03
473	CHQ-581	160.0	168.0	1220	200	10400	2000	-0.2	LIGERAMENTE ACIDO	0.02
474	CHQ-581	168.0	176.0	790	300	9470	2270	-0.2	LIGERAMENTE ACIDO	0.01
475	CHQ-581	176.0	184.0	1830	200	4280	100	0.1	INERTE	0.04
476	CHQ-581	184.0	192.0	920	200	2680	100	0.1	INERTE	0.02
477	CHQ-581	192.0	200.0	770	200	9460	3960	-0.5	LIGERAMENTE ACIDO	0.03
478	CHQ-581	200.0	208.0	600	200	2600	100	0.1	INERTE	0.05
479	CHQ-581	208.0	216.0	1130	300	6560	1560	-0.1	LIGERAMENTE ACIDO	0.08
480	CHQ-581	248.0	256.0	1550	200	16900	3300	-0.4	LIGERAMENTE ACIDO	0.07

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
481	CHQ-581	256.0	264.0	1450	200	12900	2700	-0.3	LIGERAMENTE ACIDO	0.04
482	CHQ-581	264.0	272.0	1360	200	9930	1930	-0.2	LIGERAMENTE ACIDO	0.03
483	CHQ-581	288.0	296.0	910	200	790	100	0.1	INERTE	0.08
484	CHQ-581	296.0	304.0	370	200	780	100	0.1	INERTE	0.05
485	CHQ-581	304.0	312.0	380	200	880	100	0.1	INERTE	0.04
486	CHQ-581	312.0	320.0	830	200	1080	100	0.1	INERTE	0.06
487	CHQ-581	344.0	350.0	350	200	1160	100	0.1	INERTE	0.06
488	CHQ-583	32.0	40.0	760	200	420	220	0.0	INERTE	0.08
489	CHQ-583	56.0	64.0	800	200	570	100	0.1	INERTE	0.09
490	CHQ-583	64.0	72.0	570	300	650	100	0.1	LIGERAMENTE BASICO	0.06
491	CHQ-583	72.0	80.0	1610	200	850	100	0.1	INERTE	0.07
492	CHQ-583	80.0	88.0	1110	200	510	100	0.1	INERTE	0.09
493	CHQ-583	88.0	96.0	530	200	200	100	0.1	INERTE	0.07
494	CHQ-583	96.0	104.0	1580	200	230	100	0.1	INERTE	0.08
495	CHQ-583	104.0	112.0	550	300	200	100	0.1	LIGERAMENTE BASICO	0.07
496	CHQ-583	112.0	120.0	610	200	200	100	0.1	INERTE	0.06
497	CHQ-583	120.0	128.0	460	200	1470	100	0.1	INERTE	0.10
498	CHQ-583	136.0	144.0	1280	200	420	100	0.1	INERTE	0.09
499	CHQ-583	144.0	152.0	900	200	410	100	0.1	INERTE	0.04
500	CHQ-583	152.0	160.0	1130	200	270	100	0.1	INERTE	0.04
501	CHQ-583	168.0	176.0	840	200	410	100	0.1	INERTE	0.08
502	CHQ-583	176.0	184.0	1060	200	200	100	0.1	INERTE	0.08
503	CHQ-583	184.0	192.0	710	300	230	100	0.1	LIGERAMENTE BASICO	0.07
504	CHQ-583	192.0	200.0	1140	300	250	100	0.1	LIGERAMENTE BASICO	0.07
505	CHQ-583	208.0	216.0	830	200	690	490	0.0	INERTE	0.09
506	CHQ-587	104.2	112.0	690	200	6220	220	0.0	INERTE	0.05
507	CHQ-587	112.0	120.0	420	200	760	100	0.1	INERTE	0.07
508	CHQ-587	136.0	144.0	490	200	780	100	0.1	INERTE	0.05
509	CHQ-587	144.0	152.0	400	200	800	100	0.1	INERTE	0.03
510	CHQ-587	152.0	160.0	310	200	1050	100	0.1	INERTE	0.03
511	CHQ-587	168.0	176.0	400	200	1560	100	0.1	INERTE	0.01
512	CHQ-587	288.0	296.3	400	200	830	100	0.1	INERTE	0.09
513	CHQ-587	296.3	304.0	360	200	14500	5800	-0.7	LIGERAMENTE ACIDO	0.09
514	CHQ-587	312.0	320.0	340	200	1450	100	0.1	INERTE	0.09
515	CHQ-587	336.0	344.0	250	200	10700	8300	-1.1	ACIDO	0.07
516	CHQ-587	344.0	352.0	220	200	29900	25900	-3.5	ACIDO	0.05
517	CHQ-587	352.0	360.0	420	200	12000	9700	-1.3	ACIDO	0.09
518	CHQ-587	360.0	368.0	350	200	8870	6370	-0.8	LIGERAMENTE ACIDO	0.05
519	CHQ-587	376.0	384.0	370	200	34900	30500	-4.1	ACIDO	0.08
520	CHQ-587	392.0	400.0	340	200	15100	13900	-1.8	ACIDO	0.06
521	CHQ-587	432.0	440.0	360	200	18100	5500	-0.7	LIGERAMENTE ACIDO	0.07
522	CHQ-587	440.0	448.0	440	200	19100	9100	-1.2	ACIDO	0.07
523	CHQ-587	448.0	452.3	260	200	14400	3600	-0.4	LIGERAMENTE ACIDO	0.07
524	CHQ-592	16.0	24.0	360	200	350	100	0.1	INERTE	0.07
525	CHQ-592	48.0	55.7	320	300	200	100	0.1	LIGERAMENTE BASICO	0.06
526	CHQ-592	55.7	64.0	370	200	200	100	0.1	INERTE	0.03
527	CHQ-592	64.0	72.0	430	200	200	100	0.1	INERTE	0.05
528	CHQ-592	72.0	80.0	380	200	200	100	0.1	INERTE	0.04
529	CHQ-593	0.0	8.0	610	200	750	100	0.1	INERTE	0.02
530	CHQ-593	8.0	16.0	250	200	2280	780	0.0	INERTE	0.02
531	CHQ-593	32.0	40.0	320	200	300	100	0.1	INERTE	0.06
532	CHQ-593	40.0	47.7	250	200	600	100	0.1	INERTE	0.03
533	CHQ-593	56.0	63.4	330	200	910	210	0.0	INERTE	0.03
534	CHQ-593	63.4	72.0	920	200	1920	100	0.1	INERTE	0.03
535	CHQ-593	104.0	112.0	440	200	800	600	0.0	INERTE	0.01
536	CHQ-593	112.0	120.0	250	200	890	100	0.1	INERTE	0.03
537	CHQ-593	120.0	128.0	280	200	970	100	0.1	INERTE	0.03
538	CHQ-593	128.0	136.0	370	200	880	100	0.1	INERTE	0.02
539	CHQ-593	136.0	144.0	480	200	920	100	0.1	INERTE	0.01
540	CHQ-593	144.0	152.0	400	200	1400	100	0.1	INERTE	0.01
541	CHQ-593	152.0	160.0	440	200	3270	100	0.1	INERTE	0.02
542	CHQ-593	186.0	194.0	700	200	4100	100	0.1	INERTE	0.07
543	CHQ-593	194.0	202.0	700	200	2900	500	0.0	INERTE	0.10
544	CHQ-593	258.0	266.0	400	400	500	300	0.1	LIGERAMENTE BASICO	0.07
545	CHQ-593	266.0	274.0	600	200	1100	900	0.0	INERTE	0.06
546	CHQ-593	298.0	306.0	230	200	790	100	0.1	INERTE	0.07
547	CHQ-593	306.0	314.0	290	200	2260	100	0.1	INERTE	0.05
548	CHQ-593	314.0	321.6	230	200	1490	100	0.1	INERTE	0.03
549	CHQ-593	322.9	330.1	200	200	820	100	0.1	INERTE	0.07
550	CHQ-593	330.1	338.0	240	200	1630	100	0.1	INERTE	0.07
551	CHQ-593	338.0	346.8	320	200	23600	20400	-2.7	ACIDO	0.09
552	CHQ-593	352.1	360.0	650	200	21300	18800	-2.5	ACIDO	0.09
553	CHQ-593	360.0	367.4	390	200	14000	11100	-1.4	ACIDO	0.08
554	CHQ-594	192.0	200.0	490	200	1410	100	0.1	INERTE	0.06
555	CHQ-594	200.0	208.3	520	200	480	100	0.1	INERTE	0.05
556	CHQ-594	208.3	216.0	400	200	300	100	0.1	INERTE	0.09
557	CHQ-594	216.0	224.0	560	200	280	100	0.1	INERTE	0.04
558	CHQ-594	224.0	232.4	480	300	260	100	0.1	LIGERAMENTE BASICO	0.05
559	CHQ-594	232.4	240.0	470	300	210	100	0.1	LIGERAMENTE BASICO	0.08
560	CHQ-594	288.0	296.0	600	200	10400	9100	-1.2	ACIDO	0.08
561	CHQ-594	336.0	344.0	700	200	2200	1200	-0.1	INERTE	0.09
562	CHQ-596	56.1	64.0	360	200	380	100	0.0	INERTE	0.06
563	CHQ-596	112.0	120.0	510	200	960	100	0.1	INERTE	0.08
564	CHQ-596	184.0	192.0	430	200	620	100	0.1	INERTE	0.07
565	CHQ-596	192.0	200.0	430	200	370	100	0.1	INERTE	0.04
566	CHQ-596	200.0	208.0	510	200	310	100	0.1	INERTE	0.05
567	CHQ-596	208.0	216.0	500	200	410	100	0.1	INERTE	0.07
568	CHQ-598	24.0	32.0	200	200	27200	100	0.1	INERTE	0.04
569	CHQ-598	32.0	40.0	200	200	24000	8900	-1.1	ACIDO	0.05
570	CHQ-598	72.0	80.0	430	200	1050	100	0.1	INERTE	0.10
571	CHQ-598	80.0	88.0	330	200	480	100	0.1	INERTE	0.06
572	CHQ-598	88.0	96.0	510	200	680	100	0.1	INERTE	0.07
573	CHQ-598	96.0	104.0	360	200	360	100	0.1	INERTE	0.02
574	CHQ-598	104.0	111.7	240	200	1520	100	0.1	INERTE	0.03
575	CHQ-598	111.7	120.0	850	200	440	100	0.1	INERTE	0.02
576	CHQ-598	120.0	128.0	200	200	320	100	0.1	INERTE	0.04
577	CHQ-598	128.0	136.0	210	200	310	100	0.1	INERTE	0.03
578	CHQ-598	136.0	144.0	200	200	360	100	0.1	INERTE	0.02
579	CHQ-598	144.0	152.0	340	200	1050	100	0.1	INERTE	0.02
580	CHQ-598	152.0	160.0	350	200	960	100	0.1	INERTE	0.03
581	CHQ-598	160.0	168.3	210	200	410	210	0.0	INERTE	0.04
582	CHQ-598	168.3	176.0	260	200	560	100	0.1	INERTE	0.04
583	CHQ-598	176.0	184.0	200	200	720	100	0.1	INERTE	0.03
584	CHQ-598	184.0	192.0	330	200	510	100	0.1	INERTE	0.05
585	CHQ-598	192.0	200.0	410	200	480	100	0.1	INERTE	0.06
586	CHQ-598	200.0	208.0	440	200	670	100	0.1	INERTE	0.07
587	CHQ-598	208.0	216.0	370	200	370	100	0.1	INERTE	0.07
588	CHQ-598	216.0	224.0	500	200	410	210	0.0	INERTE	0.06
589	CHQ-598	224.0	232.0	390	200	410	100	0.1	INERTE	0.07
590	CHQ-598	232.0	240.0	430	200	550	100	0.1	INERTE	0.05
591	CHQ-598	256.0	264.0	620	200	520	100	0.1	INERTE	0.06
592	CHQ-598	264.0	272.0	390	200	490	100	0.1	INERTE	0.06
593	CHQ-598	272.0	280.0	300	200	800	400	0.0	INERTE	0.05
594	CHQ-598	280.0	288.0	200	200	700	300	0.0	INERTE	0.09
595	CHQ-600	201.2	210.0	200	200	1100	200	0.0	INERTE	0.05
596	CHQ-600	210.0	218.0	300	200	1000	300	0.0	INERTE	0.04
597	CHQ-600	218.0	226.1	400	200	1000	200	0.0	INERTE	0.04
598	CHQ-600	234.0	242.0	300	400	1200	200	0.1	LIGERAMENTE BASICO	0.10
599	CHQ-600	322.0	330.0	300	200	700	300	0.0	INERTE	0.07
600	CHQ-600	338.0	346.0	400	200	14500	13300	-1.7	ACIDO	0.07

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
601	CHQ-600	346.0	354.0	300	200	1600	200	0.0	INERTE	0.05
602	CHQ-600	354.0	362.0	300	200	2200	1100	-0.1	INERTE	0.04
603	CHQ-600	362.0	370.0	300	200	900	100	0.0	INERTE	0.04
604	CHQ-600	370.0	378.0	400	300	10500	9500	-1.2	ACIDO	0.07
605	CHQ-600	378.0	386.0	300	200	8000	7200	-0.9	LIGERAMENTE ACIDO	0.05
606	CHQ-600	386.0	394.0	300	200	7500	6400	-0.8	LIGERAMENTE ACIDO	0.03
607	CHQ-600	394.0	402.0	500	200	32400	30700	-4.1	ACIDO	0.04
608	CHQ-600	402.0	410.0	400	200	8500	6700	-0.8	LIGERAMENTE ACIDO	0.05
609	CHQ-600	410.0	418.4	400	200	1000	100	0.1	INERTE	0.03
610	CHQ-600	418.4	426.0	300	200	4400	3200	-0.4	LIGERAMENTE ACIDO	0.01
611	CHQ-600	426.0	434.0	400	200	36800	30000	-4.0	ACIDO	0.02
612	CHQ-600	434.0	441.8	400	200	22000	18800	-2.5	ACIDO	0.01
613	CHQ-600	441.8	450.0	400	200	44300	37300	-5.0	ACIDO	0.07
614	CHQ-600	458.0	466.0	200	200	40000	20400	-2.7	ACIDO	0.09
615	CHQ-600	466.0	474.0	300	200	64500	34800	-4.7	ACIDO	0.09
616	CHQ-600	474.0	482.0	300	200	39700	22100	-3.0	ACIDO	0.08
617	CHQ-600	482.0	487.8	300	200	44800	36400	-4.9	ACIDO	0.04
618	CHQ-607	0.0	8.0	800	200	1270	100	0.1	INERTE	0.08
619	CHQ-607	8.0	16.0	1290	200	18200	4400	-0.5	LIGERAMENTE ACIDO	0.01
620	CHQ-607	16.0	18.0	550	200	12200	2390	-0.3	LIGERAMENTE ACIDO	0.01
621	CHQ-607	18.0	24.0	550	200	12200	2390	-0.3	LIGERAMENTE ACIDO	0.01
622	CHQ-607	24.0	32.3	690	200	490	100	0.1	INERTE	0.01
623	CHQ-607	32.3	40.0	420	210	440	100	0.1	INERTE	0.01
624	CHQ-607	40.0	48.0	480	200	510	230	0.0	INERTE	0.08
625	CHQ-607	56.0	64.0	600	200	350	100	0.1	INERTE	0.08
626	CHQ-607	72.0	80.0	500	220	340	100	0.1	INERTE	0.06
627	CHQ-607	80.0	88.0	690	200	380	100	0.0	INERTE	0.03
628	CHQ-607	88.0	96.0	490	200	310	100	0.1	INERTE	0.02
629	CHQ-607	96.0	104.0	620	200	780	350	0.0	INERTE	0.02
630	CHQ-607	104.0	112.0	480	200	260	100	0.1	INERTE	0.03
631	CHQ-607	112.0	120.0	530	250	330	100	0.1	INERTE	0.03
632	CHQ-607	120.0	128.0	550	200	300	100	0.1	INERTE	0.02
633	CHQ-607	128.0	136.0	460	200	350	100	0.1	INERTE	0.05
634	CHQ-607	136.0	144.0	440	200	330	100	0.1	INERTE	0.08
635	CHQ-607	144.0	152.0	500	200	290	100	0.1	INERTE	0.10
636	CHQ-607	152.0	160.0	590	200	370	100	0.1	INERTE	0.04
637	CHQ-607	160.0	168.0	520	200	400	100	0.1	INERTE	0.10
638	CHQ-607	424.0	432.0	610	200	43400	37310	-5.0	ACIDO	0.09
639	CHQ-608	0.0	8.0	480	200	390	100	0.1	INERTE	0.01
640	CHQ-608	8.0	16.0	690	200	480	100	0.1	INERTE	0.02
641	CHQ-608	16.0	24.0	630	200	460	100	0.1	INERTE	0.03
642	CHQ-608	32.0	39.7	490	200	630	250	0.0	INERTE	0.06
643	CHQ-608	39.7	47.7	510	200	440	100	0.1	INERTE	0.03
644	CHQ-608	47.7	56.0	300	200	310	100	0.1	INERTE	0.03
645	CHQ-608	56.0	64.3	400	200	320	100	0.1	INERTE	0.05
646	CHQ-608	64.3	72.0	550	200	440	100	0.1	INERTE	0.06
647	CHQ-608	72.0	80.0	380	320	420	210	0.1	INERTE	0.02
648	CHQ-608	80.0	88.0	420	200	530	310	0.0	INERTE	0.02
649	CHQ-608	88.0	96.0	620	220	290	100	0.1	INERTE	0.02
650	CHQ-608	96.0	104.2	460	200	290	100	0.1	INERTE	0.02
651	CHQ-608	104.2	112.0	620	200	410	100	0.1	INERTE	0.03
652	CHQ-608	112.0	120.0	570	200	420	100	0.1	INERTE	0.03
653	CHQ-608	120.0	128.0	720	200	350	100	0.1	INERTE	0.02
654	CHQ-608	128.0	136.2	480	200	340	100	0.1	INERTE	0.04
655	CHQ-608	136.2	145.7	630	200	410	210	0.0	INERTE	0.08
656	CHQ-608	145.7	154.0	500	230	350	100	0.1	INERTE	0.09
657	CHQ-608	170.0	178.0	660	200	520	100	0.1	INERTE	0.05
658	CHQ-608	194.0	202.0	530	200	890	100	0.1	INERTE	0.05
659	CHQ-608	202.0	210.0	730	200	650	100	0.1	INERTE	0.05
660	CHQ-608	210.0	218.0	640	200	910	100	0.1	INERTE	0.05
661	CHQ-608	362.0	370.0	8780	3300	520	270	1.2	BASICO	0.07
662	CHQ-608	370.0	378.0	690	200	18000	16970	-2.3	ACIDO	0.04
663	CHQ-608	378.0	386.0	470	200	13300	12350	-1.6	ACIDO	0.04
664	CHQ-608	386.0	394.0	670	200	2140	1520	-0.1	LIGERAMENTE ACIDO	0.04
665	CHQ-608	394.0	402.0	690	200	15400	14490	-1.9	ACIDO	0.05
666	CHQ-608	402.0	410.0	780	200	16200	14030	-1.8	ACIDO	0.09
667	CHQ-608	410.0	418.0	690	200	27200	23840	-3.2	ACIDO	0.03
668	CHQ-608	418.0	426.0	800	200	39600	36520	-4.9	ACIDO	0.05
669	CHQ-608	426.0	434.0	830	280	40600	34810	-4.7	ACIDO	0.07
670	CHQ-608	442.0	450.0	430	200	2340	100	0.1	INERTE	0.04
671	CHQ-608	450.0	457.7	830	200	1330	100	0.1	INERTE	0.05
672	CHQ-608	457.7	466.0	890	200	18300	5300	-0.7	LIGERAMENTE ACIDO	0.05
673	CHQ-608	466.0	473.7	1890	200	9210	3160	-0.4	LIGERAMENTE ACIDO	0.04
674	CHQ-608	473.7	482.0	470	250	65000	31400	-4.2	ACIDO	0.05
675	CHQ-608	482.0	491.0	730	200	66600	29900	-4.0	ACIDO	0.07
676	CHQ-609	22.1	32.0	1400	270	1600	590	0.0	INERTE	0.06
677	CHQ-609	32.0	40.0	1150	200	660	100	0.1	INERTE	0.05
678	CHQ-609	40.0	48.0	990	200	1640	470	0.0	INERTE	0.07
679	CHQ-609	80.0	88.0	790	200	280	100	0.1	INERTE	0.09
680	CHQ-609	88.0	96.0	860	200	250	100	0.1	INERTE	0.06
681	CHQ-609	96.0	103.6	940	200	250	100	0.1	INERTE	0.08
682	CHQ-609	103.6	112.0	850	200	210	100	0.1	INERTE	0.08
683	CHQ-609	128.0	136.0	930	250	310	100	0.1	INERTE	0.09
684	CHQ-610	0.0	8.0	540	290	320	100	0.1	INERTE	0.01
685	CHQ-610	8.0	16.0	970	200	250	100	0.1	INERTE	0.01
686	CHQ-610	16.0	24.0	450	200	260	100	0.1	INERTE	0.03
687	CHQ-610	24.0	32.0	560	200	360	100	0.1	INERTE	0.04
688	CHQ-610	32.0	40.0	430	200	360	100	0.1	INERTE	0.04
689	CHQ-610	56.0	64.0	570	280	360	100	0.1	INERTE	0.05
690	CHQ-610	64.0	72.0	900	200	330	100	0.1	INERTE	0.04
691	CHQ-610	72.0	80.0	620	200	320	100	0.1	INERTE	0.09
692	CHQ-610	80.0	88.0	550	240	360	100	0.1	INERTE	0.03
693	CHQ-610	88.0	96.0	390	200	410	100	0.1	INERTE	0.04
694	CHQ-610	96.0	100.0	520	200	400	100	0.0	INERTE	0.03
695	CHQ-611	0.0	8.0	1140	250	2080	750	0.0	INERTE	0.08
696	CHQ-611	40.0	48.0	660	200	390	100	0.0	INERTE	0.08
697	CHQ-611	48.0	56.0	1110	200	740	210	0.0	INERTE	0.08
698	CHQ-611	56.0	64.0	1170	280	410	100	0.1	INERTE	0.05
699	CHQ-611	64.0	72.0	720	200	300	100	0.1	INERTE	0.03
700	CHQ-611	72.0	80.0	920	200	310	100	0.1	INERTE	0.05
701	CHQ-611	88.0	96.0	990	200	390	100	0.0	INERTE	0.08
702	CHQ-611	96.0	104.0	890	200	410	100	0.1	INERTE	0.06
703	CHQ-611	104.0	110.0	1060	220	420	200	0.1	INERTE	0.04
704	CHQ-620	0.0	8.0	830	200	1310	240	0.0	INERTE	0.04
705	CHQ-620	8.0	16.4	550	200	410	210	0.0	INERTE	0.05
706	CHQ-620	16.4	24.0	700	270	360	100	0.1	INERTE	0.07
707	CHQ-620	24.0	32.0	310	230	440	240	0.1	INERTE	0.08
708	CHQ-620	32.0	40.0	1130	200	360	100	0.1	INERTE	0.03
709	CHQ-620	40.0	48.0	410	200	400	200	0.0	INERTE	0.03
710	CHQ-620	48.0	56.0	280	200	1620	320	0.0	INERTE	0.05
711	CHQ-620	56.0	64.0	240	200	470	270	0.0	INERTE	0.02
712	CHQ-620	64.0	72.0	200	200	420	220	0.0	INERTE	0.05
713	CHQ-620	72.0	80.2	270	200	470	270	0.0	INERTE	0.03
714	CHQ-620	80.2	88.0	470	200	440	240	0.0	INERTE	0.05
715	CHQ-620	88.0	96.0	470	200	400	200	0.0	INERTE	0.02
716	CHQ-620	96.0	104.0	250	200	320	100	0.1	INERTE	0.04
717	CHQ-620	120.0	128.4	240	200	370	100	0.1	INERTE	0.08
718	CHQ-620	176.0	184.0	500	200	320	100	0.1	INERTE	0.06
719	CHQ-620	184.0	192.0	400	200	290	100	0.1	INERTE	0.07
720	CHQ-620	192.0	200.0	460	220	350	100	0.1	INERTE	0.09

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
721	CHQ-620	200.0	208.0	300	200	320	100	0.1	INERTE	0.10
722	CHQ-620	231.6	240.0	200	200	470	100	0.1	INERTE	0.10
723	CHQ-624	130.0	138.0	200	200	51400	13900	-1.8	ACIDO	0.02
724	CHQ-624	138.0	140.0	570	200	45100	11300	-1.5	ACIDO	0.02
725	CHQ-624	140.0	146.0	570	200	45100	11300	-1.5	ACIDO	0.02
726	CHQ-624	146.0	150.0	380	200	57700	12500	-1.6	ACIDO	0.01
727	CHQ-624	150.0	154.0	380	200	57700	12500	-1.6	ACIDO	0.01
728	CHQ-624	154.0	156.0	360	200	61300	16600	-2.2	ACIDO	0.02
729	CHQ-624	156.0	162.0	360	200	61300	16600	-2.2	ACIDO	0.02
730	CHQ-624	162.0	170.0	200	200	32000	8800	-1.1	ACIDO	0.01
731	CHQ-624	170.0	178.0	360	200	1010	100	0.1	INERTE	0.02
732	CHQ-624	178.0	186.0	200	200	3330	100	0.1	INERTE	0.03
733	CHQ-624	186.0	194.0	200	200	2950	100	0.1	INERTE	0.05
734	CHQ-624	194.0	202.0	200	200	720	100	0.1	INERTE	0.03
735	CHQ-624	202.0	209.8	200	200	940	100	0.1	INERTE	0.05
736	CHQ-624	209.8	218.0	200	200	1160	100	0.1	INERTE	0.03
737	CHQ-624	218.0	226.0	220	200	980	100	0.1	INERTE	0.04
738	CHQ-624	226.0	234.0	200	200	710	100	0.1	INERTE	0.09
739	CHQ-624	234.0	242.0	200	200	580	100	0.1	INERTE	0.08
740	CHQ-624	242.0	250.0	200	200	620	100	0.1	INERTE	0.06
741	CHQ-624	250.0	258.0	550	220	1390	100	0.1	INERTE	0.05
742	CHQ-624	258.0	266.0	600	200	1670	340	0.0	INERTE	0.08
743	CHQ-624	266.0	274.0	480	200	4570	1710	-0.2	LIGERAMENTE ACIDO	0.05
744	CHQ-624	274.0	282.0	700	260	1020	300	0.1	INERTE	0.06
745	CHQ-624	314.0	321.9	700	200	1130	100	0.1	INERTE	0.08
746	CHQ-624	338.0	345.8	560	210	600	100	0.1	INERTE	0.07
747	CHQ-624	345.8	354.0	660	280	940	100	0.1	INERTE	0.06
748	CHQ-624	354.0	362.0	400	200	1790	100	0.1	INERTE	0.08
749	CHQ-624	362.0	370.0	400	210	1500	100	0.1	INERTE	0.04
750	CHQ-624	370.0	378.0	670	260	1380	100	0.1	INERTE	0.02
751	CHQ-624	386.0	394.0	900	210	34800	28360	-3.8	ACIDO	0.04
752	CHQ-624	394.0	402.0	320	210	31200	13400	-1.8	ACIDO	0.05
753	CHQ-624	402.0	409.7	610	360	29900	8900	-1.1	ACIDO	0.07
754	CHQ-624	409.7	418.0	1210	200	28700	14900	-2.0	ACIDO	0.08
755	CHQ-624	418.0	426.0	830	430	13800	4510	-0.5	LIGERAMENTE ACIDO	0.04
756	CHQ-695	220.0	228.0	230	200	1050	200	0.1	INERTE	0.06
757	CHQ-695	228.0	236.0	390	200	770	200	0.1	INERTE	0.04
758	CHQ-695	236.0	244.0	250	200	550	200	0.1	INERTE	0.05
759	CHQ-695	244.0	252.0	330	200	300	200	0.1	INERTE	0.10
760	CHQ-695	252.0	257.1	260	200	200	200	0.1	INERTE	0.07
761	CHQ-695	259.1	268.0	420	200	1010	340	0.0	INERTE	0.05
762	CHQ-695	268.0	276.0	290	200	1000	230	0.0	INERTE	0.06
763	CHQ-695	276.0	284.0	280	200	680	200	0.1	INERTE	0.05
764	CHQ-695	284.0	292.0	350	200	540	200	0.0	INERTE	0.03
765	CHQ-695	292.0	300.0	280	200	4550	2310	-0.2	LIGERAMENTE ACIDO	0.05
766	CHQ-695	300.0	308.0	290	200	1540	200	0.1	INERTE	0.05
767	CHQ-695	308.0	316.0	200	230	1300	200	0.1	INERTE	0.08
768	CHQ-695	316.0	324.0	200	200	9380	6850	-0.9	LIGERAMENTE ACIDO	0.09
769	CHQ-698	150.0	154.0	780	200	200	200	0.1	INERTE	0.06
770	CHQ-698	154.0	158.0	780	200	200	200	0.1	INERTE	0.05
771	CHQ-698	158.0	162.0	3230	200	1680	1370	-0.1	LIGERAMENTE ACIDO	0.07
772	CHQ-698	162.0	166.0	3230	200	1680	1370	-0.1	LIGERAMENTE ACIDO	0.08
773	CHQ-698	166.0	166.7	3230	200	1680	1370	-0.1	LIGERAMENTE ACIDO	0.08
774	CHQ-698	166.7	170.0	540	200	220	200	0.1	INERTE	0.06
775	CHQ-698	170.0	174.0	540	200	220	200	0.1	INERTE	0.05
776	CHQ-698	174.0	178.0	290	200	390	200	0.1	INERTE	0.08
777	CHQ-698	178.0	182.0	290	200	390	200	0.1	INERTE	0.04
778	CHQ-698	182.0	186.0	1740	200	200	200	0.1	INERTE	0.05
779	CHQ-698	186.0	190.0	1740	200	200	200	0.1	INERTE	0.05
780	CHQ-698	190.0	190.6	1740	200	200	200	0.1	INERTE	0.05
781	CHQ-698	190.6	194.0	490	200	1960	200	0.1	INERTE	0.05
782	CHQ-698	194.0	197.2	490	200	1960	200	0.1	INERTE	0.05
783	CHQ-698	197.2	198.0	200	200	490	200	0.1	INERTE	0.05
784	CHQ-698	198.0	202.0	200	200	490	200	0.1	INERTE	0.06
785	CHQ-698	202.0	206.0	200	200	490	200	0.1	INERTE	0.06
786	CHQ-698	206.0	210.0	380	200	670	200	0.1	INERTE	0.06
787	CHQ-698	210.0	214.0	380	200	670	200	0.1	INERTE	0.09
788	CHQ-698	214.0	214.5	380	200	670	200	0.1	INERTE	0.08
789	CHQ-698	214.5	218.0	200	200	1250	200	0.1	INERTE	0.05
790	CHQ-698	218.0	222.0	200	200	1250	200	0.1	INERTE	0.04
791	CHQ-698	222.0	222.5	200	200	1250	200	0.1	INERTE	0.05
792	CHQ-698	222.5	226.0	440	200	550	200	0.1	INERTE	0.07
793	CHQ-698	226.0	230.0	440	200	550	200	0.1	INERTE	0.07
794	CHQ-698	230.0	234.0	200	200	770	200	0.1	INERTE	0.06
795	CHQ-698	234.0	238.0	200	200	770	200	0.1	INERTE	0.06
796	CHQ-698	242.0	245.5	200	200	1170	200	0.1	INERTE	0.08
797	CHQ-698	246.0	250.0	200	200	960	200	0.1	INERTE	0.10
798	CHQ-698	370.0	371.5	370	200	17600	3700	-0.4	LIGERAMENTE ACIDO	0.08
799	CHQ-700	180.0	188.0	950	200	1900	200	0.1	INERTE	0.02
800	CHQ-700	188.0	196.0	620	200	200	200	0.1	INERTE	0.05
801	CHQ-700	196.0	203.9	830	240	200	200	0.1	INERTE	0.06
802	CHQ-700	203.9	204.0	830	200	200	200	0.1	INERTE	0.10
803	CHQ-700	204.0	211.7	830	200	200	200	0.1	INERTE	0.06
804	CHQ-700	211.7	212.0	630	200	200	200	0.1	INERTE	0.05
805	CHQ-700	212.0	220.0	630	200	200	200	0.1	INERTE	0.04
806	CHQ-700	220.0	228.0	820	200	200	200	0.1	INERTE	0.04
807	CHQ-700	228.0	236.0	750	200	200	200	0.1	INERTE	0.05
808	CHQ-700	236.0	244.0	830	200	770	490	0.0	INERTE	0.09
809	CHQ-700	244.0	252.0	510	200	260	200	0.1	INERTE	0.06
810	CHQ-700	252.0	260.0	960	200	210	200	0.1	INERTE	0.07
811	CHQ-700	260.0	268.0	840	200	610	200	0.1	INERTE	0.07
812	CHQ-700	268.0	276.0	1300	200	220	200	0.1	INERTE	0.05
813	CHQ-700	276.0	284.0	860	200	330	200	0.1	INERTE	0.07
814	CHQ-700	291.9	292.0	820	200	1230	200	0.1	INERTE	0.06
815	CHQ-700	300.0	308.0	790	200	440	200	0.1	INERTE	0.06
816	CHQ-700	308.0	315.8	950	200	860	280	0.0	INERTE	0.08
817	CHQ-700	315.8	316.0	690	200	890	520	0.0	INERTE	0.10
818	CHQ-700	372.0	380.0	200	200	132250	94060	-12.8	ACIDO	0.08
819	CHQ-700	380.0	388.0	200	200	130020	83760	-11.4	ACIDO	0.04
820	CHQ-700	388.0	396.0	200	200	107060	55360	-7.5	ACIDO	0.09
821	CHQ-700	396.0	404.0	570	200	40360	17850	-2.4	ACIDO	0.04
822	CHQ-700	404.0	412.0	200	200	71490	54390	-7.4	ACIDO	0.06
823	CHQ-700	412.0	412.2	200	200	71490	54390	-7.4	ACIDO	0.05
824	CHQ-700	412.2	420.0	200	200	73830	24210	-3.2	ACIDO	0.06
825	CHQ-700	420.0	428.0	200	200	86100	31860	-4.3	ACIDO	0.08
826	CHQ-700	428.0	436.0	200	200	99360	75990	-10.3	ACIDO	0.07
827	CHQ-700	436.0	436.1	200	200	99360	75990	-10.3	ACIDO	0.07
828	CHQ-700	436.1	444.0	200	200	94200	44700	-6.1	ACIDO	0.05
829	CHQ-700	444.0	453.7	200	200	72000	30440	-4.1	ACIDO	0.05
830	CHQ-702	182.0	186.0	590	120	830	0	0.0	INERTE	0.09
831	CHQ-702	189.4	190.0	1100	50	930	10	0.0	INERTE	0.08
832	CHQ-702	190.0	194.0	1100	50	930	10	0.0	INERTE	0.07
833	CHQ-702	206.0	210.0	510	50	340	10	0.0	INERTE	0.09
834	CHQ-702	210.0	214.0	510	50	340	10	0.0	INERTE	0.07
835	CHQ-702	214.0	215.2	510	50	340	10	0.0	INERTE	0.07
836	CHQ-702	215.2	218.0	390	60	360	10	0.0	INERTE	0.08
837	CHQ-702	218.0	222.0	390	60	360	10	0.0	INERTE	0.08
838	CHQ-702	224.0	226.0	1760	80	700	180	0.0	INERTE	0.09
839	CHQ-702	226.0	230.0	1760	80	700	180	0.0	INERTE	0.09
840	CHQ-702	230.0	232.0	1760	80	700	180	0.0	INERTE	0.09
841	CHQ-702	232.0	234.0	330	90	630	60	0.0	INERTE	0.10
842	CHQ-702	234.0	238.0	330	90	630	60	0.0	INERTE	0.08
843	CHQ-702	238.0	240.2	330	90	630	60	0.0	INERTE	0.08
844	CHQ-702	240.2	242.0	420	70	1210	340	0.0	INERTE	0.08
845	CHQ-702	242.0	246.0	420	70	1210	340	0.0	INERTE	0.08
846	CHQ-702	246.0	249.2	420	70	1210	340	0.0	INERTE	0.08
847	CHQ-702	390.0	394.0	350	30	42650	27030	-3.7	ACIDO	0.09
848	CHQ-703	198.0	206.0	360	200	540	200	0.1	INERTE	0.09
849	CHQ-703	206.0	214.0	330	200	520	200	0.1	INERTE	0.08
850	CHQ-703	418.2	420.0	490	200	25300	22510	-3.0	ACIDO	0.00
851	CHQ-707	147.0	149.0	200	200	440	200	0.1	INERTE	0.07
852	CHQ-707	149.0	151.0	200	200	440	200	0.1	INERTE	0.09
853	CHQ-707	151.0	153.0	200	200	440	200	0.1	INERTE	0.09
854	CHQ-707	153.0	154.5	200	200	440	200	0.1	INERTE	0.09
855	CHQ-707	154.5	155.0	200	200	490	200	0.1	INERTE	0.08
856	CHQ-707	155.0	157.0	200	200	490	200	0.1	INERTE	0.09
857	CHQ-707	165.0	167.0	200	200	490	200	0.1	INERTE	0.09
858	CHQ-707	167.0	169.0	200	200	490	200	0.1	INERTE	0.07
859	CHQ-707	169.0	170.0	200	200	490	200	0.1	INERTE	0.05
860	CHQ-707	170.0	171.0	200	200	600	200	0.1	INERTE	0.06
861	CHQ-707	171.0	173.0	200	200	600	200	0.1	INERTE	0.07
862	CHQ-707	173.0	175.0	200	200	600	200	0.1	INERTE	0.08
863	CHQ-707	175.0	177.0	200	200	600	200	0.1	INERTE	0.09
864	CHQ-707	181.0	183.0	200	200	2970	2520	-0.3	LIGERAMENTE ACIDO	0.06
865	CHQ-707	183.0	185.0	200	200	2970	2520	-0.3	LIGERAMENTE ACIDO	0.06
866	CHQ-707	185.0	186.8	200	200	2970	2520	-0.3	LIGERAMENTE ACIDO	0.07
867	CHQ-707	189.0	191.0	200	200	460	200	0.1	INERTE	0.10
868	CHQ-707	191.0	193.0	200	200	460	200	0.1	INERTE	0.09
869	CHQ-707	193.0	194.0	200	200	460	200	0.1	INERTE	0.09
870	CHQ-707	197.0	199.0	200	200	750	200	0.1	INERTE	0.10
871	CHQ-707	202.8	203.0	200	200	460	200	0.1	INERTE	0.07
872	CHQ-707	203.0	205.0	200	200	460	200	0.1	INERTE	0.07
873	CHQ-707	205.0	207.0	200	200	460	200	0.1	INERTE	0.10
874	CHQ-707	207.0	209.0	200	200	460	200	0.1	INERTE	0.09
875	CHQ-707	209.0	211.0	200	200	460	200	0.1	INERTE	0.10
876	CHQ-707	213.0	215.0	200	200	15900	14780	-2.0	ACIDO	0.08
877	CHQ-707	215.0	217.0	200	200	15900	14780	-2.0	ACIDO	0.06
878	CHQ-707	217.0	218.5	200	200	15900	14780	-2.0	ACIDO	0.08
879	CHQ-707	218.5	219.0	200	200	11500	10900	-1.4	ACIDO	0.08
880	CHQ-707	219.0	221.0	200	200	11500	10900	-1.4	ACIDO	0.08
881	CHQ-707	221.0	223.0	200	200	11500	10900	-1.4	ACIDO	0.09
882	CHQ-707	223.0	225.0	200	200	11500	10900	-1.4	ACIDO	0.07
883	CHQ-707	225.0	225.2	200	200	11500	10900	-1.4	ACIDO	0.06
884	CHQ-707	225.2	227.0	200	200	27600	27020	-3.6	ACIDO	0.09
885	CHQ-707	231.0	232.0	200	200	27600	27020	-3.6	ACIDO	0.09
886	CHQ-707	232.0	233.0	200	200	38000	37340	-5.0	ACIDO	0.08
887	CHQ-707	233.0	235.0	200	200	38000	37340	-5.0	ACIDO	0.08
888	CHQ-707	235.0	237.0	200	200	38000	37340	-5.0	ACIDO	0.10
889	CHQ-707	237.0	239.0	200	200	38000	37340	-5.0	ACIDO	0.06
890	CHQ-707	239.0	241.0	200	200	15800	12240	-1.6	ACIDO	0.09
891	CHQ-707	256.1	257.0	200	200	11100	9210	-1.2	ACIDO	0.09
892	CHQ-707	257.0	259.0	200	200	11100	9210	-1.2	ACIDO	0.10
893	CHQ-707	271.0	272.0	200	200	10200	8960	-1.2	ACIDO	0.10
894	CHQ-707	272.0	273.0	200	200	44500	43430	-5.9	ACIDO	0.09
895	CHQ-709	234.0	236.0	230	200	1020	200	0.1	INERTE	0.08
896	CHQ-709	236.0	237.5	230	200	1020	200	0.1	INERTE	0.07
897	CHQ-709	284.5	292.0	1190	200	210	200	0.1	INERTE	0.10
898	CHQ-710	0.0	10.0	4200	50	23700	3800	-0.5	LIGERAMENTE ACIDO	0.02
899	CHQ-710	10.0	20.0	1600	50	14700	2700	-0.4	LIGERAMENTE ACIDO	0.02
900	CHQ-710	20.0	30.0	2400	50	200	0	0.0	INERTE	0.09
901	CHQ-710	40.0	50.0	700	50	200	0	0.0	INERTE	0.06
902	CHQ-710	60.0	70.0	500	50	200	100	0.0	INERTE	0.09
903	CHQ-710	70.0	80.0	200	50	100	0	0.0	INERTE	0.04
904	CHQ-710	80.0	90.0	500	50	200	100	0.0	INERTE	0.05
905	CHQ-710	90.0	100.0	500	50	200	0	0.0	INERTE	0.04
906	CHQ-710	100.0	110.0	300	50	200	100	0.0	INERTE	0.03
907	CHQ-710	110.0	120.0	100	50	100	0	0.0	INERTE	0.02
908	CHQ-710	120.0	130.0	200	50	200	0	0.0	INERTE	0.06
909	CHQ-710	130.0	140.0	100	50	100	0	0.0	INERTE	0.03
910	CHQ-710	140.0	150.0	300	50	200	0	0.0	INERTE	0.05
911	CHQ-710	150.0	152.0	200	200	360	200	0.1	INERTE	0.06
912	CHQ-710	152.0	154.0	200	200	360	200	0.1	INERTE	0.07
913	CHQ-710	160.0	162.0	200	200	440	200	0.1	INERTE	0.10
914	CHQ-710	172.0	174.0	200	200	450	200	0.1	INERTE	0.09
915	CHQ-710	176.0	178.0	200	200	380	200	0.1	INERTE	0.06
916	CHQ-710	180.0	182.0	200	200	380	200	0.1	INERTE	0.10
917	CHQ-710	182.0	182.5	200	200	380	200	0.1	INERTE	0.08
918	CHQ-710	184.0	186.0	200	200	300	200	0.1	INERTE	0.10
919	CHQ-710	208.0	210.0	200	200	290	200	0.1	INERTE	0.09
920	CHQ-710	212.0	213.5	200	200	290	200	0.1	INERTE	0.09
921	CHQ-710	218.0	220.0	200	200	610	200	0.1	INERTE	0.10
922	CHQ-710	220.0	222.0	200	200	610	200	0.1	INERTE	0.10
923	CHQ-710	228.0	230.0	200	200	370	200	0.1	INERTE	0.10
924	CHQ-711	56.0	64.0	770	200	530	200	0.0	INERTE	0.02
925	CHQ-711	64.0	72.0	760	200	590	200	0.1	INERTE	0.01
926	CHQ-711	72.0	80.0	690	200	620	220	0.0	INERTE	0.01
927	CHQ-711	80.0	88.0	570	200	600	200	0.1	INERTE	0.01
928	CHQ-711	88.0	96.0	450	200	550	200	0.1	INERTE	0.01
929	CHQ-711	96.0	104.0	470	200	520	200	0.1	INERTE	0.08
930	CHQ-711	104.0	112.0	590	200	700	340	0.0	INERTE	0.02
931	CHQ-711	112.0	119.6	590	200	490	200	0.1	INERTE	0.03
932	CHQ-711	119.6	128.0	590	200	430	200	0.1	INERTE	0.02
933	CHQ-711	168.0	176.0	520	200	540	200	0.1	INERTE	0.07
934	CHQ-711	176.0	184.0	550	200	710	200	0.1	INERTE	0.07
935	CHQ-711	184.0	192.0	520	200	560	200	0.1	INERTE	0.03
936	CHQ-711	192.0	202.5	610	200	690	200	0.1	INERTE	0.02
937	CHQ-715	88.0	96.0	490	200	2560	1350	-0.1	LIGERAMENTE ACIDO	0.01
938	CHQ-715	96.0	104.0	290	200	1800	750	0.0	INERTE	0.00
939	CHQ-715	104.0	112.0	420	1330	310	0	0.5	LIGERAMENTE BASICO	0.00
940	CHQ-715	112.0	120.0	280	200	570	160	0.1	INERTE	0.00
941	CHQ-715	120.0	128.0	300	200	280	0	0.1	INERTE	0.00
942	CHQ-715	128.0	136.0	310	200	350	20	0.1	INERTE	0.00
943	CHQ-715	136.0	144.0	430	200	640	100	0.1	INERTE	0.01
944	CHQ-715	144.0	152.0	350	200	400	60	0.1	INERTE	0.01
945	CHQ-715	152.0	160.0	630	200	450	110	0.1	INERTE	0.03
946	CHQ-716	96.0	104.0	390	200	220	20	0.1	INERTE	0.07
947	CHQ-716	112.0	114.0	300	200	520	20	0.1	INERTE	0.07
948	CHQ-716	114.0	116.0	300	200	520	20	0.1	INERTE	0.04
949	CHQ-716	116.0	118.0	300	200	520	20	0.1	INERTE	0.09
950	CHQ-716	126.0	128.0	230	200	390	190	0.0	INERTE	0.06
951	CHQ-716	128.0	130.0	260	200	300	20	0.1	INERTE	0.06
952	CHQ-716	130.0	132.0	260	200	300	20	0.1	INERTE	0.05
953	CHQ-716	132.0	134.0	260	200	300	20	0.1	INERTE	0.04
954	CHQ-716	134.0	136.0	260	200	300	20	0.1	INERTE	0.08
955	CHQ-716	136.0	138.0	280	200	340	140	0.1	INERTE	0.10
956	CHQ-716	138.0	140.0	280	200	340	140	0.1	INERTE	0.08
957	CHQ-716	140.0	142.0	280	200	340	140	0.1	INERTE	0.09
958	CHQ-716	144.0	146.0	200	200	270	70	0.1	INERTE	0.05
959	CHQ-716	146.0	148.0	200	200	270	70	0.1	INERTE	0.07
960	CHQ-716	148.0	150.0	200	200	270	70	0.1	INERTE	0.05
961	CHQ-716	150.0	152.0	200	200	270	70	0.1	INERTE	0.06
962	CHQ-716	152.0	154.0	240	200	230	30	0.1	INERTE	0.04
963	CHQ-716	154.0	156.0	240	200	230	30	0.1	INERTE	0.05
964	CHQ-716	156.0	158.0	240	200	230	30	0.1	INERTE	0.04
965	CHQ-716	158.0	160.0	240	200	230	30	0.1	INERTE	0.06
966	CHQ-716	160.0	162.0	360	200	300	50	0.1	INERTE	0.04
967	CHQ-716	162.0	164.0	360	200	300	50	0.1	INERTE	0.04
968	CHQ-716	164.0	166.0	360	200	300	50	0.1	INERTE	0.04
969	CHQ-716	166.0	168.0	360	200	300	50	0.1	INERTE	0.03
970	CHQ-716	168.0	170.0	350	200	350	50	0.1	INERTE	0.03
971	CHQ-716	170.0	172.0	350	200	350	50	0.1	INERTE	0.03
972	CHQ-716	172.0	174.0	350	200	350	50	0.1	INERTE	0.05
973	CHQ-716	174.0	176.0	350	200	350	50	0.1	INERTE	0.04
974	CHQ-716	176.0	178.0	200	200	300	0	0.1	INERTE	0.03
975	CHQ-716	178.0	180.0	200	200	300	0	0.1	INERTE	0.03
976	CHQ-716	180.0	182.0	200	200	300	0	0.1	INERTE	0.03
977	CHQ-716	182.0	184.0	200	200	300	0	0.1	INERTE	0.03
978	CHQ-716	184.0	186.0	200	200	300	100	0.1	INERTE	0.03
979	CHQ-716	186.0	188.0	200	200	300	100	0.1	INERTE	0.05
980	CHQ-716	188.0	190.0	200	200	300	100	0.1	INERTE	0.05
981	CHQ-716	190.0	192.0	200	200	300	100	0.1	INERTE	0.06
982	CHQ-716	192.0	194.0	200	200	380	80	0.1	INERTE	0.07
983	CHQ-716	194.0	196.0	200	200	380	80	0.1	INERTE	0.06
984	CHQ-716	196.0	198.0	200	200	380	80	0.1	INERTE	0.04
985	CHQ-716	198.0	200.0	200	200	380	80	0.1	INERTE	0.04
986	CHQ-716	200.0	202.0	200	200	590	190	0.0	INERTE	0.03
987	CHQ-716	202.0	204.0	200	200	590	190	0.0	INERTE	0.03
988	CHQ-716	204.0	206.0	200	200	590	190	0.0	INERTE	0.08
989	CHQ-716	206.0	208.0	200	200	590	190	0.0	INERTE	0.05
990	CHQ-716	208.0	210.0	240	200	600	100	0.1	INERTE	0.08
991	CHQ-716	210.0	212.0	240	200	600	100	0.1	INERTE	0.06
992	CHQ-716	212.0	214.0	240	200	600	100	0.1	INERTE	0.07
993	CHQ-716	214.0	216.0	240	200	600	100	0.1	INERTE	0.06
994	CHQ-716	224.0	226.0	300	200	870	160	0.1	INERTE	0.08
995	CHQ-716	226.0	228.0	300	200	870	160	0.1	INERTE	0.09
996	CHQ-716	228.0	230.0	300	200	870	160	0.1	INERTE	0.08
997	CHQ-716	242.0	244.0	440	200	2830	1940	-0.2	LIGERAMENTE ACIDO	0.08
998	CHQ-716	250.0	252.0	410	200	10640	8950	-1.2	ACIDO	0.10
999	CHQ-716	252.0	254.0	410	200	10640	8950	-1.2	ACIDO	0.08
1000	CHQ-716	254.0	256.0	410	200	10640	8950	-1.2	ACIDO	0.10
1001	CHQ-717	206.0	208.0	360	200	1400	1030	-0.1	INERTE	0.10
1002	CHQ-717	208.0	208.1	360	200	1400	1030	-0.1	INERTE	0.10
1003	CHQ-717	248.0	250.0	200	200	5250	3620	-0.4	LIGERAMENTE ACIDO	0.08
1004	CHQ-718	230.0	232.4	500	500	1060	0	0.2	LIGERAMENTE BASICO	0.08
1005	CHQ-719	16.0	23.9	240	200	2890	1020	-0.1	INERTE	0.02
1006	CHQ-719	23.9	32.0	200	200	740	300	0.0	INERTE	0.01
1007	CHQ-719	32.0	40.0	200	200	430	110	0.1	INERTE	0.01
1008	CHQ-719	40.0	48.0	200	200	800	380	0.0	INERTE	0.01
1009	CHQ-719	48.0	56.0	200	200	330	0	0.1	INERTE	0.00
1010	CHQ-719	56.0	64.0	200	200	370	20	0.1	INERTE	0.00
1011	CHQ-719	64.0	72.0	200	200	410	60	0.1	INERTE	0.00
1012	CHQ-719	72.0	80.0	200	200	430	30	0.1	INERTE	0.01
1013	CHQ-719	80.0	88.0	200	200	370	70	0.1	INERTE	0.00
1014	CHQ-719	88.0	96.0	200	200	350	40	0.1	INERTE	0.01
1015	CHQ-719	96.0	103.9	200	200	270	0	0.1	INERTE	0.01
1016	CHQ-719	103.9	112.0	200	200	350	60	0.1	INERTE	0.01
1017	CHQ-719	112.0	120.0	200	200	370	50	0.1	INERTE	0.01
1018	CHQ-719	120.0	128.0	200	200	400	30	0.1	INERTE	0.02
1019	CHQ-719	128.0	136.0	200	200	400	80	0.1	INERTE	0.07
1020	CHQ-719	152.0	160.0	200	200	350	20	0.1	INERTE	0.10
1021	CHQ-719	160.0	168.0	200	200	380	50	0.1	INERTE	0.03
1022	CHQ-719	168.0	172.0	200	200	290	40	0.1	INERTE	0.04
1023	CHQ-724	64.0	70.0	200	200	670	0	0.1	INERTE	0.02
1024	CHQ-724	70.0	72.0	200	200	670	0	0.1	INERTE	0.01
1025	CHQ-724	72.0	80.0	470	200	760	0	0.1	INERTE	0.05
1026	CHQ-724	80.0	88.0	200	200	820	0	0.1	INERTE	0.01
1027	CHQ-724	88.0	90.0	370	200	790	0	0.1	INERTE	0.01
1028	CHQ-742	20.0	30.0	250	200	5130	540	0.0	INERTE	0.09
1029	CHQ-742	30.0	40.0	200	200	470	0	0.1	INERTE	0.04
1030	CHQ-742	50.0	60.0	870	200	970	270	0.0	INERTE	0.04
1031	CHQ-742	60.0	70.0	430	200	2160	320	0.0	INERTE	0.06
1032	CHQ-742	70.0	80.0	220	200	1540	190	0.0	INERTE	0.05
1033	CHQ-742	80.0	90.0	470	200	2520	0	0.1	INERTE	0.09
1034	CHQ-742	90.0	100.0	1010	220	2720	20	0.1	INERTE	0.06
1035	CHQ-742	100.0	110.0	850	200	2090	0	0.1	INERTE	0.06
1036	CHQ-742	110.0	120.0	700	200	3460	70	0.1	INERTE	0.08
1037	CHQ-742	120.0	130.0	1110	220	2090	0	0.1	INERTE	0.09
1038	CHQ-742	130.0	140.0	530	200	680	0	0.1	INERTE	0.08
1039	CHQ-742	140.0	150.0	520	200	620	0	0.1	INERTE	0.08
1040	CHQ-755	19.3	29.8	910	200	960	10	0.1	INERTE	0.06
1041	CHQ-755	29.8	40.0	290	200	340	60	0.1	INERTE	0.03
1042	CHQ-755	40.0	50.0	320	200	320	70	0.1	INERTE	0.04
1043	CHQ-755	50.0	60.5	340	200	260	20	0.1	INERTE	0.06
1044	CHQ-755	60.5	70.0	290	200	260	30	0.1	INERTE	0.06
1045	CHQ-755	70.0	80.0	370	200	200	0	0.1	INERTE	0.04
1046	CHQ-755	80.0	90.0	350	200	200	0	0.1	INERTE	0.02
1047	CHQ-755	90.0	99.4	300	200	200	0	0.1	INERTE	0.07
1048	CHQ-755	99.4	100.0	280	200	330	130	0.1	INERTE	0.08
1049	CHQ-755	110.0	120.0	230	200	200	0	0.1	INERTE	0.08
1050	CHQ-755	120.0	129.5	260	200	200	0	0.1	INERTE	0.10
1051	CHQ-755	129.5	130.0	260	200	200	0	0.1	INERTE	0.08
1052	CHQ-755	130.0	139.9	260	200	200	0	0.1	INERTE	0.07
1053	CHQ-755	139.9	140.0	260	200	200	0	0.1	INERTE	0.04
1054	CHQ-755	140.0	149.5	260	200	200	0	0.1	INERTE	0.09
1055	CHQ-755	150.0	160.0	200	200	200	0	0.1	INERTE	0.08
1056	CHQ-755	160.0	169.5	240	200	200	0	0.1	INERTE	0.10
1057	CHQ-755	169.5	170.0	220	200	200	0	0.1	INERTE	0.05
1058	CHQ-755	170.0	180.0	220	200	200	0	0.1	INERTE	0.06
1059	CHQ-760	20.0	30.0	1000	390	680	110	0.1	LIGERAMENTE BASICO	0.06
1060	CHQ-760	30.0	40.0	690	360	1080	300	0.1	INERTE	0.02
1061	CHQ-760	40.0	50.0	1120	360	500	210	0.1	LIGERAMENTE BASICO	0.02
1062	CHQ-760	50.0	60.0	910	380	820	270	0.1	LIGERAMENTE BASICO	0.03
1063	CHQ-760	60.0	70.0	2650	2260	580	0	0.8	LIGERAMENTE BASICO	0.01
1064	CHQ-760	160.0	170.0	760	370	200	0	0.1	LIGERAMENTE BASICO	0.10
1065	CHQ-760	170.0	180.0	530	390	200	0	0.1	LIGERAMENTE BASICO	0.07
1066	CHQ-760	180.0	190.0	610	340	200	0	0.1	LIGERAMENTE BASICO	0.05
1067	CHQ-760	190.0	200.0	540	310	200	0	0.1	LIGERAMENTE BASICO	0.06
1068	CHQ-760	200.0	210.0	520	260	200	0	0.1	INERTE	0.07
1069	CHQ-760	210.0	220.0	680	400	200	0	0.1	LIGERAMENTE BASICO	0.08
1070	CHQ-760	230.0	240.0	730	280	200	0	0.1	LIGERAMENTE BASICO	0.05
1071	CHQ-760	240.0	250.0	650	350	200	0	0.1	LIGERAMENTE BASICO	0.05
1072	CHQ-762	40.0	50.0	600	200	400	20	0.1	INERTE	0.05
1073	CHQ-762	50.0	60.0	2310	200	420	30	0.1	INERTE	0.02
1074	CHQ-762	60.0	70.0	1240	200	560	40	0.1	INERTE	0.02
1075	CHQ-762	70.0	80.0	1120	200	740	60	0.1	INERTE	0.02
1076	CHQ-762	110.0	120.0	1870	200	660	40	0.1	INERTE	0.07
1077	CHQ-762	170.0	180.0	640	200	290	0	0.1	INERTE	0.10
1078	CHQ-762	200.0	210.0	750	200	460	40	0.1	INERTE	0.07
1079	CHQ-762	210.0	220.0	620	200	250	30	0.1	INERTE	0.07
1080	CHQ-762	220.0	230.0	1380	200	420	10	0.1	INERTE	0.06

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1081	CHQ-762	230.0	240.0	850	200	280	60	0.1	INERTE	0.05
1082	CHQ-762	240.0	250.0	600	200	260	50	0.1	INERTE	0.04
1083	CHQ-764	180.0	190.9	540	200	390	140	0.1	INERTE	0.06
1084	CHQ-764	190.9	199.7	570	200	450	80	0.1	INERTE	0.09
1085	CHQ-764	199.7	209.3	1350	200	610	410	0.0	INERTE	0.05
1086	CHQ-764	209.3	220.0	1510	200	330	130	0.1	INERTE	0.07
1087	CHQ-764	220.0	230.0	1740	200	360	160	0.1	INERTE	0.04
1088	CHQ-764	230.0	240.5	1950	1710	640	20	0.6	LIGERAMENTE BASICO	0.06
1089	CHQ-764	240.5	250.4	530	660	1920	1560	0.0	INERTE	0.06
1090	CHQ-764	250.4	260.7	490	660	380	110	0.2	LIGERAMENTE BASICO	0.05
1091	CHQ-764	260.7	270.0	740	790	900	320	0.2	LIGERAMENTE BASICO	0.05
1092	CHQ-764	270.0	280.0	1840	200	1300	0	0.1	INERTE	0.08
1093	CHQ-764	289.7	299.8	1910	200	13680	11620	-1.5	ACIDO	0.09
1094	CHQ-764	299.8	309.6	2060	200	16950	15050	-2.0	ACIDO	0.10
1095	CHQ-768	200.0	205.9	1380	200	1460	-10	0.1	INERTE	0.08
1096	CHQ-769	20.0	30.0	860	410	5180	850	0.0	INERTE	0.05
1097	CHQ-769	30.0	40.0	990	400	470	100	0.1	LIGERAMENTE BASICO	0.02
1098	CHQ-769	40.0	50.0	620	350	210	0	0.1	LIGERAMENTE BASICO	0.03
1099	CHQ-769	50.0	60.0	710	320	270	70	0.1	LIGERAMENTE BASICO	0.03
1100	CHQ-769	60.0	70.0	810	400	290	30	0.1	LIGERAMENTE BASICO	0.03
1101	CHQ-769	70.0	76.0	710	360	360	100	0.1	LIGERAMENTE BASICO	0.02
1102	CHQ-792	0.0	10.0	1270	200	1620	210	0.0	INERTE	0.08
1103	CHQ-792	10.0	20.0	300	200	430	0	0.1	INERTE	0.06
1104	CHQ-792	20.0	30.0	1040	200	350	30	0.1	INERTE	0.05
1105	CHQ-792	30.0	40.0	330	200	400	0	0.1	INERTE	0.03
1106	CHQ-792	40.0	50.0	200	200	430	0	0.1	INERTE	0.02
1107	CHQ-792	50.0	60.0	200	200	410	10	0.1	INERTE	0.02
1108	CHQ-792	60.0	70.0	290	200	450	20	0.1	INERTE	0.03
1109	CHQ-792	70.0	80.0	200	200	520	60	0.1	INERTE	0.02
1110	CHQ-792	80.0	90.0	200	200	500	60	0.1	INERTE	0.02
1111	CHQ-792	90.0	100.0	200	200	480	10	0.1	INERTE	0.03
1112	CHQ-792	100.0	110.0	210	200	430	0	0.1	INERTE	0.06
1113	CHQ-792	110.0	120.0	200	200	450	10	0.1	INERTE	0.06
1114	CHQ-792	120.0	130.0	200	200	430	0	0.1	INERTE	0.08
1115	CHQ-792	130.0	140.0	200	200	420	10	0.1	INERTE	0.06
1116	CHQ-829	406.0	408.0	260	200	84820	48460	-6.6	ACIDO	0.07
1117	CHQ-983	40.0	50.0	500	100	6500	2000	-0.2	LIGERAMENTE ACIDO	0.08
1118	CHQ-983	50.0	60.0	700	100	21900	5400	-0.7	LIGERAMENTE ACIDO	0.08
1119	CHQ-983	60.0	70.0	1100	50	15100	3900	-0.5	LIGERAMENTE ACIDO	0.07
1120	CHQ-984	60.0	70.0	700	50	6000	1800	-0.2	LIGERAMENTE ACIDO	0.09
1121	CHQ-CNX-001	60.0	68.0	570	80	290	0	0.0	INERTE	0.08
1122	CHQ-CNX-001	68.0	70.0	390	50	270	0	0.0	INERTE	0.04
1123	CHQ-CNX-001	70.0	76.0	390	50	270	0	0.0	INERTE	0.09
1124	CHQ-CNX-001	84.0	90.0	260	70	180	0	0.0	INERTE	0.07
1125	CHQ-CNX-001	90.0	92.0	260	70	180	0	0.0	INERTE	0.05
1126	CHQ-CNX-001	92.0	100.0	390	70	380	60	0.0	INERTE	0.04
1127	CHQ-CNX-001	100.0	108.0	480	60	200	10	0.0	INERTE	0.04
1128	CHQ-CNX-001	108.0	116.0	500	100	200	0	0.0	INERTE	0.08
1129	CHQ-CNX-001	116.0	124.0	490	40	350	40	0.0	INERTE	0.06
1130	CHQ-CNX-001	124.0	132.0	470	60	210	0	0.0	INERTE	0.10
1131	CHQ-CNX-001	132.0	140.0	580	50	250	20	0.0	INERTE	0.09
1132	CHQ-CNX-001	140.0	148.0	790	100	360	70	0.0	INERTE	0.07
1133	CHQ-CNX-001	148.0	150.0	1510	90	490	140	0.0	INERTE	0.08
1134	CHQ-CNX-001	152.0	160.0	2800	50	500	100	0.0	INERTE	0.10
1135	CHQ-CNX-001	160.0	170.0	2800	50	500	100	0.0	INERTE	0.09
1136	CHQ-CNX-001	170.0	180.0	600	50	500	100	0.0	INERTE	0.08
1137	CHQ-CNX-001	180.0	190.0	500	50	300	100	0.0	INERTE	0.03
1138	CHQ-CNX-001	190.0	200.0	700	100	400	100	0.0	INERTE	0.04
1139	CHQ-CNX-002	200.0	210.0	800	50	900	300	0.0	INERTE	0.06
1140	CHQ-CNX-002	210.0	220.0	2500	100	1200	200	0.0	INERTE	0.05
1141	CHQ-CNX-002	220.0	230.0	600	50	1300	200	0.0	INERTE	0.04
1142	CHQ-CNX-003	0.0	10.0	300	50	2200	400	0.0	INERTE	0.03
1143	CHQ-CNX-003	10.0	20.0	50	50	400	0	0.0	INERTE	0.01
1144	CHQ-CNX-003	20.0	30.0	200	50	11700	3400	-0.4	LIGERAMENTE ACIDO	0.02
1145	CHQ-CNX-003	30.0	40.0	600	50	55600	6100	-0.8	LIGERAMENTE ACIDO	0.01
1146	CHQ-CNX-003	40.0	50.0	700	50	64000	7900	-1.1	ACIDO	0.02
1147	CHQ-CNX-003	50.0	60.0	1600	50	15500	2800	-0.4	LIGERAMENTE ACIDO	0.01
1148	CHQ-CNX-003	60.0	70.0	900	50	8600	1900	-0.2	LIGERAMENTE ACIDO	0.01
1149	CHQ-CNX-003	70.0	72.0	700	50	1000	100	0.0	INERTE	0.01
1150	CHQ-CNX-003	72.0	80.0	700	50	1000	100	0.0	INERTE	0.02
1151	CHQ-CNX-003	80.0	90.0	1000	100	3600	300	0.0	INERTE	0.01
1152	CHQ-CNX-003	90.0	100.0	2200	100	6700	500	0.0	INERTE	0.01
1153	CHQ-CNX-003	100.0	110.0	1400	100	9600	1300	-0.1	LIGERAMENTE ACIDO	0.01
1154	CHQ-CNX-003	110.0	120.0	2300	100	5100	200	0.0	INERTE	0.01
1155	CHQ-CNX-003	120.0	130.0	1600	100	18100	2700	-0.3	LIGERAMENTE ACIDO	0.01
1156	CHQ-CNX-003	130.0	140.0	400	50	26300	5300	-0.7	LIGERAMENTE ACIDO	0.01
1157	CHQ-CNX-003	140.0	150.0	600	100	37200	7200	-0.9	LIGERAMENTE ACIDO	0.01
1158	CHQ-CNX-003	150.0	160.0	400	50	46100	8600	-1.2	ACIDO	0.01
1159	CHQ-CNX-003	160.0	170.0	400	50	69600	25400	-3.5	ACIDO	0.01
1160	CHQ-CNX-003	170.0	180.0	500	50	26000	4500	-0.6	LIGERAMENTE ACIDO	0.01
1161	CHQ-CNX-003	180.0	190.0	700	100	38200	6200	-0.8	LIGERAMENTE ACIDO	0.01
1162	CHQ-CNX-003	190.0	200.0	600	100	29100	5000	-0.6	LIGERAMENTE ACIDO	0.02
1163	CHQPZ-0002	50.0	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1164	CHQPZ-0002	60.0	70.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1165	CHQPZ-0002	70.0	80.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1166	CHQPZ-0002	80.0	90.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.00
1167	CHQPZ-0002	90.0	100.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
1168	CHQPZ-0002	100.0	110.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1169	CHQPZ-0003	16.0	24.0	200	200	2240	1120	-0.1	INERTE	0.01
1170	CHQPZ-0003	24.0	32.0	200	200	1090	380	0.0	INERTE	0.01
1171	CHQPZ-0003	32.0	40.0	200	200	360	0	0.1	INERTE	0.00
1172	CHQPZ-0003	40.0	48.0	200	200	200	0	0.1	INERTE	0.00
1173	CHQPZ-0003	48.0	56.0	200	200	200	0	0.1	INERTE	0.00
1174	CHQPZ-0003	56.0	64.0	200	200	260	0	0.1	INERTE	0.00
1175	CHQPZ-0003	64.0	72.0	1510	200	200	0	0.1	INERTE	0.01
1176	CHQPZ-0003	72.0	80.0	200	200	200	0	0.1	INERTE	0.00
1177	CHQPZ-0003	80.0	88.0	240	200	440	0	0.1	INERTE	0.00
1178	CHQPZ-0003	88.0	96.0	200	200	200	0	0.1	INERTE	0.01
1179	CHQPZ-0003	96.0	104.0	200	200	200	0	0.1	INERTE	0.02
1180	CHQPZ-0003	104.0	112.0	200	200	200	0	0.1	INERTE	0.05
1181	CHQPZ-0003	112.0	120.0	340	200	200	0	0.1	INERTE	0.02
1182	CHQPZ-0003	120.0	128.0	270	200	430	0	0.1	INERTE	0.02
1183	CHQPZ-0003	128.0	136.0	200	200	350	150	0.1	INERTE	0.04
1184	CHQPZ-0003	136.0	144.0	1450	200	320	0	0.1	INERTE	0.05
1185	CHQPZ-0003	144.0	152.0	320	200	320	0	0.1	INERTE	0.02
1186	CHQPZ-0003	152.0	160.0	2620	200	370	0	0.1	INERTE	0.01
1187	CHQPZ-0003	160.0	168.0	200	200	250	0	0.1	INERTE	0.06
1188	CHQPZ-0003	168.0	176.0	200	200	410	0	0.1	INERTE	0.02
1189	CHQPZ-0003	176.0	184.0	200	200	430	0	0.1	INERTE	0.01
1190	CHQPZ-0003	184.0	192.0	1270	200	410	0	0.1	INERTE	0.01
1191	CHQPZ-0003	192.0	200.0	510	200	240	0	0.1	INERTE	0.04
1192	CHQPZ-0003	200.0	208.0	230	200	300	0	0.1	INERTE	0.02
1193	CHQPZ-0003	208.0	216.0	200	200	200	0	0.1	INERTE	0.01
1194	CHQPZ-0003	216.0	224.0	290	200	260	0	0.1	INERTE	0.01
1195	CHQPZ-0003	224.0	232.0	490	200	200	0	0.1	INERTE	0.01
1196	CHQPZ-0003	232.0	240.0	200	200	200	0	0.1	INERTE	0.00
1197	CHQPZ-0003	240.0	248.0	250	200	200	0	0.1	INERTE	0.01
1198	CHQPZ-0003	248.0	256.0	270	200	250	50	0.1	INERTE	0.03
1199	CHQPZ-0003	256.0	264.0	220	200	370	70	0.1	INERTE	0.01
1200	CHQPZ-0003	264.0	272.0	200	200	330	40	0.1	INERTE	0.01

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1201	CHQPZ-0003	272.0	280.0	200	200	250	40	0.1	INERTE	0.01
1202	CHQPZ-0003	280.0	288.0	700	200	210	10	0.1	INERTE	0.01
1203	CHQPZ-0003	288.0	296.0	200	200	200	0	0.1	INERTE	0.03
1204	CHQPZ-0003	296.0	304.0	200	200	1260	660	0.0	INERTE	0.03
1205	CHQPZ-0003	304.0	312.0	360	200	930	340	0.0	INERTE	0.07
1206	CHQPZ-0003	328.0	336.0	200	200	2160	1340	-0.1	LIGERAMENTE ACIDO	0.08
1207	CHQPZ-0003	360.0	368.0	200	200	61000	53420	-7.2	ACIDO	0.04
1208	CHQPZ-0003	368.0	377.0	660	200	71700	54400	-7.4	ACIDO	0.04
1209	ESC-002	0.0	10.0	500	50	300	100	0.0	INERTE	0.02
1210	ESC-002	10.0	20.0	600	50	500	100	0.0	INERTE	0.02
1211	ESC-002	20.0	30.0	300	50	500	100	0.0	INERTE	0.02
1212	ESC-002	30.0	40.0	600	50	400	100	0.0	INERTE	0.01
1213	ESC-002	40.0	50.0	600	50	300	100	0.0	INERTE	0.01
1214	ESC-002	50.0	60.0	300	50	500	100	0.0	INERTE	0.01
1215	ESC-002	60.0	70.0	400	50	500	100	0.0	INERTE	0.01
1216	ESC-002	70.0	80.0	400	50	700	100	0.0	INERTE	0.01
1217	ESC-002	80.0	82.0	200	50	800	300	0.0	INERTE	0.01
1218	ESC-002	82.0	90.0	200	50	800	300	0.0	INERTE	0.01
1219	ESC-002	90.0	100.0	200	50	400	100	0.0	INERTE	0.01
1220	ESC-002	100.0	110.0	300	50	400	0	0.0	INERTE	0.01
1221	ESC-002	110.0	120.0	800	50	500	100	0.0	INERTE	0.01
1222	ESC-002	120.0	130.0	600	50	19000	18600	-2.5	ACIDO	0.01
1223	ESC-002	130.0	139.7	1100	50	49700	6800	-0.9	LIGERAMENTE ACIDO	0.00
1224	ESC-003	70.0	80.0	600	50	26800	15600	-2.1	ACIDO	0.08
1225	ESC-003	80.0	90.0	600	50	33100	22000	-3.0	ACIDO	0.09
1226	ESC-004	0.0	10.0	500	50	200	100	0.0	INERTE	0.04
1227	ESC-004	10.0	20.0	50	50	200	0	0.0	INERTE	0.03
1228	ESC-004	20.0	30.0	200	50	200	0	0.0	INERTE	0.03
1229	ESC-004	30.0	40.0	50	50	200	0	0.0	INERTE	0.02
1230	ESC-004	40.0	50.0	50	50	100	50	0.0	INERTE	0.03
1231	ESC-004	50.0	60.0	100	50	200	0	0.0	INERTE	0.03
1232	ESC-004	60.0	70.0	50	50	200	0	0.0	INERTE	0.03
1233	ESC-004	70.0	80.0	100	50	200	100	0.0	INERTE	0.04
1234	ESC-004	80.0	90.0	200	50	100	50	0.0	INERTE	0.02
1235	ESC-004	90.0	100.0	200	50	200	100	0.0	INERTE	0.03
1236	ESC-004	100.0	110.0	200	50	100	50	0.0	INERTE	0.05
1237	ESC-004	110.0	120.0	50	50	100	50	0.0	INERTE	0.06
1238	ESC-004	120.0	130.0	50	50	100	50	0.0	INERTE	0.05
1239	ESC-004	130.0	140.0	200	50	200	0	0.0	INERTE	0.05
1240	ESC-004	140.0	150.0	300	50	200	0	0.0	INERTE	0.05
1241	ESC-004	150.0	160.0	200	50	200	0	0.0	INERTE	0.06
1242	ESC-004	160.0	170.0	200	50	200	0	0.0	INERTE	0.05
1243	ESC-004	170.0	180.0	200	50	500	100	0.0	INERTE	0.06
1244	ESC-004	180.0	190.0	50	50	500	0	0.0	INERTE	0.06
1245	ESC-004	190.0	200.0	50	50	300	0	0.0	INERTE	0.05
1246	ESC-004	200.0	210.0	50	50	300	0	0.0	INERTE	0.04
1247	ESC-004	210.0	220.0	50	50	500	100	0.0	INERTE	0.08
1248	ESC-004	220.0	230.0	50	50	300	0	0.0	INERTE	0.08
1249	ESC-004	230.0	240.0	50	50	600	100	0.0	INERTE	0.08
1250	ESC-004	260.0	270.0	200	50	900	400	0.0	INERTE	0.08
1251	ESC-004	270.0	280.0	200	50	500	200	0.0	INERTE	0.09
1252	GEO-004	70.0	80.0	700	300	1800	100	0.1	INERTE	0.03
1253	GEO-004	80.0	90.0	400	300	5900	1100	0.0	INERTE	0.06
1254	GEO-004	90.0	100.8	300	200	7100	1100	-0.1	INERTE	0.09
1255	LL-001	0.0	10.0	650	200	340	120	0.1	INERTE	0.09
1256	LL-001	10.0	20.0	1030	200	470	100	0.1	INERTE	0.06
1257	LL-001	20.0	30.0	420	200	400	20	0.1	INERTE	0.09
1258	LL-001	70.0	79.7	330	200	860	150	0.1	INERTE	0.03
1259	LL-001	90.0	100.0	240	200	2160	1030	-0.1	INERTE	0.08
1260	LL-001	100.0	110.0	300	200	1570	620	0.0	INERTE	0.06
1261	LL-001	120.0	130.0	530	200	640	50	0.1	INERTE	0.03
1262	LL-001	130.0	140.0	590	200	1040	90	0.1	INERTE	0.06
1263	LL-001	140.0	150.0	660	200	800	150	0.1	INERTE	0.01
1264	LL-001	150.0	160.0	290	200	4720	40	0.1	INERTE	0.03
1265	LL-001	160.0	170.0	410	200	4520	2590	-0.3	LIGERAMENTE ACIDO	0.06
1266	LL-001	170.0	180.0	330	200	4250	3780	-0.4	LIGERAMENTE ACIDO	0.05
1267	LL-001	180.0	190.0	200	200	1070	170	0.1	INERTE	0.09
1268	LL-001	286.0	288.0	280	200	78800	53070	-7.2	ACIDO	0.09
1269	LL-001	298.0	299.8	800	200	29300	26230	-3.5	ACIDO	0.06
1270	LL-001	306.0	310.0	380	200	33000	26600	-3.6	ACIDO	0.08
1271	LL-002	50.0	60.0	810	200	470	100	0.1	INERTE	0.02
1272	LL-002	60.0	70.0	2270	200	1020	0	0.1	INERTE	0.02
1273	LL-002	70.0	80.0	1130	200	310	0	0.1	INERTE	0.08
1274	LL-002	80.0	90.0	1640	200	410	0	0.1	INERTE	0.08
1275	LL-002	130.0	140.0	1070	200	1140	0	0.1	INERTE	0.04
1276	LL-002	180.4	190.0	200	200	1340	40	0.1	INERTE	0.08
1277	LL-002	190.0	200.0	270	200	1210	0	0.1	INERTE	0.09
1278	LL-002	200.0	210.0	200	200	1500	0	0.1	INERTE	0.06
1279	LL-002	210.0	220.0	220	200	1500	0	0.1	INERTE	0.07
1280	LL-002	220.0	230.0	620	200	2400	0	0.1	INERTE	0.07
1281	LL-003	150.0	160.0	220	200	1920	170	0.1	INERTE	0.09
1282	LL-003	200.6	210.0	200	200	1660	420	0.0	INERTE	0.09
1283	LL-003	210.0	220.0	200	200	1190	290	0.0	INERTE	0.08
1284	LL-003	229.7	240.0	200	200	1540	240	0.0	INERTE	0.08
1285	LL-003	302.0	304.0	200	200	34730	34120	-4.6	ACIDO	0.08
1286	OCU-001	8.0	10.0	2300	50	48400	5700	-0.8	LIGERAMENTE ACIDO	0.01
1287	OCU-001	10.0	20.0	900	50	65600	3200	-0.4	LIGERAMENTE ACIDO	0.02
1288	OCU-001	20.0	30.0	400	50	8700	4700	-0.6	LIGERAMENTE ACIDO	0.03
1289	OCU-001	30.0	40.0	300	50	9300	4100	-0.5	LIGERAMENTE ACIDO	0.03
1290	OCU-001	40.0	50.0	400	50	12300	5500	-0.7	LIGERAMENTE ACIDO	0.03
1291	OCU-001	50.0	60.0	600	50	27200	12100	-1.6	ACIDO	0.03
1292	OCU-001	60.0	64.0	200	50	1500	500	-0.1	INERTE	0.04
1293	OCU-001	64.0	70.0	200	50	1500	500	-0.1	INERTE	0.03
1294	OCU-001	70.0	80.0	200	50	800	200	0.0	INERTE	0.04
1295	OCU-001	80.0	90.0	300	50	12600	2500	-0.3	LIGERAMENTE ACIDO	0.04
1296	OCU-002	0.0	10.0	4900	50	34400	6300	-0.8	LIGERAMENTE ACIDO	0.03
1297	OCU-002	10.0	20.0	1200	50	60000	5200	-0.7	LIGERAMENTE ACIDO	0.03
1298	OCU-002	20.0	30.0	1000	50	58400	6400	-0.9	LIGERAMENTE ACIDO	0.02
1299	OCU-002	30.0	40.0	900	50	47200	8800	-1.2	ACIDO	0.02
1300	OCU-002	40.0	46.0	600	50	56700	17100	-2.3	ACIDO	0.02
1301	OCU-002	50.0	60.0	600	50	55800	5200	-0.7	LIGERAMENTE ACIDO	0.02
1302	OCU-002	60.0	70.0	300	50	20000	3100	-0.4	LIGERAMENTE ACIDO	0.03
1303	OCU-002	70.0	80.0	400	50	900	200	0.0	INERTE	0.03
1304	OCU-002	80.0	90.0	500	50	1200	300	0.0	INERTE	0.03
1305	OCU-002	90.0	100.0	300	50	10600	2200	-0.3	LIGERAMENTE ACIDO	0.04
1306	OCU-002	100.0	110.2	500	50	51600	2400	-0.3	LIGERAMENTE ACIDO	0.02
1307	OCU-002	110.2	120.0	1300	50	4400	0	0.0	INERTE	0.02
1308	OCU-002	120.0	130.0	1000	50	22100	1300	-0.2	LIGERAMENTE ACIDO	0.02
1309	OCU-002	130.0	140.0	1300	100	14300	10700	-1.4	ACIDO	0.02
1310	QCMYBH1301	6.1	10.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1311	QCMYBH1301	10.0	20.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1312	QCMYBH1301	20.0	29.4	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1313	QCMYBH1301	29.4	39.8	500	500	1310	0	0.2	LIGERAMENTE BASICO	0.01
1314	QCMYBH1301	39.8	50.0	500	500	61330	2820	-0.2	LIGERAMENTE ACIDO	0.01
1315	QCMYBH1301	50.0	60.5	500	500	38930	2110	-0.1	LIGERAMENTE ACIDO	0.01
1316	QCMYBH1301	60.5	69.6	500	500	5660	590	0.1	LIGERAMENTE BASICO	0.01
1317	QCMYBH1301	71.1	80.0	500	500	50330	4180	-0.4	LIGERAMENTE ACIDO	0.01
1318	QCMYBH1301	80.0	91.0	500	500	39280	3130	-0.2	LIGERAMENTE ACIDO	0.01
1319	QCMYBH1301	91.0	100.0	500	500	36320	1450	0.0	INERTE	0.00
1320	QCMYBH1301	100.0	110.7	500	500	44850	4890	-0.5	LIGERAMENTE ACIDO	0.01

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1321	QCMYBH1301	110.7	120.0	500	500	35290	2100	-0.1	LIGERAMENTE ACIDO	0.00
1322	QCMYBH1301	120.0	130.1	500	500	46580	5130	-0.5	LIGERAMENTE ACIDO	0.01
1323	QCMYBH1301	130.1	140.0	500	500	45680	0	0.2	LIGERAMENTE BASICO	0.00
1324	QCMYBH1301	140.0	150.0	500	500	52870	0	0.2	LIGERAMENTE BASICO	0.00
1325	QCMYBH1301	150.0	160.0	500	500	49720	0	0.2	LIGERAMENTE BASICO	0.00
1326	QCMYBH1301	160.0	170.0	500	500	44690	0	0.2	LIGERAMENTE BASICO	0.01
1327	QCMYBH1301	170.0	180.1	500	500	9410	0	0.2	LIGERAMENTE BASICO	0.00
1328	QCMYBH1301	180.1	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1329	QCMYBH1301	190.0	200.0	500	500	4170	0	0.2	LIGERAMENTE BASICO	0.02
1330	QCMYBH1301	200.0	210.0	500	500	8280	620	0.1	INERTE	0.02
1331	QCMYBH1301	210.0	220.0	500	500	10920	0	0.2	LIGERAMENTE BASICO	0.02
1332	QCMYBH1301	220.0	230.0	500	500	9110	170	0.2	LIGERAMENTE BASICO	0.01
1333	QCMYBH1301	230.0	240.0	500	500	8930	2040	-0.1	INERTE	0.01
1334	QCMYBH1301	240.0	250.0	500	500	7640	280	0.1	LIGERAMENTE BASICO	0.01
1335	QCMYBH1301	250.0	260.2	500	500	4760	180	0.2	LIGERAMENTE BASICO	0.02
1336	QCMYBH1301	260.2	270.0	500	500	3650	240	0.2	LIGERAMENTE BASICO	0.05
1337	QCMYBH1302	0.0	9.9	3630	500	1510	0	0.2	LIGERAMENTE BASICO	0.01
1338	QCMYBH1302	9.9	20.1	2140	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1339	QCMYBH1302	20.1	29.7	2570	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1340	QCMYBH1302	29.7	39.8	3540	500	500	0	0.2	LIGERAMENTE BASICO	0.03
1341	QCMYBH1302	39.8	50.0	1750	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1342	QCMYBH1302	50.0	60.0	1490	500	500	0	0.2	LIGERAMENTE BASICO	0.00
1343	QCMYBH1302	60.0	70.0	1720	500	500	0	0.2	LIGERAMENTE BASICO	0.00
1344	QCMYBH1302	70.0	80.0	1870	500	1270	0	0.2	LIGERAMENTE BASICO	0.00
1345	QCMYBH1302	80.0	90.0	1860	500	4960	130	0.2	LIGERAMENTE BASICO	0.01
1346	QCMYBH1302	90.0	100.0	1980	500	3090	0	0.2	LIGERAMENTE BASICO	0.01
1347	QCMYBH1302	100.0	110.8	2810	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1348	QCMYBH1302	110.8	119.1	2510	500	12810	7110	-0.8	LIGERAMENTE ACIDO	0.01
1349	QCMYBH1302	119.1	130.0	500	500	45880	43490	-5.8	ACIDO	0.01
1350	QCMYBH1302	130.0	139.8	500	500	42890	40890	-5.4	ACIDO	0.01
1351	QCMYBH1302	139.8	150.6	500	500	20380	17240	-2.2	ACIDO	0.00
1352	QCMYBH1302	150.6	160.0	500	500	31780	29790	-3.9	ACIDO	0.01
1353	QCMYBH1302	160.0	170.0	500	500	39610	36480	-4.8	ACIDO	0.00
1354	QCMYBH1302	170.0	180.0	500	500	39480	34640	-4.6	ACIDO	0.00
1355	QCMYBH1302	180.0	190.0	500	500	38170	30950	-4.1	ACIDO	0.01
1356	QCMYBH1302	190.0	200.0	500	500	44790	31190	-4.1	ACIDO	0.01
1357	QCMYBH1302	200.0	210.0	500	500	41480	36250	-4.8	ACIDO	0.00
1358	QCMYBH1302	210.0	220.0	500	500	42420	36770	-4.9	ACIDO	0.00
1359	QCMYBH1302	220.0	230.0	500	500	48830	44760	-5.9	ACIDO	0.00
1360	QCMYBH1302	230.0	240.0	500	500	39830	36740	-4.8	ACIDO	0.00
1361	QCMYBH1302	240.0	250.0	500	500	46660	41760	-5.5	ACIDO	0.00
1362	QCMYBH1302	250.0	260.0	500	500	42020	38150	-5.0	ACIDO	0.00
1363	QCMYBH1302	260.0	270.0	500	500	47370	40450	-5.4	ACIDO	0.00
1364	QCMYBH1302	270.0	280.0	500	500	43230	39820	-5.3	ACIDO	0.00
1365	QCMYBH1302	280.0	286.5	500	500	32660	30630	-4.0	ACIDO	0.00
1366	QCMYBH1302	286.5	290.5	2480	500	43980	37720	-5.0	ACIDO	0.00
1367	QCMYBH1302	290.5	300.5	2490	500	39510	35090	-4.6	ACIDO	0.01
1368	QCMYBH1302	300.5	310.0	1600	500	74270	36100	-4.8	ACIDO	0.00
1369	QCMYBH1302	310.0	320.0	1570	500	2090	60	0.2	LIGERAMENTE BASICO	0.00
1370	QCMYBH1303	0.0	10.0	1290	500	8240	5330	-0.5	LIGERAMENTE ACIDO	0.02
1371	QCMYBH1303	10.0	20.0	1560	500	12670	10040	-1.2	ACIDO	0.02
1372	QCMYBH1303	20.0	30.0	1570	500	16930	14290	-1.8	ACIDO	0.02
1373	QCMYBH1303	30.0	40.0	1690	500	26350	23870	-3.1	ACIDO	0.02
1374	QCMYBH1303	40.0	50.0	500	500	22630	19430	-2.5	ACIDO	0.02
1375	QCMYBH1303	50.0	60.0	500	500	34230	30880	-4.0	ACIDO	0.02
1376	QCMYBH1303	60.0	70.0	500	500	23950	20980	-2.7	ACIDO	0.01
1377	QCMYBH1303	70.0	79.0	500	500	26150	12000	-1.5	ACIDO	0.02
1378	QCMYBH1303	79.0	90.0	500	500	35100	32260	-4.2	ACIDO	0.02
1379	QCMYBH1303	90.0	100.0	500	500	38740	38240	-5.1	ACIDO	0.04
1380	QCMYBH1303	100.0	110.0	500	500	36290	34170	-4.5	ACIDO	0.05
1381	QCMYBH1303	110.0	120.0	500	500	20150	16510	-2.1	ACIDO	0.04
1382	QCMYBH1303	120.0	130.0	500	500	24850	22180	-2.9	ACIDO	0.09
1383	QCMYBH1303	190.0	200.0	500	500	42460	39360	-5.2	ACIDO	0.08
1384	QCMYBH1303	220.0	230.0	500	500	32730	30190	-4.0	ACIDO	0.09
1385	QCMYBH1303	230.0	239.7	500	500	25200	23020	-3.0	ACIDO	0.07
1386	QCMYBH1304	0.0	10.0	500	500	12500	2640	-0.2	LIGERAMENTE ACIDO	0.01
1387	QCMYBH1304	10.0	19.6	500	500	26750	2010	-0.1	INERTE	0.00
1388	QCMYBH1304	19.6	30.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.00
1389	QCMYBH1304	30.0	40.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1390	QCMYBH1304	40.0	50.0	500	500	27450	4170	-0.4	LIGERAMENTE ACIDO	0.00
1391	QCMYBH1304	50.0	60.8	500	500	41650	780	0.1	INERTE	0.00
1392	QCMYBH1304	60.8	69.8	500	500	53880	3990	-0.4	LIGERAMENTE ACIDO	0.00
1393	QCMYBH1304	69.8	79.6	500	500	30660	4760	-0.5	LIGERAMENTE ACIDO	0.01
1394	QCMYBH1304	79.6	90.0	500	500	35910	5910	-0.6	LIGERAMENTE ACIDO	0.01
1395	QCMYBH1304	90.0	100.4	500	500	1140	640	0.1	INERTE	0.01
1396	QCMYBH1304	100.4	110.9	500	500	54140	2930	-0.2	LIGERAMENTE ACIDO	0.00
1397	QCMYBH1304	110.9	120.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1398	QCMYBH1304	120.0	130.0	500	500	1010	510	0.1	LIGERAMENTE BASICO	0.01
1399	QCMYBH1304	130.0	140.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1400	QCMYBH1304	140.0	150.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
1401	QCMYBH1304	150.0	160.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1402	QCMYBH1304	160.0	170.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
1403	QCMYBH1304	170.0	180.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
1404	QCMYBH1304	180.8	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
1405	QCMYBH1304	190.0	200.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.04
1406	QCMYBH1304	200.0	210.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.04
1407	QCMYBH1304	210.0	220.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
1408	QCMYBH1304	220.0	230.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
1409	QCMYBH1304	230.0	239.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
1410	QCMYBH1304	239.6	249.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
1411	QCMYBH1304	249.2	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
1412	QCMYBH1304	260.0	270.0	500	500	1650	1150	0.0	INERTE	0.03
1413	QCMYBH1304	270.0	280.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
1414	QCMYBH1304	280.0	290.4	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
1415	QCMYBH1304	290.4	299.7	500	500	500	0	0.2	LIGERAMENTE BASICO	0.04
1416	QCMYBH1304	299.7	309.4	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
1417	QCMYBH1304	309.4	317.9	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
1418	QCMYBH1304	317.9	322.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
1419	QCMYBH1406	1.5	9.9	2800	50	7000	2800	-0.4	LIGERAMENTE ACIDO	0.02
1420	QCMYBH1406	9.9	20.3	4100	50	9100	7100	-1.0	LIGERAMENTE ACIDO	0.00
1421	QCMYBH1406	20.3	30.0	2400	50	5200	2300	-0.3	LIGERAMENTE ACIDO	0.00
1422	QCMYBH1406	30.0	40.0	1300	50	30000	17400	-2.4	ACIDO	0.00
1423	QCMYBH1406	40.0	49.7	1800	50	15700	11800	-1.6	ACIDO	0.00
1424	QCMYBH1406	49.7	59.8	800	50	14200	12000	-1.6	ACIDO	0.00
1425	QCMYBH1406	59.8	70.0	600	50	21200	13100	-1.8	ACIDO	0.01
1426	QCMYBH1406	70.0	80.0	1700	50	44200	38300	-5.2	ACIDO	0.01
1427	QCMYBH1406	80.0	90.0	2000	100	3400	1500	-0.2	LIGERAMENTE ACIDO	0.00
1428	QCMYBH1406	90.0	100.0	1300	50	7400	3900	-0.5	LIGERAMENTE ACIDO	0.01
1429	QCMYBH1406	100.0	109.9	800	50	18300	9100	-1.2	ACIDO	0.00
1430	QCMYBH1406	109.9	120.0	500	100	5600	3500	-0.4	LIGERAMENTE ACIDO	0.01
1431	QCMYBH1406	120.0	130.0	700	50	400	200	0.0	INERTE	0.01
1432	QCMYBH1406	130.0	140.0	400	50	800	600	-0.1	INERTE	0.01
1433	QCMYBH1406	140.0	150.0	600	50	500	200	0.0	INERTE	0.01
1434	QCMYBH1406	150.0	160.0	900	50	8000	4300	-0.6	LIGERAMENTE ACIDO	0.02
1435	QCMYBH1406	160.0	170.4	400	50	22800	13500	-1.8	ACIDO	0.03
1436	QCMYBH1406	170.4	180.0	900	50	23700	18100	-2.5	ACIDO	0.01
1437	QCMYBH1406	180.0	190.0	1300	100	17700	15600	-2.1	ACIDO	0.01
1438	QCMYBH1406	190.0	201.2	1600	50	19400	17200	-2.3	ACIDO	0.01
1439	QCMYBH1406	201.2	211.0	1100	50	3200	1300	-0.2	LIGERAMENTE ACIDO	0.03
1440	QCMYBH1406	211.0	219.8	1300	100	4700	2600	-0.3	LIGERAMENTE ACIDO	0.02

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1441	QCMYBH1406	219.8	229.7	1700	100	32800	29800	-4.0	ACIDO	0.02
1442	QCMYBH1406	229.7	240.0	1100	100	25200	13300	-1.8	ACIDO	0.02
1443	QCMYBH1406	240.0	250.0	1200	100	12800	6500	-0.9	LIGERAMENTE ACIDO	0.03
1444	QCMYBH1501	10.7	20.0	500	100	300	100	0.0	INERTE	0.01
1445	QCMYBH1501	20.0	30.0	300	50	400	100	0.0	INERTE	0.00
1446	QCMYBH1501	30.0	40.0	400	50	400	100	0.0	INERTE	0.00
1447	QCMYBH1501	40.0	50.1	500	50	400	100	0.0	INERTE	0.00
1448	QCMYBH1501	50.1	60.0	1200	100	8500	4200	-0.5	LIGERAMENTE ACIDO	0.01
1449	QCMYBH1501	60.0	69.6	1600	50	29300	26300	-3.6	ACIDO	0.01
1450	QCMYBH1501	69.6	80.1	1800	100	37800	33900	-4.6	ACIDO	0.00
1451	QCMYBH1501	80.1	90.0	2300	50	50600	46700	-6.4	ACIDO	0.00
1452	QCMYBH1501	90.0	100.0	2500	50	68500	65000	-8.9	ACIDO	0.00
1453	QCMYBH1501	100.0	110.2	3000	50	53400	49500	-6.8	ACIDO	0.00
1454	QCMYBH1501	110.2	120.0	2700	50	65100	61300	-8.4	ACIDO	0.01
1455	QCMYBH1501	120.0	129.8	3100	50	48100	45600	-6.2	ACIDO	0.00
1456	QCMYBH1501	129.8	140.0	1700	100	37000	32000	-4.3	ACIDO	0.01
1457	QCMYBH1501	140.0	150.0	1000	100	29000	17400	-2.3	ACIDO	0.00
1458	QCMYBH1501	150.0	160.0	1700	50	14200	10100	-1.4	ACIDO	0.00
1459	QCMYBH1501	160.0	170.0	1000	50	14200	9900	-1.3	ACIDO	0.00
1460	QCMYBH1501	170.0	180.0	2500	50	27100	16100	-2.2	ACIDO	0.00
1461	QCMYBH1501	180.0	190.4	2000	50	39400	36000	-4.9	ACIDO	0.00
1462	QCMYBH1501	190.4	200.0	1300	50	45300	43000	-5.9	ACIDO	0.00
1463	QCMYBH1501	200.0	210.0	1000	50	33800	26200	-3.6	ACIDO	0.00
1464	QCMYBH1501	210.0	220.0	400	50	41000	26800	-3.7	ACIDO	0.00
1465	QCMYBH1501	220.0	230.0	600	50	32500	19800	-2.7	ACIDO	0.00
1466	QCMYBH1501	230.0	239.8	400	100	700	300	0.0	INERTE	0.02
1467	QCMYBH1501	239.8	250.0	200	100	100	50	0.0	INERTE	0.01
1468	QCMYBH1501	250.0	260.0	500	50	800	100	0.0	INERTE	0.01
1469	QCMYBH1501	260.0	269.7	600	100	5800	2300	-0.3	LIGERAMENTE ACIDO	0.01
1470	QCMYBH1501	269.7	280.0	400	300	400	100	0.1	NEUTRAL	0.02
1471	QCMYBH1501	280.0	290.0	200	50	300	100	0.0	INERTE	0.04
1472	QCMYBH1501	290.0	300.0	300	50	9300	5100	-0.7	LIGERAMENTE ACIDO	0.02
1473	QCMYBH1501	300.0	310.0	200	50	5500	2900	-0.4	LIGERAMENTE ACIDO	0.01
1474	QCMYBH1501	310.0	320.0	300	100	900	300	0.0	INERTE	0.01
1475	QCMYBH1501	320.0	330.0	400	100	2900	1600	-0.2	LIGERAMENTE ACIDO	0.03
1476	QCMYBH1501	330.0	340.0	300	100	2500	1500	-0.2	LIGERAMENTE ACIDO	0.06
1477	QCMYBH1501	340.0	350.0	400	50	1400	900	-0.1	LIGERAMENTE ACIDO	0.04
1478	QCMYBH1501	350.0	360.5	400	50	800	500	-0.1	INERTE	0.03
1479	QCMYBH1501	360.5	370.0	400	300	500	100	0.1	NEUTRAL	0.03
1480	QCMYBH1501	370.0	380.0	400	100	200	100	0.0	INERTE	0.01
1481	QCMYBH1501	380.0	390.0	400	50	200	100	0.0	INERTE	0.04
1482	QCMYBH1501	390.0	399.9	400	200	300	100	0.1	INERTE	0.09
1483	QCMYBH1501	399.9	410.2	300	100	300	100	0.0	INERTE	0.08
1484	QCMYBH1501	430.0	440.4	400	200	200	100	0.1	INERTE	0.09
1485	QCMYBH1501	440.4	450.0	300	100	200	100	0.0	INERTE	0.08
1486	QCMYBH1501	450.0	460.0	400	100	200	100	0.0	INERTE	0.07
1487	QCMYBH1501	460.0	470.0	400	100	200	100	0.0	INERTE	0.10
1488	QCMYBH1502	2.9	10.0	200	50	10800	6900	-0.9	LIGERAMENTE ACIDO	0.00
1489	QCMYBH1502	10.0	20.0	200	100	300	100	0.0	INERTE	0.01
1490	QCMYBH1502	20.0	29.7	300	50	200	100	0.0	INERTE	0.00
1491	QCMYBH1502	29.7	40.0	800	50	27700	25500	-3.5	ACIDO	0.01
1492	QCMYBH1502	40.0	50.0	1300	100	41300	39700	-5.4	ACIDO	0.01
1493	QCMYBH1502	50.0	60.0	1200	50	35200	33800	-4.6	ACIDO	0.00
1494	QCMYBH1502	60.0	70.0	900	50	40600	38900	-5.3	ACIDO	0.01
1495	QCMYBH1502	70.0	80.0	1300	50	21600	18700	-2.5	ACIDO	0.01
1496	QCMYBH1502	80.0	90.3	700	50	12500	8400	-1.1	ACIDO	0.05
1497	QCMYBH1502	90.3	100.1	1800	50	32600	30500	-4.2	ACIDO	0.02
1498	QCMYBH1502	100.1	109.2	2100	50	43900	42100	-5.7	ACIDO	0.01
1499	QCMYBH1502	109.2	119.7	600	50	22900	13500	-1.8	ACIDO	0.01
1500	QCMYBH1502	119.7	130.0	1200	50	8900	5000	-0.7	LIGERAMENTE ACIDO	0.03
1501	QCMYBH1502	130.0	140.0	1000	50	7500	5500	-0.7	LIGERAMENTE ACIDO	0.02
1502	QCMYBH1502	140.0	149.9	900	50	21900	16900	-2.3	ACIDO	0.02
1503	QCMYBH1502	149.9	160.0	1300	200	19100	11600	-1.5	ACIDO	0.01
1504	QCMYBH1502	160.0	170.0	300	200	29600	15300	-2.0	ACIDO	0.02
1505	QCMYBH1502	170.0	180.5	300	50	56200	22600	-3.1	ACIDO	0.08
1506	QCMYBH1502	180.5	190.0	400	50	1500	700	-0.1	INERTE	0.02
1507	QCMYBH1502	190.0	200.0	400	50	25900	11500	-1.6	ACIDO	0.04
1508	QCMYBH1502	200.0	210.0	300	100	6700	3500	-0.4	LIGERAMENTE ACIDO	0.05
1509	QCMYBH1502	210.0	220.0	800	50	36600	18100	-2.5	ACIDO	0.01
1510	QCMYBH1502	220.0	230.0	700	50	32800	19100	-2.6	ACIDO	0.01
1511	QCMYBH1502	230.0	240.0	2000	50	20300	17700	-2.4	ACIDO	0.01
1512	QCMYBH1502	240.0	250.0	1000	50	19200	12200	-1.7	ACIDO	0.01
1513	QCMYBH1502	250.0	260.0	800	100	24400	14300	-1.9	ACIDO	0.02
1514	QCMYBH1502	260.0	269.9	400	50	44600	27900	-3.8	ACIDO	0.01
1515	QCMYBH1502	269.9	280.0	300	50	38500	19800	-2.7	ACIDO	0.02
1516	QCMYBH1502	280.0	290.0	300	50	13300	7300	-1.0	LIGERAMENTE ACIDO	0.03
1517	QCMYBH1502	290.0	300.0	300	100	4700	2800	-0.3	LIGERAMENTE ACIDO	0.04
1518	QCMYBH1502	300.0	310.0	300	50	3700	2100	-0.3	LIGERAMENTE ACIDO	0.04
1519	QCMYBH1502	310.0	320.0	300	100	1900	1100	-0.1	LIGERAMENTE ACIDO	0.05
1520	QCMYBH1502	370.0	380.0	500	50	64600	51800	-7.1	ACIDO	0.03
1521	QCMYBH1502	380.0	390.0	100	50	108600	64500	-8.8	ACIDO	0.05
1522	QCMYBH1502	400.0	410.0	600	100	38700	27600	-3.7	ACIDO	0.05
1523	QCMYBH1502	410.0	420.0	400	50	44900	33700	-4.6	ACIDO	0.04
1524	QCMYBH1502	420.0	430.0	1800	100	45500	42500	-5.8	ACIDO	0.02
1525	QCMYBH1502	430.0	439.6	1400	50	40700	38300	-5.2	ACIDO	0.03
1526	QCMYBH1502	439.6	450.2	200	50	73600	53400	-7.3	ACIDO	0.10
1527	QCMYBH1502	450.2	460.4	500	50	44000	38500	-5.3	ACIDO	0.04
1528	QCMYBH1502	460.4	470.0	200	50	24800	17500	-2.4	ACIDO	0.07
1529	QCMYBH1502	470.0	480.0	200	50	5200	3500	-0.5	LIGERAMENTE ACIDO	0.06
1530	QCMYBH1502	489.7	499.4	800	50	46300	44700	-6.1	ACIDO	0.06
1531	QCMYBH1503	0.0	10.0	400	100	200	0	0.0	INERTE	0.00
1532	QCMYBH1503	10.0	20.0	1100	50	2900	500	-0.1	INERTE	0.07
1533	QCMYBH1503	20.0	30.0	2200	50	14500	11100	-1.5	ACIDO	0.01
1534	QCMYBH1503	30.0	40.0	2300	100	51300	49100	-6.7	ACIDO	0.01
1535	QCMYBH1503	40.0	50.0	900	100	39800	37700	-5.1	ACIDO	0.01
1536	QCMYBH1503	50.0	60.0	1000	50	44200	41700	-5.7	ACIDO	0.01
1537	QCMYBH1503	60.0	70.0	900	100	41500	39800	-5.4	ACIDO	0.00
1538	QCMYBH1503	70.0	80.0	1000	50	35200	33700	-4.6	ACIDO	0.00
1539	QCMYBH1503	80.0	90.0	1100	100	33300	31600	-4.3	ACIDO	0.01
1540	QCMYBH1503	90.0	100.1	1800	100	25500	23400	-3.2	ACIDO	0.01
1541	QCMYBH1503	100.9	109.4	1800	50	13300	7100	-1.0	LIGERAMENTE ACIDO	0.01
1542	QCMYBH1503	109.4	120.0	700	200	18000	10500	-1.4	ACIDO	0.01
1543	QCMYBH1503	120.0	130.0	1000	100	17800	9600	-1.3	ACIDO	0.01
1544	QCMYBH1503	130.0	140.0	1400	50	10700	5400	-0.7	LIGERAMENTE ACIDO	0.01
1545	QCMYBH1503	140.0	149.6	2100	100	50800	47100	-6.4	ACIDO	0.01
1546	QCMYBH1503	149.6	160.0	2100	200	62700	60100	-8.2	ACIDO	0.01
1547	QCMYBH1503	160.0	170.0	2000	50	27200	22800	-3.1	ACIDO	0.01
1548	QCMYBH1503	170.0	180.0	2000	50	17100	12700	-1.7	ACIDO	0.00
1549	QCMYBH1503	180.0	190.0	900	50	27700	15000	-2.0	ACIDO	0.00
1550	QCMYBH1503	190.0	200.0	300	200	40900	21600	-2.9	ACIDO	0.00
1551	QCMYBH1504	280.0	290.0	1300	50	48700	41600	-5.7	ACIDO	0.08
1552	QCMYBH1504	310.0	320.0	2200	50	40800	35400	-4.8	ACIDO	0.08
1553	QCMYBH1504	320.0	330.0	1200	50	45300	40000	-5.5	ACIDO	0.05
1554	QCMYBH1504	330.0	340.5	700	50	62100	51200	-7.0	ACIDO	0.08
1555	QCMYBH1509	4.4	10.0	500	100	40700	22600	-3.1	ACIDO	0.01
1556	QCMYBH1509	10.0	20.0	600	50	41400	22200	-3.0	ACIDO	0.01
1557	QCMYBH1509	20.0	30.0	1400	50	57700	29200	-4.0	ACIDO	0.02
1558	QCMYBH1509	30.0	40.8	900	100	51600	22100	-3.0	ACIDO	0.01
1559	QCMYBH1509	40.8	50.0	1200	50	15500	8500	-1.1	ACIDO	0.03
1560	QCMYBH1509	50.0	59.8	2600	50	19700	15200	-2.1	ACIDO	0.00
1561	QCMYBH1509	59.8	70.0	1000	50	32700	29900	-4.1	ACIDO	0.00
1562	QCMYBH1509	70.0	80.0	600	50	24300	18600	-2.5	ACIDO	0.00
1563	QCMYBH1509	80.0	90.0	600	50	14900	7900	-1.1	ACIDO	0.01
1564	QCMYBH1509	90.0	100.7	1400	50	21700	13200	-1.8	ACIDO	0.01
1565	QCMYBH1509	100.7	110.0	600	50	54600	23700	-3.2	ACIDO	0.02
1566	QCMYBH1509	110.0	120.0	1300	50	21900	15000	-2.0	ACIDO	0.01
1567	QCMYBH1509	120.0	130.0	1300	50	33200	30400	-4.1	ACIDO	0.01
1568	QCMYBH1509	130.0	140.0	1900	50	46600	45200	-6.2	ACIDO	0.00
1569	QCMYBH1509	140.0	150.0	2500	100	47000	45700	-6.2	ACIDO	0.01
1570	QCMYBH1509	150.0	160.0	4700	100	35900	34700	-4.7	ACIDO	0.00
1571	QCMYBH1509	160.0	170.5	2800	50	47000	44900	-6.1	ACIDO	0.00
1572	QCMYBH1509	170.5	180.0	200	100	58600	41500	-5.6	ACIDO	0.01
1573	QCMYBH1509	180.0	190.0	600	100	48400	44500	-6.1	ACIDO	0.01
1574	QCMYBH1509	190.0	200.0	500	50	47800	43800	-6.0	ACIDO	0.01
1575	QCMYBH1509	200.0	210.0	3900	100	34400	33100	-4.5	ACIDO	0.01
1576	QCMYBH1509	210.0	220.0	2600	100	38500	32800	-4.5	ACIDO	0.02
1577	QCMYBH1509	220.0	230.0	400	200	34400	22800	-3.1	ACIDO	0.02
1578	QCMYBH1509	230.0	240.0	400	100	17600	9700	-1.3	ACIDO	0.03
1579	QCMYBH1509	240.0	250.0	900	50	19500	9500	-1.3	ACIDO	0.01
1580	QCMYBH1509	250.0	260.0	600	100	9200	4900	-0.6	LIGERAMENTE ACIDO	0.03
1581	QCMYBH1509	260.0	270.0	500	50	10800	5300	-0.7	LIGERAMENTE ACIDO	0.01
1582	QCMYBH1509	270.0	280.0	600	50	21500	10400	-1.4	ACIDO	0.01
1583	QCMYBH1509	280.0	290.0	400	50	21300	12900	-1.7	ACIDO	0.05
1584	QCMYBH1509	290.0	300.5	600	100	17400	9600	-1.3	ACIDO	0.05
1585	QCMYBH1509	300.5	310.0	500	100	14800	7800	-1.0	ACIDO	0.03
1586	QCMYBH1509	310.0	320.0	300	100	9500	5000	-0.6	LIGERAMENTE ACIDO	0.02
1587	QCMYBH1509	320.0	330.0	200	50	17000	14500	-2.0	ACIDO	0.02
1588	QCMYBH1509	330.0	340.0	500	50	52700	47900	-6.5	ACIDO	0.02
1589	QCMYBH1509	340.0	350.0	700	100	90500	78900	-10.8	ACIDO	0.01
1590	QCMYBH1509	350.0	359.8	1100	50	71100	58100	-7.9	ACIDO	0.04
1591	QCMYBH1509	359.8	370.0	300	50	60900	47000	-6.4	ACIDO	0.01
1592	QCMYBH1509	370.0	380.0	300	50	89200	66200	-9.1	ACIDO	0.02
1593	QCMYBH1509	380.0	390.0	800	100	83100	67500	-9.2	ACIDO	0.01
1594	QCMYBH1509	390.0	395.3	300	50	92900	71600	-9.8	ACIDO	0.01
1595	QCMYBH1510	0.0	10.0	700	100	40900	24900	-3.4	ACIDO	0.06
1596	QCMYBH1510	10.0	20.7	400	200	51200	25700	-3.4	ACIDO	0.04
1597	QCMYBH1510	20.7	29.6	300	50	22500	13600	-1.8	ACIDO	0.04
1598	QCMYBH1510	29.6	40.0	300	50	59000	29000	-4.0	ACIDO	0.04
1599	QCMYBH1510	40.0	50.3	500	50	31100	19600	-2.7	ACIDO	0.06
1600	QCMYBH1510	50.3	60.4	500	50	11000	5900	-0.8	LIGERAMENTE ACIDO	0.04
1601	QCMYBH1510	60.4	70.0	300	50	45900	23000	-3.1	ACIDO	0.04
1602	QCMYBH1510	70.0	80.0	200	100	42300	20800	-2.8	ACIDO	0.04
1603	QCMYBH1510	80.0	90.1	200	50	41200	22100	-3.0	ACIDO	0.02
1604	QCMYBH1510	90.1	100.0	300	100	57700	29900	-4.1	ACIDO	0.03
1605	QCMYBH1510	100.0	110.0	400	100	38700	20400	-2.8	ACIDO	0.03
1606	QCMYBH1510	110.0	120.0	700	100	45600	23600	-3.2	ACIDO	0.02
1607	QCMYBH1510	120.0	130.2	500	100	27300	15000	-2.0	ACIDO	0.05
1608	QCMYBH1510	130.2	141.4	400	100	44700	21800	-2.9	ACIDO	0.06
1609	QCMYBH1510	143.0	150.0	800	100	9100	4200	-0.5	LIGERAMENTE ACIDO	0.03
1610	QCMYBH1510	150.0	159.8	700	100	17100	8800	-1.2	ACIDO	0.02
1611	QCMYBH1510	159.8	169.8	900	100	35000	31400	-4.3	ACIDO	0.01
1612	QCMYBH1510	169.8	180.0	1000	200	22900	19300	-2.6	ACIDO	0.01
1613	QCMYBH1510	180.0	190.0	1300	50	37400	35600	-4.9	ACIDO	0.01
1614	QCMYBH1510	190.0	200.0	1500	100	44500	43000	-5.9	ACIDO	0.01
1615	QCMYBH1510	200.0	210.0	1900	100	49600	48100	-6.6	ACIDO	0.00
1616	QCMYBH1510	210.0	220.0	1800	50	46100	44600	-6.1	ACIDO	0.01
1617	QCMYBH1510	220.0	229.6	1400	50	17200	15200	-2.1	ACIDO	0.00
1618	QCMYBH1510	229.6	240.0	500	100	9000	5100	-0.7	LIGERAMENTE ACIDO	0.01
1619	QCMYBH1510	240.0	250.0	500	50	20600	12400	-1.7	ACIDO	0.02
1620	QCMYBH1510	250.0	260.1	300	100	33100	18000	-2.4	ACIDO	0.00
1621	QCMYBH1510	260.1	270.0	500	500	12700	6500	-0.7	LIGERAMENTE ACIDO	0.00
1622	QCMYBH1510	270.0	280.5	400	400	37100	21300	-2.8	ACIDO	0.00
1623	QCMYBH1510	280.5	290.0	300	50	32400	20200	-2.7	ACIDO	0.00
1624	QCMYBH1510	290.0	300.0	400	100	49800	34800	-4.7	ACIDO	0.00
1625	QCMYBH1510	300.0	310.0	400	100	34300	20100	-2.7	ACIDO	0.00
1626	QCMYBH1510	310.0	317.4	500	50	51900	26900	-3.7	ACIDO	0.00
1627	QCMYBH1510	321.5	329.0	700	50	62600	28000	-3.8	ACIDO	0.00
1628	QCMYBH1510	330.0	331.0	1200	50	12500	5100	-0.7	LIGERAMENTE ACIDO	0.01
1629	QCMYBH1510	335.0	340.0	900	50	46800	21900	-3.0	ACIDO	0.01
1630	QCMYBH1510	340.0	350.0	400	50	83600	35900	-4.9	ACIDO	0.01
1631	QCMYBH1510	350.0	360.0	800	50	39800	19300	-2.6	ACIDO	0.02
1632	QCMYBH1510	360.0	370.0	700	50	68100	49500	-6.8	ACIDO	0.02
1633	QCMYBH1510	370.0	380.0	1400	50	38600	37100	-5.1	ACIDO	0.00
1634	QCMYBH1510	380.0	390.1	1300	50	37200	35800	-4.9	ACIDO	0.00
1635	QCMYBH1511	2.0	10.0	700	50	52900	17800	-2.4	ACIDO	0.01
1636	QCMYBH1511	10.0	20.0	300	50	56200	16600	-2.3	ACIDO	0.01
1637	QCMYBH1511	20.0	30.0	400	100	55200	22400	-3.0	ACIDO	0.01
1638	QCMYBH1511	30.0	40.0	500	50	55400	15700	-2.1	ACIDO	0.01
1639	QCMYBH1511	40.0	50.0	400	100	44900	20600	-2.8	ACIDO	0.01
1640	QCMYBH1511	50.0	60.0	300	50	42100	22000	-3.0	ACIDO	0.01
1641	QCMYBH1511	60.0	70.0	500	400	36800	23000	-3.0	ACIDO	0.01
1642	QCMYBH1511	70.0	80.0	400	50	45700	26200	-3.6	ACIDO	0.01
1643	QCMYBH1511	80.0	90.0	300	50	58100	22100	-3.0	ACIDO	0.01
1644	QCMYBH1511	90.0	100.0	300	50	62400	22300	-3.0	ACIDO	0.01
1645	QCMYBH1511	100.0	110.0	300	200	53600	19300	-2.6	ACIDO	0.01
1646	QCMYBH1511	110.0	120.0	300	50	44900	19600	-2.7	ACIDO	0.01
1647	QCMYBH1512	2.6	10.2	400	50	43800	26600	-3.6	ACIDO	0.01
1648	QCMYBH1512	10.2	20.0	400	50	50300	29200	-4.0	ACIDO	0.01
1649	QCMYBH1512	20.0	31.1	400	50	41600	24200	-3.3	ACIDO	0.01
1650	QCMYBH1512	31.1	40.5	3700	50	35300	32700	-4.5	ACIDO	0.01
1651	QCMYBH1512	40.5	50.0	4600	50	38000	35400	-4.8	ACIDO	0.00
1652	QCMYBH1512	50.0	60.0	2800	50	39400	37300	-5.1	ACIDO	0.00
1653	QCMYBH1512	60.0	70.0	1900	50	33400	31300	-4.3	ACIDO	0.01
1654	QCMYBH1512	70.0	80.0	1400	50	36800	34600	-4.7	ACIDO	0.01
1655	QCMYBH1512	80.0	90.5	2400	50	52100	49300	-6.7	ACIDO	0.00
1656	QCMYBH1512	90.5	100.0	2000	50	38700	36400	-5.0	ACIDO	0.00
1657	QCMYBH1512	100.0	110.0	2800	50	46200	43000	-5.9	ACIDO	0.01
1658	QCMYBH1512	110.0	120.0	5600	50	40100	37600	-5.1	ACIDO	0.01
1659	QCMYBH1512	120.0	130.0	400	50	34000	18100	-2.5	ACIDO	0.00
1660	QCMYBH1512	130.0	140.0	300	50	1300	500	-0.1	INERTE	0.00
1661	QCMYBH1512	140.0	151.0	300	50	31500	19000	-2.6	ACIDO	0.01
1662	QCMYBH1512	151.0	160.0	300	50	36300	19100	-2.6	ACIDO	0.01
1663	QCMYBH1512	160.0	170.0	200	50	31800	15800	-2.1	ACIDO	0.01
1664	QCMYBH1512	170.0	180.1	400	50	34900	18300	-2.5	ACIDO	0.00
1665	QCMYBH1513	6.3	12.0	300	100	400	200	0.0	INERTE	0.03
1666	QCMYBH1513	12.0	20.0	200	100	300	0	0.0	INERTE	0.03
1667	QCMYBH1513	20.0	30.0	200	200	300	100	0.1	INERTE	0.03
1668	QCMYBH1513	30.0	40.0	100	50	200	0	0.0	INERTE	0.02
1669	QCMYBH1513	40.0	50.0	300	50	200	100	0.0	INERTE	0.01
1670	QCMYBH1513	50.0	60.0	200	100	200	100	0.0	INERTE	0.01
1671	QCMYBH1513	60.0	70.0	300	50	400	300	0.0	INERTE	0.02
1672	QCMYBH1513	70.0	80.2	300	50	200	0	0.0	INERTE	0.02
1673	QCMYBH1513	80.2	90.0	200	100	200	100	0.0	INERTE	0.02
1674	QCMYBH1513	90.0	100.7	300	50	200	100	0.0	INERTE	0.06
1675	QCMYBH1513	100.7	110.0	200	200	200	0	0.1	INERTE	0.01
1676	QCMYBH1513	110.0	119.9	300	50	200	100	0.0	INERTE	0.01
1677	QCMYBH1513	119.9	130.0	200	100	200	0	0.0	INERTE	0.02
1678	QCMYBH1513	130.0	140.0	200	100	200	100	0.0	INERTE	0.02
1679	QCMYBH1513	140.0	149.6	200	200	200	100	0.1	INERTE	0.02
1680	QCMYBH1513	149.6	160.0	300	50	200	100	0.0	INERTE	0.03
1681	QCMYBH1513	160.0	170.2	300	50	100	0	0.0	INERTE	0.03
1682	QCMYBH1513	170.2	180.0	200	50	200	0	0.0	INERTE	0.06
1683	QCMYBH1513	180.0	190.0	100	50	200	100	0.0	INERTE	0.06
1684	QCMYBH1513	190.0	200.0	300	100	200	100	0.0	INERTE	0.04
1685	QCMYBH1513	200.0	210.0	400	100	200	100	0.0	INERTE	0.02
1686	QCMYBH1513	210.0	214.4	300	50	200	100	0.0	INERTE	0.05
1687	QCMYBH1514	0.0	10.0	300	100	66700	19800	-2.7	ACIDO	0.00
1688	QCMYBH1514	10.0	14.0	500	100	70600	20300	-2.7	ACIDO	0.00
1689	QCMYBH1514	20.0	26.0	300	200	47600	18400	-2.4	ACIDO	0.00
1690	QCMYBH1514	30.0	40.0	100	50	42000	19200	-2.6	ACIDO	0.00
1691	QCMYBH1514	40.0	50.2	200	100	1300	800	-0.1	NEUTRAL	0.01
1692	QCMYBH1514	50.2	60.0	500	100	800	300	0.0	INERTE	0.01
1693	QCMYBH1514	60.0	70.0	300	100	700	200	0.0	INERTE	0.00
1694	QCMYBH1514	70.0	80.0	300	200	300	100	0.1	INERTE	0.00
1695	QCMYBH1514	80.0	90.0	500	50	25300	14300	-1.9	ACIDO	0.01
1696	QCMYBH1514	90.0	100.1	300	50	17900	10400	-1.4	ACIDO	0.00
1697	QCMYBH1514	100.1	109.9	400	50	20600	11600	-1.6	ACIDO	0.00
1698	QCMYBH1514	109.9	119.6	600	100	44400	22500	-3.0	ACIDO	0.00
1699	QCMYBH1514	119.6	130.4	200	50	14500	8500	-1.1	ACIDO	0.00
1700	QCMYBH1514	130.4	140.0	700	50	41600	24500	-3.3	ACIDO	0.00
1701	QCMYBH1514	140.0	150.0	100	100	300	200	0.0	INERTE	0.00
1702	QCMYBH1514	150.0	160.0	100	50	300	200	0.0	INERTE	0.01
1703	QCMYBH1514	160.0	170.0	200	50	9600	5500	-0.7	LIGERAMENTE ACIDO	0.06
1704	QCMYBH1514	170.0	179.8	100	50	200	100	0.0	INERTE	0.01
1705	QCMYBH1514	179.8	190.0	100	100	800	500	0.0	INERTE	0.00
1706	QCMYBH1514	190.0	200.0	100	50	600	200	0.0	INERTE	0.03
1707	QCMYBH1514	200.0	210.0	100	100	4800	3300	-0.4	LIGERAMENTE ACIDO	0.03
1708	QCMYBH1514	210.0	220.0	100	100	2000	1100	-0.1	LIGERAMENTE ACIDO	0.04
1709	QCMYBH1514	220.0	230.0	300	100	300	0	0.0	INERTE	0.02
1710	QCMYBH1514	230.0	240.0	400	100	300	0	0.0	INERTE	0.02
1711	QCMYBH1514	240.0	250.0	50	50	600	200	0.0	INERTE	0.05
1712	QCMYBH1514	250.0	260.0	400	100	200	0	0.0	INERTE	0.04
1713	QCMYBH1514	260.0	268.0	100	50	200	100	0.0	INERTE	0.06
1714	QCMYBH1514	268.0	272.8	300	50	300	100	0.0	INERTE	0.07
1715	QUE-001	0.0	10.0	500	200	300	0	0.1	INERTE	0.10
1716	QUE-001	30.0	40.0	700	50	200	0	0.0	INERTE	0.06
1717	QUE-001	70.0	80.0	800	100	200	0	0.0	INERTE	0.08
1718	QUE-001	90.0	100.0	700	100	300	0	0.0	INERTE	0.06
1719	QUE-001	100.0	110.0	600	100	300	0	0.0	INERTE	0.04
1720	QUE-001	110.0	120.0	700	50	200	0	0.0	INERTE	0.04
1721	QUE-001	130.0	140.0	600	100	400	0	0.0	INERTE	0.09
1722	QUE-001	220.0	229.3	800	200	200	100	0.1	INERTE	0.06
1723	QUE-001E	4.0	10.0	200	50	700	500	-0.1	INERTE	0.07
1724	QUE-001E	10.0	20.0	900	100	700	200	0.0	INERTE	0.08
1725	QUE-001E	20.0	30.0	1000	300	200	0	0.1	LIGERAMENTE BASICO	0.06
1726	QUE-001E	30.0	40.0	800	50	300	100	0.0	INERTE	0.07
1727	QUE-001E	40.0	50.0	1200	50	300	0	0.0	INERTE	0.07
1728	QUE-001E	50.0	60.0	1500	200	300	100	0.1	INERTE	0.05
1729	QUE-001E	60.0	70.0	900	200	200	0	0.1	INERTE	0.07
1730	QUE-001E	70.0	80.0	900	100	100	0	0.0	INERTE	0.07
1731	QUE-001E	80.0	90.0	1800	200	200	0	0.1	INERTE	0.09
1732	QUE-002	109.9	120.0	600	100	600	300	0.0	INERTE	0.09
1733	QUE-002	120.0	130.0	600	100	700	100	0.0	INERTE	0.10
1734	QUE-002	130.0	134.0	400	100	11900	1400	-0.2	LIGERAMENTE ACIDO	0.05
1735	QUE-002	134.0	140.0	400	100	11900	1400	-0.2	LIGERAMENTE ACIDO	0.05
1736	QUE-002	140.0	150.0	400	100	26100	3000	-0.4	LIGERAMENTE ACIDO	0.07
1737	QUE-002	150.0	160.0	600	50	26400	3100	-0.4	LIGERAMENTE ACIDO	0.04
1738	QUE-002	160.0	170.0	700	100	33200	4600	-0.6	LIGERAMENTE ACIDO	0.05
1739	QUE-002	170.0	180.0	600	50	29300	11100	-1.5	ACIDO	0.05
1740	QUE-002	180.0	190.0	1100	100	33200	26400	-3.6	ACIDO	0.03
1741	QUE-002	190.0	200.7	700	100	58000	41600	-5.7	ACIDO	0.06
1742	QUE-003	0.0	10.0	1600	50	33700	8100	-1.1	ACIDO	0.04
1743	QUE-003	10.0	20.0	2800	50	33200	24800	-3.4	ACIDO	0.02
1744	QUE-003	20.0	30.0	5500	50	26400	18100	-2.5	ACIDO	0.03
1745	QUE-003	30.0	39.8	6800	50	6000	2000	-0.3	LIGERAMENTE ACIDO	0.02
1746	QUE-003	39.8	50.0	2100	50	19200	10900	-1.5	ACIDO	0.02
1747	QUE-003	50.0	60.0	1600	50	15900	6800	-0.9	LIGERAMENTE ACIDO	0.02
1748	QUE-003	60.0	70.0	2400	50	20100	9800	-1.3	ACIDO	0.03
1749	QUE-003	70.0	80.1	1800	50	10400	4900	-0.7	LIGERAMENTE ACIDO	0.01
1750	QUE-003	80.1	90.0	7200	50	18100	7700	-1.0	ACIDO	0.06
1751	QUE-003	100.0	110.0	4700	50	28700	16500	-2.2	ACIDO	0.09
1752	QUE-003	110.0	120.0	2900	50	27000	21600	-2.9	ACIDO	0.06
1753	QUE-003	120.0	129.5	5000	100	7800	4300	-0.6	LIGERAMENTE ACIDO	0.04
1754	QUE-003	140.0	150.0	900	50	21500	1900	-0.2	LIGERAMENTE ACIDO	0.09
1755	QUE-004	10.2	20.0	400	50	24800	5000	-0.7	LIGERAMENTE ACIDO	0.10
1756	QUE-004	250.2	260.0	100	50	300	100	0.0	INERTE	0.05
1757	QUE-004	260.0	269.9	200	100	50	0	0.0	INERTE	0.09
1758	QUE-004	269.9	279.2	600	100	400	100	0.0	INERTE	0.06
1759	QUE-004	279.2	290.0	300	100	100	50	0.0	INERTE	0.08
1760	QUE-005	20.0	30.6	300	50	100	50	0.0	INERTE	0.05
1761	QUE-005	30.6	40.0	300	50	200	100	0.0	INERTE	0.06
1762	QUE-005	40.0	50.0	400	50	200	100	0.0	INERTE	0.06
1763	QUE-005	50.0	59.9	400	50	200	100	0.0	INERTE	0.07
1764	QUE-005	59.9	70.0	200	50	200	100	0.0	INERTE	0.08
1765	QUE-005	80.0	90.0	200	50	200	100	0.0	INERTE	0.10
1766	QUE-005	90.0	100.0	200	50	300	100	0.0	INERTE	0.07
1767	QUE-006	0.0	10.0	400	50	300	100	0.0	INERTE	0.06
1768	QUE-006	10.0	20.0	200	50	200	100	0.0	INERTE	0.05
1769	QUE-006	20.0	30.0	100	50	200	100	0.0	INERTE	0.04
1770	QUE-007	30.0	40.5	1100	50	12100	2600	-0.3	LIGERAMENTE ACIDO	0.06
1771	QUE-007	60.0	70.0	800	50	200	0	0.0	INERTE	0.08
1772	QUE-007	131.1	140.2	500	50	34300	4400	-0.6	LIGERAMENTE ACIDO	0.08
1773	QUE-007	160.0	170.0	1600	50	22400	1600	-0.2	LIGERAMENTE ACIDO	0.08
1774	QUE-007	170.0	180.0	1100	50	7700	0	0.0	INERTE	0.06
1775	QUE-007	180.0	190.0	300	50	3300	500	-0.1	INERTE	0.05
1776	QUE-007	190.0	200.0	400	50	9800	2200	-0.3	LIGERAMENTE ACIDO	0.05
1777	QUE-007	200.0	210.0	500	50	3400	800	-0.1	INERTE	0.06
1778	QUE-007	220.0	230.0	300	100	1100	200	0.0	INERTE	0.08
1779	QUE-008	0.0	10.0	2600	200	33000	9200	-1.2	ACIDO	0.04
1780	QUE-008	10.0	20.0	1500	300	17100	4100	-0.5	LIGERAMENTE ACIDO	0.03
1781	QUE-008	20.0	30.0	800	50	600	0	0.0	INERTE	0.01
1782	QUE-008	30.0	40.0	500	50	500	100	0.0	INERTE	0.01
1783	QUE-008	40.0	50.0	400	50	200	0	0.0	INERTE	0.04
1784	QUE-008	50.0	60.0	1000	300	400	100	0.1	INERTE	0.07
1785	QUE-008	60.0	70.0	900	300	500	100	0.1	INERTE	0.02
1786	QUE-008	70.0	79.7	1000	300	500	100	0.1	INERTE	0.03
1787	QUE-009	2.0	10.0	2400	50	27500	4500	-0.6	LIGERAMENTE ACIDO	0.03
1788	QUE-009	10.0	20.0	3600	50	4000	200	0.0	INERTE	0.05
1789	QUE-009	20.0	30.0	3000	50	9900	1000	-0.1	LIGERAMENTE ACIDO	0.05
1790	QUE-009	30.0	40.0	700	50	27900	5800	-0.8	LIGERAMENTE ACIDO	0.03
1791	QUE-009	40.0	50.0	1500	50	9000	1800	-0.2	LIGERAMENTE ACIDO	0.04
1792	QUE-009	50.0	60.0	700	50	25200	5600	-0.7	LIGERAMENTE ACIDO	0.04
1793	QUE-009	60.0	70.0	700	50	52900	7400	-1.0	LIGERAMENTE ACIDO	0.07
1794	QUE-009	70.0	80.0	500	50	28900	4500	-0.6	LIGERAMENTE ACIDO	0.07
1795	QUE-009	80.0	90.0	900	50	19600	2600	-0.3	LIGERAMENTE ACIDO	0.10
1796	QUE-009	90.0	99.9	1300	50	32300	3700	-0.5	LIGERAMENTE ACIDO	0.07
1797	QUE-009	140.8	150.0	600	50	43200	7200	-1.0	LIGERAMENTE ACIDO	0.09
1798	QUE-009	190.0	200.0	400	50	8700	1900	-0.2	LIGERAMENTE ACIDO	0.09
1799	QUE-009	260.0	270.0	1400	300	25900	20900	-2.8	ACIDO	0.07
1800	QUE-009	280.0	290.0	1500	400	31600	24800	-3.3	ACIDO	0.08

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1801	QUE-010	2.0	10.0	9100	50	500	0	0.0	INERTE	0.01
1802	QUE-010	10.0	20.0	6500	50	9000	0	0.0	INERTE	0.01
1803	QUE-010	20.0	30.0	5100	50	12800	5600	-0.7	LIGERAMENTE ACIDO	0.01
1804	QUE-010	30.0	40.0	3100	50	10000	5900	-0.8	LIGERAMENTE ACIDO	0.01
1805	QUE-010	40.0	50.0	4400	50	16300	10900	-1.5	ACIDO	0.01
1806	QUE-010	50.0	60.0	8400	50	12400	7400	-1.0	LIGERAMENTE ACIDO	0.01
1807	QUE-010	60.0	70.0	10000	700	1400	300	0.2	LIGERAMENTE BASICO	0.01
1808	QUE-010	70.0	80.8	7800	50	8700	4400	-0.6	LIGERAMENTE ACIDO	0.01
1809	QUE-010	80.8	89.9	1800	50	18600	1300	-0.2	LIGERAMENTE ACIDO	0.01
1810	QUE-010	89.9	100.0	6600	300	37400	16800	-2.2	ACIDO	0.01
1811	QUE-010	100.0	104.0	6200	300	24100	17100	-2.2	ACIDO	0.01
1812	QUE-010	104.0	110.0	6200	300	24100	17100	-2.2	ACIDO	0.01
1813	QUE-010	110.0	120.0	1600	400	15200	6600	-0.8	LIGERAMENTE ACIDO	0.01
1814	QUE-010	120.0	130.0	1500	300	31900	18900	-2.5	ACIDO	0.01
1815	QUE-010	130.0	140.0	1200	600	36600	29300	-3.8	ACIDO	0.01
1816	QUE-010	140.0	150.0	2600	1300	33200	25300	-3.0	ACIDO	0.01
1817	QUE-010	150.0	160.0	1000	50	33200	25900	-3.5	ACIDO	0.01
1818	QUE-010	160.0	170.0	1400	200	24500	16800	-2.2	ACIDO	0.01
1819	QUE-010	170.0	180.0	600	100	9900	4700	-0.6	LIGERAMENTE ACIDO	0.01
1820	QUE-010	180.0	190.0	400	50	41500	4300	-0.6	LIGERAMENTE ACIDO	0.01
1821	QUE-011	0.0	10.0	2000	50	31300	18500	-2.5	ACIDO	0.02
1822	QUE-011	10.0	20.0	1900	50	42200	36300	-5.0	ACIDO	0.01
1823	QUE-011	20.0	30.0	1700	50	32700	26700	-3.6	ACIDO	0.01
1824	QUE-011	30.0	40.0	2000	50	38900	30800	-4.2	ACIDO	0.01
1825	QUE-011	40.0	50.0	1200	50	38600	21100	-2.9	ACIDO	0.01
1826	QUE-011	50.0	60.0	1400	50	36900	20600	-2.8	ACIDO	0.03
1827	QUE-011	60.0	70.0	1300	50	35500	6100	-0.8	LIGERAMENTE ACIDO	0.02
1828	QUE-011	70.0	80.4	1000	50	47000	17800	-2.4	ACIDO	0.03
1829	QUE-011	80.4	89.8	1200	50	42600	10800	-1.5	ACIDO	0.03
1830	QUE-011	89.8	99.7	1300	50	46700	8200	-1.1	ACIDO	0.03
1831	QUE-011	99.7	110.0	1200	50	51200	10500	-1.4	ACIDO	0.02
1832	QUE-011	110.0	120.0	800	50	25700	2700	-0.4	LIGERAMENTE ACIDO	0.02
1833	QUE-011	120.0	130.0	1200	50	34300	3700	-0.5	LIGERAMENTE ACIDO	0.05
1834	QUE-011	130.0	140.0	3700	50	15800	6700	-0.9	LIGERAMENTE ACIDO	0.03
1835	QUE-011	140.0	150.0	1100	50	26200	13300	-1.8	ACIDO	0.04
1836	QUE-011	150.0	160.0	1300	50	33600	13500	-1.8	ACIDO	0.05
1837	QUE-011	160.0	170.0	3200	50	8400	5200	-0.7	LIGERAMENTE ACIDO	0.02
1838	QUE-011	170.0	180.0	1900	50	24700	17500	-2.4	ACIDO	0.03
1839	QUE-011	180.0	190.0	2700	50	24900	18100	-2.5	ACIDO	0.03
1840	QUE-011	190.0	200.0	1100	700	31300	12000	-1.4	ACIDO	0.05
1841	QUE-011	200.0	210.0	1300	500	18100	11000	-1.3	ACIDO	0.06
1842	QUE-011	210.0	220.0	1100	400	18000	7000	-0.8	LIGERAMENTE ACIDO	0.07
1843	QUE-011	220.0	230.0	100	50	6900	1600	-0.2	LIGERAMENTE ACIDO	0.07
1844	QUE-011	240.0	249.8	100	50	18500	3900	-0.5	LIGERAMENTE ACIDO	0.06
1845	QUE-011	249.8	260.0	500	200	33400	6300	-0.8	LIGERAMENTE ACIDO	0.08
1846	QUE-011	260.0	270.0	200	100	16700	3500	-0.4	LIGERAMENTE ACIDO	0.05
1847	QUE-013	40.0	50.0	400	50	400	300	0.0	INERTE	0.08
1848	QUE-013	50.0	60.0	400	50	400	200	0.0	INERTE	0.08
1849	QUE-013	60.0	70.0	400	50	400	200	0.0	INERTE	0.04
1850	QUE-013	70.0	80.0	500	50	400	300	0.0	INERTE	0.04
1851	QUE-013	80.0	90.0	500	50	300	250	0.0	INERTE	0.05
1852	QUE-013	90.0	100.0	400	50	300	250	0.0	INERTE	0.07
1853	QUE-013	100.0	110.0	500	50	400	300	0.0	INERTE	0.08
1854	QUE-013	110.0	120.0	500	50	400	300	0.0	INERTE	0.08
1855	QUE-013	120.0	130.0	500	50	400	200	0.0	INERTE	0.04
1856	QUE-013	130.0	140.0	500	50	400	200	0.0	INERTE	0.04
1857	QUE-013	140.0	150.0	400	50	500	300	0.0	INERTE	0.05
1858	QUE-013	150.0	160.0	400	50	300	200	0.0	INERTE	0.07
1859	QUE-013	160.0	170.0	400	50	400	300	0.0	INERTE	0.04
1860	QUE-013	180.0	190.0	400	50	400	350	0.0	INERTE	0.07
1861	QUE-013	190.0	196.0	400	50	400	350	0.0	INERTE	0.06
1862	QUE-013	200.0	210.0	200	50	400	100	0.0	INERTE	0.05
1863	QUE-013	210.0	220.0	200	50	300	100	0.0	INERTE	0.05
1864	QUE-013	220.0	230.0	200	50	300	100	0.0	INERTE	0.06
1865	QUE-013	230.0	240.0	300	50	200	0	0.0	INERTE	0.06
1866	QUE-013	240.0	250.0	50	50	50	0	0.0	INERTE	0.05
1867	QUE-013	250.0	260.0	50	50	200	100	0.0	INERTE	0.06
1868	QUE-013	260.0	270.0	200	50	200	100	0.0	INERTE	0.04
1869	QUE-013	270.0	279.6	100	50	100	0	0.0	INERTE	0.02
1870	QUE-013	279.6	290.0	100	50	200	0	0.0	INERTE	0.02
1871	QUE-014	50.0	60.0	200	50	700	100	0.0	INERTE	0.01
1872	QUE-014	60.0	70.0	500	50	700	100	0.0	INERTE	0.02
1873	QUE-014	70.0	80.0	600	50	800	100	0.0	INERTE	0.03
1874	QUE-015	50.3	60.0	200	50	400	0	0.0	INERTE	0.01
1875	QUE-015	60.0	69.6	200	100	600	100	0.0	INERTE	0.01
1876	QUE-015	69.6	78.3	200	50	600	100	0.0	INERTE	0.01
1877	QUE-016	0.0	10.0	1000	50	300	200	0.0	INERTE	0.02
1878	QUE-016	10.0	20.0	700	50	300	200	0.0	INERTE	0.01
1879	QUE-016	20.0	30.0	800	50	300	200	0.0	INERTE	0.01
1880	QUE-016	30.0	36.0	700	50	300	200	0.0	INERTE	0.01
1881	QUE-016	40.0	50.0	500	50	200	0	0.0	INERTE	0.01
1882	QUE-016	50.0	60.0	200	50	200	0	0.0	INERTE	0.01
1883	QUE-016	60.0	70.0	100	50	200	100	0.0	INERTE	0.01
1884	QUE-017	129.8	140.0	600	50	51900	7100	-1.0	LIGERAMENTE ACIDO	0.06
1885	QUE-017	140.0	150.0	300	50	63000	8500	-1.1	ACIDO	0.10
1886	QUE-017	150.0	160.0	1000	50	24500	2200	-0.3	LIGERAMENTE ACIDO	0.07
1887	QUE-017	160.0	170.0	600	50	33800	4500	-0.6	LIGERAMENTE ACIDO	0.08
1888	QUE-017	170.0	180.0	800	50	32900	6600	-0.9	LIGERAMENTE ACIDO	0.08
1889	QUE-017	180.0	189.6	4100	50	22200	9100	-1.2	ACIDO	0.08
1890	QUE-017	189.6	200.0	2700	50	26700	4100	-0.5	LIGERAMENTE ACIDO	0.05
1891	QUE-017	200.0	210.0	1200	50	8700	2500	-0.3	LIGERAMENTE ACIDO	0.08
1892	QUE-018	120.0	130.6	500	50	500	0	0.0	INERTE	0.00
1893	QUE-018	130.6	140.0	500	300	1600	200	0.1	INERTE	0.01
1894	QUE-018	140.0	150.0	100	50	2900	2000	-0.3	LIGERAMENTE ACIDO	0.01
1895	QUE-018	150.0	160.0	200	50	400	0	0.0	INERTE	0.00
1896	QUE-018	160.0	170.0	200	50	300	0	0.0	INERTE	0.01
1897	QUE-018	170.0	180.0	200	50	400	100	0.0	INERTE	0.00
1898	QUE-018	180.0	190.0	200	50	300	0	0.0	INERTE	0.01
1899	QUE-018	190.0	200.0	400	50	300	100	0.0	INERTE	0.09
1900	QUE-018	200.0	210.0	300	100	400	100	0.0	INERTE	0.03
1901	QUE-018	210.0	220.0	300	100	400	100	0.0	INERTE	0.04
1902	QUE-018	220.0	230.0	300	100	800	200	0.0	INERTE	0.04
1903	QUE-018	230.0	240.0	1000	100	600	0	0.0	INERTE	0.04
1904	QUE-018	240.0	250.0	300	100	700	200	0.0	INERTE	0.04
1905	QUE-020	10.0	20.0	400	100	100	50	0.0	INERTE	0.04
1906	QUE-020	20.0	30.0	400	100	100	50	0.0	INERTE	0.10
1907	QUE-020	30.0	40.0	100	50	100	50	0.0	INERTE	0.03
1908	QUE-020	40.0	50.0	100	50	200	100	0.0	INERTE	0.04
1909	QUE-020	50.0	60.0	100	50	100	50	0.0	INERTE	0.05
1910	QUE-020	60.0	70.0	200	100	100	50	0.0	INERTE	0.07
1911	QUE-020	170.0	180.0	400	50	300	100	0.0	INERTE	0.10
1912	QUE-021	10.0	20.0	400	50	400	200	0.0	INERTE	0.05
1913	QUE-021	20.0	30.0	400	50	300	200	0.0	INERTE	0.04
1914	QUE-021	30.0	40.0	600	50	300	100	0.0	INERTE	0.06
1915	QUE-021	40.0	50.0	400	50	300	200	0.0	INERTE	0.06
1916	QUE-021	50.0	60.0	700	50	400	200	0.0	INERTE	0.08
1917	QUE-021	60.0	70.0	500	50	400	200	0.0	INERTE	0.09
1918	QUE-021	70.0	80.0	1300	50	500	300	0.0	INERTE	0.08
1919	QUE-021	80.0	90.0	600	50	400	200	0.0	INERTE	0.09
1920	QUE-021	90.0	100.0	400	50	300	200	0.0	INERTE	0.08
1921	QUE-021	310.2	320.0	200	100	300	100	0.0	INERTE	0.09
1922	QUE-021	320.0	330.3	300	100	700	300	0.0	INERTE	0.10
1923	QUE-021	330.3	340.0	100	50	400	200	0.0	INERTE	0.06
1924	QUE-021	340.0	350.0	200	50	500	200	0.0	INERTE	0.07
1925	QUE-021	350.0	355.5	200	100	8500	8000	-1.1	ACIDO	0.05
1926	QUE-02E	0.0	10.0	400	50	200	0	0.0	INERTE	0.04
1927	QUE-02E	10.0	20.0	600	50	200	0	0.0	INERTE	0.04
1928	QUE-02E	20.0	30.0	500	300	200	0	0.1	LIGERAMENTE BASICO	0.06
1929	QUE-02E	30.0	40.0	400	100	200	0	0.0	INERTE	0.06
1930	QUE-02E	50.0	60.0	800	50	200	0	0.0	INERTE	0.07
1931	QUE-02E	60.0	70.0	100	100	200	0	0.0	INERTE	0.07
1932	QUE-02E	70.0	80.0	600	600	200	0	0.2	LIGERAMENTE BASICO	0.08
1933	QUE-02E	80.0	90.0	900	50	200	0	0.0	INERTE	0.09
1934	QUE-02E	120.0	130.0	900	50	200	0	0.0	INERTE	0.07
1935	QUE-02E	130.0	140.0	700	50	200	0	0.0	INERTE	0.06
1936	QUE-02E	140.0	150.0	1000	50	100	0	0.0	INERTE	0.08
1937	QUE-02E	150.0	160.0	700	50	100	0	0.0	INERTE	0.06
1938	QUE-02E	160.0	170.0	900	200	100	0	0.1	INERTE	0.02
1939	QUE-02E	170.0	180.0	1000	300	200	0	0.1	LIGERAMENTE BASICO	0.08
1940	QUE-030	0.0	10.0	1300	600	10200	3700	-0.3	LIGERAMENTE ACIDO	0.09
1941	QUE-030	10.0	19.7	500	200	6900	4600	-0.6	LIGERAMENTE ACIDO	0.08
1942	QUE-030	30.0	40.0	600	50	200	0	0.0	INERTE	0.06
1943	QUE-030	40.0	50.0	300	50	14600	4000	-0.5	LIGERAMENTE ACIDO	0.07
1944	QUE-030	50.0	60.0	1600	200	50700	9000	-1.2	ACIDO	0.05
1945	QUE-030	60.0	70.0	800	50	44700	12600	-1.7	ACIDO	0.04
1946	QUE-030	70.0	80.1	1100	50	42500	7900	-1.1	ACIDO	0.08
1947	QUE-030	80.1	90.0	700	50	27000	6800	-0.9	LIGERAMENTE ACIDO	0.08
1948	QUE-030	90.0	100.0	400	50	35800	8500	-1.1	ACIDO	0.04
1949	QUE-030	100.0	110.3	600	50	39400	8000	-1.1	ACIDO	0.07
1950	QUE-030	110.3	120.0	200	50	31900	6400	-0.9	LIGERAMENTE ACIDO	0.08
1951	QUE-030	120.0	130.0	700	50	11000	2600	-0.3	LIGERAMENTE ACIDO	0.08
1952	QUE-032	0.0	10.0	1300	100	4900	1900	-0.2	LIGERAMENTE ACIDO	0.07
1953	QUE-032	10.0	20.0	800	100	300	100	0.0	INERTE	0.08
1954	QUE-032	20.0	30.0	600	100	300	0	0.0	INERTE	0.06
1955	QUE-032	30.0	40.0	600	100	500	100	0.0	INERTE	0.08
1956	QUE-032	40.0	50.0	500	100	300	100	0.0	INERTE	0.05
1957	QUE-032	50.0	60.0	300	100	300	100	0.0	INERTE	0.05
1958	QUE-032	60.0	70.0	500	100	400	100	0.0	INERTE	0.03
1959	QUE-032	70.0	80.3	600	100	400	100	0.0	INERTE	0.06
1960	QUE-032	90.0	100.0	500	100	400	100	0.0	INERTE	0.03
1961	QUE-032	100.0	110.3	300	100	400	100	0.0	INERTE	0.02
1962	QUE-032	110.3	120.0	600	100	600	400	0.0	INERTE	0.01
1963	QUE-032	120.0	126.0	500	100	600	300	0.0	INERTE	0.04
1964	QUE-032	130.0	140.0	1000	200	2700	100	0.1	INERTE	0.08
1965	QUE-032	140.0	150.0	700	400	400	100	0.1	LIGERAMENTE BASICO	0.03
1966	QUE-032	150.0	160.0	500	300	300	200	0.1	INERTE	0.04
1967	QUE-032	160.0	170.0	400	300	300	200	0.1	INERTE	0.01
1968	QUE-034	0.0	10.0	1100	200	19500	500	0.0	INERTE	0.03
1969	QUE-034	10.0	20.0	600	300	25700	8300	-1.0	ACIDO	0.02
1970	QUE-034	20.0	30.0	700	200	50400	23300	-3.1	ACIDO	0.05
1971	QUE-034	30.0	40.0	600	300	61900	29600	-3.9	ACIDO	0.07
1972	QUE-034	40.0	50.0	600	200	58400	27400	-3.7	ACIDO	0.04
1973	QUE-034	50.0	60.0	500	200	32800	13300	-1.7	ACIDO	0.05
1974	QUE-035	99.0	110.0	1200	50	48500	9100	-1.2	ACIDO	0.05
1975	QUE-035	110.0	120.0	600	50	40300	7900	-1.1	ACIDO	0.04
1976	QUE-035	120.0	130.0	800	50	51400	9300	-1.3	ACIDO	0.07
1977	QUE-035	130.0	140.0	800	50	51000	9500	-1.3	ACIDO	0.02
1978	QUE-035	200.4	206.5	600	50	1100	0	0.0	INERTE	0.08
1979	QUE-035	206.5	212.7	1000	50	1000	0	0.0	INERTE	0.07
1980	QUE-041	4.0	10.0	100	50	26400	6200	-0.8	LIGERAMENTE ACIDO	0.07
1981	QUE-041	20.0	30.0	500	50	83500	25700	-3.5	ACIDO	0.10
1982	QUE-041	30.0	40.0	300	100	84500	21800	-2.9	ACIDO	0.09
1983	QUE-043	0.0	7.0	1000	300	23800	1500	-0.1	INERTE	0.06
1984	QUE-043	7.0	10.1	1000	300	23800	1500	-0.1	INERTE	0.03
1985	QUE-043	10.1	20.0	500	50	32000	5300	-0.7	LIGERAMENTE ACIDO	0.04
1986	QUE-043	20.0	29.6	400	200	45100	5500	-0.7	LIGERAMENTE ACIDO	0.07
1987	QUE-043	29.6	39.6	300	50	53000	6700	-0.9	LIGERAMENTE ACIDO	0.05
1988	QUE-043	39.6	50.0	200	200	30600	5600	-0.7	LIGERAMENTE ACIDO	0.06
1989	QUE-047	23.3	30.0	600	100	25600	6800	-0.9	LIGERAMENTE ACIDO	0.08
1990	QUE-047	30.0	40.4	400	100	33800	6900	-0.9	LIGERAMENTE ACIDO	0.05
1991	QUE-047	40.4	50.2	400	50	32500	6900	-0.9	LIGERAMENTE ACIDO	0.08
1992	QUE-047	50.2	60.0	200	50	44500	7100	-1.0	LIGERAMENTE ACIDO	0.06
1993	QUE-048	0.0	10.0	1900	50	12600	8500	-1.1	ACIDO	0.04
1994	QUE-048	10.0	20.0	1700	50	7300	4500	-0.6	LIGERAMENTE ACIDO	0.02
1995	QUE-048	20.0	30.0	1400	50	26300	23200	-3.2	ACIDO	0.03
1996	QUE-048	30.0	40.0	1300	50	34200	30000	-4.1	ACIDO	0.01
1997	QUE-048	40.0	50.0	1600	50	32700	26800	-3.7	ACIDO	0.02
1998	QUE-048	50.0	60.0	1300	50	27300	21500	-2.9	ACIDO	0.03
1999	QUE-048	60.0	70.0	2400	50	37600	31000	-4.2	ACIDO	0.02
2000	QUE-048	70.0	80.0	3900	200	28300	23800	-3.2	ACIDO	0.03
2001	QUE-048	80.0	90.0	1400	50	20400	16300	-2.2	ACIDO	0.06
2002	QUE-048	90.0	100.0	1800	50	25000	20400	-2.8	ACIDO	0.04
2003	QUE-048	100.0	110.0	1600	50	18500	13400	-1.8	ACIDO	0.02
2004	QUE-048	110.0	120.0	1500	100	14300	11000	-1.5	ACIDO	0.02
2005	QUE-048	120.0	130.0	2000	50	26200	21700	-3.0	ACIDO	0.02
2006	QUE-048	130.0	140.0	2300	50	10400	7300	-1.0	LIGERAMENTE ACIDO	0.01
2007	QUE-048	140.0	150.0	1600	50	21100	17600	-2.4	ACIDO	0.01
2008	QUE-048	150.0	160.0	1600	50	19700	16900	-2.3	ACIDO	0.03
2009	QUE-048	160.0	170.0	1600	50	23900	21000	-2.9	ACIDO	0.06
2010	QUE-048	170.0	180.0	900	50	53300	47100	-6.4	ACIDO	0.03
2011	QUE-048	180.0	190.0	500	50	33700	9500	-1.3	ACIDO	0.08
2012	QUE-049	0.0	10.0	1600	100	13300	9800	-1.3	ACIDO	0.04
2013	QUE-049	10.0	20.0	1100	50	7000	4700	-0.6	LIGERAMENTE ACIDO	0.02
2014	QUE-049	20.0	30.0	2000	50	6700	4200	-0.6	LIGERAMENTE ACIDO	0.01
2015	QUE-049	30.0	40.0	3200	50	9900	7700	-1.0	ACIDO	0.02
2016	QUE-049	40.0	50.0	1700	50	4100	1800	-0.2	LIGERAMENTE ACIDO	0.01
2017	QUE-049	50.0	60.0	2100	50	4900	900	-0.1	LIGERAMENTE ACIDO	0.05
2018	QUE-049	60.0	70.0	2800	50	4200	600	-0.1	INERTE	0.09
2019	QUE-049	70.0	80.0	1400	50	8400	1700	-0.2	LIGERAMENTE ACIDO	0.01
2020	QUE-049	80.0	90.0	1700	50	30700	7000	-0.9	LIGERAMENTE ACIDO	0.04
2021	QUE-049	90.0	96.0	1700	50	12000	3100	-0.4	LIGERAMENTE ACIDO	0.07
2022	QUE-049	100.0	110.0	2500	400	25900	1000	0.0	INERTE	0.02
2023	QUE-049	110.0	120.0	1200	200	10300	300	0.0	INERTE	0.06
2024	QUE-049	120.0	130.0	1700	200	600	100	0.1	INERTE	0.08
2025	QUE-049	130.0	140.0	700	200	300	100	0.1	INERTE	0.04
2026	QUE-049	140.0	150.0	600	100	500	100	0.0	INERTE	0.04
2027	QUE-049	150.0	160.0	2200	400	16100	5900	-0.7	LIGERAMENTE ACIDO	0.03
2028	QUE-049	160.0	170.0	700	300	6000	1000	0.0	INERTE	0.03
2029	QUE-050	0.0	10.0	500	100	300	0	0.0	INERTE	0.01
2030	QUE-050	10.0	20.0	1100	300	200	0	0.1	LIGERAMENTE BASICO	0.01
2031	QUE-050	20.0	30.0	400	50	200	100	0.0	INERTE	0.01
2032	QUE-050	30.0	40.0	800	50	300	100	0.0	INERTE	0.01
2033	QUE-050	40.0	50.0	1300	50	5000	200	0.0	INERTE	0.01
2034	QUE-050	50.0	60.0	2100	700	8300	800	0.1	LIGERAMENTE BASICO	0.01
2035	QUE-050	60.0	70.0	3400	50	36700	30600	-4.2	ACIDO	0.01
2036	QUE-050	70.0	80.0	2400	400	49000	44200	-5.9	ACIDO	0.01
2037	QUE-050	80.0	90.0	400	50	40400	37200	-5.1	ACIDO	0.00
2038	QUE-050	90.0	100.0	1500	50	33300	29600	-4.0	ACIDO	0.01
2039	QUE-050	100.0	110.0	1200	50	12600	6600	-0.9	LIGERAMENTE ACIDO	0.01
2040	QUE-050	110.0	120.0	1300	100	28600	9500	-1.3	ACIDO	0.02
2041	QUE-050	120.0	126.0	2200	50	21200	14700	-2.0	ACIDO	0.01
2042	QUE-050	130.0	140.0	1500	300	33700	28700	-3.8	ACIDO	0.01
2043	QUE-050	140.0	150.0	1500	400	32900	27400	-3.6	ACIDO	0.00
2044	QUE-050	150.0	160.0	1800	300	24100	3500	-0.4	LIGERAMENTE ACIDO	0.01
2045	QUE-050	160.0	170.0	500	200	1900	1000	-0.1	INERTE	0.01
2046	QUE-050	170.0	180.0	2800	400	17200	5800	-0.6	LIGERAMENTE ACIDO	0.02
2047	QUE-050	180.0	190.0	1100	200	29500	25200	-3.4	ACIDO	0.01
2048	QUE-050	190.0	200.0	1000	300	21700	5200	-0.6	LIGERAMENTE ACIDO	0.01
2049	QUE-050	200.0	210.0	900	300	27600	5700	-0.7	LIGERAMENTE ACIDO	0.00
2050	QUE-050	210.0	220.0	1400	300	20300	5500	-0.6	LIGERAMENTE ACIDO	0.00
2051	QUE-050	220.0	230.0	1100	400	44200	15000	-1.9	ACIDO	0.01
2052	QUE-052	2.0	10.0	1600	100	8400	1500	-0.2	LIGERAMENTE ACIDO	0.05
2053	QUE-052	10.0	12.0	2500	300	13200	100	0.1	INERTE	0.06
2054	QUE-052	12.0	20.0	2500	300	13200	100	0.1	INERTE	0.09
2055	QUE-052	20.0	30.0	2300	300	52800	23600	-3.1	ACIDO	0.04
2056	QUE-052	30.0	40.0	1500	200	64600	41000	-5.5	ACIDO	0.04
2057	QUE-052	40.0	50.0	3000	300	62400	33900	-4.5	ACIDO	0.03
2058	QUE-052	50.0	60.0	1100	200	48700	26300	-3.5	ACIDO	0.04
2059	QUE-052	60.0	70.0	1100	200	29600	11100	-1.4	ACIDO	0.05
2060	QUE-052	70.0	80.0	1000	600	34000	12400	-1.5	ACIDO	0.04
2061	QUE-052	80.0	90.0	1100	200	18100	2500	-0.3	LIGERAMENTE ACIDO	0.04
2062	QUE-052	90.0	100.0	1600	200	15200	2200	-0.2	LIGERAMENTE ACIDO	0.03
2063	QUE-052	100.0	110.0	900	100	22200	1200	-0.1	LIGERAMENTE ACIDO	0.04
2064	QUE-052	110.0	120.0	800	100	45900	5000	-0.6	LIGERAMENTE ACIDO	0.03
2065	QUE-052	120.0	130.0	1300	100	34800	2500	-0.3	LIGERAMENTE ACIDO	0.05
2066	QUE-052	130.0	140.0	500	500	6630	130	0.2	LIGERAMENTE BASICO	0.10
2067	QUE-052	150.0	160.0	2000	200	11600	7100	-0.9	LIGERAMENTE ACIDO	0.09
2068	QUE-052	160.0	170.0	800	200	20500	2700	-0.3	LIGERAMENTE ACIDO	0.06
2069	QUE-053	90.0	100.0	800	50	500	100	0.0	INERTE	0.09
2070	QUE-053	110.0	120.0	1100	50	700	100	0.0	INERTE	0.07
2071	QUE-053	120.0	130.0	1100	50	600	100	0.0	INERTE	0.08
2072	QUE-053	130.0	140.0	700	50	500	100	0.0	INERTE	0.07
2073	QUE-053	140.0	146.0	900	50	1400	200	0.0	INERTE	0.05
2074	QUE-053	150.0	160.0	700	200	12600	1900	-0.2	LIGERAMENTE ACIDO	0.06
2075	QUE-053	160.0	170.0	600	200	17900	3500	-0.4	LIGERAMENTE ACIDO	0.06
2076	QUE-053	170.0	180.0	2100	200	32100	3800	-0.4	LIGERAMENTE ACIDO	0.05
2077	QUE-053	180.0	190.0	500	200	5500	1200	-0.1	INERTE	0.04
2078	QUE-054	0.0	10.0	600	100	2800	900	-0.1	INERTE	0.01
2079	QUE-054	10.0	20.0	400	100	200	100	0.0	INERTE	0.03
2080	QUE-054	20.0	30.0	500	100	200	100	0.0	INERTE	0.01
2081	QUE-054	30.0	40.0	600	200	2100	300	0.0	INERTE	0.03
2082	QUE-054	40.0	50.0	1100	100	900	100	0.0	INERTE	0.02
2083	QUE-059	0.0	10.0	4000	500	6600	900	0.1	INERTE	0.07
2084	QUE-059	20.0	30.0	2500	300	17100	2700	-0.3	LIGERAMENTE ACIDO	0.07
2085	QUE-059	30.0	40.0	4600	300	6000	300	0.1	INERTE	0.07
2086	QUE-059	50.0	60.0	1900	400	20200	15200	-1.9	ACIDO	0.08
2087	QUE-060	0.0	10.0	700	50	5000	1200	-0.1	LIGERAMENTE ACIDO	0.07
2088	QUE-060	10.0	19.9	400	50	27200	6600	-0.9	LIGERAMENTE ACIDO	0.09
2089	QUE-060	19.9	30.0	700	50	51300	8400	-1.1	ACIDO	0.06
2090	QUE-060	30.0	40.0	500	50	50200	8000	-1.1	ACIDO	0.08
2091	QUE-060	40.0	50.0	200	50	32800	8600	-1.2	ACIDO	0.04
2092	QUE-060	50.0	60.0	200	50	39000	8400	-1.1	ACIDO	0.09
2093	QUE-060	70.0	80.0	400	50	34700	8000	-1.1	ACIDO	0.09
2094	QUE-060	200.0	210.0	200	50	7000	2500	-0.3	LIGERAMENTE ACIDO	0.07
2095	QUE-060	210.0	220.0	50	50	3200	1200	-0.1	LIGERAMENTE ACIDO	0.06
2096	QUE-063	50.0	59.6	3300	50	43500	36700	-5.0	ACIDO	0.06
2097	QUE-063	59.6	70.0	1600	50	45100	37300	-5.1	ACIDO	0.04
2098	QUE-063	100.0	110.1	1900	100	42200	37000	-5.0	ACIDO	0.09
2099	QUE-063	110.1	120.0	700	50	34800	30700	-4.2	ACIDO	0.06
2100	QUE-064	0.0	10.0	900	200	400	100	0.1	INERTE	0.01
2101	QUE-064	10.0	20.0	2600	200	13200	1400	-0.1	LIGERAMENTE ACIDO	0.00
2102	QUE-064	20.0	30.0	700	100	10300	1500	-0.2	LIGERAMENTE ACIDO	0.00
2103	QUE-064	30.0	40.0	1100	100	2100	100	0.0	INERTE	0.01
2104	QUE-064	40.0	50.0	2700	200	1100	100	0.1	INERTE	0.03
2105	QUE-064	50.0	60.0	3500	200	4200	100	0.1	INERTE	0.01
2106	QUE-064	60.0	70.0	4500	200	25600	3400	-0.4	LIGERAMENTE ACIDO	0.00
2107	QUE-064	70.0	80.0	1100	200	40500	16400	-2.2	ACIDO	0.01
2108	QUE-064	80.0	90.0	800	200	36700	27300	-3.7	ACIDO	0.00
2109	QUE-064	90.0	100.0	600	100	35900	12200	-1.6	ACIDO	0.00
2110	QUE-064	100.0	110.0	500	100	20700	4300	-0.6	LIGERAMENTE ACIDO	0.00
2111	QUE-065	10.0	20.0	1900	50	2700	1100	-0.1	LIGERAMENTE ACIDO	0.03
2112	QUE-065	20.0	30.0	200	50	300	0	0.0	INERTE	0.02
2113	QUE-065	30.0	40.0	100	100	200	0	0.0	INERTE	0.02
2114	QUE-065	40.0	50.0	900	200	200	0	0.1	INERTE	0.01
2115	QUE-065	50.0	60.0	600	300	300	0	0.1	LIGERAMENTE BASICO	0.02
2116	QUE-065	60.0	70.0	1100	50	400	100	0.0	INERTE	0.02
2117	QUE-065	70.0	78.0	1000	100	3300	1200	-0.1	LIGERAMENTE ACIDO	0.03
2118	QUE-065	80.0	90.0	2000	200	1000	200	0.0	INERTE	0.02
2119	QUE-065	90.0	100.0	500	200	600	100	0.1	INERTE	0.01
2120	QUE-065	100.0	110.0	1200	100	800	100	0.0	INERTE	0.02
2121	QUE-066	0.0	10.0	400	100	300	0	0.0	INERTE	0.10
2122	QUE-066	30.0	40.0	700	50	34700	9800	-1.3	ACIDO	0.05
2123	QUE-066	40.0	50.0	900	50	31300	7200	-1.0	LIGERAMENTE ACIDO	0.09
2124	QUE-066	80.0	90.0	900	50	23100	5200	-0.7	LIGERAMENTE ACIDO	0.09
2125	QUE-067	4.0	10.0	2300	100	22900	17600	-2.4	ACIDO	0.01
2126	QUE-067	10.0	20.0	1800	50	16400	9100	-1.2	ACIDO	0.02
2127	QUE-067	20.0	30.0	600	50	42000	34000	-4.6	ACIDO	0.01
2128	QUE-067	30.0	40.0	2700	100	33000	26900	-3.6	ACIDO	0.01
2129	QUE-067	40.0	50.0	800	50	39900	10300	-1.4	ACIDO	0.02
2130	QUE-067	50.0	60.0	1500	50	61600	30400	-4.1	ACIDO	0.01
2131	QUE-067	60.0	70.0	50	50	44800	16200	-2.2	ACIDO	0.03
2132	QUE-067	70.0	80.0	200	100	49600	12500	-1.7	ACIDO	0.02
2133	QUE-067	80.0	90.0	1400	50	16700	3800	-0.5	LIGERAMENTE ACIDO	0.03
2134	QUE-067	90.0	100.0	4500	50	48200	43400	-5.9	ACIDO	0.02
2135	QUE-067	100.0	110.0	1900	50	46600	39300	-5.4	ACIDO	0.03
2136	QUE-067	110.0	120.0	2400	50	37300	33700	-4.6	ACIDO	0.08
2137	QUE-067	120.0	130.0	1400	50	39500	34100	-4.7	ACIDO	0.05
2138	QUE-067	130.0	140.0	500	50	36700	10800	-1.5	ACIDO	0.07
2139	QUE-067	140.0	150.0	500	100	37600	1600	-0.2	LIGERAMENTE ACIDO	0.05
2140	QUE-067	150.0	160.0	800	200	34500	3400	-0.4	LIGERAMENTE ACIDO	0.04
2141	QUE-067	160.0	170.0	700	100	29800	500	0.0	INERTE	0.08
2142	QUE-067	170.0	180.0	700	100	23700	2200	-0.3	LIGERAMENTE ACIDO	0.05
2143	QUE-067	180.0	190.0	600	100	25500	2800	-0.3	LIGERAMENTE ACIDO	0.05
2144	QUE-067	190.0	200.0	600	200	37500	8600	-1.1	ACIDO	0.06
2145	QUE-069	0.0	10.0	900	50	800	200	0.0	INERTE	0.05
2146	QUE-069	10.0	20.0	900	50	100	0	0.0	INERTE	0.02
2147	QUE-069	20.0	30.0	900	50	200	100	0.0	INERTE	0.02
2148	QUE-069	30.0	40.0	500	50	200	150	0.0	INERTE	0.02
2149	QUE-069	40.0	50.0	400	50	200	0	0.0	INERTE	0.02
2150	QUE-069	50.0	60.0	300	50	200	100	0.0	INERTE	0.03
2151	QUE-069	60.0	70.0	300	50	100	0	0.0	INERTE	0.04
2152	QUE-069	70.0	80.0	300	50	200	100	0.0	INERTE	0.03
2153	QUE-069	80.0	90.0	900	50	200	100	0.0	INERTE	0.03
2154	QUE-069	90.0	100.0	700	100	200	0	0.0	INERTE	0.03
2155	QUE-069	100.0	110.0	200	50	200	100	0.0	INERTE	0.05
2156	QUE-069	110.0	120.0	400	100	200	0	0.0	INERTE	0.03
2157	QUE-069	120.0	128.0	200	50	200	100	0.0	INERTE	0.03
2158	QUE-069	130.0	140.0	400	300	600	100	0.1	INERTE	0.02
2159	QUE-069	140.0	150.0	500	300	400	100	0.1	INERTE	0.05
2160	QUE-069	150.0	160.0	500	200	800	100	0.1	INERTE	0.07

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2161	QUE-069	160.0	170.0	700	300	600	100	0.1	INERTE	0.05
2162	QUE-069	170.0	180.0	400	300	400	100	0.1	INERTE	0.02
2163	QUE-070	9.1	20.0	700	50	100	50	0.0	INERTE	0.04
2164	QUE-070	20.0	30.0	400	50	200	100	0.0	INERTE	0.04
2165	QUE-070	30.0	40.0	100	50	200	100	0.0	INERTE	0.05
2166	QUE-070	40.0	50.0	300	50	200	0	0.0	INERTE	0.07
2167	QUE-070	50.0	60.0	300	100	100	0	0.0	INERTE	0.05
2168	QUE-070	60.0	70.0	1000	50	200	0	0.0	INERTE	0.05
2169	QUE-070	70.0	80.0	400	50	200	100	0.0	INERTE	0.09
2170	QUE-070	80.0	90.0	300	50	100	0	0.0	INERTE	0.05
2171	QUE-070	90.0	100.0	200	50	100	0	0.0	INERTE	0.03
2172	QUE-070	100.0	110.0	400	50	100	0	0.0	INERTE	0.06
2173	QUE-070	130.1	139.6	700	50	100	0	0.0	INERTE	0.05
2174	QUE-071	0.0	10.0	1200	50	25500	6400	-0.9	LIGERAMENTE ACIDO	0.03
2175	QUE-071	10.0	20.0	1000	50	35100	21900	-3.0	ACIDO	0.01
2176	QUE-071	20.0	30.0	700	50	58500	45200	-6.2	ACIDO	0.01
2177	QUE-071	30.0	40.0	800	50	57600	50800	-6.9	ACIDO	0.01
2178	QUE-071	40.0	50.0	1200	50	33700	25600	-3.5	ACIDO	0.01
2179	QUE-071	50.0	60.0	900	50	42400	37000	-5.1	ACIDO	0.01
2180	QUE-071	60.0	70.0	800	50	19100	14600	-2.0	ACIDO	0.01
2181	QUE-071	70.0	80.0	500	50	24500	5100	-0.7	LIGERAMENTE ACIDO	0.02
2182	QUE-071	80.0	90.0	1300	50	8200	100	0.0	INERTE	0.02
2183	QUE-071	90.0	100.0	700	50	18400	5300	-0.7	LIGERAMENTE ACIDO	0.01
2184	QUE-071	100.0	106.0	600	50	42500	9600	-1.3	ACIDO	0.01
2185	QUE-071	110.0	120.0	1100	300	25700	3600	-0.4	LIGERAMENTE ACIDO	0.01
2186	QUE-071	120.0	130.0	1600	100	39500	5400	-0.7	LIGERAMENTE ACIDO	0.01
2187	QUE-071	130.0	140.0	1800	200	13200	2600	-0.3	LIGERAMENTE ACIDO	0.01
2188	QUE-071	140.0	150.0	1000	300	34300	29100	-3.9	ACIDO	0.01
2189	QUE-071	150.0	160.0	2500	200	26600	18500	-2.5	ACIDO	0.01
2190	QUE-071	160.0	170.0	1100	200	35100	7100	-0.9	LIGERAMENTE ACIDO	0.01
2191	QUE-071	170.0	180.0	1400	200	30400	6200	-0.8	LIGERAMENTE ACIDO	0.01
2192	QUE-071	180.0	190.0	1200	300	20900	5200	-0.6	LIGERAMENTE ACIDO	0.00
2193	QUE-071	190.0	200.0	500	200	46800	7200	-0.9	LIGERAMENTE ACIDO	0.00
2194	QUE-071	200.0	210.0	1100	100	47800	8300	-1.1	ACIDO	0.01
2195	QUE-072	30.3	40.0	100	50	100	0	0.0	INERTE	0.08
2196	QUE-072	160.0	170.1	500	50	200	100	0.0	INERTE	0.08
2197	QUE-072	200.0	208.0	300	50	50	0	0.0	INERTE	0.08
2198	QUE-072	208.0	209.7	200	50	100	0	0.0	INERTE	0.09
2199	QUE-073	0.0	10.0	1000	100	300	100	0.0	INERTE	0.02
2200	QUE-073	10.0	20.0	900	100	23500	7000	-0.9	LIGERAMENTE ACIDO	0.01
2201	QUE-073	20.0	30.0	2500	100	5100	400	0.0	INERTE	0.01
2202	QUE-073	30.0	40.0	3900	200	11900	7100	-0.9	LIGERAMENTE ACIDO	0.01
2203	QUE-073	40.0	50.0	2200	50	2700	100	0.0	INERTE	0.01
2204	QUE-073	50.0	60.0	1400	200	5100	100	0.1	INERTE	0.01
2205	QUE-073	60.0	70.0	1000	50	49400	10000	-1.4	ACIDO	0.02
2206	QUE-073	70.0	80.0	1200	50	18100	4600	-0.6	LIGERAMENTE ACIDO	0.01
2207	QUE-073	80.0	90.0	1600	100	7200	3700	-0.5	LIGERAMENTE ACIDO	0.03
2208	QUE-073	90.0	100.0	6600	400	11500	8800	-1.1	ACIDO	0.02
2209	QUE-073	100.0	110.0	1200	50	34600	28500	-3.9	ACIDO	0.03
2210	QUE-073	110.0	120.0	2100	100	20900	16600	-2.2	ACIDO	0.02
2211	QUE-073	120.0	130.0	3000	50	26800	22100	-3.0	ACIDO	0.01
2212	QUE-073	130.0	140.0	1100	100	16400	13200	-1.8	ACIDO	0.01
2213	QUE-073	140.0	150.0	1300	100	24900	20800	-2.8	ACIDO	0.01
2214	QUE-073	150.0	160.0	3600	400	34500	28300	-3.7	ACIDO	0.01
2215	QUE-073	160.0	170.0	2700	400	38600	22400	-2.9	ACIDO	0.02
2216	QUE-073	170.0	180.0	1800	300	43000	9900	-1.2	ACIDO	0.04
2217	QUE-073	180.0	190.0	4600	400	6100	2400	-0.2	LIGERAMENTE ACIDO	0.01
2218	QUE-074	0.0	10.0	1500	50	33200	5200	-0.7	LIGERAMENTE ACIDO	0.01
2219	QUE-074	10.0	20.0	700	50	30200	7300	-1.0	LIGERAMENTE ACIDO	0.03
2220	QUE-074	20.0	30.0	1700	50	32800	7500	-1.0	ACIDO	0.02
2221	QUE-074	30.0	40.0	600	50	38600	8600	-1.2	ACIDO	0.02
2222	QUE-074	40.0	50.0	200	50	47600	9600	-1.3	ACIDO	0.03
2223	QUE-074	50.0	60.0	1600	50	22900	4900	-0.7	LIGERAMENTE ACIDO	0.02
2224	QUE-074	60.0	70.0	4200	50	14300	2500	-0.3	LIGERAMENTE ACIDO	0.01
2225	QUE-074	70.0	80.0	1800	50	48800	9800	-1.3	ACIDO	0.03
2226	QUE-074	80.0	90.0	1400	50	42900	6700	-0.9	LIGERAMENTE ACIDO	0.04
2227	QUE-074	90.0	100.0	2500	50	42300	24200	-3.3	ACIDO	0.05
2228	QUE-074	100.0	110.0	4000	50	42900	37600	-5.1	ACIDO	0.03
2229	QUE-074	110.0	120.0	900	50	25900	15500	-2.1	ACIDO	0.03
2230	QUE-074	120.0	130.0	800	50	25700	5200	-0.7	LIGERAMENTE ACIDO	0.04
2231	QUE-074	130.0	140.0	700	50	38300	21600	-2.9	ACIDO	0.04
2232	QUE-074	140.0	150.0	1000	50	36400	17500	-2.4	ACIDO	0.05
2233	QUE-074	150.0	160.0	400	50	2100	500	-0.1	INERTE	0.04
2234	QUE-074	160.0	170.0	700	50	41400	9200	-1.2	ACIDO	0.06
2235	QUE-074	170.0	180.0	1800	50	26600	4100	-0.5	LIGERAMENTE ACIDO	0.05
2236	QUE-074	180.0	190.0	500	50	18600	2500	-0.3	LIGERAMENTE ACIDO	0.04
2237	QUE-074	190.0	200.0	800	50	34300	13800	-1.9	ACIDO	0.05
2238	QUE-074	200.0	210.0	1600	400	67700	62300	-8.4	ACIDO	0.03
2239	QUE-074	210.0	220.0	1000	200	50700	42000	-5.7	ACIDO	0.04
2240	QUE-074	230.0	240.0	1100	200	40800	33700	-4.5	ACIDO	0.06
2241	QUE-074	240.0	250.0	1200	300	39600	33200	-4.4	ACIDO	0.04
2242	QUE-074	250.0	260.0	1900	500	41000	35200	-4.6	ACIDO	0.03
2243	QUE-086	140.0	150.0	900	100	2100	0	0.0	INERTE	0.09
2244	QUE-094	4.0	16.0	1000	50	35200	8800	-1.2	ACIDO	0.08
2245	QUE-095	2.0	12.0	2000	50	50100	7500	-1.0	ACIDO	0.04
2246	QUE-095	22.0	32.0	1000	100	45000	7400	-1.0	LIGERAMENTE ACIDO	0.07
2247	QUE-099	0.0	10.0	700	50	40600	8000	-1.1	ACIDO	0.04
2248	QUE-099	10.0	20.0	600	50	38400	6800	-0.9	LIGERAMENTE ACIDO	0.03
2249	QUE-099	20.0	30.0	500	100	19800	13200	-1.8	ACIDO	0.01
2250	QUE-099	30.0	40.0	700	50	36600	33000	-4.5	ACIDO	0.01
2251	QUE-099	40.0	50.0	900	100	33700	30200	-4.1	ACIDO	0.02
2252	QUE-099	50.0	60.0	600	50	22100	19200	-2.6	ACIDO	0.02
2253	QUE-099	60.0	70.0	400	50	49800	6400	-0.9	LIGERAMENTE ACIDO	0.04
2254	QUE-099	70.0	80.0	400	50	29500	5300	-0.7	LIGERAMENTE ACIDO	0.07
2255	QUE-099	100.0	110.0	300	50	9700	2300	-0.3	LIGERAMENTE ACIDO	0.09
2256	QUE-100	28.4	36.4	440	200	200	100	0.1	INERTE	0.04
2257	QUE-100	36.4	44.0	200	200	200	100	0.1	INERTE	0.05
2258	QUE-100	44.0	52.0	350	200	200	100	0.1	INERTE	0.07
2259	QUE-100	52.0	60.0	440	200	200	100	0.1	INERTE	0.06
2260	QUE-100	60.0	68.1	240	200	200	100	0.1	INERTE	0.08
2261	QUE-100	100.0	108.0	300	200	1900	200	0.0	INERTE	0.09
2262	QUE-100	124.0	132.0	300	200	200	100	0.1	INERTE	0.08
2263	QUE-100	140.0	148.0	600	200	200	100	0.1	INERTE	0.08
2264	QUE-100	188.0	196.0	570	200	200	100	0.1	INERTE	0.09
2265	QUE-100	204.0	211.6	500	200	230	100	0.1	INERTE	0.09
2266	QUE-100	211.6	220.5	710	200	200	100	0.1	INERTE	0.09
2267	QUE-101	30.2	38.0	220	200	200	100	0.1	INERTE	0.02
2268	QUE-101	38.0	46.0	200	300	200	100	0.1	LIGERAMENTE BASICO	0.03
2269	QUE-101	46.0	54.0	220	200	200	100	0.1	INERTE	0.06
2270	QUE-101	54.0	62.4	340	200	200	100	0.1	INERTE	0.05
2271	QUE-101	70.0	78.0	350	200	200	100	0.1	INERTE	0.03
2272	QUE-101	78.0	86.0	800	200	300	100	0.1	INERTE	0.06
2273	QUE-101	86.0	94.0	300	200	200	100	0.1	INERTE	0.09
2274	QUE-101	94.0	101.7	200	200	200	100	0.1	INERTE	0.05
2275	QUE-101	101.7	110.1	200	200	200	100	0.1	INERTE	0.06
2276	QUE-101	110.1	118.0	400	200	300	100	0.1	INERTE	0.06
2277	QUE-101	150.0	157.8	300	200	200	100	0.1	INERTE	0.09
2278	QUE-102	3.1	8.0	1200	200	39700	11400	-1.5	ACIDO	0.03
2279	QUE-102	8.0	10.0	3500	200	23000	10100	-1.3	ACIDO	0.03
2280	QUE-102	10.0	16.0	3500	200	23000	10100	-1.3	ACIDO	0.02

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2281	QUE-102	16.0	20.0	4100	200	22400	18100	-2.4	ACIDO	0.02
2282	QUE-102	20.0	24.0	4100	200	22400	18100	-2.4	ACIDO	0.02
2283	QUE-102	24.0	30.0	4300	200	17300	12300	-1.6	ACIDO	0.02
2284	QUE-102	30.0	32.0	4300	200	17300	12300	-1.6	ACIDO	0.04
2285	QUE-102	32.0	39.7	1200	200	27100	6800	-0.9	LIGERAMENTE ACIDO	0.04
2286	QUE-102	39.7	48.0	1100	200	40100	10700	-1.4	ACIDO	0.04
2287	QUE-102	48.0	50.0	900	200	24000	5700	-0.7	LIGERAMENTE ACIDO	0.04
2288	QUE-102	50.0	56.0	900	200	24000	5700	-0.7	LIGERAMENTE ACIDO	0.04
2289	QUE-102	56.0	60.0	1100	200	16200	12900	-1.7	ACIDO	0.06
2290	QUE-102	60.0	64.0	1100	200	16200	12900	-1.7	ACIDO	0.07
2291	QUE-102	64.0	70.0	1900	300	10400	8900	-1.1	ACIDO	0.02
2292	QUE-102	70.0	72.0	1900	300	10400	8900	-1.1	ACIDO	0.02
2293	QUE-102	72.0	80.0	1400	200	17800	15600	-2.1	ACIDO	0.03
2294	QUE-102	80.0	88.0	2600	200	11200	9600	-1.2	ACIDO	0.01
2295	QUE-102	88.0	90.0	1500	200	16400	14000	-1.8	ACIDO	0.01
2296	QUE-102	90.0	96.0	1500	200	16400	14000	-1.8	ACIDO	0.01
2297	QUE-102	96.0	100.0	600	200	9000	7700	-1.0	LIGERAMENTE ACIDO	0.01
2298	QUE-102	100.0	104.0	600	200	9000	7700	-1.0	LIGERAMENTE ACIDO	0.01
2299	QUE-102	104.0	110.0	1380	200	13500	10800	-1.4	ACIDO	0.02
2300	QUE-102	110.0	112.0	1380	200	13500	10800	-1.4	ACIDO	0.02
2301	QUE-102	112.0	120.0	1920	200	5860	4760	-0.6	LIGERAMENTE ACIDO	0.01
2302	QUE-102	120.0	127.9	2670	200	20300	18000	-2.4	ACIDO	0.02
2303	QUE-102	127.9	130.0	2940	200	15600	13000	-1.7	ACIDO	0.01
2304	QUE-102	130.0	136.0	2940	200	15600	13000	-1.7	ACIDO	0.03
2305	QUE-102	136.0	140.0	3270	200	26200	24100	-3.2	ACIDO	0.04
2306	QUE-102	140.0	144.0	3270	200	26200	24100	-3.2	ACIDO	0.01
2307	QUE-102	144.0	150.0	4130	200	25800	23400	-3.1	ACIDO	0.02
2308	QUE-102	150.0	152.0	4130	200	25800	23400	-3.1	ACIDO	0.01
2309	QUE-102	152.0	160.3	2990	200	29600	27100	-3.6	ACIDO	0.02
2310	QUE-102	160.3	168.0	900	200	21300	19400	-2.6	ACIDO	0.01
2311	QUE-102	168.0	170.0	300	200	800	300	0.0	INERTE	0.01
2312	QUE-102	170.0	176.0	300	200	800	300	0.0	INERTE	0.02
2313	QUE-102	424.0	430.0	200	200	71000	33100	-4.5	ACIDO	0.09
2314	QUE-103	0.0	8.0	1190	200	640	100	0.1	INERTE	0.05
2315	QUE-103	40.0	48.0	790	200	450	100	0.1	INERTE	0.10
2316	QUE-103	192.0	200.0	1060	200	290	100	0.1	INERTE	0.08
2317	QUE-103	200.0	208.0	1190	200	350	100	0.1	INERTE	0.10
2318	QUE-103	359.7	368.0	800	200	4700	300	0.0	INERTE	0.10
2319	QUE-103	368.0	376.0	1100	200	21700	14900	-2.0	ACIDO	0.07
2320	QUE-103	376.0	384.2	1000	200	16300	5900	-0.7	LIGERAMENTE ACIDO	0.08
2321	QUE-103	391.7	400.0	700	200	2500	300	0.0	INERTE	0.03
2322	QUE-103	408.0	416.2	700	200	98000	14900	-2.0	ACIDO	0.02
2323	QUE-103	423.8	430.0	2200	300	27700	12300	-1.6	ACIDO	0.03
2324	QUE-103	430.0	435.7	1600	300	5300	3800	-0.4	LIGERAMENTE ACIDO	0.02
2325	QUE-104	0.0	8.0	7200	400	5400	1800	-0.1	INERTE	0.01
2326	QUE-104	8.0	16.0	7800	500	13600	10000	-1.2	ACIDO	0.02
2327	QUE-104	16.0	20.0	3600	200	19400	16500	-2.2	ACIDO	0.01
2328	QUE-104	20.0	24.0	3600	200	19400	16500	-2.2	ACIDO	0.01
2329	QUE-104	24.0	30.0	3100	200	33000	30200	-4.1	ACIDO	0.01
2330	QUE-104	30.0	32.0	3100	200	33000	30200	-4.1	ACIDO	0.01
2331	QUE-104	32.0	40.0	4600	200	35400	32500	-4.4	ACIDO	0.03
2332	QUE-104	40.0	48.0	3700	200	34500	31700	-4.3	ACIDO	0.02
2333	QUE-104	48.0	50.0	2600	200	31800	29100	-3.9	ACIDO	0.01
2334	QUE-104	50.0	56.0	2600	200	31800	29100	-3.9	ACIDO	0.01
2335	QUE-104	56.0	60.0	3800	300	31900	28400	-3.8	ACIDO	0.01
2336	QUE-104	60.0	64.0	3800	300	31900	28400	-3.8	ACIDO	0.01
2337	QUE-104	64.0	70.0	4300	200	33000	29300	-3.9	ACIDO	0.02
2338	QUE-104	70.0	72.0	4300	200	33000	29300	-3.9	ACIDO	0.02
2339	QUE-104	72.0	80.0	6300	200	38100	34500	-4.7	ACIDO	0.02
2340	QUE-104	88.0	90.0	2000	200	33600	31000	-4.2	ACIDO	0.04
2341	QUE-104	90.0	96.0	2000	200	33600	31000	-4.2	ACIDO	0.04
2342	QUE-104	96.0	100.0	2200	200	36900	33900	-4.6	ACIDO	0.05
2343	QUE-104	100.0	104.0	2200	200	36900	33900	-4.6	ACIDO	0.05
2344	QUE-104	104.0	110.0	2900	200	35000	32100	-4.3	ACIDO	0.07
2345	QUE-104	110.0	112.0	2900	200	35000	32100	-4.3	ACIDO	0.07
2346	QUE-104	112.0	120.0	7700	300	32700	29600	-3.9	ACIDO	0.05
2347	QUE-104	120.0	128.0	3600	300	31300	27600	-3.7	ACIDO	0.10
2348	QUE-104	136.0	140.0	5500	400	27900	24600	-3.2	ACIDO	0.07
2349	QUE-104	140.0	141.0	1100	200	34000	27800	-3.7	ACIDO	0.00
2350	QUE-104	148.0	150.0	2600	200	39200	34800	-4.7	ACIDO	0.09
2351	QUE-104	150.0	156.0	2600	200	39200	34800	-4.7	ACIDO	0.07
2352	QUE-104	156.0	160.1	4900	200	43400	39800	-5.4	ACIDO	0.10
2353	QUE-104	160.1	164.0	4900	200	43400	39800	-5.4	ACIDO	0.08
2354	QUE-104	180.0	188.0	2200	200	33600	30400	-4.1	ACIDO	0.05
2355	QUE-104	356.0	364.0	990	200	37200	32900	-4.4	ACIDO	0.09
2356	QUE-105	16.0	24.0	240	200	270	100	0.1	INERTE	0.08
2357	QUE-105	40.7	48.0	200	200	330	100	0.1	INERTE	0.08
2358	QUE-105	64.0	72.0	100	200	200	100	0.1	INERTE	0.07
2359	QUE-105	72.0	79.6	240	200	210	100	0.1	INERTE	0.06
2360	QUE-105	79.6	88.0	470	200	260	100	0.1	INERTE	0.09
2361	QUE-105	120.0	128.4	1500	200	300	100	0.1	INERTE	0.04
2362	QUE-105	208.0	215.6	340	200	220	100	0.1	INERTE	0.08
2363	QUE-105	215.6	224.0	470	200	250	100	0.1	INERTE	0.08
2364	QUE-105	224.0	232.0	430	200	200	100	0.1	INERTE	0.08
2365	QUE-105	319.7	327.9	1880	200	41200	34500	-4.7	ACIDO	0.06
2366	QUE-105	327.9	331.4	3320	200	42400	39100	-5.3	ACIDO	0.04
2367	QUE-106	24.0	32.0	2330	200	4460	460	0.0	INERTE	0.07
2368	QUE-106	32.0	40.0	680	200	220	100	0.1	INERTE	0.06
2369	QUE-106	40.0	48.0	1630	200	370	100	0.1	INERTE	0.07
2370	QUE-106	48.0	56.0	820	200	250	100	0.1	INERTE	0.07
2371	QUE-106	72.0	80.0	1140	300	240	100	0.1	LIGERAMENTE BASICO	0.09
2372	QUE-106	80.0	90.0	820	200	200	100	0.1	INERTE	0.06
2373	QUE-106	90.0	98.0	820	200	200	100	0.1	INERTE	0.05
2374	QUE-106	98.0	106.0	990	300	200	100	0.1	LIGERAMENTE BASICO	0.09
2375	QUE-107	0.0	8.0	1950	200	4080	480	0.0	INERTE	0.07
2376	QUE-107	8.0	16.0	2570	300	16500	13000	-1.7	ACIDO	0.02
2377	QUE-107	16.0	20.0	1080	300	23400	20300	-2.7	ACIDO	0.01
2378	QUE-107	20.0	24.0	1080	300	23400	20300	-2.7	ACIDO	0.01
2379	QUE-107	24.0	30.0	1120	300	28600	25900	-3.4	ACIDO	0.01
2380	QUE-107	30.0	32.0	1120	300	28600	25900	-3.4	ACIDO	0.01
2381	QUE-107	32.0	40.0	920	400	25700	21600	-2.8	ACIDO	0.01
2382	QUE-107	40.0	48.0	1130	200	17500	12500	-1.6	ACIDO	0.01
2383	QUE-107	48.0	50.0	780	200	28300	25600	-3.4	ACIDO	0.02
2384	QUE-107	50.0	56.0	780	200	28300	25600	-3.4	ACIDO	0.02
2385	QUE-107	56.0	64.0	860	200	15800	10300	-1.3	ACIDO	0.02
2386	QUE-107	64.0	72.0	500	200	14400	2700	-0.3	LIGERAMENTE ACIDO	0.06
2387	QUE-107	72.0	80.0	580	200	7520	420	0.0	INERTE	0.07
2388	QUE-107	80.0	88.0	1190	200	5580	100	0.1	INERTE	0.03
2389	QUE-107	88.0	96.0	600	200	14300	2900	-0.3	LIGERAMENTE ACIDO	0.03
2390	QUE-107	112.0	120.0	560	200	870	100	0.1	INERTE	0.08
2391	QUE-107	136.0	144.0	560	200	320	100	0.1	INERTE	0.06
2392	QUE-107	152.0	160.0	740	200	1020	100	0.1	INERTE	0.08
2393	QUE-107	160.0	168.0	490	200	1040	100	0.1	INERTE	0.10
2394	QUE-107	176.0	184.0	510	200	680	100	0.1	INERTE	0.09
2395	QUE-107	184.0	192.0	510	200	1440	100	0.1	INERTE	0.08
2396	QUE-107	192.0	200.0	670	200	700	100	0.1	INERTE	0.07
2397	QUE-107	208.0	216.0	260	200	300	100	0.1	INERTE	0.07
2398	QUE-107	216.0	224.0	250	200	490	100	0.1	INERTE	0.07
2399	QUE-107	224.0	232.0	260	200	730	100	0.1	INERTE	0.08
2400	QUE-107	288.0	296.0	360	200	270	100	0.1	INERTE	0.07

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2401	QUE-107	296.0	304.0	310	200	450	100	0.1	INERTE	0.09
2402	QUE-141	40.0	50.0	1400	200	37600	34400	-4.6	ACIDO	0.08
2403	QUE-141	80.0	90.0	900	200	31700	15300	-2.0	ACIDO	0.07
2404	QUE-144	208.0	209.7	700	200	9630	200	0.1	INERTE	0.09
2405	QUE-144	216.0	218.0	660	200	38900	15300	-2.0	ACIDO	0.06
2406	QUE-144	264.0	266.0	780	200	200	200	0.1	INERTE	0.06
2407	QUE-144	280.0	282.0	870	200	37200	23200	-3.1	ACIDO	0.05
2408	QUE-144	282.0	288.0	1070	200	36200	33960	-4.6	ACIDO	0.03
2409	QUE-144	288.0	290.0	1070	200	36200	33960	-4.6	ACIDO	0.06
2410	QUE-144	290.0	296.0	760	200	33200	18800	-2.5	ACIDO	0.04
2411	QUE-144	296.0	298.0	760	200	33200	18800	-2.5	ACIDO	0.06
2412	QUE-144	336.0	340.0	200	200	9020	2010	-0.2	LIGERAMENTE ACIDO	0.09
2413	QUE-144	340.0	344.0	200	200	6350	750	0.0	INERTE	0.10
2414	QUE-144	344.0	348.0	200	200	6350	750	0.0	INERTE	0.07
2415	QUE-144	348.0	352.0	200	200	670	200	0.1	INERTE	0.07
2416	QUE-144	352.0	356.0	200	200	670	200	0.1	INERTE	0.07
2417	QUE-144	360.0	364.2	200	200	240	200	0.1	INERTE	0.09
2418	QUE-144	372.0	376.0	200	200	16250	9830	-1.3	ACIDO	0.05
2419	QUE-144	376.0	380.0	200	200	16250	9830	-1.3	ACIDO	0.06
2420	QUE-144	380.0	384.0	200	200	18780	3120	-0.4	LIGERAMENTE ACIDO	0.07
2421	QUE-144	384.0	387.8	200	200	18780	3120	-0.4	LIGERAMENTE ACIDO	0.07
2422	QUE-144	392.0	396.0	260	200	38970	2590	-0.3	LIGERAMENTE ACIDO	0.08
2423	QUE-144	400.0	404.0	200	200	35360	200	0.1	INERTE	0.08
2424	QUE-144	408.0	412.0	1630	200	35890	22310	-3.0	ACIDO	0.07
2425	QUE-144	412.0	416.0	460	200	10450	1200	-0.1	INERTE	0.04
2426	QUE-144	416.0	420.0	460	200	10450	1200	-0.1	INERTE	0.05
2427	QUE-144	420.0	424.0	250	200	35210	9530	-1.2	ACIDO	0.07
2428	QUE-144	424.0	428.0	250	200	35210	9530	-1.2	ACIDO	0.07
2429	QUE-144	428.0	432.0	200	200	33950	5920	-0.7	LIGERAMENTE ACIDO	0.06
2430	QUE-144	436.0	440.0	200	200	43520	29220	-3.9	ACIDO	0.03
2431	QUE-144	440.0	444.0	200	200	43520	29220	-3.9	ACIDO	0.03
2432	QUE-144	444.0	448.0	280	200	37920	13120	-1.7	ACIDO	0.05
2433	QUE-144	448.0	452.0	280	200	37920	13120	-1.7	ACIDO	0.04
2434	QUE-144	452.0	456.0	250	200	17110	3050	-0.3	LIGERAMENTE ACIDO	0.04
2435	QUE-144	456.0	460.0	250	200	17110	3050	-0.3	LIGERAMENTE ACIDO	0.04
2436	QUE-144	460.0	464.0	200	200	11300	790	0.0	INERTE	0.02
2437	QUE-144	464.0	468.0	200	200	11300	790	0.0	INERTE	0.02
2438	QUE-144	468.0	472.0	250	200	17630	2630	-0.3	LIGERAMENTE ACIDO	0.03
2439	QUE-144	472.0	476.3	250	200	17630	2630	-0.3	LIGERAMENTE ACIDO	0.05
2440	QUE-144	476.3	480.0	200	200	53940	37360	-5.0	ACIDO	0.08
2441	QUE-144	480.0	484.3	200	200	53940	37360	-5.0	ACIDO	0.07
2442	QUE-144	484.3	488.0	240	200	37060	21140	-2.8	ACIDO	0.06
2443	QUE-144	488.0	492.0	240	200	37060	21140	-2.8	ACIDO	0.03
2444	QUE-144	492.0	496.0	200	200	20440	3060	-0.3	LIGERAMENTE ACIDO	0.03
2445	QUE-144	496.0	500.3	200	200	20440	3060	-0.3	LIGERAMENTE ACIDO	0.03
2446	QUE-145	160.0	168.0	1000	1000	1290	0	0.4	LIGERAMENTE BASICO	0.08
2447	QUE-145	168.0	168.2	1000	1000	1290	0	0.4	LIGERAMENTE BASICO	0.07
2448	QUE-145	184.0	192.0	1000	1000	1180	0	0.4	LIGERAMENTE BASICO	0.10
2449	QUE-145	192.0	200.0	450	30	26780	150	0.0	INERTE	0.08
2450	QUE-145	240.0	240.1	390	60	340	10	0.0	INERTE	0.07
2451	QUE-145	240.1	248.0	480	80	450	10	0.0	INERTE	0.08
2452	QUE-145	255.7	256.0	450	40	8620	0	0.0	INERTE	0.08
2453	QUE-145	256.0	264.0	450	40	8620	0	0.0	INERTE	0.09
2454	QUE-145	272.0	280.0	450	40	54880	33900	-4.6	ACIDO	0.05
2455	QUE-145	280.0	288.0	370	100	51020	37510	-5.1	ACIDO	0.04
2456	QUE-145	288.0	296.0	600	60	41930	25900	-3.5	ACIDO	0.04
2457	QUE-146	0.0	8.0	2390	620	10420	4430	-0.4	LIGERAMENTE ACIDO	0.07
2458	QUE-146	318.0	326.0	200	200	1060	720	0.0	INERTE	0.07
2459	QUE-146	326.0	333.8	230	200	400	200	0.1	INERTE	0.08
2460	QUE-146	404.0	406.0	590	200	53160	46430	-6.3	ACIDO	0.05
2461	QUE-146	406.0	412.0	590	200	53160	46430	-6.3	ACIDO	0.06
2462	QUE-146	412.0	414.0	530	200	61930	32330	-4.4	ACIDO	0.08
2463	QUE-146	438.0	444.0	590	200	63590	35190	-4.7	ACIDO	0.10
2464	QUE-146	444.0	446.0	940	200	65590	40390	-5.5	ACIDO	0.07
2465	QUE-146	452.0	454.0	520	200	61740	35140	-4.7	ACIDO	0.07
2466	QUE-146	454.0	460.0	520	200	61740	35140	-4.7	ACIDO	0.08
2467	QUE-146	460.0	462.0	410	200	12200	4210	-0.5	LIGERAMENTE ACIDO	0.03
2468	QUE-146	462.0	467.7	410	200	12200	4210	-0.5	LIGERAMENTE ACIDO	0.07
2469	QUE-146	486.0	492.3	550	200	46920	18920	-2.5	ACIDO	0.08
2470	QUE-146	494.0	500.0	530	200	48950	22250	-3.0	ACIDO	0.09
2471	QUE-152	21.0	30.2	500	500	44150	5350	-0.5	LIGERAMENTE ACIDO	0.01
2472	QUE-152	30.2	39.5	500	500	64720	30920	-4.1	ACIDO	0.02
2473	QUE-152	39.5	50.0	500	500	15380	3330	-0.3	LIGERAMENTE ACIDO	0.06
2474	QUE-152	50.0	60.3	500	500	6620	690	0.1	INERTE	0.05
2475	QUE-152	60.3	70.0	500	500	19170	1210	0.0	INERTE	0.05
2476	QUE-152	70.0	80.5	500	500	29670	4240	-0.4	LIGERAMENTE ACIDO	0.02
2477	QUE-152	80.5	90.5	500	500	39770	7330	-0.8	LIGERAMENTE ACIDO	0.02
2478	QUE-152	90.5	100.0	500	500	24140	1630	0.0	INERTE	0.03
2479	QUE-152	100.0	107.8	500	500	30520	1720	-0.1	INERTE	0.03
2480	QUE-152	107.8	113.0	500	500	8740	720	0.1	INERTE	0.04
2481	QUE-153	4.0	10.0	500	500	6590	0	0.2	LIGERAMENTE BASICO	0.01
2482	QUE-153	10.0	20.8	500	500	18790	4150	-0.4	LIGERAMENTE ACIDO	0.02
2483	QUE-153	20.8	30.0	500	500	64050	13510	-1.7	ACIDO	0.04
2484	QUE-153	30.0	40.8	500	500	38250	3220	-0.3	LIGERAMENTE ACIDO	0.08
2485	QUE-153	40.8	49.6	500	500	30230	5820	-0.6	LIGERAMENTE ACIDO	0.02
2486	QUE-153	60.3	70.0	500	500	26440	6090	-0.7	LIGERAMENTE ACIDO	0.02
2487	QUE-153	70.0	80.3	500	500	57370	14010	-1.7	ACIDO	0.05
2488	QUE-153	100.2	110.0	500	500	36480	32410	-4.3	ACIDO	0.04
2489	QUE-153	120.0	130.0	1410	500	29950	26460	-3.4	ACIDO	0.05
2490	QUE-153	130.0	140.0	500	500	33550	30240	-4.0	ACIDO	0.07
2491	QUE-153	150.0	160.0	1140	500	28420	23980	-3.1	ACIDO	0.09
2492	QUE-153	160.0	170.0	500	500	35230	30670	-4.0	ACIDO	0.07
2493	QUE-153	170.0	180.0	500	500	35590	31500	-4.1	ACIDO	0.06
2494	QUE-154	20.0	30.0	500	500	19060	13100	-1.6	ACIDO	0.08
2495	QUE-154	50.0	60.5	500	500	54000	41390	-5.5	ACIDO	0.09
2496	QUE-154	60.5	70.0	500	500	31190	8610	-1.0	LIGERAMENTE ACIDO	0.09
2497	QUE-154	70.0	80.0	500	500	42990	31580	-4.1	ACIDO	0.09
2498	QUE-154	140.0	150.0	1140	500	46620	43990	-5.8	ACIDO	0.08
2499	QUE-154	150.0	160.0	500	500	69880	64930	-8.7	ACIDO	0.08
2500	QUE-154	160.0	170.0	500	500	19950	10240	-1.2	ACIDO	0.04
2501	QUE-154	170.0	180.3	500	500	2180	70	0.2	LIGERAMENTE BASICO	0.04
2502	QUE-154	180.3	190.0	500	500	25840	16220	-2.0	ACIDO	0.07
2503	QUE-154	190.0	200.0	500	500	50190	47620	-6.3	ACIDO	0.03
2504	QUE-154	200.0	210.0	500	500	44610	42380	-5.6	ACIDO	0.01
2505	QUE-154	210.0	220.0	500	500	44440	41000	-5.4	ACIDO	0.01
2506	QUE-154	220.0	230.7	500	500	12640	0	0.2	LIGERAMENTE BASICO	0.04
2507	QUE-154	230.7	241.0	500	500	12330	0	0.2	LIGERAMENTE BASICO	0.05
2508	QUE-154	241.0	250.0	500	500	22720	13630	-1.7	ACIDO	0.02
2509	QUE-154	250.0	260.1	500	500	21600	15260	-1.9	ACIDO	0.01
2510	QUE-154	260.1	270.0	500	500	48700	32810	-4.3	ACIDO	0.01
2511	QUE-154	270.0	275.1	500	500	44960	39870	-5.3	ACIDO	0.01
2512	QUE-156	130.7	140.0	500	500	1800	0	0.2	LIGERAMENTE BASICO	0.08
2513	QUE-156	140.0	150.0	500	500	10310	2630	-0.2	LIGERAMENTE ACIDO	0.05
2514	QUE-156	150.0	160.0	500	500	12930	1680	0.0	INERTE	0.03
2515	QUE-156	160.0	170.0	500	500	11540	1480	0.0	INERTE	0.04
2516	QUE-156	170.0	180.0	500	500	2020	0	0.2	LIGERAMENTE BASICO	0.04
2517	QUE-156	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.04
2518	QUE-156	190.0	200.1	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
2519	QUE-157	11.0	20.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.04
2520	QUE-157	20.0	30.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2521	QUE-157	30.0	41.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
2522	QUE-157	70.0	81.6	500	500	16810	3250	-0.3	LIGERAMENTE ACIDO	0.07
2523	QUE-157	81.6	90.0	500	500	48180	10080	-1.2	ACIDO	0.05
2524	QUE-157	90.0	99.3	500	500	38690	11400	-1.4	ACIDO	0.05
2525	QUE-157	99.3	104.5	500	500	46420	13140	-1.6	ACIDO	0.03
2526	QUE-157	104.5	111.4	500	500	53360	2990	-0.2	LIGERAMENTE ACIDO	0.03
2527	QUE-157	111.4	120.5	500	500	29920	2180	-0.1	LIGERAMENTE ACIDO	0.06
2528	QUE-157	120.5	130.0	500	500	17760	870	0.1	INERTE	0.03
2529	QUE-157	130.0	140.0	500	500	9490	4860	-0.5	LIGERAMENTE ACIDO	0.02
2530	QUE-157	140.0	150.0	500	500	27330	24690	-3.2	ACIDO	0.05
2531	QUE-157	150.0	160.8	500	500	39140	36440	-4.8	ACIDO	0.04
2532	QUE-157	160.8	170.0	500	500	33000	30620	-4.0	ACIDO	0.04
2533	QUE-158	0.0	10.0	500	500	40400	6030	-0.6	LIGERAMENTE ACIDO	0.02
2534	QUE-158	10.0	20.0	500	500	48750	4770	-0.5	LIGERAMENTE ACIDO	0.07
2535	QUE-158	20.0	30.5	500	500	45610	6550	-0.7	LIGERAMENTE ACIDO	0.03
2536	QUE-158	30.5	40.0	500	500	39980	6210	-0.7	LIGERAMENTE ACIDO	0.02
2537	QUE-158	40.0	50.0	500	500	1620	0	0.2	LIGERAMENTE BASICO	0.01
2538	QUE-158	50.0	59.7	500	500	4350	1240	0.0	INERTE	0.01
2539	QUE-158	59.7	70.0	500	500	23860	19930	-2.5	ACIDO	0.02
2540	QUE-158	70.0	80.0	1020	500	18210	16530	-2.1	ACIDO	0.02
2541	QUE-158	80.0	89.5	500	500	24360	12320	-1.5	ACIDO	0.04
2542	QUE-158	89.5	100.0	500	500	28240	25990	-3.4	ACIDO	0.02
2543	QUE-158	100.0	110.0	1780	1190	20870	18800	-2.1	ACIDO	0.04
2544	QUE-158	159.5	170.0	500	500	33940	6590	-0.7	LIGERAMENTE ACIDO	0.08
2545	QUE-158	170.0	180.5	500	500	32960	9770	-1.2	ACIDO	0.08
2546	QUE-158	180.5	191.0	500	500	14220	1000	0.0	INERTE	0.07
2547	QUE-159	80.0	90.0	500	500	39330	35350	-4.7	ACIDO	0.02
2548	QUE-159	90.0	100.0	500	500	21080	18280	-2.3	ACIDO	0.08
2549	QUE-159	110.0	120.0	500	500	28300	26570	-3.5	ACIDO	0.09
2550	QUE-159	120.0	130.0	500	500	27260	25710	-3.3	ACIDO	0.08
2551	QUE-159	180.0	190.0	500	500	20590	18770	-2.4	ACIDO	0.06
2552	QUE-159	290.0	296.8	500	500	29270	26910	-3.5	ACIDO	0.05
2553	QUE-160	133.1	140.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
2554	QUE-160	140.0	151.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
2555	QUE-160	151.0	160.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.05
2556	QUE-160	171.5	181.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
2557	QUE-160	181.8	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.05
2558	QUE-160	190.0	200.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
2559	QUE-160	200.0	210.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.05
2560	QUE-160	210.0	221.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.04
2561	QUE-160	221.5	230.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.05
2562	QUE-160	230.0	240.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
2563	QUE-160	240.0	250.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
2564	QUE-160	250.0	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.10
2565	QUE-160	270.0	281.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
2566	QUE-160	281.0	285.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.01
2567	QUE-161	2.5	10.5	500	500	46960	7190	-0.8	LIGERAMENTE ACIDO	0.08
2568	QUE-161	10.5	20.0	500	500	54060	8060	-0.9	LIGERAMENTE ACIDO	0.06
2569	QUE-161	20.0	30.0	500	500	49860	9280	-1.1	ACIDO	0.06
2570	QUE-161	30.0	40.0	500	500	57380	8750	-1.0	ACIDO	0.07
2571	QUE-161	40.0	50.2	500	500	62860	7140	-0.8	LIGERAMENTE ACIDO	0.08
2572	QUE-161	230.0	240.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.08
2573	QUE-161	250.0	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
2574	QUE-161	260.0	270.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
2575	QUE-162	30.0	40.5	500	500	33140	3300	-0.3	LIGERAMENTE ACIDO	0.07
2576	QUE-162	40.5	50.0	1390	1040	40680	38240	-4.9	ACIDO	0.05
2577	QUE-162	50.0	61.0	1720	1060	28400	26390	-3.2	ACIDO	0.03
2578	QUE-162	61.0	70.0	500	500	17070	14070	-1.7	ACIDO	0.03
2579	QUE-162	70.0	81.0	500	500	3310	0	0.2	LIGERAMENTE BASICO	0.09
2580	QUE-162	140.0	150.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
2581	QUE-162	178.9	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
2582	QUE-162	208.7	213.7	500	500	500	0	0.2	LIGERAMENTE BASICO	0.08
2583	QUE-163	39.5	49.5	500	500	18020	220	0.2	LIGERAMENTE BASICO	0.06
2584	QUE-163	60.0	70.0	500	500	75970	0	0.2	LIGERAMENTE BASICO	0.10
2585	QUE-163	90.9	100.0	500	500	41520	14300	-1.8	ACIDO	0.06
2586	QUE-163	100.0	109.5	500	500	43910	6660	-0.7	LIGERAMENTE ACIDO	0.05
2587	QUE-163	109.5	120.5	500	500	48610	5490	-0.6	LIGERAMENTE ACIDO	0.06
2588	QUE-163	120.5	130.3	500	500	22350	520	0.1	LIGERAMENTE BASICO	0.06
2589	QUE-164	20.0	31.5	1150	500	43300	41110	-5.4	ACIDO	0.09
2590	QUE-164	190.0	200.6	500	500	35770	6990	-0.8	LIGERAMENTE ACIDO	0.06
2591	QUE-164	220.5	230.0	500	500	9690	1490	0.0	INERTE	0.09
2592	QUE-164	230.0	240.0	500	500	2980	660	0.1	INERTE	0.03
2593	QUE-164	240.0	250.0	500	500	4300	560	0.1	LIGERAMENTE BASICO	0.02
2594	QUE-164	250.0	260.3	500	500	13300	0	0.2	LIGERAMENTE BASICO	0.05
2595	QUE-164	260.8	270.0	500	500	12240	1520	0.0	INERTE	0.07
2596	QUE-164	270.0	281.4	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
2597	QUE-165	16.3	20.7	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
2598	QUE-165	20.7	30.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
2599	QUE-165	30.0	41.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
2600	QUE-165	41.5	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
2601	QUE-165	50.0	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.05
2602	QUE-165	60.0	70.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
2603	QUE-165	70.0	81.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.03
2604	QUE-165	81.0	90.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.07
2605	QUE-165	110.5	120.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.09
2606	QUE-165	120.5	130.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.02
2607	QUE-165	130.0	140.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.10
2608	QUE-165	251.0	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.06
2609	QUE-165	260.0	270.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.08
2610	QUE-166	7.5	11.5	600	50	25700	13500	-1.8	ACIDO	0.03
2611	QUE-166	11.5	21.5	400	50	25300	13300	-1.8	ACIDO	0.02
2612	QUE-166	21.5	30.3	300	50	29700	12200	-1.7	ACIDO	0.04
2613	QUE-166	30.3	39.3	400	50	13200	6500	-0.9	LIGERAMENTE ACIDO	0.04
2614	QUE-166	39.3	49.5	400	50	200	100	0.0	INERTE	0.07
2615	QUE-166	49.5	59.5	400	50	200	100	0.0	INERTE	0.05
2616	QUE-166	59.5	69.0	300	100	200	100	0.0	INERTE	0.02
2617	QUE-166	69.0	80.0	500	50	46500	20300	-2.8	ACIDO	0.02
2618	QUE-166	80.0	89.0	500	50	61200	28400	-3.9	ACIDO	0.01
2619	QUE-166	89.0	100.0	800	50	62900	30000	-4.1	ACIDO	0.03
2620	QUE-166	100.0	109.5	400	50	62600	31200	-4.3	ACIDO	0.02
2621	QUE-166	119.1	130.0	400	50	18600	9800	-1.3	ACIDO	0.06
2622	QUE-166	130.0	140.0	500	50	23900	15400	-2.1	ACIDO	0.08
2623	QUE-166	140.0	150.5	500	50	22700	13800	-1.9	ACIDO	0.06
2624	QUE-166	150.5	160.5	300	50	31300	18600	-2.5	ACIDO	0.05
2625	QUE-166	160.5	170.5	400	50	21500	12900	-1.7	ACIDO	0.06
2626	QUE-166	170.5	180.5	400	50	200	100	0.0	INERTE	0.07
2627	QUE-166	180.5	190.3	400	100	200	100	0.0	INERTE	0.10
2628	QUE-166	190.3	200.0	500	200	500	100	0.1	INERTE	0.08
2629	QUE-167	11.5	21.5	600	50	200	100	0.0	INERTE	0.02
2630	QUE-167	21.5	31.0	500	50	200	100	0.0	INERTE	0.01
2631	QUE-167	31.0	41.5	300	100	200	100	0.0	INERTE	0.02
2632	QUE-167	41.5	51.5	300	50	300	100	0.0	INERTE	0.03
2633	QUE-167	51.5	60.0	500	50	200	100	0.0	INERTE	0.03
2634	QUE-167	60.0	70.0	300	50	300	100	0.0	INERTE	0.03
2635	QUE-167	70.0	80.0	100	50	300	100	0.0	INERTE	0.03
2636	QUE-167	80.0	90.0	400	50	300	100	0.0	INERTE	0.07
2637	QUE-167	90.0	99.0	200	100	300	100	0.0	INERTE	0.05
2638	QUE-167	99.0	109.0	300	50	200	100	0.0	INERTE	0.09
2639	QUE-168	4.2	10.8	500	50	30100	15200	-2.1	ACIDO	0.04
2640	QUE-168	10.8	19.0	3500	50	23800	13400	-1.8	ACIDO	0.03
2641	QUE-168	19.0	30.5	4000	100	8000	6500	-0.9	LIGERAMENTE ACIDO	0.01
2642	QUE-168	30.5	40.3	4200	50	10800	9700	-1.3	ACIDO	0.03
2643	QUE-168	40.3	50.5	1000	50	17200	15000	-2.0	ACIDO	0.02
2644	QUE-168	50.5	60.5	600	100	11800	5500	-0.7	LIGERAMENTE ACIDO	0.04
2645	QUE-168	60.5	71.0	600	100	47800	22600	-3.1	ACIDO	0.04
2646	QUE-168	71.0	80.5	600	100	36800	18600	-2.5	ACIDO	0.03
2647	QUE-168	80.5	89.5	6100	100	18100	16100	-2.2	ACIDO	0.04
2648	QUE-168	89.5	99.5	2100	100	1300	300	0.0	INERTE	0.06
2649	QUE-168	99.5	110.0	3300	100	5700	4300	-0.6	LIGERAMENTE ACIDO	0.02
2650	QUE-168	110.0	120.0	8600	200	7700	6700	-0.8	LIGERAMENTE ACIDO	0.01
2651	QUE-168	120.0	130.0	16700	400	29400	28300	-3.7	ACIDO	0.01
2652	QUE-168	130.0	139.5	6100	50	21600	15700	-2.1	ACIDO	0.02
2653	QUE-168	139.5	150.5	300	50	46600	20200	-2.7	ACIDO	0.10
2654	QUE-169	11.3	20.0	400	100	300	100	0.0	INERTE	0.01
2655	QUE-169	20.0	30.0	300	100	300	200	0.0	INERTE	0.01
2656	QUE-169	30.0	40.5	200	50	200	0	0.0	INERTE	0.01
2657	QUE-169	40.5	49.0	400	50	300	200	0.0	INERTE	0.03
2658	QUE-169	49.0	59.0	300	200	300	100	0.1	INERTE	0.03
2659	QUE-169	59.0	69.0	400	50	300	200	0.0	INERTE	0.02
2660	QUE-169	69.0	79.0	400	50	300	250	0.0	INERTE	0.04
2661	QUE-169	79.0	90.0	200	50	200	100	0.0	INERTE	0.07
2662	QUE-169	90.0	100.0	300	50	200	100	0.0	INERTE	0.05
2663	QUE-169	100.0	110.0	300	50	300	100	0.0	INERTE	0.06
2664	QUE-169	110.0	120.5	300	50	300	200	0.0	INERTE	0.08
2665	QUE-169	120.5	130.5	400	50	300	100	0.0	INERTE	0.10
2666	QUE-169	199.0	210.0	300	50	200	150	0.0	INERTE	0.10
2667	QUE-169	229.5	239.5	300	100	300	200	0.0	INERTE	0.06
2668	QUE-169	330.0	340.0	400	50	12200	12000	-1.6	ACIDO	0.10
2669	QUE-170	2.7	11.2	600	50	44700	16900	-2.3	ACIDO	0.05
2670	QUE-170	11.2	20.0	200	50	27100	13400	-1.8	ACIDO	0.05
2671	QUE-170	20.0	31.0	400	100	34200	16200	-2.2	ACIDO	0.04
2672	QUE-170	31.0	40.7	500	100	42300	21000	-2.8	ACIDO	0.04
2673	QUE-170	40.7	51.5	500	50	18300	9400	-1.3	ACIDO	0.03
2674	QUE-170	51.5	60.3	1200	50	1800	400	0.0	INERTE	0.04
2675	QUE-170	60.3	70.8	1000	50	1700	300	0.0	INERTE	0.05
2676	QUE-170	70.8	81.0	2300	100	30500	28200	-3.8	ACIDO	0.06
2677	QUE-170	81.0	91.0	5300	100	30800	28700	-3.9	ACIDO	0.05
2678	QUE-170	91.0	101.0	7900	100	34700	30500	-4.1	ACIDO	0.07
2679	QUE-170	101.0	111.0	3700	700	30800	27500	-3.5	ACIDO	0.02
2680	QUE-170	111.0	120.5	4600	1200	29500	25400	-3.0	ACIDO	0.02
2681	QUE-170	120.5	130.5	3400	700	31200	27300	-3.5	ACIDO	0.01
2682	QUE-170	130.5	140.5	33100	50	31400	29500	-4.0	ACIDO	0.01
2683	QUE-170	140.5	150.2	1100	50	32500	30900	-4.2	ACIDO	0.01
2684	QUE-170	150.2	160.0	1600	100	31000	28300	-3.8	ACIDO	0.01
2685	QUE-170	160.0	170.0	3900	1200	26000	23000	-2.7	ACIDO	0.00
2686	QUE-170	170.0	180.0	3800	1000	20900	17300	-2.0	ACIDO	0.01
2687	QUE-170	180.0	191.1	2100	100	31100	28500	-3.9	ACIDO	0.01
2688	QUE-170	191.1	200.4	1200	50	19300	17300	-2.4	ACIDO	0.03
2689	QUE-170	200.4	210.0	300	50	83800	22000	-3.0	ACIDO	0.09
2690	QUE-171	3.1	11.0	1600	100	51000	20300	-2.7	ACIDO	0.03
2691	QUE-171	11.0	21.0	1000	50	54200	30200	-4.1	ACIDO	0.04
2692	QUE-171	21.0	30.7	300	50	39500	24400	-3.3	ACIDO	0.06
2693	QUE-171	30.7	40.0	700	50	31700	18100	-2.5	ACIDO	0.07
2694	QUE-171	40.0	50.1	1200	50	51300	26200	-3.6	ACIDO	0.07
2695	QUE-171	50.1	60.0	1200	50	35300	19200	-2.6	ACIDO	0.05
2696	QUE-171	60.0	71.3	800	50	36500	22100	-3.0	ACIDO	0.07
2697	QUE-171	71.3	80.5	500	50	44600	28200	-3.8	ACIDO	0.06
2698	QUE-171	80.5	90.5	300	50	26700	13200	-1.8	ACIDO	0.10
2699	QUE-171	90.5	99.2	400	50	33300	16900	-2.3	ACIDO	0.10
2700	QUE-171	99.2	109.5	800	100	32600	16900	-2.3	ACIDO	0.09
2701	QUE-171	130.5	139.5	700	100	23900	12100	-1.6	ACIDO	0.10
2702	QUE-172	4.0	10.0	200	100	51500	20200	-2.7	ACIDO	0.04
2703	QUE-172	10.0	20.0	300	50	49300	22000	-3.0	ACIDO	0.08
2704	QUE-172	20.0	29.5	300	50	22200	13100	-1.8	ACIDO	0.08
2705	QUE-172	29.5	39.7	400	50	30700	19700	-2.7	ACIDO	0.07
2706	QUE-172	39.7	50.0	300	50	1600	900	-0.1	LIGERAMENTE ACIDO	0.05
2707	QUE-172	50.0	60.5	400	100	300	100	0.0	INERTE	0.08
2708	QUE-172	60.5	71.1	300	50	1700	1000	-0.1	LIGERAMENTE ACIDO	0.09
2709	QUE-172	71.1	80.0	400	200	7400	4400	-0.5	LIGERAMENTE ACIDO	0.05
2710	QUE-172	80.0	90.3	400	50	19000	9500	-1.3	ACIDO	0.06
2711	QUE-172	90.3	101.5	200	50	54400	24200	-3.3	ACIDO	0.09
2712	QUE-172	140.6	149.2	200	200	1300	700	0.0	INERTE	0.05
2713	QUE-172	149.2	159.5	300	200	300	0	0.1	INERTE	0.07
2714	QUE-173	3.5	10.0	1200	200	29800	23900	-3.2	ACIDO	0.01
2715	QUE-173	10.0	20.0	800	100	38200	35300	-4.8	ACIDO	0.01
2716	QUE-173	20.0	30.0	1200	50	38200	36400	-5.0	ACIDO	0.01
2717	QUE-173	30.0	39.5	2500	50	43800	42400	-5.8	ACIDO	0.02
2718	QUE-173	39.5	49.5	2800	50	36300	35000	-4.8	ACIDO	0.03
2719	QUE-173	49.5	59.7	5700	50	18200	17200	-2.3	ACIDO	0.01
2720	QUE-173	59.7	69.2	1400	50	28500	27100	-3.7	ACIDO	0.05
2721	QUE-173	69.2	79.9	500	50	15000	7500	-1.0	ACIDO	0.05
2722	QUE-173	79.9	90.5	500	50	14100	5500	-0.7	LIGERAMENTE ACIDO	0.06
2723	QUE-173	90.5	100.2	300	100	6000	2200	-0.3	LIGERAMENTE ACIDO	0.06
2724	QUE-173	100.2	109.5	200	50	28600	15700	-2.1	ACIDO	0.06
2725	QUE-173	109.5	119.0	200	100	24500	12500	-1.7	ACIDO	0.07
2726	QUE-173	119.0	130.7	300	50	37800	25500	-3.5	ACIDO	0.09
2727	QUE-173	180.6	190.0	200	50	11300	6000	-0.8	LIGERAMENTE ACIDO	0.05
2728	QUE-173	199.5	209.0	1000	50	28900	20800	-2.8	ACIDO	0.09
2729	QUE-174	0.5	10.5	6100	100	2000	400	0.0	INERTE	0.02
2730	QUE-174	10.5	19.2	4700	200	3800	2400	-0.3	LIGERAMENTE ACIDO	0.02
2731	QUE-174	19.2	29.0	5700	100	5900	2300	-0.3	LIGERAMENTE ACIDO	0.03
2732	QUE-174	29.0	40.5	900	50	40100	30000	-4.1	ACIDO	0.03
2733	QUE-174	40.5	49.8	600	50	34300	24800	-3.4	ACIDO	0.06
2734	QUE-174	49.8	59.7	1000	50	25600	17300	-2.4	ACIDO	0.07
2735	QUE-174	130.4	140.5	2400	50	8000	3500	-0.5	LIGERAMENTE ACIDO	0.07
2736	QUE-175	2.5	11.5	400	50	400	0	0.0	INERTE	0.02
2737	QUE-175	11.5	20.2	100	50	800	300	0.0	INERTE	0.03
2738	QUE-175	20.2	30.0	100	50	300	100	0.0	INERTE	0.02
2739	QUE-175	30.0	39.0	50	50	400	100	0.0	INERTE	0.02
2740	QUE-175	39.0	49.0	300	50	300	0	0.0	INERTE	0.05
2741	QUE-175	49.0	60.1	100	50	300	100	0.0	INERTE	0.04
2742	QUE-175	60.1	70.0	300	50	500	200	0.0	INERTE	0.03
2743	QUE-175	70.0	80.0	200	50	300	100	0.0	INERTE	0.05
2744	QUE-175	80.0	90.0	200	50	300	100	0.0	INERTE	0.08
2745	QUE-175	90.0	100.0	200	50	400	100	0.0	INERTE	0.06
2746	QUE-175	100.0	110.5	50	50	400	100	0.0	INERTE	0.07
2747	QUE-175	110.5	118.7	50	50	500	300	0.0	INERTE	0.08
2748	QUE-175	118.7	129.0	400	50	400	0	0.0	INERTE	0.08
2749	QUE-175	129.0	139.0	100	50	400	100	0.0	INERTE	0.09
2750	QUE-176	14.5	20.6	1900	100	82100	23800	-3.2	ACIDO	0.01
2751	QUE-176	20.6	30.3	600	50	35500	18700	-2.5	ACIDO	0.08
2752	QUE-176	30.3	39.0	300	100	29400	18300	-2.5	ACIDO	0.03
2753	QUE-176	39.0	49.8	1000	100	80300	48800	-6.6	ACIDO	0.02
2754	QUE-176	49.8	60.0	500	50	56100	26600	-3.6	ACIDO	0.07
2755	QUE-176	60.0	69.5	500	50	40000	23500	-3.2	ACIDO	0.06
2756	QUE-176	69.5	80.5	400	100	49400	22900	-3.1	ACIDO	0.04
2757	QUE-176	80.5	90.0	300	50	52000	33100	-4.5	ACIDO	0.05
2758	QUE-176	90.0	99.2	700	50	33400	17100	-2.3	ACIDO	0.06
2759	QUE-176	99.2	110.0	400	50	38500	19700	-2.7	ACIDO	0.07
2760	QUE-176	119.5	130.0	400	50	41900	23600	-3.2	ACIDO	0.10
2761	QUE-176	440.5	449.5	1300	50	53500	48300	-6.6	ACIDO	0.04
2762	QUE-176	449.5	456.5	3600	50	38500	37100	-5.1	ACIDO	0.02
2763	QUE-178	8.4	13.0	1100	50	6300	2500	-0.3	LIGERAMENTE ACIDO	0.05
2764	QUE-178	29.4	40.8	500	50	37900	19800	-2.7	ACIDO	0.04
2765	QUE-178	40.8	50.7	2600	50	13600	11400	-1.5	ACIDO	0.02
2766	QUE-178	50.7	61.0	1100	50	23400	21000	-2.9	ACIDO	0.09
2767	QUE-178	61.0	69.0	4100	50	36100	34200	-4.7	ACIDO	0.04
2768	QUE-178	69.0	78.8	1400	50	10800	9200	-1.2	ACIDO	0.04
2769	QUE-178	78.8	89.0	800	50	7700	3500	-0.5	LIGERAMENTE ACIDO	0.09
2770	QUE-178	100.4	110.6	300	50	28300	18500	-2.5	ACIDO	0.03
2771	QUE-178	110.6	120.0	300	50	37400	22800	-3.1	ACIDO	0.06
2772	QUE-178	120.0	130.8	500	50	27800	14800	-2.0	ACIDO	0.09
2773	QUE-178	130.8	140.0	500	50	39500	21300	-2.9	ACIDO	0.08
2774	QUE-178	209.5	220.2	400	50	36300	21500	-2.9	ACIDO	0.10
2775	QUE-178	440.5	450.0	1100	50	43500	40000	-5.5	ACIDO	0.03
2776	QUE-179	24.8	31.0	300	100	1000	500	0.0	INERTE	0.00
2777	QUE-179	31.0	41.0	200	100	900	600	0.0	INERTE	0.00
2778	QUE-179	41.0	51.0	100	50	200	0	0.0	INERTE	0.00
2779	QUE-179	51.0	61.0	100	100	100	0	0.0	INERTE	0.00
2780	QUE-179	61.0	70.2	200	200	200	0	0.1	INERTE	0.00
2781	QUE-179	70.2	79.0	200	100	300	0	0.0	INERTE	0.01
2782	QUE-179	79.0	89.5	200	100	200	0	0.0	INERTE	0.01
2783	QUE-179	89.5	99.8	300	100	300	0	0.0	INERTE	0.05
2784	QUE-179	99.8	110.0	100	100	100	0	0.0	INERTE	0.10
2785	QUE-179	120.2	130.0	200	100	100	0	0.0	INERTE	0.07
2786	QUE-179	130.0	139.5	200	50	300	100	0.0	INERTE	0.09
2787	QUE-179	139.5	150.0	200	100	100	0	0.0	INERTE	0.05
2788	QUE-179	150.0	159.5	100	100	100	0	0.0	INERTE	0.03
2789	QUE-179	159.5	169.4	100	100	100	0	0.0	INERTE	0.08
2790	QUE-179	169.4	180.0	200	100	300	0	0.0	INERTE	0.08
2791	QUE-179	180.0	190.0	200	100	300	0	0.0	INERTE	0.09
2792	QUE-179	190.0	200.0	200	100	200	0	0.0	INERTE	0.08
2793	QUE-179	200.0	210.0	200	100	300	100	0.0	INERTE	0.08
2794	QUE-179	210.0	220.0	200	100	400	0	0.0	INERTE	0.06
2795	QUE-179	220.0	230.0	200	100	700	0	0.0	INERTE	0.08
2796	QUE-179	230.0	240.0	200	200	600	100	0.1	INERTE	0.09
2797	QUE-180	29.0	39.0	300	50	300	100	0.0	INERTE	0.01
2798	QUE-180	39.0	50.0	300	50	300	100	0.0	INERTE	0.01
2799	QUE-180	50.0	60.3	400	50	15800	8800	-1.2	ACIDO	0.01
2800	QUE-180	60.3	70.0	500	50	20700	11500	-1.6	ACIDO	0.02
2801	QUE-180	70.0	80.4	400	50	25100	14900	-2.0	ACIDO	0.04
2802	QUE-180	80.4	90.5	700	50	37500	22400	-3.1	ACIDO	0.04
2803	QUE-180	90.5	100.2	600	50	33100	20100	-2.7	ACIDO	0.03
2804	QUE-180	100.2	110.7	400	50	33600	19100	-2.6	ACIDO	0.01
2805	QUE-180	110.7	120.5	600	50	32600	16900	-2.3	ACIDO	0.01
2806	QUE-180	120.5	131.0	400	100	59400	21700	-2.9	ACIDO	0.01
2807	QUE-180	131.0	140.5	500	50	31400	17800	-2.4	ACIDO	0.03
2808	QUE-180	140.5	150.0	300	50	30800	18400	-2.5	ACIDO	0.01
2809	QUE-180	150.0	160.5	100	50	39400	24700	-3.4	ACIDO	0.01
2810	QUE-180	160.5	170.5	300	50	12700	7600	-1.0	ACIDO	0.01
2811	QUE-180	170.5	180.0	400	50	2000	1100	-0.1	LIGERAMENTE ACIDO	0.02
2812	QUE-180	180.0	189.8	400	50	2100	1000	-0.1	LIGERAMENTE ACIDO	0.02
2813	QUE-180	189.8	200.0	600	50	1700	800	-0.1	NEUTRAL	0.07
2814	QUE-180	200.0	209.3	500	50	600	300	0.0	INERTE	0.09
2815	QUE-180	209.3	220.0	400	50	500	100	0.0	INERTE	0.05
2816	QUE-180	220.0	230.0	400	50	600	200	0.0	INERTE	0.05
2817	QUE-180	230.0	240.5	400	50	800	300	0.0	INERTE	0.06
2818	QUE-180	240.5	250.8	400	100	400	0	0.0	INERTE	0.10
2819	QUE-181	180.0	190.5	1000	50	14100	11100	-1.5	ACIDO	0.06
2820	QUE-181	190.5	201.0	1700	50	41400	34700	-4.7	ACIDO	0.08
2821	QUE-181	201.0	210.0	2500	50	47400	45500	-6.2	ACIDO	0.06
2822	QUE-181	240.0	250.0	1800	50	32100	29500	-4.0	ACIDO	0.03
2823	QUE-181	250.0	260.0	1500	50	17100	15100	-2.1	ACIDO	0.04
2824	QUE-181	290.0	300.0	1700	50	18800	17800	-2.4	ACIDO	0.07
2825	QUE-182	6.0	10.0	1200	50	33100	30200	-4.1	ACIDO	0.00
2826	QUE-182	10.0	20.0	2800	100	50600	47800	-6.5	ACIDO	0.01
2827	QUE-182	20.0	30.0	1700	50	43900	41200	-5.6	ACIDO	0.00
2828	QUE-182	30.0	40.0	800	50	54700	44400	-6.1	ACIDO	0.01
2829	QUE-182	40.0	50.0	1600	50	45000	41400	-5.7	ACIDO	0.02
2830	QUE-182	50.0	60.0	1900	50	36900	35000	-4.8	ACIDO	0.02
2831	QUE-182	60.0	70.0	2600	1500	27500	24600	-2.8	ACIDO	0.01
2832	QUE-182	70.0	80.0	300	100	30800	16300	-2.2	ACIDO	0.02
2833	QUE-182	80.0	90.0	500	100	20800	11000	-1.5	ACIDO	0.02
2834	QUE-182	90.0	100.0	700	50	34000	26400	-3.6	ACIDO	0.02
2835	QUE-182	100.0	110.0	3900	50	17500	16900	-2.3	ACIDO	0.02
2836	QUE-182	110.0	120.5	1900	100	12100	5600	-0.7	LIGERAMENTE ACIDO	0.03
2837	QUE-182	120.5	131.0	300	200	22500	12900	-1.7	ACIDO	0.01
2838	QUE-182	131.0	139.4	1000	300	26200	15700	-2.0	ACIDO	0.05
2839	QUE-182	139.4	150.0	400	300	46500	27300	-3.6	ACIDO	0.04
2840	QUE-182	150.0	160.0	400	300	45000	23700	-3.1	ACIDO	0.05
2841	QUE-182	160.0	170.9	500	100	45500	27400	-3.7	ACIDO	0.04
2842	QUE-182	170.9	180.0	200	50	17300	9700	-1.3	ACIDO	0.05
2843	QUE-182	190.2	200.3	200	50	22300	12300	-1.7	ACIDO	0.07
2844	QUE-182	200.3	210.0	200	100	7500	4000	-0.5	LIGERAMENTE ACIDO	0.09
2845	QUE-182	230.1	232.3	400	200	22600	11800	-1.5	ACIDO	0.09
2846	QUE-182	260.5	269.9	200	100	36100	17800	-2.4	ACIDO	0.08
2847	QUE-182	330.0	340.0	3200	50	41000	40100	-5.5	ACIDO	0.08
2848	QUE-182	340.0	350.0	2900	50	43300	42400	-5.8	ACIDO	0.06
2849	QUE-182	370.0	380.0	200	100	300	100	0.0	INERTE	0.05
2850	QUE-182	389.7	400.0	700	50	67600	53500	-7.3	ACIDO	0.09
2851	QUE-183	13.8	20.0	400	100	47800	36100	-4.9	ACIDO	0.00
2852	QUE-183	20.0	30.0	600	100	28800	14500	-1.9	ACIDO	0.01
2853	QUE-183	30.0	39.7	2000	100	21800	18500	-2.5	ACIDO	0.01
2854	QUE-183	39.7	50.0	1400	50	12300	9600	-1.3	ACIDO	0.07
2855	QUE-183	50.0	60.0	400	50	40900	22500	-3.1	ACIDO	0.03
2856	QUE-183	60.0	70.0	300	50	41400	21600	-2.9	ACIDO	0.02
2857	QUE-183	70.0	80.0	300	100	62200	35500	-4.8	ACIDO	0.03
2858	QUE-183	80.0	90.0	300	50	49300	24400	-3.3	ACIDO	0.04
2859	QUE-183	90.0	100.4	300	50	44600	22200	-3.0	ACIDO	0.05
2860	QUE-183	129.7	140.3	500	100	13800	9800	-1.3	ACIDO	0.06
2861	QUE-183	300.7	310.0	2400	200	43100	40200	-5.4	ACIDO	0.07
2862	QUE-184	16.1	22.0	500	200	300	100	0.1	INERTE	0.02
2863	QUE-184	22.0	30.0	300	50	200	100	0.0	INERTE	0.06
2864	QUE-184	30.0	40.0	300	50	300	100	0.0	INERTE	0.07
2865	QUE-184	40.0	50.0	400	50	300	100	0.0	INERTE	0.06
2866	QUE-184	50.0	60.0	300	50	400	100	0.0	INERTE	0.05
2867	QUE-184	60.0	70.0	300	50	300	100	0.0	INERTE	0.05
2868	QUE-184	90.2	100.0	300	50	400	100	0.0	INERTE	0.10
2869	QUE-184	100.0	110.0	300	100	500	100	0.0	INERTE	0.06
2870	QUE-184	110.0	120.5	400	50	300	100	0.0	INERTE	0.10
2871	QUE-184	130.0	140.0	600	100	300	100	0.0	INERTE	0.09
2872	QUE-184	140.0	150.0	300	200	300	100	0.1	INERTE	0.08
2873	QUE-185	33.8	40.0	3000	100	22600	20700	-2.8	ACIDO	0.00
2874	QUE-185	40.0	50.0	2200	100	14300	12400	-1.7	ACIDO	0.01
2875	QUE-185	50.0	60.0	500	100	10700	6400	-0.8	LIGERAMENTE ACIDO	0.03
2876	QUE-185	60.0	70.0	1100	50	1200	500	-0.1	INERTE	0.07
2877	QUE-185	70.0	80.0	1600	400	1400	400	0.1	NEUTRAL	0.08
2878	QUE-185	80.0	90.1	2200	50	12100	6400	-0.9	LIGERAMENTE ACIDO	0.01
2879	QUE-185	90.1	100.0	1100	50	19800	10900	-1.5	ACIDO	0.01
2880	QUE-185	100.0	110.0	1400	50	21700	16400	-2.2	ACIDO	0.01

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2881	QUE-185	110.0	120.0	1400	50	3900	1300	-0.2	LIGERAMENTE ACIDO	0.01
2882	QUE-185	120.0	130.0	2100	50	9000	6200	-0.8	LIGERAMENTE ACIDO	0.01
2883	QUE-185	130.0	140.0	1900	50	30500	24300	-3.3	ACIDO	0.02
2884	QUE-185	140.0	150.0	400	50	38300	16900	-2.3	ACIDO	0.02
2885	QUE-185	150.0	160.0	400	50	12000	5400	-0.7	LIGERAMENTE ACIDO	0.02
2886	QUE-185	160.0	170.2	400	50	5300	2600	-0.3	LIGERAMENTE ACIDO	0.06
2887	QUE-185	170.2	180.7	500	50	7700	2800	-0.4	LIGERAMENTE ACIDO	0.06
2888	QUE-185	180.7	189.6	700	50	8100	3300	-0.4	LIGERAMENTE ACIDO	0.05
2889	QUE-185	189.6	200.0	400	50	16800	7400	-1.0	LIGERAMENTE ACIDO	0.05
2890	QUE-185	200.0	210.0	500	100	10400	4900	-0.6	LIGERAMENTE ACIDO	0.08
2891	QUE-185	210.0	220.0	500	100	9100	3500	-0.4	LIGERAMENTE ACIDO	0.07
2892	QUE-185	220.0	230.0	400	200	59700	16300	-2.2	ACIDO	0.05
2893	QUE-185	430.0	440.0	1300	200	57900	50100	-6.8	ACIDO	0.10
2894	QUE-185	440.0	450.0	1400	200	34500	33700	-4.5	ACIDO	0.01
2895	QUE-185	450.0	458.8	2100	100	35700	34500	-4.7	ACIDO	0.01
2896	QUE-186	36.0	40.0	400	50	1200	600	-0.1	INERTE	0.06
2897	QUE-186	40.0	50.0	300	100	300	200	0.0	INERTE	0.04
2898	QUE-186	50.0	60.0	300	50	300	100	0.0	INERTE	0.06
2899	QUE-186	60.0	70.0	300	50	300	100	0.0	INERTE	0.07
2900	QUE-186	70.0	80.0	200	50	200	100	0.0	INERTE	0.07
2901	QUE-186	80.0	90.0	400	50	300	100	0.0	INERTE	0.09
2902	QUE-186	90.0	100.0	300	50	200	100	0.0	INERTE	0.09
2903	QUE-186	100.0	108.0	300	50	200	100	0.0	INERTE	0.08
2904	QUE-187	13.3	20.0	700	50	10600	7600	-1.0	ACIDO	0.04
2905	QUE-187	20.0	30.0	300	100	6200	4300	-0.6	LIGERAMENTE ACIDO	0.04
2906	QUE-187	30.0	40.0	300	50	200	0	0.0	INERTE	0.02
2907	QUE-187	40.0	50.0	600	100	300	0	0.0	INERTE	0.02
2908	QUE-187	50.0	60.0	500	100	300	100	0.0	INERTE	0.07
2909	QUE-187	60.0	70.2	400	100	300	100	0.0	INERTE	0.06
2910	QUE-187	80.0	90.0	300	200	300	0	0.1	INERTE	0.06
2911	QUE-187	90.0	100.0	400	50	300	100	0.0	INERTE	0.05
2912	QUE-187	100.0	110.4	400	50	200	100	0.0	INERTE	0.05
2913	QUE-187	110.4	120.0	300	50	300	100	0.0	INERTE	0.04
2914	QUE-187	120.0	130.0	300	50	200	0	0.0	INERTE	0.07
2915	QUE-187	140.0	150.0	400	50	300	100	0.0	INERTE	0.10
2916	QUE-187	150.0	159.9	400	50	300	100	0.0	INERTE	0.09
2917	QUE-187	350.0	360.0	200	50	300	200	0.0	INERTE	0.10
2918	QUE-188	36.7	40.7	400	100	600	200	0.0	INERTE	0.05
2919	QUE-188	40.7	50.0	400	200	400	100	0.1	INERTE	0.03
2920	QUE-188	50.0	60.0	300	100	300	0	0.0	INERTE	0.07
2921	QUE-188	60.0	70.1	400	200	300	100	0.1	INERTE	0.05
2922	QUE-188	70.1	80.0	400	100	300	100	0.0	INERTE	0.07
2923	QUE-188	80.0	89.9	300	50	300	100	0.0	INERTE	0.06
2924	QUE-188	89.9	100.0	300	100	200	0	0.0	INERTE	0.07
2925	QUE-188	100.0	110.0	300	50	300	100	0.0	INERTE	0.05
2926	QUE-188	110.0	120.5	300	100	300	0	0.0	INERTE	0.07
2927	QUE-188	420.0	430.0	300	200	1900	1100	-0.1	NEUTRAL	0.10
2928	QUE-189	230.0	240.0	300	100	300	100	0.0	INERTE	0.09
2929	QUE-189	420.0	430.0	300	50	700	100	0.0	INERTE	0.10
2930	QUE-189	430.0	440.0	200	50	400	100	0.0	INERTE	0.06
2931	QUE-190	4.2	10.0	600	50	27900	12000	-1.6	ACIDO	0.06
2932	QUE-190	10.0	20.0	500	50	36300	15500	-2.1	ACIDO	0.03
2933	QUE-190	20.0	30.0	800	50	26500	14600	-2.0	ACIDO	0.03
2934	QUE-190	30.0	40.0	2100	50	5900	2300	-0.3	LIGERAMENTE ACIDO	0.01
2935	QUE-190	40.0	50.0	1000	50	13900	7900	-1.1	ACIDO	0.01
2936	QUE-190	50.0	60.0	2300	50	32500	30500	-4.2	ACIDO	0.00
2937	QUE-190	60.0	70.0	1100	50	26600	25100	-3.4	ACIDO	0.02
2938	QUE-190	70.0	80.0	600	50	21900	20400	-2.8	ACIDO	0.02
2939	QUE-190	80.0	89.6	800	50	23700	22500	-3.1	ACIDO	0.05
2940	QUE-190	89.6	100.0	2400	50	10400	5400	-0.7	LIGERAMENTE ACIDO	0.03
2941	QUE-190	100.0	110.0	300	100	58400	26600	-3.6	ACIDO	0.05
2942	QUE-190	130.0	140.0	700	50	28000	22800	-3.1	ACIDO	0.08
2943	QUE-190	140.0	149.7	800	50	55300	48700	-6.7	ACIDO	0.06
2944	QUE-190	149.7	160.0	2400	50	28500	17600	-2.4	ACIDO	0.02
2945	QUE-190	170.0	180.0	500	100	28600	15200	-2.0	ACIDO	0.10
2946	QUE-190	190.0	200.0	400	50	39100	19500	-2.7	ACIDO	0.10
2947	QUE-190	260.4	271.1	400	200	2700	1400	-0.1	LIGERAMENTE ACIDO	0.08
2948	QUE-192	45.3	50.0	500	50	400	100	0.0	INERTE	0.07
2949	QUE-192	50.0	60.0	300	50	200	100	0.0	INERTE	0.10
2950	QUE-192	60.0	70.0	400	50	800	100	0.0	INERTE	0.06
2951	QUE-192	70.0	79.9	300	50	200	100	0.0	INERTE	0.07
2952	QUE-192	79.9	90.0	500	100	200	100	0.0	INERTE	0.03
2953	QUE-192	90.0	100.0	300	50	200	100	0.0	INERTE	0.03
2954	QUE-192	100.0	110.0	400	50	300	100	0.0	INERTE	0.04
2955	QUE-192	110.0	120.0	300	50	300	100	0.0	INERTE	0.06
2956	QUE-192	120.0	130.4	400	50	400	100	0.0	INERTE	0.09
2957	QUE-192	340.0	350.0	400	100	300	100	0.0	INERTE	0.09
2958	QUE-192	350.0	360.0	500	100	900	500	0.0	INERTE	0.08
2959	QUE-193	11.0	20.0	300	50	1800	1000	-0.1	LIGERAMENTE ACIDO	0.03
2960	QUE-193	20.0	30.1	300	50	200	100	0.0	INERTE	0.02
2961	QUE-193	30.1	40.0	300	50	200	100	0.0	INERTE	0.04
2962	QUE-193	40.0	50.0	400	100	200	100	0.0	INERTE	0.08
2963	QUE-193	50.0	60.0	500	100	300	100	0.0	INERTE	0.10
2964	QUE-193	60.0	70.0	300	50	200	100	0.0	INERTE	0.06
2965	QUE-193	70.0	80.3	300	50	200	100	0.0	INERTE	0.04
2966	QUE-193	80.3	90.3	300	50	300	100	0.0	INERTE	0.03
2967	QUE-193	90.3	100.0	300	50	25000	15200	-2.1	ACIDO	0.02
2968	QUE-193	100.0	110.1	300	50	18500	12000	-1.6	ACIDO	0.02
2969	QUE-193	110.1	120.6	200	50	2300	1500	-0.2	LIGERAMENTE ACIDO	0.04
2970	QUE-193	120.6	130.0	300	50	10900	6100	-0.8	LIGERAMENTE ACIDO	0.04
2971	QUE-193	440.0	450.0	1200	50	39800	38600	-5.3	ACIDO	0.08
2972	QUE-194	261.3	270.0	400	100	3800	2100	-0.3	LIGERAMENTE ACIDO	0.08
2973	QUE-194	270.0	280.0	400	100	600	100	0.0	INERTE	0.08
2974	QUE-194	280.0	290.0	500	50	500	100	0.0	INERTE	0.07
2975	QUE-194	290.0	300.0	600	50	1100	600	-0.1	INERTE	0.10
2976	QUE-194	300.0	310.0	400	50	600	200	0.0	INERTE	0.10
2977	QUE-195	40.0	49.9	6200	400	39700	38400	-5.1	ACIDO	0.10
2978	QUE-195	220.0	229.6	500	100	200	150	0.0	INERTE	0.04
2979	QUE-195	229.6	240.0	400	300	200	100	0.1	NEUTRAL	0.04
2980	QUE-195	240.0	250.0	900	400	400	300	0.1	LIGERAMENTE BASICO	0.05
2981	QUE-195	250.0	260.0	500	200	400	200	0.0	INERTE	0.05
2982	QUE-195	260.0	270.0	700	300	500	300	0.1	NEUTRAL	0.08
2983	QUE-195	290.0	300.0	200	50	300	100	0.0	INERTE	0.05
2984	QUE-195	300.0	310.0	700	300	200	100	0.1	NEUTRAL	0.08
2985	QUE-195	320.0	330.1	500	200	300	200	0.0	INERTE	0.09
2986	QUE-195	330.1	340.2	400	200	400	300	0.0	INERTE	0.07
2987	QUE-195	340.2	350.0	400	200	500	400	0.0	INERTE	0.08
2988	QUE-195	350.0	361.2	400	200	800	500	0.0	INERTE	0.07
2989	QUE-196	2.6	10.0	600	50	52200	20600	-2.8	ACIDO	0.07
2990	QUE-196	20.0	29.7	300	50	72400	39200	-5.4	ACIDO	0.08
2991	QUE-196	29.7	40.0	900	50	48900	30200	-4.1	ACIDO	0.09
2992	QUE-198	10.0	20.2	500	50	11700	6900	-0.9	LIGERAMENTE ACIDO	0.05
2993	QUE-198	30.8	39.7	1200	50	35300	21500	-2.9	ACIDO	0.07
2994	QUE-198	39.7	50.0	1200	50	45500	25900	-3.5	ACIDO	0.06
2995	QUE-199	0.0	10.0	1800	50	16100	8100	-1.1	ACIDO	0.06
2996	QUE-199	10.0	20.3	1200	50	11300	5700	-0.8	LIGERAMENTE ACIDO	0.07
2997	QUE-199	20.3	25.0	2200	50	11500	6700	-0.9	LIGERAMENTE ACIDO	0.04
2998	QUE-199	25.7	30.0	2800	50	21000	18000	-2.4	ACIDO	0.04
2999	QUE-199	30.0	40.0	1800	50	47700	46200	-6.3	ACIDO	0.04
3000	QUE-199	40.0	49.2	3100	50	47500	45400	-6.2	ACIDO	0.07

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
3001	QUE-199	49.2	60.2	3200	50	18600	12900	-1.7	ACIDO	0.08
3002	QUE-199	60.2	70.4	700	50	24600	14000	-1.9	ACIDO	0.07
3003	QUE-199	70.4	80.0	2200	50	2700	600	-0.1	INERTE	0.08
3004	QUE-199	140.0	150.0	1500	50	40100	38100	-5.2	ACIDO	0.07
3005	QUE-200	146.2	152.0	1300	50	27800	26200	-3.6	ACIDO	0.05
3006	QUE-200	152.0	160.0	1100	50	31900	30400	-4.1	ACIDO	0.08
3007	QUE-200	160.0	170.0	1000	50	20200	18400	-2.5	ACIDO	0.05
3008	QUE-200	190.0	200.0	1500	50	35500	34100	-4.7	ACIDO	0.09
3009	QUE-200	200.0	210.6	1400	50	35100	33200	-4.5	ACIDO	0.09
3010	QUE-201	39.1	50.0	300	50	300	200	0.0	INERTE	0.02
3011	QUE-201	50.0	60.0	200	50	200	100	0.0	INERTE	0.02
3012	QUE-201	60.0	70.0	200	50	200	0	0.0	INERTE	0.04
3013	QUE-201	70.0	80.0	200	50	200	100	0.0	INERTE	0.05
3014	QUE-201	80.0	90.0	300	200	200	100	0.1	INERTE	0.03
3015	QUE-201	90.0	100.0	300	50	300	100	0.0	INERTE	0.05
3016	QUE-201	100.0	110.0	200	50	300	200	0.0	INERTE	0.07
3017	QUE-201	110.0	120.0	300	50	200	0	0.0	INERTE	0.06
3018	QUE-201	120.0	130.0	200	50	200	100	0.0	INERTE	0.05
3019	QUE-201	130.0	140.0	200	50	200	100	0.0	INERTE	0.04
3020	QUE-201	140.0	150.0	200	50	200	100	0.0	INERTE	0.08
3021	QUE-201	150.0	160.0	200	50	300	200	0.0	INERTE	0.07
3022	QUE-201	160.0	168.9	300	50	200	0	0.0	INERTE	0.05
3023	QUE-203	26.0	30.0	400	50	200	0	0.0	INERTE	0.04
3024	QUE-203	30.0	40.0	500	100	200	0	0.0	INERTE	0.06
3025	QUE-203	60.0	70.2	400	50	200	150	0.0	INERTE	0.09
3026	QUE-203	70.2	80.0	300	50	200	0	0.0	INERTE	0.09
3027	QUE-203	80.0	90.0	700	50	100	0	0.0	INERTE	0.07
3028	QUE-203	90.0	100.0	500	50	200	100	0.0	INERTE	0.08
3029	QUE-203	100.0	110.0	200	50	100	0	0.0	INERTE	0.07
3030	QUE-203	180.0	190.0	300	50	300	100	0.0	INERTE	0.09
3031	QUE-203	200.0	210.0	200	50	200	0	0.0	INERTE	0.10
3032	QUE-203	210.0	220.1	600	100	100	0	0.0	INERTE	0.09
3033	QUE-204	26.2	32.0	500	50	300	100	0.0	INERTE	0.05
3034	QUE-204	32.0	40.0	600	50	300	100	0.0	INERTE	0.05
3035	QUE-204	40.0	50.0	300	50	300	100	0.0	INERTE	0.05
3036	QUE-204	50.0	60.0	400	50	300	100	0.0	INERTE	0.03
3037	QUE-204	60.0	70.0	300	50	200	100	0.0	INERTE	0.05
3038	QUE-204	70.0	79.6	400	50	300	200	0.0	INERTE	0.10
3039	QUE-204	79.6	90.0	300	50	200	100	0.0	INERTE	0.09
3040	QUE-204	90.0	100.0	500	50	200	100	0.0	INERTE	0.09
3041	QUE-204	100.0	110.1	500	50	300	100	0.0	INERTE	0.08
3042	QUE-204	110.1	120.0	500	50	300	100	0.0	INERTE	0.10
3043	QUE-204	120.0	130.0	300	50	200	100	0.0	INERTE	0.07
3044	QUE-204	180.0	190.0	300	50	300	100	0.0	INERTE	0.08
3045	QUE-204	310.0	319.6	500	50	200	100	0.0	INERTE	0.09
3046	QUE-204	319.6	330.4	300	50	200	100	0.0	INERTE	0.09
3047	QUE-204	340.0	350.0	400	50	300	100	0.0	INERTE	0.08
3048	QUE-205	290.0	300.0	200	100	500	400	0.0	INERTE	0.08
3049	QUE-206	8.6	14.0	400	50	63800	28000	-3.8	ACIDO	0.04
3050	QUE-206	14.0	20.0	500	50	68300	30700	-4.2	ACIDO	0.07
3051	QUE-206	20.0	30.0	300	50	62500	23500	-3.2	ACIDO	0.09
3052	QUE-206	60.0	70.0	500	50	500	300	0.0	INERTE	0.07
3053	QUE-207	22.8	30.0	300	100	200	100	0.0	INERTE	0.05
3054	QUE-207	40.0	50.0	300	50	200	100	0.0	INERTE	0.09
3055	QUE-207	50.0	60.0	600	50	300	100	0.0	INERTE	0.09
3056	QUE-208	164.3	169.6	300	200	200	100	0.1	INERTE	0.05
3057	QUE-208	169.6	180.0	300	100	100	0	0.0	INERTE	0.07
3058	QUE-208	320.3	330.0	400	100	300	100	0.0	INERTE	0.10
3059	QUE-208	330.0	339.6	300	100	300	100	0.0	INERTE	0.08
3060	QUE-208	339.6	350.0	300	100	200	100	0.0	INERTE	0.09
3061	QUE-208	350.0	360.0	300	100	200	100	0.0	INERTE	0.07
3062	QUE-208	360.0	370.0	300	200	200	100	0.1	INERTE	0.10
3063	QUE-208	380.0	390.0	300	100	1200	900	-0.1	NEUTRAL	0.09
3064	QUE-208	390.0	400.0	300	50	300	200	0.0	INERTE	0.09
3065	QUE-208	400.0	410.0	300	100	13100	12700	-1.7	ACIDO	0.07
3066	QUE-208	410.0	420.0	200	100	2300	1900	-0.2	LIGERAMENTE ACIDO	0.08
3067	QUE-208	420.0	426.0	300	100	15300	14900	-2.0	ACIDO	0.08
3068	QUE-208	426.0	432.1	300	200	4200	3700	-0.4	LIGERAMENTE ACIDO	0.08
3069	QUE-209	45.0	50.0	500	50	100	50	0.0	INERTE	0.09
3070	QUE-209	50.0	60.0	200	50	300	200	0.0	INERTE	0.08
3071	QUE-209	80.4	90.8	500	100	300	100	0.0	INERTE	0.08
3072	QUE-209	90.8	100.0	500	100	400	200	0.0	INERTE	0.04
3073	QUE-209	100.0	110.0	600	100	300	200	0.0	INERTE	0.04
3074	QUE-209	110.0	119.8	400	100	300	100	0.0	INERTE	0.05
3075	QUE-209	119.8	129.9	500	50	300	100	0.0	INERTE	0.04
3076	QUE-209	129.9	140.0	400	100	200	100	0.0	INERTE	0.03
3077	QUE-209	140.0	150.0	600	50	300	100	0.0	INERTE	0.04
3078	QUE-209	150.0	160.0	500	50	400	100	0.0	INERTE	0.07
3079	QUE-209	160.0	170.0	400	50	300	100	0.0	INERTE	0.08
3080	QUE-209	170.0	180.0	300	200	200	100	0.1	INERTE	0.03
3081	QUE-209	180.0	190.0	300	100	200	100	0.0	INERTE	0.03
3082	QUE-209	190.0	200.0	300	100	200	100	0.0	INERTE	0.04
3083	QUE-209	200.0	210.0	300	100	200	100	0.0	INERTE	0.06
3084	QUE-209	210.0	221.8	300	100	100	50	0.0	INERTE	0.02
3085	QUE-210	0.0	10.5	500	100	14300	7900	-1.0	ACIDO	0.08
3086	QUE-210	10.5	20.0	700	100	40100	16100	-2.2	ACIDO	0.07
3087	QUE-211	4.4	10.0	3300	100	11300	10000	-1.3	ACIDO	0.08
3088	QUE-211	20.0	30.0	4100	50	13000	12100	-1.6	ACIDO	0.10
3089	QUE-211	100.0	110.0	1000	100	9500	5700	-0.7	LIGERAMENTE ACIDO	0.09
3090	QUE-211	180.0	190.0	1400	100	4300	2300	-0.3	LIGERAMENTE ACIDO	0.06
3091	QUE-211	190.0	201.3	900	200	49200	34900	-4.7	ACIDO	0.04
3092	QUE-212	30.5	40.0	300	100	400	0	0.0	INERTE	0.05
3093	QUE-212	40.0	50.0	300	100	300	0	0.0	INERTE	0.03
3094	QUE-212	50.0	60.0	300	100	200	0	0.0	INERTE	0.02
3095	QUE-212	90.0	100.0	200	200	200	0	0.1	INERTE	0.06
3096	QUE-212	100.0	110.0	200	100	200	100	0.0	INERTE	0.07
3097	QUE-212	110.0	120.0	200	100	200	100	0.0	INERTE	0.04
3098	QUE-213	20.0	30.0	1100	50	35000	32100	-4.4	ACIDO	0.03
3099	QUE-213	30.0	40.0	2000	300	30900	28200	-3.8	ACIDO	0.06
3100	QUE-215	206.9	211.2	400	50	22700	9100	-1.2	ACIDO	0.08
3101	QUE-215	211.2	220.5	300	100	15400	7000	-0.9	LIGERAMENTE ACIDO	0.06
3102	QUE-215	230.4	240.2	200	100	200	100	0.0	INERTE	0.08
3103	QUE-216	2.7	10.0	2500	100	2400	200	0.0	INERTE	0.02
3104	QUE-216	10.0	20.0	1100	50	11400	4800	-0.6	LIGERAMENTE ACIDO	0.03
3105	QUE-216	20.0	30.0	300	300	6100	2400	-0.2	LIGERAMENTE ACIDO	0.00
3106	QUE-216	30.0	40.0	300	50	27200	13100	-1.8	ACIDO	0.01
3107	QUE-216	40.0	50.0	700	50	28500	13300	-1.8	ACIDO	0.02
3108	QUE-216	50.0	60.0	500	50	34000	20000	-2.7	ACIDO	0.01
3109	QUE-216	60.0	70.0	300	50	45400	23600	-3.2	ACIDO	0.03
3110	QUE-216	70.0	80.0	300	100	29300	16700	-2.3	ACIDO	0.03
3111	QUE-216	80.0	89.8	400	100	47700	23600	-3.2	ACIDO	0.03
3112	QUE-216	89.8	100.0	300	200	51000	23800	-3.2	ACIDO	0.04
3113	QUE-216	100.0	109.9	300	200	43400	20300	-2.7	ACIDO	0.03
3114	QUE-216	109.9	120.0	300	100	37100	34300	-4.7	ACIDO	0.03
3115	QUE-216	120.0	130.0	700	50	45700	39500	-5.4	ACIDO	0.02
3116	QUE-216	130.0	140.0	400	200	35600	18100	-2.4	ACIDO	0.03
3117	QUE-216	160.0	169.7	400	200	21500	13900	-1.8	ACIDO	0.07
3118	QUE-216	180.1	190.0	500	50	39100	35600	-4.9	ACIDO	0.09
3119	QUE-216	209.6	220.0	500	50	37700	18500	-2.5	ACIDO	0.07
3120	QUE-216	220.0	230.0	400	50	37100	19300	-2.6	ACIDO	0.06

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
3121	QUE-216	230.0	240.0	400	100	24800	15400	-2.1	ACIDO	0.08
3122	QUE-216	250.0	260.0	400	50	46100	39300	-5.4	ACIDO	0.08
3123	QUE-216	270.0	280.0	400	100	800	500	0.0	INERTE	0.09
3124	QUE-216	300.0	310.0	300	50	900	600	-0.1	INERTE	0.07
3125	QUE-216	310.0	320.0	300	100	500	300	0.0	INERTE	0.06
3126	QUE-216	320.0	329.9	500	100	27200	22700	-3.1	ACIDO	0.07
3127	QUE-216	329.9	340.0	600	100	54400	35100	-4.8	ACIDO	0.08
3128	QUE-216	340.0	350.0	300	100	1700	1100	-0.1	LIGERAMENTE ACIDO	0.08
3129	QUE-216	370.0	374.8	400	100	41700	35300	-4.8	ACIDO	0.08
3130	QUE-217	5.0	10.0	300	100	200	100	0.0	INERTE	0.00
3131	QUE-217	10.0	20.0	100	50	100	50	0.0	INERTE	0.01
3132	QUE-217	20.0	30.0	200	200	200	0	0.1	INERTE	0.01
3133	QUE-217	30.0	40.0	300	200	500	200	0.0	INERTE	0.01
3134	QUE-217	40.0	50.0	400	100	400	100	0.0	INERTE	0.05
3135	QUE-217	50.0	60.0	300	100	300	100	0.0	INERTE	0.04
3136	QUE-217	60.0	70.0	300	50	400	200	0.0	INERTE	0.03
3137	QUE-217	70.0	80.0	300	400	400	200	0.1	LIGERAMENTE BASICO	0.03
3138	QUE-217	80.0	90.1	200	100	300	100	0.0	INERTE	0.03
3139	QUE-217	90.1	100.0	200	200	200	100	0.1	INERTE	0.04
3140	QUE-217	100.0	110.0	200	200	300	200	0.0	INERTE	0.04
3141	QUE-217	110.0	120.5	300	200	300	200	0.0	INERTE	0.03
3142	QUE-217	120.5	130.0	300	300	3500	2000	-0.2	LIGERAMENTE ACIDO	0.04
3143	QUE-217	130.0	140.0	300	400	12200	5800	-0.6	LIGERAMENTE ACIDO	0.01
3144	QUE-217	140.0	149.7	300	50	10300	4500	-0.6	LIGERAMENTE ACIDO	0.02
3145	QUE-217	149.7	160.0	200	50	1600	1100	-0.1	LIGERAMENTE ACIDO	0.03
3146	QUE-217	160.0	170.0	300	200	300	200	0.0	INERTE	0.03
3147	QUE-217	170.0	180.4	200	100	300	200	0.0	INERTE	0.04
3148	QUE-217	180.4	190.0	200	300	300	200	0.1	NEUTRAL	0.01
3149	QUE-217	190.0	200.0	200	100	200	0	0.0	INERTE	0.03
3150	QUE-217	200.0	210.0	400	100	200	100	0.0	INERTE	0.03
3151	QUE-217	210.0	220.0	500	400	200	0	0.1	LIGERAMENTE BASICO	0.02
3152	QUE-217	220.0	230.5	200	50	100	50	0.0	INERTE	0.02
3153	QUE-217	230.5	240.1	200	100	200	150	0.0	INERTE	0.02
3154	QUE-217	250.0	260.0	200	200	500	0	0.1	INERTE	0.07
3155	QUE-217	290.0	300.0	300	50	300	200	0.0	INERTE	0.09
3156	QUE-217	320.0	330.0	300	50	200	0	0.0	INERTE	0.06
3157	QUE-217	330.0	340.0	200	50	200	150	0.0	INERTE	0.04
3158	QUE-217	340.0	350.0	200	50	300	200	0.0	INERTE	0.04
3159	QUE-217	350.0	360.0	300	100	1400	1350	-0.1	LIGERAMENTE ACIDO	0.04
3160	QUE-217	360.0	370.0	300	50	200	100	0.0	INERTE	0.07
3161	QUE-217	370.0	380.0	300	50	5700	5500	-0.7	LIGERAMENTE ACIDO	0.08
3162	QUE-217	380.0	390.0	300	100	500	450	0.0	INERTE	0.10
3163	QUE-218	3.3	10.0	400	100	300	100	0.0	INERTE	0.00
3164	QUE-218	10.0	20.0	600	50	300	200	0.0	INERTE	0.00
3165	QUE-218	20.0	30.0	400	50	200	100	0.0	INERTE	0.00
3166	QUE-218	30.0	40.0	400	100	300	200	0.0	INERTE	0.00
3167	QUE-218	40.0	50.0	300	50	200	100	0.0	INERTE	0.00
3168	QUE-218	50.0	60.0	400	100	200	100	0.0	INERTE	0.00
3169	QUE-218	60.0	70.0	300	50	200	100	0.0	INERTE	0.00
3170	QUE-218	70.0	80.0	400	50	300	100	0.0	INERTE	0.00
3171	QUE-218	80.0	90.0	400	50	700	300	0.0	INERTE	0.00
3172	QUE-218	90.0	100.0	300	100	200	100	0.0	INERTE	0.04
3173	QUE-218	100.0	110.0	400	50	200	100	0.0	INERTE	0.03
3174	QUE-218	110.0	120.0	300	50	300	200	0.0	INERTE	0.00
3175	QUE-218	120.0	130.0	300	100	300	200	0.0	INERTE	0.00
3176	QUE-218	130.0	139.8	300	50	100	50	0.0	INERTE	0.00
3177	QUE-218	139.8	150.0	400	300	300	200	0.1	NEUTRAL	0.02
3178	QUE-218	150.0	160.0	400	100	700	400	0.0	INERTE	0.02
3179	QUE-218	160.0	170.0	300	100	800	200	0.0	INERTE	0.03
3180	QUE-218	170.0	180.0	300	100	600	200	0.0	INERTE	0.02
3181	QUE-218	180.0	190.0	300	50	1200	700	-0.1	INERTE	0.07
3182	QUE-218	210.0	220.0	300	200	1500	200	0.0	INERTE	0.05
3183	QUE-218	220.0	230.0	300	100	400	100	0.0	INERTE	0.02
3184	QUE-218	230.0	240.0	200	100	200	100	0.0	INERTE	0.01
3185	QUE-218	240.0	250.0	200	100	200	100	0.0	INERTE	0.00
3186	QUE-218	250.0	260.0	200	100	400	100	0.0	INERTE	0.01
3187	QUE-218	260.0	270.0	200	100	900	200	0.0	INERTE	0.02
3188	QUE-218	270.0	280.0	300	200	900	200	0.0	INERTE	0.00
3189	QUE-218	280.0	290.4	400	200	800	100	0.1	INERTE	0.01
3190	QUE-218	290.4	300.0	500	100	7200	5900	-0.8	LIGERAMENTE ACIDO	0.03
3191	QUE-218	329.4	340.4	1000	300	79300	64400	-8.7	ACIDO	0.01
3192	QUE-218	340.4	350.3	600	100	115700	87900	-12.0	ACIDO	0.01
3193	QUE-218	350.3	360.0	400	100	136900	83600	-11.4	ACIDO	0.04
3194	QUE-218	360.0	369.7	700	100	46000	43000	-5.9	ACIDO	0.01
3195	QUE-218	369.7	380.0	700	100	70400	60600	-8.3	ACIDO	0.01
3196	QUE-218	380.0	390.0	900	200	37300	35300	-4.8	ACIDO	0.00
3197	QUE-218	390.0	400.0	500	200	41400	39500	-5.3	ACIDO	0.00
3198	QUE-218	400.0	410.0	700	300	44300	42300	-5.7	ACIDO	0.01
3199	QUE-218	410.0	420.0	700	50	38400	36400	-5.0	ACIDO	0.01
3200	QUE-218	420.0	430.0	900	50	36600	34000	-4.6	ACIDO	0.00
3201	QUE-218	430.0	440.0	900	50	46600	43900	-6.0	ACIDO	0.01
3202	QUE-218	440.0	450.0	800	50	47600	45300	-6.2	ACIDO	0.01
3203	QUE-218	450.0	460.0	700	50	52000	50100	-6.8	ACIDO	0.01
3204	QUE-218	460.0	471.3	600	50	56300	50700	-6.9	ACIDO	0.01
3205	QUE-218	471.3	482.6	700	50	53300	51200	-7.0	ACIDO	0.00
3206	QUE-219	0.0	9.7	800	50	51200	21000	-2.9	ACIDO	0.02
3207	QUE-219	9.7	20.0	800	50	21900	11400	-1.5	ACIDO	0.06
3208	QUE-219	20.0	30.0	400	50	23400	12200	-1.7	ACIDO	0.02
3209	QUE-219	30.0	35.1	500	50	36600	19500	-2.7	ACIDO	0.03
3210	QUE-219	35.8	40.0	500	50	51400	29000	-4.0	ACIDO	0.04
3211	QUE-219	40.0	50.0	300	50	39000	20100	-2.7	ACIDO	0.03
3212	QUE-219	50.0	60.0	300	50	17800	9000	-1.2	ACIDO	0.02
3213	QUE-219	60.0	70.5	500	50	11600	7500	-1.0	ACIDO	0.02
3214	QUE-219	70.5	80.0	4000	200	33300	31100	-4.2	ACIDO	0.02
3215	QUE-219	80.0	90.0	4800	50	34500	33000	-4.5	ACIDO	0.02
3216	QUE-219	90.0	100.0	600	50	32600	31400	-4.3	ACIDO	0.02
3217	QUE-219	100.0	110.0	1000	50	34800	33500	-4.6	ACIDO	0.03
3218	QUE-219	110.0	120.0	3100	50	38200	36400	-5.0	ACIDO	0.03
3219	QUE-219	130.0	140.0	3100	50	34700	33100	-4.5	ACIDO	0.05
3220	QUE-220	0.0	10.0	300	50	52900	28500	-3.9	ACIDO	0.03
3221	QUE-220	10.0	20.0	300	50	38500	21100	-2.9	ACIDO	0.05
3222	QUE-220	20.0	30.0	200	50	46400	23300	-3.2	ACIDO	0.06
3223	QUE-220	30.0	40.0	200	50	56000	34700	-4.7	ACIDO	0.07
3224	QUE-220	40.0	50.0	200	100	60000	35200	-4.8	ACIDO	0.06
3225	QUE-220	50.0	60.0	200	50	67700	42100	-5.7	ACIDO	0.06
3226	QUE-220	70.0	80.0	200	200	17000	10200	-1.3	ACIDO	0.06
3227	QUE-220	80.0	90.0	300	50	33400	22100	-3.0	ACIDO	0.09
3228	QUE-221	430.0	440.0	400	50	17900	14100	-1.9	ACIDO	0.09
3229	QUE-221	440.0	446.5	600	50	50200	45000	-6.1	ACIDO	0.07
3230	QUE-222	63.8	70.0	400	200	300	250	0.0	INERTE	0.09
3231	QUE-222	130.0	139.8	400	300	200	100	0.1	NEUTRAL	0.08
3232	QUE-222	139.8	149.9	300	200	200	150	0.1	INERTE	0.04
3233	QUE-222	149.9	160.0	400	100	200	100	0.0	INERTE	0.04
3234	QUE-222	160.0	170.0	400	200	200	100	0.1	INERTE	0.04
3235	QUE-222	170.0	180.0	400	300	200	100	0.1	NEUTRAL	0.03
3236	QUE-222	180.0	190.0	400	100	200	100	0.0	INERTE	0.02
3237	QUE-222	190.0	200.0	400	300	200	100	0.1	NEUTRAL	0.05
3238	QUE-222	200.0	210.0	300	100	300	200	0.0	INERTE	0.04
3239	QUE-222	210.0	220.0	300	200	400	200	0.0	INERTE	0.06
3240	QUE-222	230.0	240.0	500	200	200	100	0.1	INERTE	0.07

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
3241	QUE-222	240.0	249.9	400	300	200	100	0.1	NEUTRAL	0.05
3242	QUE-222	249.9	260.6	400	200	500	400	0.0	INERTE	0.03
3243	QUE-222	260.6	270.0	400	50	500	400	0.0	INERTE	0.07
3244	QUE-222	270.0	280.0	400	200	400	300	0.0	INERTE	0.09
3245	QUE-223	20.0	30.0	400	50	29100	15700	-2.1	ACIDO	0.10
3246	QUE-223	30.0	40.0	400	50	29600	16300	-2.2	ACIDO	0.09
3247	QUE-223	40.0	50.0	400	50	46400	22800	-3.1	ACIDO	0.10
3248	QUE-223	60.0	70.0	400	50	33100	16300	-2.2	ACIDO	0.09
3249	QUE-223	70.0	80.0	200	50	45700	21000	-2.9	ACIDO	0.06
3250	QUE-223	180.0	190.0	300	50	400	0	0.0	INERTE	0.06
3251	QUE-223	190.0	200.0	400	50	200	0	0.0	INERTE	0.05
3252	QUE-225	0.0	10.0	600	300	32800	17600	-2.3	ACIDO	0.03
3253	QUE-225	10.0	20.0	300	100	41600	21400	-2.9	ACIDO	0.08
3254	QUE-225	110.1	120.0	300	100	300	0	0.0	INERTE	0.09
3255	QUE-225	140.1	150.0	500	50	300	100	0.0	INERTE	0.08
3256	QUE-225	150.0	160.0	500	50	300	100	0.0	INERTE	0.05
3257	QUE-225	160.0	170.0	400	50	200	100	0.0	INERTE	0.02
3258	QUE-225	170.0	180.0	300	50	200	100	0.0	INERTE	0.05
3259	QUE-225	180.0	190.0	300	50	200	100	0.0	INERTE	0.04
3260	QUE-225	190.0	200.0	200	50	500	300	0.0	INERTE	0.01
3261	QUE-225	200.0	210.0	300	50	200	100	0.0	INERTE	0.04
3262	QUE-225	210.0	220.0	300	50	100	0	0.0	INERTE	0.02
3263	QUE-225	220.0	230.0	200	200	100	0	0.1	INERTE	0.02
3264	QUE-226	8.8	20.0	400	300	300	100	0.1	NEUTRAL	0.01
3265	QUE-226	20.0	30.0	50	50	300	100	0.0	INERTE	0.00
3266	QUE-226	30.0	40.0	100	50	200	0	0.0	INERTE	0.02
3267	QUE-226	40.0	50.0	200	50	300	100	0.0	INERTE	0.03
3268	QUE-226	50.0	60.0	100	50	300	0	0.0	INERTE	0.04
3269	QUE-226	60.0	70.0	200	100	200	0	0.0	INERTE	0.02
3270	QUE-226	70.0	80.0	200	50	100	0	0.0	INERTE	0.01
3271	QUE-226	80.0	90.0	300	300	200	100	0.1	NEUTRAL	0.01
3272	QUE-226	90.0	100.0	300	100	200	0	0.0	INERTE	0.02
3273	QUE-226	100.0	110.0	200	200	200	0	0.1	INERTE	0.04
3274	QUE-226	110.0	120.0	100	100	200	0	0.0	INERTE	0.01
3275	QUE-226	120.0	130.1	200	100	200	0	0.0	INERTE	0.01
3276	QUE-226	130.1	140.0	200	100	200	0	0.0	INERTE	0.02
3277	QUE-226	140.0	150.0	500	50	200	0	0.0	INERTE	0.02
3278	QUE-226	150.0	160.0	200	50	19100	10400	-1.4	ACIDO	0.02
3279	QUE-226	160.0	170.6	100	100	1500	900	-0.1	NEUTRAL	0.02
3280	QUE-227	39.4	50.0	200	50	200	0	0.0	INERTE	0.10
3281	QUE-228	163.0	170.0	100	100	300	100	0.0	INERTE	0.02
3282	QUE-228	170.0	180.0	200	100	300	250	0.0	INERTE	0.03
3283	QUE-228	180.0	190.0	200	100	300	200	0.0	INERTE	0.05
3284	QUE-228	190.0	200.0	200	100	300	200	0.0	INERTE	0.03
3285	QUE-228	200.0	210.0	200	50	200	100	0.0	INERTE	0.03
3286	QUE-228	210.0	220.0	300	100	400	300	0.0	INERTE	0.04
3287	QUE-228	220.0	230.0	200	100	400	300	0.0	INERTE	0.05
3288	QUE-228	230.0	240.0	300	100	400	200	0.0	INERTE	0.05
3289	QUE-228	240.0	250.0	200	100	400	300	0.0	INERTE	0.07
3290	QUE-229	12.8	20.0	300	50	300	0	0.0	INERTE	0.00
3291	QUE-229	20.0	30.0	200	50	300	0	0.0	INERTE	0.01
3292	QUE-229	30.0	40.0	300	50	500	100	0.0	INERTE	0.00
3293	QUE-229	40.0	50.0	200	50	200	0	0.0	INERTE	0.01
3294	QUE-229	50.0	60.0	200	200	200	0	0.1	INERTE	0.01
3295	QUE-229	60.0	70.0	200	50	200	0	0.0	INERTE	0.00
3296	QUE-229	70.0	80.0	200	50	200	100	0.0	INERTE	0.02
3297	QUE-229	80.0	90.0	200	50	100	0	0.0	INERTE	0.01
3298	QUE-229	90.0	100.0	300	50	300	0	0.0	INERTE	0.02
3299	QUE-229	200.0	210.0	300	50	100	0	0.0	INERTE	0.09
3300	QUE-229	210.0	220.0	200	50	100	0	0.0	INERTE	0.07
3301	QUE-229	220.0	230.2	200	100	100	0	0.0	INERTE	0.07
3302	QUE-230	26.4	31.3	200	50	200	100	0.0	INERTE	0.04
3303	QUE-230	31.3	40.0	50	50	300	100	0.0	INERTE	0.04
3304	QUE-230	40.0	50.0	100	50	300	100	0.0	INERTE	0.06
3305	QUE-230	50.0	60.0	200	50	300	100	0.0	INERTE	0.08
3306	QUE-230	60.0	70.0	300	50	200	100	0.0	INERTE	0.07
3307	QUE-230	70.0	80.1	200	50	200	100	0.0	INERTE	0.09
3308	QUE-230	80.1	90.2	100	50	200	100	0.0	INERTE	0.06
3309	QUE-230	90.2	100.0	200	50	200	100	0.0	INERTE	0.09
3310	QUE-230	100.0	110.0	200	50	200	100	0.0	INERTE	0.04
3311	QUE-230	120.0	130.0	200	50	200	0	0.0	INERTE	0.06
3312	QUE-230	130.0	140.0	300	50	300	100	0.0	INERTE	0.06
3313	QUE-231	3.5	10.0	800	50	26500	12900	-1.7	ACIDO	0.01
3314	QUE-231	10.0	20.3	200	50	33200	17100	-2.3	ACIDO	0.02
3315	QUE-231	20.3	30.3	300	50	47300	20100	-2.7	ACIDO	0.02
3316	QUE-231	30.3	40.0	900	50	32300	17600	-2.4	ACIDO	0.01
3317	QUE-231	40.0	50.0	200	50	53900	32000	-4.4	ACIDO	0.02
3318	QUE-231	60.0	70.0	200	50	63500	30200	-4.1	ACIDO	0.01
3319	QUE-231	70.0	80.0	200	50	62700	28500	-3.9	ACIDO	0.03
3320	QUE-231	80.0	90.0	300	50	43600	27200	-3.7	ACIDO	0.06
3321	QUE-231	90.0	100.0	200	50	43100	27100	-3.7	ACIDO	0.03
3322	QUE-231	100.0	110.0	300	50	28100	20000	-2.7	ACIDO	0.03
3323	QUE-231	110.0	120.0	300	50	21200	19100	-2.6	ACIDO	0.02
3324	QUE-231	120.0	130.0	1800	50	38000	36000	-4.9	ACIDO	0.09
3325	QUE-231	130.0	140.0	5300	50	10500	8800	-1.2	ACIDO	0.05
3326	QUE-231	140.0	150.0	3700	50	4100	3100	-0.4	LIGERAMENTE ACIDO	0.03
3327	QUE-231	150.0	160.0	5600	50	41900	39900	-5.4	ACIDO	0.07
3328	QUE-231	160.0	170.0	8200	50	28900	24800	-3.4	ACIDO	0.06
3329	QUE-232	320.0	330.0	100	50	400	200	0.0	INERTE	0.08
3330	QUE-232	330.0	340.0	100	50	200	100	0.0	INERTE	0.07
3331	QUE-232	340.0	350.0	50	50	3700	3500	-0.5	LIGERAMENTE ACIDO	0.06
3332	QUE-232	350.0	360.0	200	50	1800	1700	-0.2	LIGERAMENTE ACIDO	0.05
3333	QUE-232	360.0	370.0	200	50	200	100	0.0	INERTE	0.05
3334	QUE-232	370.0	380.0	100	50	200	100	0.0	INERTE	0.09
3335	QUE-232	380.0	390.0	200	50	200	100	0.0	INERTE	0.07
3336	QUE-232	390.0	400.0	50	50	4200	4000	-0.5	LIGERAMENTE ACIDO	0.09
3337	QUE-232	480.0	490.0	300	50	137300	101800	-13.9	ACIDO	0.10
3338	QUE-232	490.0	498.0	400	50	99100	79600	-10.9	ACIDO	0.09
3339	QUE-232	498.0	502.6	300	50	95600	78900	-10.8	ACIDO	0.05
3340	QUE-233	20.8	30.0	500	50	300	0	0.0	INERTE	0.02
3341	QUE-233	30.0	40.4	300	50	200	0	0.0	INERTE	0.03
3342	QUE-233	40.4	50.0	400	100	200	0	0.0	INERTE	0.03
3343	QUE-233	50.0	62.0	200	50	300	100	0.0	INERTE	0.04
3344	QUE-233	64.0	69.6	400	50	200	0	0.0	INERTE	0.03
3345	QUE-233	69.6	80.0	500	50	200	0	0.0	INERTE	0.03
3346	QUE-233	80.0	90.7	400	50	300	100	0.0	INERTE	0.05
3347	QUE-233	90.7	100.0	400	50	300	100	0.0	INERTE	0.08
3348	QUE-233	149.7	160.2	200	50	100	0	0.0	INERTE	0.10
3349	QUE-234	6.6	12.0	800	50	700	200	0.0	INERTE	0.05
3350	QUE-234	120.0	130.0	200	50	300	0	0.0	INERTE	0.08
3351	QUE-234	140.0	150.0	1300	50	700	100	0.0	INERTE	0.08
3352	QUE-234	150.0	160.2	700	50	500	100	0.0	INERTE	0.04
3353	QUE-234	160.2	169.8	200	50	300	100	0.0	INERTE	0.02
3354	QUE-234	169.8	180.0	400	50	300	100	0.0	INERTE	0.02
3355	QUE-234	180.0	190.0	200	50	200	0	0.0	INERTE	0.03
3356	QUE-234	190.0	200.0	300	50	200	0	0.0	INERTE	0.03
3357	QUE-235	4.3	10.0	200	50	200	0	0.0	INERTE	0.00
3358	QUE-235	10.0	20.0	50	50	100	0	0.0	INERTE	0.00
3359	QUE-235	20.0	30.0	200	50	1300	700	-0.1	INERTE	0.00
3360	QUE-235	30.0	40.2	200	50	2100	1500	-0.2	LIGERAMENTE ACIDO	0.00
3361	QUE-235	40.2	50.0	200	50	500	300	0.0	INERTE	0.00
3362	QUE-235	50.0	60.0	200	50	2000	1600	-0.2	LIGERAMENTE ACIDO	0.00
3363	QUE-235	60.0	70.0	200	50	3500	2400	-0.3	LIGERAMENTE ACIDO	0.00
3364	QUE-235	70.0	80.0	200	100	300	0	0.0	INERTE	0.00
3365	QUE-235	80.0	90.0	100	50	700	100	0.0	INERTE	0.00
3366	QUE-235	90.0	100.0	200	100	700	100	0.0	INERTE	0.01
3367	QUE-235	100.0	110.0	100	50	900	0	0.0	INERTE	0.03
3368	QUE-235	110.0	120.0	100	50	1000	0	0.0	INERTE	0.04
3369	QUE-235	120.0	130.0	300	50	900	0	0.0	INERTE	0.04
3370	QUE-235	130.0	140.0	50	50	600	0	0.0	INERTE	0.01
3371	QUE-235	140.0	150.4	200	50	900	100	0.0	INERTE	0.05
3372	QUE-235	210.0	220.0	50	50	300	0	0.0	INERTE	0.02
3373	QUE-235	220.0	230.2	200	50	300	0	0.0	INERTE	0.03
3374	QUE-235	230.2	240.0	100	50	200	0	0.0	INERTE	0.02
3375	QUE-235	240.0	248.0	200	50	300	0	0.0	INERTE	0.02
3376	QUE-235	248.0	252.7	300	50	300	100	0.0	INERTE	0.00
3377	QUE-236	0.0	10.0	500	50	66800	23200	-3.2	ACIDO	0.10
3378	QUE-236	10.0	20.0	1000	50	16100	7600	-1.0	ACIDO	0.07
3379	QUE-236	20.0	30.0	7100	50	40000	37200	-5.1	ACIDO	0.07
3380	QUE-236	30.0	40.0	700	50	38500	36600	-5.0	ACIDO	0.08
3381	QUE-236	40.0	50.0	2600	50	40500	37600	-5.1	ACIDO	0.08
3382	QUE-236	50.0	60.0	2600	50	36900	34200	-4.7	ACIDO	0.08
3383	QUE-236	90.0	99.6	1500	50	37400	35600	-4.9	ACIDO	0.10
3384	QUE-237	8.7	20.6	500	50	2400	1400	-0.2	LIGERAMENTE ACIDO	0.05
3385	QUE-237	30.0	40.0	200	50	200	100	0.0	INERTE	0.10
3386	QUE-237	40.0	50.6	50	50	300	200	0.0	INERTE	0.06
3387	QUE-237	60.0	70.0	400	50	200	100	0.0	INERTE	0.09
3388	QUE-237	70.0	79.7	200	50	200	100	0.0	INERTE	0.06
3389	QUE-237	79.7	90.0	200	50	200	100	0.0	INERTE	0.05
3390	QUE-238	19.7	30.0	300	50	400	200	0.0	INERTE	0.07
3391	QUE-238	60.0	70.0	200	50	300	200	0.0	INERTE	0.09
3392	QUE-238	70.0	80.0	100	50	300	100	0.0	INERTE	0.04
3393	QUE-238	80.0	90.0	400	50	300	100	0.0	INERTE	0.07
3394	QUE-238	120.0	130.0	300	50	400	200	0.0	INERTE	0.09
3395	QUE-238	130.0	140.7	100	50	200	100	0.0	INERTE	0.05
3396	QUE-239	106.1	110.2	600	100	36900	35000	-4.8	ACIDO	0.08
3397	QUE-240	250.9	260.0	100	50	300	100	0.0	INERTE	0.01
3398	QUE-240	260.0	269.9	400	50	500	100	0.0	INERTE	0.01
3399	QUE-240	269.9	280.0	400	50	1000	100	0.0	INERTE	0.02
3400	QUE-240	280.0	290.4	300	50	400	100	0.0	INERTE	0.01
3401	QUE-240	290.4	297.1	400	100	400	100	0.0	INERTE	0.02
3402	QUE-241	8.6	12.6	600	50	400	200	0.0	INERTE	0.00
3403	QUE-241	12.6	20.0	600	50	600	300	0.0	INERTE	0.00
3404	QUE-241	20.0	29.8	500	50	300	100	0.0	INERTE	0.00
3405	QUE-241	29.8	40.0	300	50	300	100	0.0	INERTE	0.02
3406	QUE-241	50.0	59.8	300	50	600	200	0.0	INERTE	0.09
3407	QUE-241	59.8	70.0	300	50	300	100	0.0	INERTE	0.06
3408	QUE-241	70.0	80.0	700	50	400	200	0.0	INERTE	0.05
3409	QUE-241	80.0	90.0	400	50	300	100	0.0	INERTE	0.07
3410	QUE-241	90.0	100.0	400	50	300	100	0.0	INERTE	0.06
3411	QUE-241	100.0	110.0	300	50	500	300	0.0	INERTE	0.03
3412	QUE-241	110.0	120.0	200	50	600	200	0.0	INERTE	0.02
3413	QUE-241	120.0	130.0	100	50	400	100	0.0	INERTE	0.03
3414	QUE-241	130.0	139.6	100	50	400	100	0.0	INERTE	0.04
3415	QUE-241	139.6	150.0	500	50	400	100	0.0	INERTE	0.05
3416	QUE-242	149.9	160.0	300	50	300	100	0.0	INERTE	0.06
3417	QUE-242	160.0	170.0	200	100	400	200	0.0	INERTE	0.06
3418	QUE-244	273.3	280.0	100	50	1000	300	0.0	INERTE	0.01
3419	QUE-244	280.0	290.0	200	50	500	0	0.0	INERTE	0.03
3420	QUE-244	290.0	300.0	200	50	500	100	0.0	INERTE	0.02
3421	QUE-244	300.0	310.3	300	50	1500	500	-0.1	INERTE	0.02
3422	QUE-244	310.3	320.0	300	50	2400	1600	-0.2	LIGERAMENTE ACIDO	0.01
3423	QUE-244	320.0	330.0	300	50	1800	900	-0.1	LIGERAMENTE ACIDO	0.01
3424	QUE-244	330.0	340.0	200	50	1600	400	0.0	INERTE	0.02
3425	QUE-244	340.0	350.0	200	50	500	100	0.0	INERTE	0.08
3426	QUE-244	350.0	360.0	100	50	500	0	0.0	INERTE	0.08
3427	QUE-244	370.0	380.0	100	50	41500	40600	-5.5	ACIDO	0.10
3428	QUE-244	400.0	410.0	400	50	87700	64700	-8.8	ACIDO	0.06
3429	QUE-244	410.0	415.8	400	50	80400	66200	-9.1	ACIDO	0.03
3430	QUE-245	255.4	260.0	300	100	300	100	0.0	INERTE	0.00
3431	QUE-245	260.0	270.0	300	100	500	100	0.0	INERTE	0.01
3432	QUE-245	270.0	275.3	300	100	1000	200	0.0	INERTE	0.01
3433	QUE-246	0.4	10.3	600	200	45700	23700	-3.2	ACIDO	0.01
3434	QUE-246	10.3	20.0	400	50	57100	19400	-2.6	ACIDO	0.00
3435	QUE-246	20.0	30.0	500	200	59200	24800	-3.3	ACIDO	0.01
3436	QUE-246	30.0	40.0	400	100	48900	25000	-3.4	ACIDO	0.01
3437	QUE-246	40.0	50.2	600	100	45600	25100	-3.4	ACIDO	0.01
3438	QUE-246	50.2	60.0	1500	100	23500	13100	-1.8	ACIDO	0.01
3439	QUE-246	60.0	70.0	600	50	33900	18500	-2.5	ACIDO	0.02
3440	QUE-246	70.0	80.3	1600	100	36700	20000	-2.7	ACIDO	0.05
3441	QUE-246	80.3	90.0	1300	100	41600	34000	-4.6	ACIDO	0.04
3442	QUE-246	90.0	99.9	1000	200	50100	45100	-6.1	ACIDO	0.07
3443	QUE-246	99.9	110.8	1300	100	46000	43500	-5.9	ACIDO	0.05
3444	QUE-246	110.8	120.0	1200	50	41600	39700	-5.4	ACIDO	0.03
3445	QUE-246	120.0	130.0	1300	50	28600	26900	-3.7	ACIDO	0.04
3446	QUE-246	140.0	150.0	2200	50	48400	46500	-6.4	ACIDO	0.06
3447	QUE-246	160.0	170.0	1100	50	14200	7900	-1.1	ACIDO	0.07
3448	QUE-246	170.0	180.0	1000	50	40800	39000	-5.3	ACIDO	0.10
3449	QUE-246	180.0	190.0	1900	100	58600	56900	-7.8	ACIDO	0.08
3450	QUE-246	190.0	200.0	1800	100	54800	46200	-6.3	ACIDO	0.08
3451	QUE-246	200.0	210.5	2000	100	22200	14200	-1.9	ACIDO	0.07
3452	QUE-246	210.5	220.0	50	50	22100	11300	-1.5	ACIDO	0.07
3453	QUE-248	30.8	40.0	600	200	400	200	0.0	INERTE	0.00
3454	QUE-248	40.0	50.0	300	50	200	0	0.0	INERTE	0.01
3455	QUE-248	50.0	60.0	500	50	400	200	0.0	INERTE	0.01
3456	QUE-248	60.0	70.0	300	100	400	100	0.0	INERTE	0.01
3457	QUE-248	70.0	80.0	200	50	300	100	0.0	INERTE	0.02
3458	QUE-248	80.0	90.0	400	50	300	100	0.0	INERTE	0.01
3459	QUE-248	100.0	110.0	400	200	300	100	0.1	INERTE	0.03
3460	QUE-248	110.0	120.0	400	50	300	0	0.0	INERTE	0.01
3461	QUE-248	120.0	130.0	400	50	200	0	0.0	INERTE	0.02
3462	QUE-248	130.0	140.0	500	50	300	100	0.0	INERTE	0.02
3463	QUE-248	140.0	150.0	800	50	300	0	0.0	INERTE	0.02
3464	QUE-248	150.0	161.3	600	50	200	0	0.0	INERTE	0.03
3465	STZ-091	7.7	12.0	300	50	3900	2400	-0.3	LIGERAMENTE ACIDO	0.01
3466	STZ-091	12.0	20.0	300	50	600	300	0.0	INERTE	0.00
3467	STZ-091	20.0	29.8	200	50	200	100	0.0	INERTE	0.00
3468	STZ-091	29.8	40.0	900	50	6300	3800	-0.5	LIGERAMENTE ACIDO	0.02
3469	STZ-091	40.0	50.0	1000	50	11200	6500	-0.9	LIGERAMENTE ACIDO	0.01
3470	STZ-091	50.0	60.0	700	50	27200	17000	-2.3	ACIDO	0.01
3471	STZ-091	60.0	70.0	500	50	25400	17100	-2.3	ACIDO	0.01
3472	STZ-091	70.0	80.0	200	50	300	200	0.0	INERTE	0.01
3473	STZ-091	80.0	90.0	700	50	39700	26200	-3.6	ACIDO	0.01
3474	STZ-091	90.0	100.0	1300	50	23600	15400	-2.1	ACIDO	0.01
3475	STZ-091	100.0	110.0	1000	50	22600	14500	-2.0	ACIDO	0.01
3476	STZ-091	110.0	121.5	1100	50	28500	18600	-2.5	ACIDO	0.03
3477	STZ-091	121.5	131.6	1200	50	13900	8600	-1.2	ACIDO	0.04
3478	STZ-091	132.1	140.3	600	50	400	200	0.0	INERTE	0.02
3479	STZ-091	140.3	149.3	800	50	36400	24000	-3.3	ACIDO	0.07
3480	STZ-091	149.3	160.0	200	50	800	400	0.0	INERTE	0.04
3481	STZ-091	160.0	170.0	300	50	100	50	0.0	INERTE	0.03
3482	STZ-091	170.0	180.0	100	50	100	50	0.0	INERTE	0.03
3483	STZ-091	180.0	190.0	100	50	200	100	0.0	INERTE	0.02
3484	STZ-091	190.0	200.0	800	50	1700	1300	-0.2	LIGERAMENTE ACIDO	0.03
3485	STZ-091	200.0	208.0	200	50	2100	1600	-0.2	LIGERAMENTE ACIDO	0.02
3486	STZ-091	208.0	213.3	200	50	1700	1400	-0.2	LIGERAMENTE ACIDO	0.03
3487	STZ-091	214.9	220.0	600	50	700	500	-0.1	INERTE	0.02
3488	STZ-091	220.0	230.0	600	50	43700	33600	-4.6	ACIDO	0.06
3489	STZ-091	230.0	240.0	1200	50	44400	41500	-5.7	ACIDO	0.02
3490	STZ-091	240.0	250.0	1200	50	56000	49500	-6.8	ACIDO	0.03
3491	STZ-091	250.0	260.0	900	50	9700	5400	-0.7	LIGERAMENTE ACIDO	0.07
3492	STZ-091	260.0	264.4	500	50	20200	10400	-1.4	ACIDO	0.05
3493	STZ-091	264.9	270.0	200	50	700	400	0.0	INERTE	0.03
3494	STZ-091	270.0	280.0	300	50	1000	800	-0.1	NEUTRAL	0.03
3495	STZ-091	280.0	290.0	200	50	1300	1100	-0.1	LIGERAMENTE ACIDO	0.06
3496	STZ-091	290.0	299.5	1000	50	700	500	-0.1	INERTE	0.07
3497	STZ-091	300.0	301.2	1100	50	700	400	0.0	INERTE	0.05
3498	STZ-091	303.8	310.0	1000	50	42400	33200	-4.5	ACIDO	0.05
3499	STZ-091	310.0	320.0	600	50	25000	16700	-2.3	ACIDO	0.06
3500	STZ-091	320.0	324.3	600	50	10400	6300	-0.8	LIGERAMENTE ACIDO	0.10
3501	STZ-091	324.7	325.9	200	50	900	600	-0.1	INERTE	0.05
3502	STZ-091	326.8	332.1	200	50	500	300	0.0	INERTE	0.03
3503	STZ-091	332.9	341.8	500	50	600	300	0.0	INERTE	0.05
3504	STZ-091	343.5	350.0	200	50	400	200	0.0	INERTE	0.09
3505	STZ-091	350.0	359.2	200	50	200	100	0.0	INERTE	0.04
3506	STZ-091	359.2	363.2	300	50	300	200	0.0	INERTE	0.04
3507	STZ-091	363.9	370.0	700	200	300	100	0.1	INERTE	0.04
3508	STZ-091	370.0	379.8	300	50	600	500	-0.1	INERTE	0.05
3509	STZ-091	392.0	399.6	100	50	200	100	0.0	INERTE	0.09
3510	STZ-091	440.0	450.0	400	50	3600	2400	-0.3	LIGERAMENTE ACIDO	0.06

Apéndice 4
Resultados Análisis NCV de Muestras de Mineral

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
3511	CHGE-008	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.35
3512	CHGE-008	200.0	208.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.16
3513	CHQ-003	20.0	30.0	900	100	200	0	0.0	INERTE	0.14
3514	CHQ-003	40.0	50.0	600	100	200	100	0.0	INERTE	0.13
3515	CHQ-003	50.0	60.0	600	50	200	100	0.0	INERTE	0.19
3516	CHQ-003	60.0	70.0	300	50	200	0	0.0	INERTE	0.27
3517	CHQ-003	90.0	100.0	700	50	300	100	0.0	INERTE	0.11
3518	CHQ-004	0.0	10.0	1300	50	15000	4300	-0.6	LIGERAMENTE ACIDO	0.24
3519	CHQ-004	10.0	20.0	800	100	31500	5900	-0.8	LIGERAMENTE ACIDO	0.22
3520	CHQ-004	30.0	40.0	900	50	500	0	0.0	INERTE	0.12
3521	CHQ-008	40.0	50.0	400	50	100	0	0.0	INERTE	0.13
3522	CHQ-008	50.0	60.0	300	100	200	100	0.0	INERTE	0.12
3523	CHQ-008	70.0	80.0	300	200	100	0	0.1	INERTE	0.11
3524	CHQ-011	60.0	70.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
3525	CHQ-011	140.0	150.0	300	50	400	200	0.0	INERTE	0.11
3526	CHQ-028	100.0	110.0	1000	50	24600	13600	-1.8	ACIDO	0.20
3527	CHQ-028	150.0	160.0	1400	50	6500	2900	-0.4	LIGERAMENTE ACIDO	0.10
3528	CHQ-028	180.0	189.9	400	50	2300	1500	-0.2	LIGERAMENTE ACIDO	0.15
3529	CHQ-028	200.0	210.0	500	100	1600	900	-0.1	INERTE	0.20
3530	CHQ-028	230.0	239.8	500	50	200	0	0.0	INERTE	0.12
3531	CHQ-032	24.0	30.0	500	100	800	100	0.0	INERTE	1.87
3532	CHQ-032	30.0	40.0	200	50	500	400	0.0	INERTE	0.16
3533	CHQ-032	40.0	50.0	300	50	300	250	0.0	INERTE	0.18
3534	CHQ-032	50.0	60.0	200	50	200	100	0.0	INERTE	0.12
3535	CHQ-032	60.0	70.0	300	50	200	100	0.0	INERTE	0.42
3536	CHQ-032	70.0	80.0	400	100	400	200	0.0	INERTE	0.26
3537	CHQ-032	90.0	100.0	100	50	200	100	0.0	INERTE	0.14
3538	CHQ-032	100.0	110.0	300	50	400	200	0.0	INERTE	0.13
3539	CHQ-032	110.0	120.0	200	50	500	300	0.0	INERTE	0.10
3540	CHQ-032	200.0	210.0	300	50	300	200	0.0	INERTE	0.13
3541	CHQ-032	210.0	220.0	300	200	300	100	0.1	INERTE	0.14
3542	CHQ-032	220.0	230.0	300	50	200	100	0.0	INERTE	0.21
3543	CHQ-032	230.0	240.0	300	50	300	100	0.0	INERTE	0.30
3544	CHQ-032	240.0	250.0	400	50	400	100	0.0	INERTE	0.27
3545	CHQ-032	250.0	260.0	100	50	200	100	0.0	INERTE	0.32
3546	CHQ-032	260.0	270.0	300	200	200	100	0.1	INERTE	0.27
3547	CHQ-032	270.0	278.0	200	50	200	100	0.0	INERTE	0.27
3548	CHQ-032	280.0	290.0	600	100	600	100	0.0	INERTE	0.43
3549	CHQ-032	290.0	300.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.57
3550	CHQ-032	300.0	310.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.31
3551	CHQ-032	310.0	320.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.52
3552	CHQ-032	320.0	330.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.27
3553	CHQ-032	330.0	340.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
3554	CHQ-032	340.0	350.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
3555	CHQ-032	360.0	370.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
3556	CHQ-032	370.0	380.0	500	100	300	100	0.0	INERTE	0.11
3557	CHQ-032	460.0	470.0	900	50	300	100	0.0	INERTE	0.15
3558	CHQ-032	470.0	480.0	500	50	600	100	0.0	INERTE	0.18
3559	CHQ-042	30.0	40.0	700	50	43200	10400	-1.4	ACIDO	0.23
3560	CHQ-042	40.0	50.0	600	50	18400	6000	-0.8	LIGERAMENTE ACIDO	0.22
3561	CHQ-042	50.0	60.0	300	50	500	400	0.0	INERTE	0.29
3562	CHQ-042	60.0	66.0	1100	50	4300	900	-0.1	LIGERAMENTE ACIDO	0.21
3563	CHQ-042	70.0	80.0	1600	50	8100	2700	-0.4	LIGERAMENTE ACIDO	0.36
3564	CHQ-042	80.0	90.0	1200	50	23500	5500	-0.7	LIGERAMENTE ACIDO	0.17
3565	CHQ-042	110.5	120.0	800	50	20200	5000	-0.7	LIGERAMENTE ACIDO	0.23
3566	CHQ-042	120.0	130.0	700	50	11200	3500	-0.5	LIGERAMENTE ACIDO	0.19
3567	CHQ-044	6.0	10.0	600	50	16400	5200	-0.7	LIGERAMENTE ACIDO	0.11
3568	CHQ-044	20.0	30.0	700	50	20600	5200	-0.7	LIGERAMENTE ACIDO	0.17
3569	CHQ-044	40.0	48.0	1600	200	4100	800	0.0	INERTE	0.31
3570	CHQ-044	51.0	60.3	1500	200	600	0	0.1	INERTE	0.40
3571	CHQ-044	60.3	70.1	2600	200	4000	1600	-0.1	LIGERAMENTE ACIDO	0.13
3572	CHQ-051	70.0	80.0	900	50	5300	2700	-0.4	LIGERAMENTE ACIDO	0.15
3573	CHQ-051	80.0	90.0	800	50	2600	1500	-0.2	LIGERAMENTE ACIDO	0.19
3574	CHQ-051	90.0	100.0	400	50	1800	700	-0.1	INERTE	0.25
3575	CHQ-052	46.0	50.0	600	100	15000	7800	-1.0	ACIDO	1.42
3576	CHQ-052	50.0	50.5	500	100	12700	1100	-0.1	LIGERAMENTE ACIDO	0.80
3577	CHQ-052	60.0	70.1	900	100	7300	1800	-0.2	LIGERAMENTE ACIDO	0.44
3578	CHQ-052	70.1	80.0	600	100	300	100	0.0	INERTE	0.70
3579	CHQ-052	80.0	90.0	500	100	200	0	0.0	INERTE	0.12
3580	CHQ-052	109.8	120.0	400	300	400	0	0.1	LIGERAMENTE BASICO	0.16
3581	CHQ-052	120.0	130.0	500	200	300	0	0.1	INERTE	0.15
3582	CHQ-052	130.0	140.0	500	200	200	100	0.1	INERTE	0.10
3583	CHQ-052	140.0	150.0	200	200	200	0	0.1	INERTE	0.11
3584	CHQ-052	150.0	160.0	300	50	300	200	0.0	INERTE	0.23
3585	CHQ-052	169.7	180.0	600	50	300	200	0.0	INERTE	0.10
3586	CHQ-079	128.0	136.0	390	200	1900	870	0.0	INERTE	0.15
3587	CHQ-079	136.0	144.0	240	200	960	200	0.1	INERTE	0.44
3588	CHQ-079	144.0	151.9	360	200	1080	200	0.1	INERTE	0.16
3589	CHQ-079	151.9	160.0	400	200	670	200	0.1	INERTE	0.12
3590	CHQ-079	191.7	200.0	490	200	1040	200	0.1	INERTE	0.15
3591	CHQ-079	232.0	240.0	530	200	1540	200	0.1	INERTE	0.19
3592	CHQ-079	240.0	248.0	250	200	1510	200	0.1	INERTE	0.11
3593	CHQ-079	264.5	271.7	410	200	2920	200	0.1	INERTE	0.11
3594	CHQ-079	271.7	280.0	420	200	1030	200	0.1	INERTE	0.21
3595	CHQ-079	280.0	288.0	440	200	3220	420	0.0	INERTE	0.33
3596	CHQ-079	288.0	296.0	340	200	10440	1880	-0.2	LIGERAMENTE ACIDO	0.47
3597	CHQ-079	296.0	304.0	350	200	4800	500	0.0	INERTE	0.26
3598	CHQ-079	304.0	312.0	440	200	6950	750	0.0	INERTE	0.36
3599	CHQ-079	312.0	320.0	390	200	6490	520	0.0	INERTE	0.87
3600	CHQ-079	320.0	327.7	680	200	6170	570	0.0	INERTE	0.44
3601	CHQ-079	327.7	335.4	300	200	63720	31760	-4.3	ACIDO	0.95
3602	CHQ-079	335.4	344.0	430	200	34330	8400	-1.1	ACIDO	0.32
3603	CHQ-079	344.0	352.0	340	200	9920	2740	-0.3	LIGERAMENTE ACIDO	0.22
3604	CHQ-079	352.0	360.0	200	200	45480	35590	-4.8	ACIDO	0.52
3605	CHQ-079	360.0	364.9	240	200	75050	62310	-8.5	ACIDO	0.84
3606	CHQ-118	50.0	60.0	600	50	15700	7900	-1.1	ACIDO	0.19
3607	CHQ-118	60.0	70.0	300	200	900	600	0.0	INERTE	0.16
3608	CHQ-126	20.0	28.0	500	50	700	200	0.0	INERTE	0.12
3609	CHQ-126	28.0	30.0	1200	50	200	0	0.0	INERTE	0.60
3610	CHQ-126	30.0	38.0	1200	50	200	0	0.0	INERTE	0.30
3611	CHQ-126	40.0	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.12
3612	CHQ-130	44.0	50.0	1450	500	15620	4060	-0.4	LIGERAMENTE ACIDO	0.10
3613	CHQ-130	50.0	60.0	500	500	12690	2590	-0.2	LIGERAMENTE ACIDO	0.12
3614	CHQ-132	60.0	70.0	1100	50	12900	8300	-1.1	ACIDO	0.24
3615	CHQ-134	60.0	70.0	700	50	6700	4000	-0.5	LIGERAMENTE ACIDO	0.38
3616	CHQ-134	70.0	75.0	2900	100	7800	2800	-0.3	LIGERAMENTE ACIDO	0.21
3617	CHQ-138	36.0	40.0	1000	200	7800	3900	-0.5	LIGERAMENTE ACIDO	0.16
3618	CHQ-138	40.0	46.0	500	100	12800	4200	-0.5	LIGERAMENTE ACIDO	0.21
3619	CHQ-141	34.0	40.0	300	50	800	500	-0.1	INERTE	0.41
3620	CHQ-141	40.0	45.0	300	50	800	500	-0.1	INERTE	0.27
3621	CHQ-144	2.0	10.0	600	50	300	200	0.0	INERTE	0.47
3622	CHQ-144	10.0	12.0	600	50	300	200	0.0	INERTE	0.60
3623	CHQ-144	12.0	20.0	500	50	200	100	0.0	INERTE	0.19
3624	CHQ-403	260.0	270.0	500	50	400	200	0.0	INERTE	0.12
3625	CHQ-403	270.0	280.0	400	50	300	100	0.0	INERTE	0.38
3626	CHQ-403	280.0	290.0	700	50	300	100	0.0	INERTE	0.19
3627	CHQ-403	290.0	300.0	400	50	300	100	0.0	INERTE	0.21
3628	CHQ-413	20.0	30.0	1000	100	4900	1500	-0.2	LIGERAMENTE ACIDO	0.45
3629	CHQ-413	30.0	40.0	700	50	9600	2700	-0.4	LIGERAMENTE ACIDO	0.14
3630	CHQ-413	40.0	50.0	2200	100	13500	3200	-0.4	LIGERAMENTE ACIDO	0.18
3631	CHQ-413	50.0	60.0	1900	100	12100	3200	-0.4	LIGERAMENTE ACIDO	0.33
3632	CHQ-413	60.0	70.0	1300	100	14400	4000	-0.5	LIGERAMENTE ACIDO	0.22
3633	CHQ-517	44.6	50.0	800	100	700	100	0.0	INERTE	0.13
3634	CHQ-517	50.0	60.0	700	50	1000	200	0.0	INERTE	0.19
3635	CHQ-517	80.0	90.0	600	50	600	100	0.0	INERTE	0.10
3636	CHQ-517	90.0	100.0	500	50	1500	600	-0.1	INERTE	0.21
3637	CHQ-520	50.1	60.0	500	500	3070	40	0.2	LIGERAMENTE BASICO	0.10
3638	CHQ-530	200.0	210.0	500	500	1070	570	0.1	LIGERAMENTE BASICO	0.40
3639	CHQ-530	210.0	220.0	500	500	1120	50	0.2	LIGERAMENTE BASICO	1.05
3640	CHQ-530	220.0	230.2	500	500	500	0	0.2	LIGERAMENTE BASICO	1.00
3641	CHQ-530	230.2	240.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.37
3642	CHQ-530	240.0	248.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.22
3643	CHQ-535	240.0	250.0	400	50	1100	100	0.0	INERTE	0.11
3644	CHQ-537	290.0	300.0	500	500	1760	360	0.1	LIGERAMENTE BASICO	0.16
3645	CHQ-537	300.0	310.0	500	500	1160	140	0.2	LIGERAMENTE BASICO	0.25
3646	CHQ-537	310.0	320.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
3647	CHQ-537	320.0	330.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.22
3648	CHQ-537	330.0	340.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.84
3649	CHQ-537	340.0	350.0	900	50	600	100	0.0	INERTE	0.28
3650	CHQ-540	2.0	10.0	500	100	300	100	0.0	INERTE	0.63
3651	CHQ-540	10.0	20.0	300	200	400	100	0.1	INERTE	0.21
3652	CHQ-540	20.0	29.9	200	100	300	100	0.0	INERTE	0.37
3653	CHQ-540	29.9	40.0	100	100	300	0	0.0	INERTE	0.37
3654	CHQ-540	40.0	50.0	200	100	400	200	0.0	INERTE	0.58
3655	CHQ-540	50.0	60.0	100	100	300	100	0.0	INERTE	1.04
3656	CHQ-540	60.0	70.0	300	50	300	100	0.0	INERTE	0.62
3657	CHQ-540	70.0	80.0	1500	600	400	0	0.2	LIGERAMENTE BASICO	0.42
3658	CHQ-540	80.0	90.0	100	100	2700	2400	-0.3	LIGERAMENTE ACIDO	0.26
3659	CHQ-543	2.0	10.0	200	50	200	0	0.0	INERTE	0.12
3660	CHQ-543	10.0	20.0	200	100	300	0	0.0	INERTE	0.14
3661	CHQ-543	20.0	30.0	300	50	400	100	0.0	INERTE	0.79
3662	CHQ-543	30.0	39.7	200	50	400	100	0.0	INERTE	0.20
3663	CHQ-543	39.7	50.0	300	50	700	400	0.0	INERTE	0.17
3664	CHQ-543	50.0	60.1	300	50	1100	800	-0.1	INERTE	0.12
3665	CHQ-543	60.1	70.0	400	50	500	200	0.0	INERTE	0.54
3666	CHQ-543	70.0	80.0	300	100	700	400	0.0	INERTE	0.16
3667	CHQ-543	80.0	90.0	300	100	500	100	0.0	INERTE	0.19
3668	CHQ-543	99.6	110.0	200	50	400	0	0.0	INERTE	0.11
3669	CHQ-543	120.0	130.0	1700	800	600	0	0.3	LIGERAMENTE BASICO	0.13
3670	CHQ-543	130.0	140.0	600	50	600	100	0.0	INERTE	0.18
3671	CHQ-543	140.0	150.0	200	50	300	0	0.0	INERTE	0.15
3672	CHQ-543	230.0	240.0	400	50	400	100	0.0	INERTE	0.11
3673	CHQ-546	88.0	96.0	500	200	1900	100	0.1	INERTE	0.18
3674	CHQ-546	104.3	112.0	300	200	300	100	0.1	INERTE	0.16
3675	CHQ-546	120.0	128.0	300	200	300	100	0.1	INERTE	0.18
3676	CHQ-546	136.0	144.0	200	200	1100	500	0.0	INERTE	0.15
3677	CHQ-546	144.0	152.0	500	200	700	100	0.1	INERTE	0.26
3678	CHQ-546	152.0	160.5	400	200	1200	500	0.0	INERTE	0.14
3679	CHQ-546	160.5	168.0	1100	200	1300	400	0.0	INERTE	0.10
3680	CHQ-546	168.0	176.0	500	300	1300	100	0.1	INERTE	0.22
3681	CHQ-546	176.0	183.8	500	400	1900	200	0.1	LIGERAMENTE BASICO	0.24
3682	CHQ-546	183.8	192.0	500	200	2300	300	0.0	INERTE	0.35
3683	CHQ-546	192.0	200.0	600	200	1100	100	0.1	INERTE	0.21
3684	CHQ-546	200.0	208.0	700	200	700	200	0.0	INERTE	0.17
3685	CHQ-546	208.0	216.0	340	200	490	100	0.1	INERTE	0.10
3686	CHQ-546	224.0	232.0	650	200	1040	100	0.1	INERTE	0.24
3687	CHQ-546	232.0	240.0	450	200	650	100	0.1	INERTE	0.17
3688	CHQ-546	240.0	248.0	280	200	470	100	0.1	INERTE	0.17
3689	CHQ-546	248.0	256.0	480	200	450	100	0.1	INERTE	0.25
3690	CHQ-546	256.0	264.0	910	200	19000	16100	-2.1	ACIDO	0.85
3691	CHQ-546	264.0	272.0	1200	200	6640	4640	-0.6	LIGERAMENTE ACIDO	0.11
3692	CHQ-546	272.0	280.0	310	200	25700	23000	-3.1	ACIDO	0.66
3693	CHQ-546	280.0	288.0	730	200	44900	41600	-5.6	ACIDO	0.65
3694	CHQ-546	288.0	296.0	310	200	21100	19100	-2.5	ACIDO	0.34
3695	CHQ-546	296.0	304.0	530	200	5900	4600	-0.6	LIGERAMENTE ACIDO	0.25
3696	CHQ-546	304.0	311.7	270	200	6480	5080	-0.6	LIGERAMENTE ACIDO	0.20
3697	CHQ-546	311.7	320.5	300	200	20700	18900	-2.5	ACIDO	2.01
3698	CHQ-546	320.5	328.0	410	200	5000	3200	-0.4	LIGERAMENTE ACIDO	0.33
3699	CHQ-546	328.0	336.0	310	200	22000	19800	-2.6	ACIDO	0.19
3700	CHQ-546	336.0	344.0	630	300	50300	47100	-6.3	ACIDO	0.75
3701	CHQ-546	344.0	352.0	640	200	78200	71100	-9.7	ACIDO	0.43
3702	CHQ-546	352.0	360.0	440	200	80600	70400	-9.6	ACIDO	0.32
3703	CHQ-546	360.0	368.0	570	400	53400	39400	-5.3	ACIDO	0.33
3704	CHQ-546	368.0	376.0	580	500	45200	37900	-5.0	ACIDO	0.36
3705	CHQ-546	376.0	384.0	630	200	74400	57500	-7.8	ACIDO	0.32
3706	CHQ-546	384.0	392.0	1450	200	65800	54800	-7.4	ACIDO	0.30
3707	CHQ-546	392.0	400.0	490	200	42100	30300	-4.1	ACIDO	0.41
3708	CHQ-546	400.0	407.7	440	200	50200	37800	-5.1	ACIDO	0.67
3709	CHQ-546	407.7	416.0	410	200	49700	34200	-4.6	ACIDO	1.19
3710	CHQ-546	416.0	424.0	870	200	91600	72200	-9.8	ACIDO	2.15
3711	CHQ-546	424.0	432.0	850	300	110000	86900	-11.8	ACIDO	1.62
3712	CHQ-546	432.0	440.0	1100	200	84400	79100	-10.8	ACIDO	1.39
3713	CHQ-546	440.0	448.0	3300	200	108800	101300	-13.8	ACIDO	1.43
3714	CHQ-546	448.0	456.0	1900	200	110900	102700	-14.0	ACIDO	3.09
3715	CHQ-546	456.0	464.0	2000	200	86700	81800	-11.1	ACIDO	4.25
3716	CHQ-546	464.0	471.8	2600	200	25100	21100	-2.8	ACIDO	2.03
3717	CHQ-546	471.8	480.0	500	200	39300	35700	-4.8	ACIDO	2.04
3718	CHQ-547	0.0	8.0	210	200	2930	1830	-0.2	LIGERAMENTE ACIDO	0.30
3719	CHQ-547	8.0	16.2	280	200	4040	2840	-0.3	LIGERAMENTE ACIDO	0.25
3720	CHQ-547	16.2	24.0	370	200	3200	2000	-0.2	LIGERAMENTE ACIDO	0.14
3721	CHQ-547	24.0	32.0	430	200	1900	200	0.0	INERTE	0.15
3722	CHQ-547	40.0	48.0	260	300	620	100	0.1	LIGERAMENTE BASICO	0.38
3723	CHQ-547	48.0	56.0	260	200	660	100	0.1	INERTE	0.16
3724	CHQ-547	56.0	64.4	290	200	590	100	0.1	INERTE	0.11
3725	CHQ-547	64.4	72.0	270	200	650	100	0.1	INERTE	0.11
3726	CHQ-547	80.0	88.0	230	200	630	100	0.1	INERTE	0.10
3727	CHQ-547	88.0	96.0	280	200	980	100	0.1	INERTE	0.29
3728	CHQ-547	96.0	104.0	200	200	1840	100	0.1	INERTE	0.13
3729	CHQ-547	112.0	120.0	310	200	4640	940	-0.1	INERTE	0.20
3730	CHQ-547	120.0	127.0	260	200	640	100	0.1	INERTE	0.36
3731	CHQ-547	127.0	136.0	200	200	1700	300	0.0	INERTE	0.29
3732	CHQ-547	136.0	143.0	530	200	2710	410	0.0	INERTE	0.20
3733	CHQ-548	160.0	168.0	550	200	1240	100	0.1	INERTE	0.15
3734	CHQ-548	168.0	176.0	580	200	1810	1610	-0.1	LIGERAMENTE ACIDO	0.22
3735	CHQ-548	176.0	184.0	520	200	1310	100	0.1	INERTE	0.25
3736	CHQ-548	184.0	192.0	520	200	3470	100	0.1	INERTE	0.28
3737	CHQ-548	192.0	200.1	530	200	2340	100	0.1	INERTE	0.15
3738	CHQ-548	200.1	208.0	360	200	430	100	0.1	INERTE	0.12
3739	CHQ-548	208.0	216.0	340	200	420	100	0.1	INERTE	0.11
3740	CHQ-548	232.0	240.0	330	200	250	100	0.1	INERTE	0.15
3741	CHQ-548	240.0	248.0	290	200	200	100	0.1	INERTE	0.12
3742	CHQ-548	248.0	256.0	280	200	200	100	0.1	INERTE	0.16
3743	CHQ-548	256.0	264.0	360	200	220	100	0.1	INERTE	0.18
3744	CHQ-548	264.0	272.0	320	200	200	100	0.1	INERTE	0.11
3745	CHQ-548	272.0	280.0	320	200	200	100	0.1	INERTE	0.12
3746	CHQ-548	280.0	288.0	390	200	390	100	0.1	INERTE	0.18
3747	CHQ-548	288.0	296.0	420	200	350	100	0.1	INERTE	0.18
3748	CHQ-548	296.0	304.2	350	200	1370	770	0.0	INERTE	0.24
3749	CHQ-548	384.0	392.2	200	200	76000	66300	-9.0	ACIDO	0.42
3750	CHQ-548	392.2	400.0	200	200	86700	72200	-9.8	ACIDO	0.62
3751	CHQ-548	400.0	408.0	550	200	53800	46100	-6.242	ACIDO	0.63
3752	CHQ-548	408.0	414.9	200	200	4730	100	0.1	INERTE	0.72
3753	CHQ-548	414.9	424.7	680	200	25500	20900	-2.8	ACIDO	0.93
3754	CHQ-548	424.7	432.0	360	200	103000	93800	-12.8	ACIDO	1.57
3755	CHQ-548	432.0	440.0	260	200	69400	61200	-8.3	ACIDO	3.27
3756	CHQ-548	440.0	448.0	350	200	101000	92800	-12.6	ACIDO	3.72
3757	CHQ-548	448.0	456.0	440	200	20700	17100	-2.3	ACIDO	0.91
3758	CHQ-548	456.0	464.0	8140	200	10300	4100	-0.5	LIGERAMENTE ACIDO	0.78
3759	CHQ-548	464.0	472.0	5600	200	30400	23500	-3.1	ACIDO	0.83
3760	CHQ-548	472.0	480.0	5090	200	23300	16300	-2.2	ACIDO	0.91
3761	CHQ-548	480.0	488.0	2030	200	48800	43300	-5.9	ACIDO	0.65
3762	CHQ-548	488.0	496.0	210	200	53100	48600	-6.6	ACIDO	0.60
3763	CHQ-548	496.0	504.0	200	200	61600	57000	-7.7	ACIDO	0.34
3764	CHQ-548	504.0	512.0	380	200	46900	40300	-5.4	ACIDO	0.39
3765	CHQ-548	512.0	520.0	530	200	46400	41600	-5.6	ACIDO	0.58
3766	CHQ-548	520.0	528.0	320	200	43900	38500	-5.2	ACIDO	0.31
3767	CHQ-548	528.0	538.5	470	200	45900	41700	-5.6	ACIDO	0.14
3768	CHQ-549	126.0	134.0	500	200	900	200	0.0	INERTE	0.18
3769	CHQ-549	134.0	142.0	500	200	2100	500	0.0	INERTE	0.23
3770	CHQ-549	206.0	214.0	600	200	7500	6100	-0.8	LIGERAMENTE ACIDO	0.13
3771	CHQ-549	222.0	230.0	300	200	1100	100	0.1	INERTE	0.15
3772	CHQ-549	230.0	238.0	400	200	1100	100	0.1	INERTE	0.13
3773	CHQ-549	262.0	270.0	500	200	13800	11700	-1.5	ACIDO	0.20
3774	CHQ-549	270.0	278.0	600	200	9900	7700	-1.0	LIGERAMENTE ACIDO	0.34
3775	CHQ-549	278.0	286.0	600	200	24200	21300	-2.8	ACIDO	1.69
3776	CHQ-549	286.0	294.0	400	200	29700	27500	-3.7	ACIDO	1.73
3777	CHQ-549	294.0	302.0	400	200	20600	17200	-2.3	ACIDO	1.11
3778	CHQ-549	302.0	310.0	800	200	18500	15700	-2.1	ACIDO	0.72
3779	CHQ-549	310.0	318.0	600	200	12100	10500	-1.4	ACIDO	3.70
3780	CHQ-549	318.0	326.0	700	200	21500	19800	-2.6	ACIDO	8.19
3781	CHQ-549	326.0	334.0	600	200	73800	69100	-9.4	ACIDO	96.56
3782	CHQ-549	334.0	342.0	1000	200	71600	67600	-9.2	ACIDO	11.72
3783	CHQ-549	342.0	350.0	800	200	42300	31400	-4.2	ACIDO	9.18
3784	CHQ-549	350.0	358.0	700	200	42300	37400	-5.1	ACIDO	1.71
3785	CHQ-549	358.0	366.0	800	200	42400	38900	-5.3	ACIDO	1.67
3786	CHQ-549	366.0	374.0	600	200	49900	40800	-5.5	ACIDO	2.69
3787	CHQ-549	374.0	382.0	600	200	41300	36700	-5.0	ACIDO	0.91
3788	CHQ-549	382.0	390.0	600	200	27500	19600	-2.6	ACIDO	1.25
3789	CHQ-549	390.0	398.0	900	200	27600	9300	-1.2	ACIDO	0.91
3790	CHQ-549	398.0	406.0	800	200	56600	35900	-4.8	ACIDO	0.82
3791	CHQ-549	406.0	411.5	700	200	98600	96400	-13.1	ACIDO	1.31
3792	CHQ-559	99.0	108.0	550	200	1760	100	0.1	INERTE	0.63
3793	CHQ-559	108.0	116.0	420	200	410	100	0.1	INERTE	0.51
3794	CHQ-559	116.0	123.0	880	200	3760	100	0.1	INERTE	0.88
3795	CHQ-559	123.0	132.0	1420	200	1010	100	0.1	INERTE	0.59
3796	CHQ-559	188.0	196.0	580	200	920	100	0.1	INERTE	0.11
3797	CHQ-559	236.0	244.0	340	200	7360	3660	-0.4	LIGERAMENTE ACIDO	0.10
3798	CHQ-559	244.0	252.0	370	200	4660	1060	-0.1	INERTE	0.16
3799	CHQ-559	252.0	260.0	290	200	3130	100	0.1	INERTE	0.15
3800	CHQ-559	260.0	268.0	300	200	6050	1750	-0.2	LIGERAMENTE ACIDO	0.20
3801	CHQ-559	268.0	276.0	460	200	8770	5770	-0.7	LIGERAMENTE ACIDO	0.25
3802	CHQ-559	276.0	284.0	250	200	13000	11300	-1.5	ACIDO	0.26
3803	CHQ-559	284.0	292.0	410	200	25800	19700	-2.6	ACIDO	0.29
3804	CHQ-559	292.0	300.0	200	200	70400	65300	-8.9	ACIDO	0.22
3805	CHQ-559	300.0	308.0	200	200	66900	61100	-8.3	ACIDO	0.20
3806	CHQ-559	308.0	316.0	230	200	61000	48200	-6.5	ACIDO	0.43
3807	CHQ-559	316.0	324.0	430	200	48700	38000	-5.1	ACIDO	0.75
3808	CHQ-559	324.0	332.0	230	200	104000	96400	-13.1	ACIDO	0.22
3809	CHQ-559	332.0	340.3	200	200	53400	36200	-4.9	ACIDO	0.23
3810	CHQ-559	340.3	348.0	200	200	90300	82500	-11.2	ACIDO	0.20
3811	CHQ-559	348.0	356.0	380	200	48300	41000	-5.5	ACIDO	0.24
3812	CHQ-559	356.0	364.0	200	200	49200	30700	-4.1	ACIDO	0.17
3813	CHQ-559	364.0	372.0	390	200	75300	56800	-7.7	ACIDO	0.32
3814	CHQ-559	372.0	380.0	220	200	90500	68000	-9.2	ACIDO	1.18
3815	CHQ-559	380.0	388.2	200	200	77200	48800	-6.6	ACIDO	0.76
3816	CHQ-559	388.2	396.0	200	200	55500	42200	-5.7	ACIDO	0.65
3817	CHQ-559	396.0	404.0	200	200	111000	96300	-13.1	ACIDO	0.21
3818	CHQ-559	404.0	412.0	200	200	74200	52700	-7.1	ACIDO	0.28
3819	CHQ-559	412.0	420.0	200	200	59200	44100	-6.0	ACIDO	0.22
3820	CHQ-559	420.0	427.6	200	200	61000	45300	-6.1	ACIDO	0.16
3821	CHQ-559	427.6	436.1	780	200	86700	62900	-8.5	ACIDO	0.17
3822	CHQ-559	436.1	444.4	220	200	94700	65300	-8.9	ACIDO	0.16
3823	CHQ-559	444.4	452.0	200	200	79500	58500	-7.9	ACIDO	0.14
3824	CHQ-559	452.0	460.0	200	200	62800	46800	-6.3	ACIDO	0.12
3825	CHQ-559	460.0	468.0	200	200	61400	39800	-5.4	ACIDO	0.13
3826	CHQ-559	476.0	484.0	200	200	67500	36000	-4.9	ACIDO	0.17
3827	CHQ-559	492.0	500.0	200	200	74500	43100	-5.8	ACIDO	0.10
3828	CHQ-561	164.0	172.0	870	200	5440	440	0.0	INERTE	0.19
3829	CHQ-561	180.0	188.0	600	200	1360	100	0.1	INERTE	0.29
3830	CHQ-561	188.0	196.0	650	200	1340	100	0.1	INERTE	0.59
3831	CHQ-561	196.0	203.9	200	200	1020	100	0.1	INERTE	0.20
3832	CHQ-561	203.9	212.0	880	200	1420	100	0.1	INERTE	0.29
3833	CHQ-561	212.0	220.0	770	200	1500	200	0.0	INERTE	0.67
3834	CHQ-561	220.0	228.0	1420	200	1380	100	0.0	INERTE	0.61
3835	CHQ-561	228.0	236.0	260	200	1770	370	0.0	INERTE	0.58
3836	CHQ-561	236.0	243.8	1040	200	2880	380	0.0	INERTE	0.58
3837	CHQ-561	276.0	284.0	390	200	40100	35200	-4.7	ACIDO	0.29
3838	CHQ-561	284.0	292.0	400	200	107000	93900	-12.8	ACIDO	0.25
3839	CHQ-561	292.0	300.0	340	200	113000	87700	-11.9	ACIDO	0.34
3840	CHQ-561	316.0	324.0	500	200	131000	122400	-16.7	ACIDO	1.39
3841	CHQ-561	324.0	332.0	590	200	112000	101800	-13.9	ACIDO	0.49
3842	CHQ-561	332.0	340.2	330	200	69300	63200	-8.6	ACIDO	0.11
3843	CHQ-561	348.0	356.0	510	200	81600	61100	-8.3	ACIDO	0.16
3844	CHQ-561	356.0	364.0	550	200	78800	58700	-8.0	ACIDO	0.17
3845	CHQ-561	364.0	372.0	710	200	69000	52900	-7.2	ACIDO	0.13
3846	CHQ-561	372.0	380.0	570	300	80900	54300	-7.3	ACIDO	0.22
3847	CHQ-561	380.0	388.0	880	300	63200	50400	-6.8	ACIDO	0.35
3848	CHQ-561	388.0	396.0	240	500	100000	75600	-10.2	ACIDO	0.47
3849	CHQ-561	396.0	404.0	240	200	91400	69600	-9.5	ACIDO	0.49
3850	CHQ-561	404.0	412.0	790	300	53400	39900	-5.4	ACIDO	0.56
3851	CHQ-561	412.0	420.0	490	200	36000	31100	-4.2	ACIDO	1.25
3852	CHQ-561	420.0	428.0	610	200	29700	23500	-3.1	ACIDO	1.05
3853	CHQ-561	428.0	436.0	200	300	45700	28300	-3.8	ACIDO	0.79
3854	CHQ-561	436.0	444.0	540	200	42800	24800	-3.3	ACIDO	0.86
3855	CHQ-561	444.0	452.0	640	200	38900	23800	-3.2	ACIDO	1.11
3856	CHQ-561	452.0	460.0	540	200	34300	28200	-3.8	ACIDO	0.80
3857	CHQ-561	460.0	468.0	720	300	45400	38900	-5.2	ACIDO	1.56
3858	CHQ-561	468.0	476.0	540	200	52700	43300	-5.9	ACIDO	2.09
3859	CHQ-561	476.0	484.0	360	200	47800	38800	-5.2	ACIDO	1.91
3860	CHQ-561	484.0	492.0	510	300	43000	34800	-4.7	ACIDO	1.37
3861	CHQ-561	492.0	500.0	2990	300	27900	22100	-2.9	ACIDO	0.47
3862	CHQ-561	500.0	508.0	8290	200	10500	4900	-0.6	LIGERAMENTE ACIDO	0.26
3863	CHQ-561	508.0	516.0	560	200	33100	27000	-3.6	ACIDO	0.47
3864	CHQ-561	516.0	524.0	390	200	48000	35400	-4.8	ACIDO	0.55
3865	CHQ-561	524.0	532.4	630	300	37500	31800	-4.2	ACIDO	0.38
3866	CHQ-561	532.4	540.0	650	200	44600	39700	-5.4	ACIDO	0.38
3867	CHQ-561	540.0	546.0	730	200	46800	41900	-5.7	ACIDO	0.45
3868	CHQ-561	546.0	551.6	650	200	38900	34400	-4.6	ACIDO	0.25
3869	CHQ-563	252.2	260.0	200	200	11000	10200	-1.3	ACIDO	0.13
3870	CHQ-563	260.0	268.0	200	200	11900	11200	-1.5	ACIDO	0.11

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
3871	CHQ-563	268.0	276.0	200	200	20500	19700	-2.6	ACIDO	0.21
3872	CHQ-563	276.0	284.0	200	200	17900	16800	-2.2	ACIDO	0.27
3873	CHQ-563	284.0	292.0	200	200	10100	6900	-0.9	LIGERAMENTE ACIDO	0.90
3874	CHQ-563	292.0	300.0	200	200	13100	10400	-1.4	ACIDO	0.48
3875	CHQ-563	316.0	324.0	250	200	21000	17300	-2.3	ACIDO	0.22
3876	CHQ-563	324.0	332.0	290	200	25800	21800	-2.9	ACIDO	0.21
3877	CHQ-563	332.0	340.0	210	200	40200	37900	-5.1	ACIDO	0.17
3878	CHQ-563	340.0	348.0	200	200	39200	36000	-4.9	ACIDO	0.16
3879	CHQ-563	348.0	356.0	250	200	36200	33000	-4.4	ACIDO	0.15
3880	CHQ-563	356.0	364.0	320	200	33800	30900	-4.2	ACIDO	0.14
3881	CHQ-563	364.0	372.0	200	200	46000	43200	-5.8	ACIDO	0.18
3882	CHQ-563	372.0	380.0	270	200	67700	65000	-8.8	ACIDO	0.15
3883	CHQ-563	380.0	388.0	200	200	54000	49500	-6.7	ACIDO	0.16
3884	CHQ-563	388.0	396.0	200	200	63300	60400	-8.2	ACIDO	0.28
3885	CHQ-563	396.0	404.0	200	200	76300	73000	-9.9	ACIDO	0.19
3886	CHQ-563	404.0	412.0	200	200	63000	55000	-7.5	ACIDO	0.37
3887	CHQ-563	412.0	420.0	200	200	65400	58600	-8.0	ACIDO	0.25
3888	CHQ-563	420.0	428.0	220	200	44100	32000	-4.3	ACIDO	0.19
3889	CHQ-563	428.0	436.0	200	200	52700	43600	-5.9	ACIDO	0.12
3890	CHQ-563	436.0	444.0	200	200	71400	59100	-8.0	ACIDO	0.15
3891	CHQ-563	444.0	452.0	340	200	56900	41500	-5.6	ACIDO	0.35
3892	CHQ-563	452.0	460.0	200	200	69300	59900	-8.1	ACIDO	0.35
3893	CHQ-563	460.0	468.0	200	200	60100	49800	-6.7	ACIDO	0.23
3894	CHQ-563	468.0	476.0	340	200	50800	41000	-5.5	ACIDO	0.16
3895	CHQ-563	484.0	492.0	200	200	87100	41100	-5.6	ACIDO	0.28
3896	CHQ-563	492.0	496.9	200	200	81100	49200	-6.7	ACIDO	0.39
3897	CHQ-564	114.3	122.0	880	500	1210	710	0.1	INERTE	0.11
3898	CHQ-564	122.0	130.0	870	200	650	250	0.0	INERTE	0.13
3899	CHQ-564	130.0	138.0	1200	300	880	100	0.1	INERTE	0.16
3900	CHQ-564	138.0	146.0	1330	200	1160	100	0.1	INERTE	0.20
3901	CHQ-564	146.0	154.0	1050	200	1530	100	0.1	INERTE	0.12
3902	CHQ-564	186.0	194.0	440	300	1400	100	0.1	LIGERAMENTE BASICO	0.10
3903	CHQ-564	194.0	202.0	760	300	2060	100	0.1	LIGERAMENTE BASICO	0.25
3904	CHQ-564	202.0	210.0	560	200	2230	730	0.0	INERTE	0.22
3905	CHQ-564	210.0	218.3	770	300	4920	100	0.1	LIGERAMENTE BASICO	0.20
3906	CHQ-564	218.3	223.8	310	200	25300	100	0.1	INERTE	0.26
3907	CHQ-564	223.8	232.0	800	300	10200	100	0.1	LIGERAMENTE BASICO	0.32
3908	CHQ-564	232.0	240.0	580	200	22100	16900	-2.2	ACIDO	0.57
3909	CHQ-564	240.0	248.0	200	200	69500	64500	-8.8	ACIDO	0.16
3910	CHQ-564	248.0	256.0	890	200	105000	95500	-13.0	ACIDO	0.28
3911	CHQ-564	256.0	264.0	1300	200	112000	96700	-13.2	ACIDO	0.32
3912	CHQ-564	272.0	280.0	360	200	31300	22400	-3.0	ACIDO	0.10
3913	CHQ-564	280.0	288.0	460	200	33700	23700	-3.2	ACIDO	0.18
3914	CHQ-564	288.0	296.0	280	200	38600	28000	-3.8	ACIDO	0.78
3915	CHQ-564	296.0	304.0	200	300	54600	32800	-4.4	ACIDO	0.38
3916	CHQ-564	304.0	312.0	200	200	60500	29500	-4.0	ACIDO	0.18
3917	CHQ-564	312.0	319.8	200	200	49800	20100	-2.7	ACIDO	0.57
3918	CHQ-564	319.8	328.0	460	300	40400	17500	-2.3	ACIDO	0.31
3919	CHQ-564	328.0	336.0	260	200	39900	35800	-4.8	ACIDO	0.26
3920	CHQ-564	336.0	344.0	290	400	40900	25600	-3.4	ACIDO	0.18
3921	CHQ-564	344.0	352.0	200	200	58300	27300	-3.7	ACIDO	0.31
3922	CHQ-564	352.0	360.0	200	200	64200	24500	-3.3	ACIDO	0.14
3923	CHQ-564	360.0	368.0	610	200	36900	15500	-2.1	ACIDO	0.10
3924	CHQ-567	164.0	172.0	600	200	3100	700	0.0	INERTE	0.17
3925	CHQ-567	172.0	180.0	400	200	4000	300	0.0	INERTE	0.23
3926	CHQ-567	180.0	187.6	200	200	800	100	0.1	INERTE	0.17
3927	CHQ-567	187.6	196.0	600	200	4900	1000	-0.1	INERTE	0.20
3928	CHQ-567	204.0	212.0	400	200	1300	100	0.1	INERTE	0.13
3929	CHQ-567	244.0	252.0	880	300	5510	2910	-0.3	LIGERAMENTE ACIDO	0.10
3930	CHQ-567	276.0	284.0	1100	500	17900	16000	-2.0	ACIDO	0.10
3931	CHQ-567	284.0	292.0	860	400	43100	39300	-5.2	ACIDO	0.12
3932	CHQ-567	292.0	299.8	1070	400	11200	6000	-0.7	LIGERAMENTE ACIDO	0.17
3933	CHQ-567	299.8	308.0	780	500	45900	42000	-5.6	ACIDO	0.12
3934	CHQ-567	308.0	316.0	1250	300	33900	30200	-4.0	ACIDO	0.11
3935	CHQ-567	316.0	324.0	230	300	31200	28300	-3.8	ACIDO	0.25
3936	CHQ-567	324.0	332.0	740	200	12000	8300	-1.1	ACIDO	0.22
3937	CHQ-567	332.0	340.1	320	200	24100	20600	-2.7	ACIDO	0.25
3938	CHQ-567	340.1	348.0	230	200	17000	14700	-1.9	ACIDO	0.16
3939	CHQ-567	348.0	356.0	590	200	23600	21600	-2.9	ACIDO	0.12
3940	CHQ-567	356.0	364.0	200	200	20900	18900	-2.5	ACIDO	0.18
3941	CHQ-567	364.0	372.0	260	300	27100	24500	-3.2	ACIDO	0.16
3942	CHQ-567	372.0	380.0	200	200	21800	18600	-2.5	ACIDO	0.12
3943	CHQ-567	380.0	388.0	230	400	39700	36100	-4.8	ACIDO	0.22
3944	CHQ-567	388.0	396.0	200	300	95400	89100	-12.1	ACIDO	0.23
3945	CHQ-567	396.0	404.0	200	200	83800	78100	-10.6	ACIDO	0.18
3946	CHQ-567	404.0	412.0	690	200	36900	30400	-4.1	ACIDO	0.23
3947	CHQ-567	412.0	420.0	280	300	50600	40900	-5.5	ACIDO	0.25
3948	CHQ-567	420.0	428.0	200	200	60000	39400	-5.3	ACIDO	0.26
3949	CHQ-567	428.0	436.0	1970	200	39900	17200	-2.3	ACIDO	0.36
3950	CHQ-567	436.0	444.0	810	200	42500	16900	-2.2	ACIDO	0.15
3951	CHQ-567	444.0	451.7	200	300	63000	46300	-6.2	ACIDO	0.38
3952	CHQ-567	451.7	462.0	280	200	52200	29800	-4.0	ACIDO	0.34
3953	CHQ-568	32.0	40.3	800	200	1400	400	0.0	INERTE	0.11
3954	CHQ-568	40.3	48.0	500	200	900	200	0.0	INERTE	0.13
3955	CHQ-568	96.0	104.0	600	200	700	100	0.1	INERTE	0.10
3956	CHQ-568	104.0	112.0	700	200	900	100	0.1	INERTE	0.45
3957	CHQ-568	112.0	120.0	1100	200	900	200	0.0	INERTE	1.12
3958	CHQ-568	136.0	144.0	1200	200	1200	100	0.1	INERTE	0.16
3959	CHQ-568	176.0	184.0	1500	200	700	400	0.0	INERTE	0.16
3960	CHQ-568	184.0	192.0	1300	200	1000	200	0.0	INERTE	0.11
3961	CHQ-568	200.0	208.0	700	200	1800	100	0.1	INERTE	0.52
3962	CHQ-568	208.0	216.1	700	200	2200	100	0.1	INERTE	2.16
3963	CHQ-568	216.1	224.0	1300	200	1600	100	0.1	INERTE	1.71
3964	CHQ-568	224.0	232.0	800	200	2000	100	0.1	INERTE	8.25
3965	CHQ-568	232.0	240.0	900	200	4100	700	0.0	INERTE	15.01
3966	CHQ-568	240.0	251.2	2800	300	6500	100	0.1	INERTE	2.25
3967	CHQ-568	254.4	262.0	1300	200	88900	83400	-11.4	ACIDO	3.53
3968	CHQ-568	262.0	270.0	2200	200	4300	100	0.1	INERTE	1.76
3969	CHQ-568	270.0	278.0	1300	200	1700	100	0.1	INERTE	5.59
3970	CHQ-568	278.0	286.0	200	200	6100	4900	-0.6	LIGERAMENTE ACIDO	1.58
3971	CHQ-568	286.0	296.4	700	200	3800	2400	-0.3	LIGERAMENTE ACIDO	0.16
3972	CHQ-568	296.8	304.0	600	200	500	100	0.1	INERTE	0.34
3973	CHQ-568	312.0	320.0	400	200	5100	3100	-0.4	LIGERAMENTE ACIDO	0.16
3974	CHQ-568	320.0	328.0	300	200	21100	17600	-2.3	ACIDO	0.14
3975	CHQ-568	328.0	336.0	400	200	3200	1600	-0.1	LIGERAMENTE ACIDO	0.14
3976	CHQ-568	360.0	368.0	600	200	29800	28100	-3.8	ACIDO	0.13
3977	CHQ-568	368.0	376.4	300	200	10500	8800	-1.1	ACIDO	0.14
3978	CHQ-568	376.4	384.0	300	200	6500	4600	-0.6	LIGERAMENTE ACIDO	0.25
3979	CHQ-568	384.0	392.0	400	200	5700	2800	-0.3	LIGERAMENTE ACIDO	0.17
3980	CHQ-568	392.0	400.0	300	200	8500	6200	-0.8	LIGERAMENTE ACIDO	0.13
3981	CHQ-568	400.0	408.0	400	200	13600	11600	-1.5	ACIDO	0.23
3982	CHQ-568	408.0	416.0	400	200	6200	4400	-0.5	LIGERAMENTE ACIDO	0.16
3983	CHQ-568	416.0	424.0	400	200	9900	6800	-0.9	LIGERAMENTE ACIDO	0.26
3984	CHQ-568	424.0	432.0	400	200	32700	25200	-3.4	ACIDO	0.25
3985	CHQ-568	432.0	440.0	400	200	33200	28300	-3.8	ACIDO	0.26
3986	CHQ-568	440.0	448.0	500	300	26200	10100	-1.3	ACIDO	0.75
3987	CHQ-568	448.0	456.0	200	200	12800	4400	-0.5	LIGERAMENTE ACIDO	0.16
3988	CHQ-568	456.0	464.0	200	200	5600	3400	-0.4	LIGERAMENTE ACIDO	0.18
3989	CHQ-568	464.0	472.0	200	200	5300	3200	-0.4	LIGERAMENTE ACIDO	0.16
3990	CHQ-568	472.0	480.0	200	200	7100	5100	-0.6	LIGERAMENTE ACIDO	0.15
3991	CHQ-568	480.0	488.0	200	200	8200	5900	-0.7	LIGERAMENTE ACIDO	0.17
3992	CHQ-569	0.0	8.0	800	200	1200	100	0.1	INERTE	0.64
3993	CHQ-569	8.0	16.0	600	300	500	100	0.1	LIGERAMENTE BASICO	0.24
3994	CHQ-569	16.0	24.0	400	300	300	100	0.1	LIGERAMENTE BASICO	0.23
3995	CHQ-569	24.0	32.0	600	200	200	100	0.1	INERTE	0.13
3996	CHQ-569	32.0	40.0	600	200	200	100	0.1	INERTE	0.17
3997	CHQ-569	40.0	48.0	500	200	300	100	0.1	INERTE	0.42
3998	CHQ-569	48.0	56.0	300	200	200	100	0.1	INERTE	0.93
3999	CHQ-569	56.0	64.0	400	200	600	100	0.1	INERTE	0.36
4000	CHQ-569	64.0	72.0	700	200	300	100	0.1	INERTE	0.55
4001	CHQ-569	72.0	80.0	600	300	200	100	0.1	LIGERAMENTE BASICO	0.37
4002	CHQ-569	80.0	88.0	500	200	200	100	0.1	INERTE	0.33
4003	CHQ-569	88.0	96.0	500	200	200	100	0.1	INERTE	0.26
4004	CHQ-569	96.0	104.0	1000	200	200	100	0.1	INERTE	0.14
4005	CHQ-569	104.0	112.0	1400	200	1100	700	0.0	INERTE	0.64
4006	CHQ-569	112.0	120.0	700	200	200	100	0.1	INERTE	0.26
4007	CHQ-569	120.0	128.0	500	200	200	100	0.1	INERTE	0.24
4008	CHQ-569	128.0	135.7	700	200	400	100	0.1	INERTE	0.34
4009	CHQ-569	135.7	144.0	700	200	2500	1100	-0.1	INERTE	1.10
4010	CHQ-569	144.0	152.0	1200	200	700	100	0.1	INERTE	0.89
4011	CHQ-569	152.0	160.2	3050	200	1520	100	0.1	INERTE	0.33
4012	CHQ-569	160.2	168.0	1570	200	1230	100	0.1	INERTE	0.11
4013	CHQ-569	168.0	176.0	1020	200	2800	100	0.1	INERTE	0.13
4014	CHQ-569	176.0	184.0	1380	200	4450	100	0.1	INERTE	0.21
4015	CHQ-569	184.0	192.3	1400	200	2210	100	0.1	INERTE	0.19
4016	CHQ-569	192.3	199.8	1220	200	3310	1710	-0.2	LIGERAMENTE ACIDO	0.21
4017	CHQ-569	199.8	208.0	1330	300	3930	1030	0.0	INERTE	2.21
4018	CHQ-569	208.0	216.0	890	200	1450	100	0.1	INERTE	0.70
4019	CHQ-569	216.0	224.0	910	200	2610	100	0.1	INERTE	0.54
4020	CHQ-569	224.0	232.0	820	200	1850	250	0.0	INERTE	0.33
4021	CHQ-569	232.0	240.0	970	200	4430	230	0.0	INERTE	0.76
4022	CHQ-569	240.0	247.7	1110	200	4070	670	0.0	INERTE	0.39
4023	CHQ-569	247.7	256.0	960	200	1620	100	0.1	INERTE	0.63
4024	CHQ-569	256.0	264.0	960	200	10600	3600	-0.4	LIGERAMENTE ACIDO	0.33
4025	CHQ-569	264.0	270.6	1080	200	1590	100	0.1	INERTE	1.52
4026	CHQ-569	282.0	290.0	400	200	18900	5200	-0.6	LIGERAMENTE ACIDO	1.47
4027	CHQ-569	290.0	298.0	300	200	21100	5800	-0.7	LIGERAMENTE ACIDO	0.16
4028	CHQ-569	298.0	306.0	200	200	44600	11300	-1.5	ACIDO	0.36
4029	CHQ-569	306.0	314.0	300	200	3100	100	0.0	INERTE	0.45
4030	CHQ-569	314.0	322.0	200	200	3900	1500	-0.1	LIGERAMENTE ACIDO	0.22
4031	CHQ-569	322.0	330.0	300	200	12200	9800	-1.3	ACIDO	0.38
4032	CHQ-569	330.0	338.0	400	200	28000	19900	-2.7	ACIDO	0.28
4033	CHQ-569	338.0	345.8	200	200	17500	7900	-1.0	ACIDO	0.22
4034	CHQ-569	345.8	354.0	200	200	39300	19400	-2.6	ACIDO	0.14
4035	CHQ-569	354.0	362.0	200	200	38000	15300	-2.0	ACIDO	0.13
4036	CHQ-569	362.0	369.7	200	200	26100	12500	-1.6	ACIDO	0.18
4037	CHQ-569	369.7	378.0	200	200	7200	2400	-0.3	LIGERAMENTE ACIDO	0.12
4038	CHQ-569	378.0	386.0	200	200	15400	8800	-1.1	ACIDO	0.16
4039	CHQ-569	386.0	394.0	300	200	43900	34600	-4.7	ACIDO	0.41
4040	CHQ-569	402.0	410.0	600	200	40500	35400	-4.8	ACIDO	0.29
4041	CHQ-569	410.0	416.0	400	200	40500	35700	-4.8	ACIDO	0.81
4042	CHQ-569	416.0	420.5	300	200	38300	26800	-3.6	ACIDO	0.56
4043	CHQ-573	128.0	135.8	800	200	700	100	0.0	INERTE	0.79
4044	CHQ-573	135.8	144.2	700	200	900	100	0.1	INERTE	1.12
4045	CHQ-575	8.0	16.0	700	200	400	100	0.1	INERTE	0.10
4046	CHQ-575	16.0	24.0	800	200	600	100	0.0	INERTE	0.16
4047	CHQ-575	24.0	32.0	800	200	400	100	0.0	INERTE	0.11
4048	CHQ-575	40.0	48.0	800	200	500	100	0.1	INERTE	0.12
4049	CHQ-575	48.0	56.0	500	300	600	100	0.1	LIGERAMENTE BASICO	0.12
4050	CHQ-575	72.0	80.0	1700	200	400	100	0.1	INERTE	0.13
4051	CHQ-575	80.0	88.0	900	200	500	100	0.0	INERTE	0.19
4052	CHQ-575	88.0	96.0	700	200	500	100	0.1	INERTE	0.15
4053	CHQ-575	96.0	104.0	600	200	500	300	0.0	INERTE	0.16
4054	CHQ-575	104.0	112.0	700	200	400	100	0.1	INERTE	0.16
4055	CHQ-575	112.0	120.0	800	200	500	100	0.0	INERTE	0.18
4056	CHQ-575	136.0	144.0	400	200	700	100	0.1	INERTE	0.11
4057	CHQ-575	166.5	168.0	300	200	500	100	0.1	INERTE	0.13
4058	CHQ-575	182.4	190.0	400	200	7600	6900	-0.9	LIGERAMENTE ACIDO	0.12
4059	CHQ-575	190.0	198.0	300	200	15400	14600	-1.9	ACIDO	0.16
4060	CHQ-575	198.0	206.0	400	200	4100	3200	-0.4	LIGERAMENTE ACIDO	0.13
4061	CHQ-575	206.0	213.9	600	200	5400	4300	-0.5	LIGERAMENTE ACIDO	0.16
4062	CHQ-575	213.9	221.9	400	200	13200	11100	-1.4	ACIDO	0.13
4063	CHQ-575	221.9	229.7	1400	200	13500	9100	-1.2	ACIDO	0.11
4064	CHQ-575	229.7	238.0	300	200	35500	32700	-4.4	ACIDO	0.20
4065	CHQ-575	238.0	246.0	500	200	45400	42300	-5.7	ACIDO	0.24
4066	CHQ-575	254.0	262.0	600	200	51200	49100	-6.7	ACIDO	0.10
4067	CHQ-575	270.0	278.0	500	200	47400	44700	-6.1	ACIDO	0.16
4068	CHQ-575	278.0	286.0	400	200	34800	32600	-4.4	ACIDO	0.12
4069	CHQ-575	286.0	294.0	400	200	27000	25000	-3.4	ACIDO	0.13
4070	CHQ-575	294.0	302.0	500	200	33100	31400	-4.2	ACIDO	0.14
4071	CHQ-575	302.0	310.0	700	200	48000	46200	-6.3	ACIDO	0.12
4072	CHQ-575	358.0	366.0	410	200	13500	11900	-1.6	ACIDO	0.12
4073	CHQ-575	366.0	374.0	380	200	7670	5770	-0.7	LIGERAMENTE ACIDO	0.40
4074	CHQ-575	374.0	382.0	900	200	90700	87200	-11.9	ACIDO	0.24
4075	CHQ-575	382.0	390.0	420	200	122000	115700	-15.8	ACIDO	0.39
4076	CHQ-575	390.0	398.0	720	200	113000	100300	-13.7	ACIDO	0.87
4077	CHQ-575	398.0	406.0	470	200	99400	90900	-12.4	ACIDO	0.77
4078	CHQ-575	406.0	414.0	560	200	152000	128100	-17.5	ACIDO	2.16
4079	CHQ-575	414.0	422.0	660	200	94200	84900	-11.6	ACIDO	1.30
4080	CHQ-575	422.0	430.0	470	200	60300	45100	-6.1	ACIDO	0.54
4081	CHQ-575	430.0	438.1	550	200	83700	56000	-7.6	ACIDO	0.49
4082	CHQ-575	438.1	446.0	520	200	69500	43700	-5.9	ACIDO	0.57
4083	CHQ-575	446.0	452.4	510	200	58000	33100	-4.5	ACIDO	0.33
4084	CHQ-576	112.0	120.0	900	200	400	100	0.1	INERTE	0.12
4085	CHQ-576	120.0	128.0	800	200	400	100	0.1	INERTE	0.12
4086	CHQ-576	136.0	144.0	900	200	900	100	0.1	INERTE	0.17
4087	CHQ-576	144.0	152.0	1100	200	800	100	0.1	INERTE	0.15
4088	CHQ-576	152.0	160.0	800	200	800	100	0.1	INERTE	0.14
4089	CHQ-576	160.0	168.0	900	200	1500	900	0.0	INERTE	0.20
4090	CHQ-576	168.0	176.0	1100	200	1000	200	0.0	INERTE	0.23
4091	CHQ-576	176.0	184.0	1000	200	600	100	0.1	INERTE	0.17
4092	CHQ-576	184.0	192.0	1200	200	900	100	0.1	INERTE	0.26
4093	CHQ-576	192.0	200.0	1000	200	800	100	0.1	INERTE	0.20
4094	CHQ-576	200.0	208.0	600	300	1000	500	0.0	INERTE	0.24
4095	CHQ-576	208.0	216.0	700	200	900	200	0.0	INERTE	0.18
4096	CHQ-576	216.0	224.0	800	300	800	300	0.1	INERTE	0.17
4097	CHQ-576	224.0	232.0	700	200	1200	100	0.1	INERTE	0.18
4098	CHQ-576	232.0	240.0	800	200	1500	400	0.0	INERTE	0.18
4099	CHQ-580	0.0	8.0	1100	200	1260	360	0.0	INERTE	0.20
4100	CHQ-580	8.0	16.0	530	200	630	100	0.1	INERTE	0.13
4101	CHQ-580	16.0	24.0	1040	200	530	100	0.1	INERTE	0.40
4102	CHQ-580	24.0	32.0	350	200	550	100	0.1	INERTE	1.02
4103	CHQ-580	32.0	40.0	520	200	520	220	0.0	INERTE	0.29
4104	CHQ-580	48.0	56.0	460	200	790	100	0.0	INERTE	0.29
4105	CHQ-580	56.0	64.0	370	200	370	100	0.1	INERTE	0.36
4106	CHQ-580	64.0	72.0	200	200	200	100	0.1	INERTE	0.21
4107	CHQ-580	72.0	80.0	220	200	200	100	0.1	INERTE	0.63
4108	CHQ-580	80.0	88.0	200	200	200	100	0.1	INERTE	0.82
4109	CHQ-580	88.0	95.9	660	200	230	100	0.1	INERTE	0.28
4110	CHQ-580	95.9	104.0	400	200	220	100	0.1	INERTE	0.20
4111	CHQ-580	104.0	112.0	200	200	390	100	0.0	INERTE	0.12
4112	CHQ-580	112.0	120.0	530	200	900	100	0.1	INERTE	0.32
4113	CHQ-580	120.0	128.0	790	200	850	100	0.1	INERTE	0.23
4114	CHQ-580	160.0	168.0	750	200	1640	100	0.1	INERTE	0.15
4115	CHQ-580	184.0	192.0	980	200	2610	100	0.1	INERTE	0.20
4116	CHQ-580	192.0	200.0	1240	200	4750	100	0.1	INERTE	0.16
4117	CHQ-580	224.0	232.0	1000	200	1640	100	0.1	INERTE	0.13
4118	CHQ-580	240.0	248.0	540	200	1570	100	0.1	INERTE	0.12
4119	CHQ-580	248.0	256.0	760	200	12300	8900	-1.1	ACIDO	0.15
4120	CHQ-580	256.0	264.0	850	200	59700	48000	-6.5	ACIDO	0.13
4121	CHQ-580	264.0	272.0	800	200	65800	53200	-7.2	ACIDO	0.21
4122	CHQ-580	272.0	280.0	660	200	67900	62300	-8.5	ACIDO	0.15
4123	CHQ-580	280.0	288.0	1090	200	54000	48400	-6.6	ACIDO	0.25
4124	CHQ-580	288.0	296.0	740	200	53800	48700	-6.6	ACIDO	0.14
4125	CHQ-580	304.0	312.0	990	200	143000	127100	-17.3	ACIDO	0.17
4126	CHQ-580	312.0	320.0	680	200	54600	35200	-4.7	ACIDO	0.11
4127	CHQ-580	320.0	328.0	340	200	34800	24800	-3.3	ACIDO	0.14
4128	CHQ-580	328.0	336.0	300	200	35500	29800	-4.0	ACIDO	0.20
4129	CHQ-580	336.0	344.0	470	200	42100	26400	-3.5	ACIDO	0.18
4130	CHQ-580	352.0	360.0	310	200	28100	25000	-3.4	ACIDO	0.27
4131	CHQ-580	360.0	368.0	510	200	23900	20700	-2.8	ACIDO	0.21
4132	CHQ-580	368.0	376.0	850	200	18600	15700	-2.1	ACIDO	0.27
4133	CHQ-580	376.0	383.1	650	200	26100	23400	-3.1	ACIDO	0.23
4134	CHQ-581	88.0	96.0	500	200	1170	270	0.0	INERTE	0.10
4135	CHQ-581	216.0	224.0	900	200	5120	2120	-0.2	LIGERAMENTE ACIDO	1.82
4136	CHQ-581	224.0	232.0	1290	200	15800	5200	-0.6	LIGERAMENTE ACIDO	0.33
4137	CHQ-581	232.0	240.0	910	200	21000	6100	-0.8	LIGERAMENTE ACIDO	0.11
4138	CHQ-581	240.0	248.0	1360	200	9970	1870	-0.2	LIGERAMENTE ACIDO	0.24
4139	CHQ-581	272.0	280.0	1440	200	7260	960	-0.1	INERTE	0.29
4140	CHQ-581	280.0	288.0	610	200	840	100	0.1	INERTE	2.72
4141	CHQ-581	320.0	328.0	510	200	900	100	0.1	INERTE	0.31
4142	CHQ-581	328.0	336.0	460	200	1890	100	0.0	INERTE	1.06
4143	CHQ-581	336.0	344.0	760	200	2730	530	0.0	INERTE	0.18
4144	CHQ-583	0.0	8.0	1660	300	450	100	0.1	LIGERAMENTE BASICO	0.24
4145	CHQ-583	8.0	16.0	800	200	850	250	0.0	INERTE	0.29
4146	CHQ-583	16.0	24.0	690	200	760	100	0.1	INERTE	0.20
4147	CHQ-583	24.0	32.0	620	200	1360	560	0.0	INERTE	0.47
4148	CHQ-583	40.0	48.0	1020	200	750	550	0.0	INERTE	0.19
4149	CHQ-583	48.0	56.0	610	200	740	540	0.0	INERTE	0.16
4150	CHQ-583	128.0	136.0	2050	200	1030	100	0.1	INERTE	0.52
4151	CHQ-583	160.0	168.0	840	200	320	100	0.1	INERTE	0.11
4152	CHQ-583	200.0	208.0	1000	200	440	240	0.0	INERTE	0.11
4153	CHQ-583	216.0	224.0	1450	300	430	100	0.1	LIGERAMENTE BASICO	0.13
4154	CHQ-583	224.0	232.0	450	200	450	250	0.0	INERTE	0.11
4155	CHQ-583	232.0	240.0	540	200	660	100	0.1	INERTE	0.17
4156	CHQ-583	240.0	248.0	320	200	5910	5210	-0.6	LIGERAMENTE ACIDO	0.14
4157	CHQ-583	248.0	256.0	560	200	3780	1380	-0.1	LIGERAMENTE ACIDO	1.17
4158	CHQ-583	256.0	261.0	540	200	12800	9000	-1.2	ACIDO	0.47
4159	CHQ-587	120.0	128.0	450	200	870	100	0.1	INERTE	0.24
4160	CHQ-587	128.0	136.0	710	200	890	100	0.1	INERTE	0.27
4161	CHQ-587	160.0	168.0	430	200	2160	100	0.1	INERTE	0.13
4162	CHQ-587	176.0	184.0	790	200	2530	100	0.1	INERTE	0.10
4163	CHQ-587	184.0	192.0	370	200	1640	100	0.1	INERTE	0.69
4164	CHQ-587	192.0	200.0	420	200	2410	100	0.1	INERTE	1.07
4165	CHQ-587	200.0	208.0	400	200	1740	100	0.1	INERTE	0.67
4166	CHQ-587	208.0	216.0	720	200	1780	100	0.1	INERTE	1.22
4167	CHQ-587	216.0	223.6	450	200	1080	100	0.1	INERTE	0.40
4168	CHQ-587	223.6	232.0	410	200	1160	100	0.1	INERTE	0.72
4169	CHQ-587	232.0	240.0	620	200	31100	26900	-3.6	ACIDO	0.17
4170	CHQ-587	240.0	248.0	1070	200	94200	88100	-12.0	ACIDO	1.16
4171	CHQ-587	248.0	256.0	1950	200	90900	81900	-11.1	ACIDO	8.65
4172	CHQ-587	256.0	264.0	1320	200	123000	115900	-15.8	ACIDO	0.32
4173	CHQ-587	264.0	271.4	730	200	107000	96500	-13.1	ACIDO	0.47
4174	CHQ-587	271.4	279.1	860	200	32600	27700	-3.7	ACIDO	0.33
4175	CHQ-587	279.1	288.0	460	200	1530	100	0.1	INERTE	0.17
4176	CHQ-587	304.0	312.0	410	200	4070	2470	-0.3	LIGERAMENTE ACIDO	0.15
4177	CHQ-587	320.0	328.0	350	200	11500	9000	-1.2	ACIDO	0.13
4178	CHQ-587	328.0	336.0	330	200	40900	38200	-5.2	ACIDO	0.12
4179	CHQ-587	368.0	376.0	360	200	23900	20900	-2.8	ACIDO	0.14
4180	CHQ-587	384.0	392.0	270	200	21500	19000	-2.5	ACIDO	0.18
4181	CHQ-587	400.0	408.0	370	200	6790	5690	-0.7	LIGERAMENTE ACIDO	0.15
4182	CHQ-587	408.0	416.0	410	200	19900	18100	-2.4	ACIDO	0.64
4183	CHQ-587	416.0	424.0	350	200	19100	14300	-1.9	ACIDO	0.56
4184	CHQ-587	424.0	432.0	340	200	17500	11400	-1.5	ACIDO	0.14
4185	CHQ-592	0.0	8.0	580	200	480	100	0.0	INERTE	0.10
4186	CHQ-592	8.0	16.0	440	200	310	100	0.1	INERTE	0.18
4187	CHQ-592	24.0	32.0	420	200	370	100	0.1	INERTE	0.13
4188	CHQ-592	32.0	40.0	280	200	220	100	0.1	INERTE	0.18
4189	CHQ-592	40.0	48.0	390	200	200	100	0.1	INERTE	0.12
4190	CHQ-592	80.0	88.0	450	200	210	100	0.1	INERTE	0.10
4191	CHQ-592	88.0	96.0	380	200	200	100	0.1	INERTE	0.13
4192	CHQ-592	96.0	104.0	460	200	350	100	0.1	INERTE	0.16
4193	CHQ-592	104.0	112.0	640	200	630	230	0.0	INERTE	0.12
4194	CHQ-592	112.0	120.0	810	200	640	240	0.0	INERTE	0.16
4195	CHQ-592	120.0	127.6	590	200	760	560	0.0	INERTE	0.14
4196	CHQ-592	127.6	136.0	520	400	1630	1230	0.0	INERTE	0.17
4197	CHQ-592	136.0	144.0	800	200	1410	100	0.1	INERTE	1.14
4198	CHQ-592	144.0	152.0	480	300	2190	1390	-0.1	INERTE	0.44
4199	CHQ-592	152.0	160.0	450	200	1600	200	0.0	INERTE	0.31
4200	CHQ-592	160.0	168.0	1290	200	2430	100	0.1	INERTE	1.35
4201	CHQ-592	168.0	176.0	1930	200	1640	640	0.0	INERTE	0.47
4202	CHQ-592	176.0	184.0	1380	200	1560	460	0.0	INERTE	0.30
4203	CHQ-592	184.0	192.5	770	200	1760	100	0.1	INERTE	0.25
4204	CHQ-592	192.5	200.0	400	200	4370	1870	-0.2	LIGERAMENTE ACIDO	0.38
4205	CHQ-592	200.0	208.0	570	200	5800	3000	-0.3	LIGERAMENTE ACIDO	0.48
4206	CHQ-592	208.0	216.0	470	200	6340	5140	-0.6	LIGERAMENTE ACIDO	0.35
4207	CHQ-592	216.0	224.0	1590	200	6290	4590	-0.6	LIGERAMENTE ACIDO	0.93
4208	CHQ-592	224.0	232.0	630	200	7590	2390	-0.3	LIGERAMENTE ACIDO	0.40
4209	CHQ-592	232.0	240.0	590	200	17300	3300	-0.4	LIGERAMENTE ACIDO	0.30
4210	CHQ-592	240.0	248.0	480	200	6360	1660	-0.2	LIGERAMENTE ACIDO	0.11
4211	CHQ-592	248.0	256.4	570	200	18000	4100	-0.5	LIGERAMENTE ACIDO	2.64
4212	CHQ-592	256.4	263.7	490	200	8500	2100	-0.2	LIGERAMENTE ACIDO	0.13
4213	CHQ-592	263.7	272.0	450	200	33000	18400	-2.4	ACIDO	0.39
4214	CHQ-592	272.0	279.8	510	200	28900	12700	-1.7	ACIDO	0.51
4215	CHQ-592	279.8	288.5	370	200	24500	4500	-0.5	LIGERAMENTE ACIDO	3.75
4216	CHQ-592	288.5	296.0	450	200	14600	4300	-0.5	LIGERAMENTE ACIDO	2.50
4217	CHQ-592	296.0	304.0	380	200	23200	4700	-0.6	LIGERAMENTE ACIDO	0.17
4218	CHQ-592	304.0	312.0	350	200	21400	5800	-0.7	LIGERAMENTE ACIDO	1.95
4219	CHQ-592	312.0	320.0	500	200	60800	14200	-1.9	ACIDO	0.21
4220	CHQ-592	320.0	328.0	370	200	19200	6400	-0.8	LIGERAMENTE ACIDO	0.34
4221	CHQ-592	328.0	335.7	460	200	37600	21500	-2.9	ACIDO	0.29
4222	CHQ-592	335.7	344.0	570	200	43400	25600	-3.4	ACIDO	0.24
4223	CHQ-592	344.0	352.0	520	300	25100	19900	-2.6	ACIDO	0.18
4224	CHQ-592	352.0	358.2	490	200	46500	19300	-2.6	ACIDO	0.20
4225	CHQ-593	16.0	24.0	300	200	1350	250	0.0	INERTE	0.13
4226	CHQ-593	24.0	32.0	330	200	1000	400	0.0	INERTE	0.15
4227	CHQ-593	47.7	56.0	300	200	480	100	0.0	INERTE	0.13
4228	CHQ-593	72.0	80.0	410	200	1300	200	0.0	INERTE	0.61
4229	CHQ-593	80.0	88.0	290	200	1110	100	0.1	INERTE	0.70
4230	CHQ-593	88.0	96.0	320	300	710	410	0.1	INERTE	0.33

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
4231	CHQ-593	96.0	104.0	360	200	1030	330	0.0	INERTE	0.20
4232	CHQ-593	160.0	168.1	1840	200	2610	100	0.1	INERTE	0.87
4233	CHQ-593	169.1	177.3	700	200	4930	100	0.1	INERTE	0.20
4234	CHQ-593	177.3	186.0	720	200	5420	100	0.1	INERTE	0.19
4235	CHQ-593	202.0	210.0	600	200	1700	700	0.0	INERTE	0.14
4236	CHQ-593	210.0	218.1	700	200	1100	300	0.0	INERTE	0.17
4237	CHQ-593	218.1	226.5	1100	300	5300	900	0.0	INERTE	0.15
4238	CHQ-593	226.5	234.0	1000	200	8300	1000	-0.1	INERTE	1.28
4239	CHQ-593	234.0	241.6	700	300	2900	100	0.1	LIGERAMENTE BASICO	0.30
4240	CHQ-593	241.6	249.6	600	200	1300	700	0.0	INERTE	0.21
4241	CHQ-593	249.6	258.0	600	200	1100	500	0.0	INERTE	0.28
4242	CHQ-593	274.0	282.0	310	200	330	100	0.1	INERTE	0.13
4243	CHQ-593	282.0	289.7	200	200	880	100	0.1	INERTE	1.28
4244	CHQ-593	289.7	298.0	200	200	750	100	0.1	INERTE	0.33
4245	CHQ-593	367.4	376.0	210	200	20100	18000	-2.4	ACIDO	0.17
4246	CHQ-593	376.0	384.0	200	200	29000	24200	-3.2	ACIDO	0.11
4247	CHQ-593	384.0	392.0	320	200	24200	17800	-2.4	ACIDO	0.20
4248	CHQ-593	392.0	401.2	240	200	19100	14000	-1.8	ACIDO	0.28
4249	CHQ-594	176.0	184.3	560	200	5120	100	0.1	INERTE	0.24
4250	CHQ-594	184.3	192.0	600	200	11100	500	0.0	INERTE	0.15
4251	CHQ-594	240.0	248.0	450	200	320	100	0.1	INERTE	0.11
4252	CHQ-594	248.0	256.0	500	200	370	100	0.1	INERTE	0.11
4253	CHQ-594	256.0	264.0	390	200	230	100	0.1	INERTE	0.18
4254	CHQ-594	264.0	272.0	430	200	8420	7520	-1.0	LIGERAMENTE ACIDO	0.25
4255	CHQ-594	272.0	280.0	600	200	1900	1300	-0.1	LIGERAMENTE ACIDO	0.41
4256	CHQ-594	280.0	288.0	500	200	4900	4000	-0.5	LIGERAMENTE ACIDO	0.44
4257	CHQ-594	296.0	304.0	600	200	4900	2600	-0.3	LIGERAMENTE ACIDO	0.10
4258	CHQ-594	304.0	311.6	600	200	28900	24200	-3.2	ACIDO	0.47
4259	CHQ-594	311.6	320.0	600	200	17800	14000	-1.8	ACIDO	0.11
4260	CHQ-594	320.0	327.8	800	200	8400	5600	-0.7	LIGERAMENTE ACIDO	0.15
4261	CHQ-594	327.8	336.0	600	200	6000	4800	-0.6	LIGERAMENTE ACIDO	0.13
4262	CHQ-594	344.0	352.0	600	200	7500	6600	-0.8	LIGERAMENTE ACIDO	0.13
4263	CHQ-594	352.0	360.0	600	200	9700	8500	-1.1	ACIDO	0.26
4264	CHQ-594	360.0	368.0	500	200	11400	8800	-1.1	ACIDO	0.25
4265	CHQ-594	368.0	376.0	700	200	4600	3700	-0.4	LIGERAMENTE ACIDO	0.34
4266	CHQ-594	376.0	384.0	600	200	3500	2300	-0.2	LIGERAMENTE ACIDO	0.45
4267	CHQ-594	384.0	392.2	500	200	5500	1700	-0.2	LIGERAMENTE ACIDO	0.47
4268	CHQ-594	392.2	400.0	600	200	3500	1500	-0.1	LIGERAMENTE ACIDO	0.45
4269	CHQ-596	0.6	8.0	570	200	980	580	0.0	INERTE	0.62
4270	CHQ-596	8.0	16.0	620	200	620	320	0.0	INERTE	0.44
4271	CHQ-596	16.0	24.0	370	200	320	100	0.1	INERTE	0.29
4272	CHQ-596	24.0	32.0	1020	200	570	370	0.0	INERTE	0.16
4273	CHQ-596	32.0	40.0	440	200	380	100	0.0	INERTE	0.17
4274	CHQ-596	40.0	48.0	420	200	410	210	0.0	INERTE	0.25
4275	CHQ-596	48.0	56.1	360	200	390	100	0.0	INERTE	0.11
4276	CHQ-596	64.0	72.0	430	200	380	100	0.1	INERTE	0.33
4277	CHQ-596	72.0	80.0	430	200	780	100	0.1	INERTE	0.44
4278	CHQ-596	80.0	88.2	540	200	720	100	0.1	INERTE	0.18
4279	CHQ-596	88.2	96.0	560	200	570	270	0.0	INERTE	0.21
4280	CHQ-596	96.0	104.0	370	200	820	320	0.0	INERTE	0.14
4281	CHQ-596	104.0	112.0	470	200	970	270	0.0	INERTE	0.12
4282	CHQ-596	120.0	128.0	400	200	770	100	0.1	INERTE	0.16
4283	CHQ-596	128.0	136.3	510	200	760	100	0.1	INERTE	0.26
4284	CHQ-596	136.3	144.0	540	200	2590	1190	-0.1	INERTE	0.53
4285	CHQ-596	144.0	152.0	460	200	2440	1140	-0.1	INERTE	0.41
4286	CHQ-596	152.0	160.0	520	200	3300	800	0.0	INERTE	0.21
4287	CHQ-596	160.0	167.6	640	200	9660	760	0.0	INERTE	0.35
4288	CHQ-596	167.6	176.5	520	300	18300	5100	-0.6	LIGERAMENTE ACIDO	0.40
4289	CHQ-596	176.5	184.0	570	300	7230	930	0.0	INERTE	0.87
4290	CHQ-596	216.0	224.0	470	200	400	100	0.1	INERTE	0.12
4291	CHQ-596	224.0	232.4	370	200	280	100	0.1	INERTE	0.17
4292	CHQ-596	232.4	240.0	430	200	1420	820	0.0	INERTE	0.11
4293	CHQ-596	240.0	248.0	500	200	22300	21200	-2.8	ACIDO	0.26
4294	CHQ-596	248.0	256.0	360	200	41500	40200	-5.4	ACIDO	0.47
4295	CHQ-596	256.0	264.0	380	200	40600	39300	-5.3	ACIDO	0.14
4296	CHQ-596	264.0	272.0	610	200	49800	47900	-6.5	ACIDO	0.13
4297	CHQ-596	272.0	280.0	480	200	68800	66600	-9.1	ACIDO	0.27
4298	CHQ-596	280.0	288.0	370	200	74400	71900	-9.8	ACIDO	0.20
4299	CHQ-596	288.0	296.2	500	200	80300	77500	-10.5	ACIDO	0.31
4300	CHQ-596	296.2	304.0	470	200	91400	89100	-12.1	ACIDO	0.87
4301	CHQ-596	304.0	312.0	480	200	50300	48000	-6.5	ACIDO	0.30
4302	CHQ-596	312.0	320.0	500	200	56400	54200	-7.4	ACIDO	0.28
4303	CHQ-596	320.0	328.0	580	200	45600	43300	-5.9	ACIDO	0.55
4304	CHQ-596	328.0	336.0	480	200	36400	34300	-4.6	ACIDO	0.21
4305	CHQ-596	336.0	344.0	400	200	32500	30800	-4.1	ACIDO	0.23
4306	CHQ-596	344.0	352.0	500	200	31700	29700	-4.0	ACIDO	0.17
4307	CHQ-596	352.0	360.0	1050	200	35800	33200	-4.5	ACIDO	0.21
4308	CHQ-596	360.0	368.0	510	200	42400	38600	-5.2	ACIDO	0.29
4309	CHQ-596	368.0	380.0	640	200	64000	60800	-8.3	ACIDO	0.33
4310	CHQ-598	0.0	8.0	470	200	15200	6100	-0.8	LIGERAMENTE ACIDO	0.14
4311	CHQ-598	8.0	16.0	210	200	33500	13100	-1.7	ACIDO	0.18
4312	CHQ-598	16.0	24.0	330	200	31600	7700	-1.0	LIGERAMENTE ACIDO	0.24
4313	CHQ-598	40.0	48.0	270	200	20500	6300	-0.8	LIGERAMENTE ACIDO	0.11
4314	CHQ-598	48.0	56.0	220	200	50400	17500	-2.3	ACIDO	0.10
4315	CHQ-598	56.0	64.0	560	400	2220	420	0.1	INERTE	0.21
4316	CHQ-598	64.0	72.0	540	200	500	100	0.1	INERTE	0.18
4317	CHQ-598	240.0	247.7	490	200	490	100	0.1	INERTE	0.12
4318	CHQ-598	247.7	256.0	610	200	480	100	0.0	INERTE	0.12
4319	CHQ-598	288.0	296.0	200	200	800	400	0.0	INERTE	0.13
4320	CHQ-598	296.0	304.0	200	200	800	500	0.0	INERTE	0.12
4321	CHQ-598	304.0	312.0	200	200	800	400	0.0	INERTE	0.13
4322	CHQ-598	312.0	320.0	200	200	900	500	0.0	INERTE	0.11
4323	CHQ-598	320.0	328.0	200	200	800	300	0.0	INERTE	0.16
4324	CHQ-598	328.0	336.0	300	200	800	200	0.0	INERTE	0.37
4325	CHQ-598	336.0	344.0	300	200	2400	400	0.0	INERTE	3.39
4326	CHQ-598	344.0	352.0	200	200	2100	300	0.0	INERTE	1.77
4327	CHQ-598	352.0	360.0	500	200	3400	800	0.0	INERTE	0.74
4328	CHQ-598	360.0	368.0	300	200	4900	2800	-0.3	LIGERAMENTE ACIDO	3.86
4329	CHQ-598	368.0	376.0	300	200	3800	1800	-0.2	LIGERAMENTE ACIDO	9.17
4330	CHQ-598	376.0	384.0	300	200	2100	300	0.0	INERTE	16.28
4331	CHQ-598	384.0	392.0	300	200	18600	15700	-2.1	ACIDO	19.04
4332	CHQ-598	392.0	400.0	1300	200	118000	112400	-15.3	ACIDO	17.25
4333	CHQ-598	400.0	408.0	800	200	133000	125200	-17.1	ACIDO	18.52
4334	CHQ-598	408.0	416.0	700	200	121000	98500	-13.4	ACIDO	0.51
4335	CHQ-598	416.0	424.0	900	300	119000	110800	-15.1	ACIDO	0.93
4336	CHQ-598	424.0	432.0	300	200	75500	66000	-9.0	ACIDO	0.74
4337	CHQ-598	432.0	440.0	400	200	91100	71400	-9.7	ACIDO	1.33
4338	CHQ-598	440.0	448.0	700	200	108000	61900	-8.4	ACIDO	0.44
4339	CHQ-598	448.0	456.0	200	200	86100	44400	-6.0	ACIDO	0.21
4340	CHQ-598	456.0	464.0	200	200	75900	36900	-5.0	ACIDO	0.28
4341	CHQ-598	464.0	470.0	200	200	75800	44500	-6.0	ACIDO	0.42
4342	CHQ-600	226.1	234.0	300	200	1000	300	0.0	INERTE	0.11
4343	CHQ-600	242.0	250.3	300	200	1500	100	0.1	INERTE	0.36
4344	CHQ-600	250.3	258.0	300	200	1100	100	0.1	INERTE	0.54
4345	CHQ-600	258.0	266.0	400	200	1000	100	0.0	INERTE	0.45
4346	CHQ-600	266.0	274.0	300	200	1100	200	0.0	INERTE	0.51
4347	CHQ-600	274.0	282.0	200	200	800	400	0.0	INERTE	0.29
4348	CHQ-600	282.0	290.0	400	200	1000	100	0.0	INERTE	0.96
4349	CHQ-600	290.0	298.0	400	200	1200	100	0.1	INERTE	0.30
4350	CHQ-600	298.0	305.6	400	200	7700	6500	-0.8	LIGERAMENTE ACIDO	0.17
4351	CHQ-600	305.6	314.0	200	200	800	100	0.1	INERTE	0.20
4352	CHQ-600	314.0	322.0	400	200	800	100	0.0	INERTE	0.11
4353	CHQ-600	330.0	338.0	300	200	6000	5400	-0.7	LIGERAMENTE ACIDO	0.10
4354	CHQ-600	450.0	458.0	400	200	23800	20400	-2.7	ACIDO	0.13
4355	CHQ-607	48.0	56.0	720	200	450	250	0.0	INERTE	0.16
4356	CHQ-607	64.0	72.0	550	200	560	100	0.1	INERTE	0.14
4357	CHQ-607	168.0	176.0	510	200	310	100	0.1	INERTE	0.18
4358	CHQ-607	176.0	184.0	560	200	280	100	0.1	INERTE	0.42
4359	CHQ-607	184.0	192.0	380	200	320	100	0.1	INERTE	0.48
4360	CHQ-607	192.0	200.1	730	240	270	100	0.1	INERTE	0.17
4361	CHQ-607	200.1	208.0	510	260	280	100	0.1	INERTE	0.20
4362	CHQ-607	208.0	216.0	570	350	270	100	0.1	LIGERAMENTE BASICO	0.58
4363	CHQ-607	216.0	224.0	880	200	340	100	0.1	INERTE	0.60
4364	CHQ-607	224.0	232.0	690	200	900	100	0.1	INERTE	0.27
4365	CHQ-607	232.0	239.9	340	300	260	100	0.1	LIGERAMENTE BASICO	0.58
4366	CHQ-607	239.9	248.0	520	350	600	100	0.1	LIGERAMENTE BASICO	1.64
4367	CHQ-607	248.0	256.0	300	200	930	100	0.1	INERTE	0.89
4368	CHQ-607	256.0	264.3	280	200	980	100	0.1	INERTE	0.98
4369	CHQ-607	264.3	272.3	630	200	430	100	0.1	INERTE	0.55
4370	CHQ-607	272.3	280.3	680	200	320	100	0.1	INERTE	0.50
4371	CHQ-607	280.3	288.0	760	490	460	100	0.2	LIGERAMENTE BASICO	0.86
4372	CHQ-607	288.0	296.0	710	200	520	100	0.1	INERTE	0.79
4373	CHQ-607	296.0	304.0	440	200	340	100	0.1	INERTE	1.78
4374	CHQ-607	304.0	312.0	570	200	300	100	0.1	INERTE	2.74
4375	CHQ-607	312.0	320.0	740	200	600	100	0.1	INERTE	4.73
4376	CHQ-607	320.0	328.0	660	200	550	100	0.1	INERTE	5.65
4377	CHQ-607	328.0	336.0	440	200	450	100	0.1	INERTE	5.42
4378	CHQ-607	336.0	344.1	580	200	500	100	0.1	INERTE	6.17
4379	CHQ-607	344.1	352.0	500	200	5110	2800	-0.3	LIGERAMENTE ACIDO	3.05
4380	CHQ-607	352.0	360.0	760	200	33800	29180	-3.9	ACIDO	3.35
4381	CHQ-607	360.0	368.0	670	200	2360	100	0.1	INERTE	1.97
4382	CHQ-607	368.0	376.0	600	200	1280	100	0.1	INERTE	1.65
4383	CHQ-607	376.0	384.3	1710	320	830	100	0.1	LIGERAMENTE BASICO	2.80
4384	CHQ-607	384.3	392.0	580	210	1380	100	0.1	INERTE	4.41
4385	CHQ-607	392.0	400.2	670	200	2680	100	0.1	INERTE	1.52
4386	CHQ-607	400.2	408.0	850	200	99200	92600	-12.6	ACIDO	1.04
4387	CHQ-607	408.0	416.0	870	200	166000	155000	-21.2	ACIDO	0.21
4388	CHQ-607	416.0	424.0	430	270	83700	64800	-8.8	ACIDO	0.20
4389	CHQ-607	432.0	437.1	720	330	53900	45440	-6.1	ACIDO	0.12
4390	CHQ-608	24.0	32.0	420	200	310	100	0.1	INERTE	0.11
4391	CHQ-608	154.0	162.4	360	200	410	210	0.0	INERTE	0.10
4392	CHQ-608	162.4	170.0	570	230	530	100	0.1	INERTE	0.16
4393	CHQ-608	178.0	186.4	580	300	570	250	0.1	INERTE	0.12
4394	CHQ-608	186.4	194.0	520	200	780	100	0.1	INERTE	0.10
4395	CHQ-608	250.0	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
4396	CHQ-608	260.0	269.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.17
4397	CHQ-608	269.8	280.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
4398	CHQ-608	280.0	290.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.39
4399	CHQ-608	290.0	300.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.28
4400	CHQ-608	300.0	310.3	500	500	500	0	0.2	LIGERAMENTE BASICO	0.37
4401	CHQ-608	310.3	320.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.22
4402	CHQ-608	320.0	330.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
4403	CHQ-608	330.0	338.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.18
4404	CHQ-608	434.0	442.0	550	200	3910	2070	-0.2	LIGERAMENTE ACIDO	0.15
4405	CHQ-609	48.0	56.0	680	200	830	100	0.1	INERTE	0.35
4406	CHQ-609	56.0	64.0	660	200	230	100	0.1	INERTE	0.11
4407	CHQ-609	64.0	72.0	690	200	280	100	0.1	INERTE	0.17
4408	CHQ-609	72.0	80.0	980	200	250	100	0.1	INERTE	0.15
4409	CHQ-609	112.0	120.0	1050	200	230	100	0.1	INERTE	0.11
4410	CHQ-609	120.0	128.0	1070	200	220	100	0.1	INERTE	0.20
4411	CHQ-609	136.0	144.0	1040	250	250	100	0.1	INERTE	0.11
4412	CHQ-609	144.0	152.0	860	240	260	100	0.1	INERTE	0.15
4413	CHQ-609	152.0	160.0	730	200	230	100	0.1	INERTE	0.18
4414	CHQ-609	160.0	168.0	980	200	250	100	0.1	INERTE	0.20
4415	CHQ-609	168.0	176.0	820	200	200	100	0.1	INERTE	0.14
4416	CHQ-609	176.0	184.0	390	200	250	100	0.1	INERTE	0.18
4417	CHQ-609	184.0	192.0	310	200	270	100	0.1	INERTE	0.14
4418	CHQ-609	192.0	200.0	490	200	250	100	0.1	INERTE	0.18
4419	CHQ-609	200.0	208.0	290	200	230	100	0.1	INERTE	0.21
4420	CHQ-609	208.0	216.0	450	200	210	100	0.1	INERTE	1.18
4421	CHQ-609	216.0	224.0	200	200	220	100	0.1	INERTE	0.28
4422	CHQ-609	224.0	232.0	280	200	230	100	0.1	INERTE	0.34
4423	CHQ-609	232.0	240.0	200	200	220	100	0.1	INERTE	0.31
4424	CHQ-609	240.0	248.0	260	200	200	100	0.1	INERTE	0.33
4425	CHQ-609	248.0	256.0	310	200	250	100	0.1	INERTE	0.32
4426	CHQ-609	256.0	264.0	420	200	230	100	0.1	INERTE	0.33
4427	CHQ-609	264.0	272.5	210	200	270	100	0.1	INERTE	0.29
4428	CHQ-609	272.5	280.0	200	200	470	100	0.1	INERTE	0.29
4429	CHQ-609	280.0	288.0	270	200	600	100	0.1	INERTE	0.17
4430	CHQ-609	288.0	296.0	290	200	430	230	0.0	INERTE	0.23
4431	CHQ-609	296.0	304.0	380	200	420	100	0.1	INERTE	0.28
4432	CHQ-609	304.0	312.0	450	200	840	100	0.1	INERTE	0.87
4433	CHQ-609	312.0	320.0	720	200	1070	100	0.1	INERTE	0.83
4434	CHQ-609	320.0	328.0	690	200	1120	100	0.1	INERTE	1.21
4435	CHQ-609	328.0	336.4	480	200	1080	100	0.1	INERTE	0.57
4436	CHQ-609	336.4	344.0	360	330	1010	810	0.0	INERTE	0.34
4437	CHQ-609	344.0	352.0	350	200	670	100	0.1	INERTE	0.42
4438	CHQ-609	352.0	360.0	200	200	280	100	0.1	INERTE	0.23
4439	CHQ-609	360.0	368.0	1660	200	240	100	0.1	INERTE	0.23
4440	CHQ-609	368.0	375.6	260	200	290	100	0.1	INERTE	0.13
4441	CHQ-609	375.6	384.0	200	200	290	100	0.1	INERTE	0.13
4442	CHQ-609	384.0	392.0	220	200	280	100	0.1	INERTE	0.13
4443	CHQ-609	392.0	400.0	230	200	270	100	0.1	INERTE	0.15
4444	CHQ-609	400.0	408.0	400	200	230	100	0.1	INERTE	0.15
4445	CHQ-609	408.0	415.6	330	200	270	100	0.1	INERTE	0.15
4446	CHQ-609	415.6	423.6	390	200	350	100	0.1	INERTE	0.24
4447	CHQ-609	423.6	432.0	410	200	360	100	0.1	INERTE	0.28
4448	CHQ-609	432.0	440.0	280	200	700	100	0.1	INERTE	0.42
4449	CHQ-609	440.0	448.0	200	200	720	100	0.1	INERTE	0.45
4450	CHQ-609	448.0	456.0	240	200	1050	100	0.1	INERTE	0.44
4451	CHQ-609	456.0	461.9	310	200	50000	37800	-5.1	ACIDO	1.45
4452	CHQ-609	461.9	471.0	1420	200	31300	21400	-2.9	ACIDO	0.16
4453	CHQ-610	40.0	48.0	450	200	390	100	0.1	INERTE	0.17
4454	CHQ-610	48.0	56.0	310	200	410	100	0.1	INERTE	0.22
4455	CHQ-611	8.0	16.0	1000	200	1740	660	0.0	INERTE	0.20
4456	CHQ-611	16.0	23.6	910	200	410	100	0.1	INERTE	0.16
4457	CHQ-611	23.6	32.0	820	200	440	100	0.1	INERTE	0.28
4458	CHQ-611	32.0	40.0	990	200	1020	100	0.1	INERTE	0.30
4459	CHQ-611	80.0	88.0	710	350	580	380	0.1	INERTE	0.11
4460	CHQ-620	104.0	112.0	200	200	370	100	0.1	INERTE	0.29
4461	CHQ-620	112.0	120.0	360	200	390	100	0.0	INERTE	0.11
4462	CHQ-620	128.0	136.0	270	200	340	100	0.1	INERTE	0.15
4463	CHQ-620	136.0	144.0	290	200	410	210	0.0	INERTE	0.26
4464	CHQ-620	144.0	152.0	430	200	370	100	0.1	INERTE	0.33
4465	CHQ-620	152.0	160.0	440	200	380	100	0.0	INERTE	0.18
4466	CHQ-620	160.0	167.8	300	200	380	100	0.0	INERTE	0.14
4467	CHQ-620	167.8	176.0	200	200	370	100	0.1	INERTE	0.18
4468	CHQ-620	208.0	216.0	380	200	360	100	0.1	INERTE	0.21
4469	CHQ-620	216.0	224.0	430	200	390	100	0.0	INERTE	0.13
4470	CHQ-620	224.0	231.6	600	200	430	230	0.0	INERTE	0.17
4471	CHQ-620	240.0	248.0	210	200	370	100	0.1	INERTE	0.16
4472	CHQ-620	248.0	256.0	200	200	410	100	0.1	INERTE	0.41
4473	CHQ-620	256.0	264.0	200	200	320	100	0.1	INERTE	0.31
4474	CHQ-620	264.0	272.0	300	280	340	100	0.1	INERTE	0.51
4475	CHQ-620	272.0	280.0	880	200	320	100	0.1	INERTE	0.67
4476	CHQ-620	280.0	288.4	200	200	320	100	0.1	INERTE	1.12
4477	CHQ-620	288.4	296.0	200	200	340	100	0.1	INERTE	0.31
4478	CHQ-620	296.0	304.0	200	200	460	100	0.1	INERTE	1.08
4479	CHQ-620	304.0	312.0	200	200	1920	100	0.1	INERTE	3.10
4480	CHQ-620	312.0	320.0	310	200	3400	760	0.0	INERTE	3.75
4481	CHQ-620	320.0	328.0	200	200	1630	100	0.1	INERTE	3.37
4482	CHQ-620	328.0	336.0	200	200	1710	100	0.1	INERTE	4.18
4483	CHQ-620	336.0	344.0	410	200	1520	100	0.1	INERTE	3.69
4484	CHQ-620	344.0	352.0	210	200	38200	27200	-3.7	ACIDO	0.65
4485	CHQ-620	352.0	360.0	420	270	43300	40080	-5.4	ACIDO	0.18
4486	CHQ-620	360.0	368.0	390	200	42100	39060	-5.3	ACIDO	0.14
4487	CHQ-620	368.0	376.0	620	220	43900	41030	-5.5	ACIDO	0.18
4488	CHQ-620	376.0	384.0	870	200	41700	38770	-5.2	ACIDO	0.13
4489	CHQ-620	384.0	391.8	310	200	41300	38410	-5.2	ACIDO	0.16
4490	CHQ-624	282.0	290.0	470	200	710	100	0.1	INERTE	0.18
4491	CHQ-624	290.0	298.0	270	200	470	100	0.1	INERTE	0.11
4492	CHQ-624	298.0	305.8	1090	220	19300	17070	-2.3	ACIDO	0.30
4493	CHQ-624	305.8	314.0	700	200	950	100	0.1	INERTE	0.14
4494	CHQ-624	321.9	330.0	540	200	1660	100	0.1	INERTE	0.50
4495	CHQ-624	330.0	338.0	290	200	1140	100	0.1	INERTE	0.43
4496	CHQ-624	378.0	386.0	770	200	10500	6300	-0.8	LIGERAMENTE ACIDO	0.12
4497	CHQ-624	426.0	430.5	950	210	18500	6500	-0.8	LIGERAMENTE ACIDO	0.18
4498	CHQ-695	324.0	332.0	200	200	2520	790	0.0	INERTE	0.14
4499	CHQ-695	332.0	340.0	270	200	20780	16590	-2.2	ACIDO	0.55
4500	CHQ-695	340.0	348.0	460	200	74480	66780	-9.1	ACIDO	1.76
4501	CHQ-695	348.0	356.0	380	200	48730	42280	-5.7	ACIDO	0.46
4502	CHQ-695	356.0	364.0	1090	200	43760	34710	-4.7	ACIDO	0.32
4503	CHQ-695	364.0	372.0	390	200	131340	108140	-14.7	ACIDO	0.34
4504	CHQ-695	372.0	380.0	270	200	126700	104900	-14.3	ACIDO	0.31
4505	CHQ-695	380.0	388.0	270	200	82580	65080	-8.8	ACIDO	0.12
4506	CHQ-695	388.0	396.2	350	200	56960	20160	-2.7	ACIDO	0.11
4507	CHQ-698	238.0	242.0	200	200	1170	200	0.1	INERTE	0.12
4508	CHQ-698	245.5	246.0	200	200	960	200	0.1	INERTE	0.12
4509	CHQ-698	250.0	254.0	200	200	960	200	0.1	INERTE	0.13
4510	CHQ-698	254.0	258.0	200	200	2270	200	0.1	INERTE	0.10
4511	CHQ-698	258.0	262.0	200	200	2270	200	0.1	INERTE	0.17
4512	CHQ-698	262.0	262.2	200	200	2270	200	0.1	INERTE	0.19
4513	CHQ-698	262.2	266.0	360	200	2620	200	0.0	INERTE	0.25
4514	CHQ-698	266.0	270.0	360	200	2620	200	0.0	INERTE	0.45
4515	CHQ-698	270.0	270.9	360	200	2620	200	0.0	INERTE	0.55
4516	CHQ-698	270.9	274.0	200	200	1550	200	0.1	INERTE	0.64
4517	CHQ-698	274.0	278.0	200	200	1550	200	0.1	INERTE	0.41
4518	CHQ-698	278.0	282.0	370	200	1750	200	0.1	INERTE	0.39
4519	CHQ-698	282.0	286.0	370	200	1750	200	0.1	INERTE	0.32
4520	CHQ-698	286.0	290.0	200	200	1450	200	0.1	INERTE	0.29
4521	CHQ-698	290.0	293.5	200	200	1450	200	0.1	INERTE	0.36
4522	CHQ-698	293.5	294.0	200	200	1820	200	0.1	INERTE	0.28
4523	CHQ-698	294.0	298.0	200	200	1820	200	0.1	INERTE	0.31
4524	CHQ-698	298.0	301.2	200	200	1820	200	0.1	INERTE	0.26
4525	CHQ-698	301.2	302.0	200	200	1970	200	0.1	INERTE	0.25
4526	CHQ-698	302.0	306.0	200	200	1970	200	0.1	INERTE	0.23
4527	CHQ-698	306.0	310.0	200	200	1970	200	0.1	INERTE	0.18
4528	CHQ-698	310.0	314.0	200	200	1920	200	0.1	INERTE	0.15
4529	CHQ-698	314.0	318.0	200	200	1920	200	0.1	INERTE	0.11
4530	CHQ-698	318.0	319.0	200	200	1920	200	0.1	INERTE	0.13
4531	CHQ-698	319.0	322.0	280	200	1650	230	0.0	INERTE	0.17
4532	CHQ-698	322.0	326.0	280	200	1650	230	0.0	INERTE	0.17
4533	CHQ-698	326.0	326.5	280	200	1650	230	0.0	INERTE	0.14
4534	CHQ-698	326.5	330.0	580	200	3910	1420	-0.1	LIGERAMENTE ACIDO	0.25
4535	CHQ-698	330.0	334.0	580	200	3910	1420	-0.1	LIGERAMENTE ACIDO	0.16
4536	CHQ-698	334.0	338.0	1870	200	72000	67100	-9.1	ACIDO	0.17
4537	CHQ-698	338.0	341.1	1870	200	72000	67100	-9.1	ACIDO	0.48
4538	CHQ-698	341.1	342.0	200	200	68300	60060	-8.2	ACIDO	1.79
4539	CHQ-698	342.0	346.0	200	200	68300	60060	-8.2	ACIDO	7.76
4540	CHQ-698	346.0	348.8	200	200	68300	60060	-8.2	ACIDO	0.66
4541	CHQ-698	348.8	350.0	200	200	19800	7000	-0.9	LIGERAMENTE ACIDO	0.19
4542	CHQ-698	350.0	354.0	200	200	19800	7000	-0.9	LIGERAMENTE ACIDO	0.32
4543	CHQ-698	354.0	356.5	200	200	19800	7000	-0.9	LIGERAMENTE ACIDO	0.13
4544	CHQ-698	356.5	358.0	200	200	23100	5500	-0.7	LIGERAMENTE ACIDO	0.32
4545	CHQ-698	358.0	362.0	200	200	23100	5500	-0.7	LIGERAMENTE ACIDO	0.30
4546	CHQ-698	362.0	364.0	200	200	23100	5500	-0.7	LIGERAMENTE ACIDO	0.22
4547	CHQ-698	364.0	366.0	370	200	17600	3700	-0.4	LIGERAMENTE ACIDO	0.26
4548	CHQ-698	366.0	370.0	370	200	17600	3700	-0.4	LIGERAMENTE ACIDO	0.16
4549	CHQ-698	371.5	374.0	310	200	16000	4600	-0.6	LIGERAMENTE ACIDO	0.20
4550	CHQ-698	374.0	378.0	310	200	16000	4600	-0.6	LIGERAMENTE ACIDO	0.30
4551	CHQ-698	378.0	380.0	310	200	16000	4600	-0.6	LIGERAMENTE ACIDO	0.21
4552	CHQ-698	380.0	382.0	280	200	22100	8000	-1.0	ACIDO	0.19
4553	CHQ-698	382.0	386.0	280	200	22100	8000	-1.0	ACIDO	0.29
4554	CHQ-698	386.0	387.5	280	200	22100	8000	-1.0	ACIDO	0.24
4555	CHQ-698	387.5	390.0	260	200	22600	3600	-0.4	LIGERAMENTE ACIDO	0.16
4556	CHQ-698	390.0	394.0	260	200	22600	3600	-0.4	LIGERAMENTE ACIDO	0.71
4557	CHQ-698	394.0	396.0	260	200	22600	3600	-0.4	LIGERAMENTE ACIDO	0.33
4558	CHQ-698	396.0	398.0	310	200	37300	20200	-2.7	ACIDO	4.32
4559	CHQ-698	398.0	402.0	310	200	37300	20200	-2.7	ACIDO	2.63
4560	CHQ-698	402.0	404.0	310	200	37300	20200	-2.7	ACIDO	1.50
4561	CHQ-698	404.0	406.0	900	200	39600	29200	-3.9	ACIDO	1.34
4562	CHQ-698	406.0	410.0	900	200	39600	29200	-3.9	ACIDO	0.15
4563	CHQ-698	410.0	412.0	900	200	39600	29200	-3.9	ACIDO	0.14
4564	CHQ-698	412.0	414.0	200	200	52800	33900	-4.6	ACIDO	0.18
4565	CHQ-698	414.0	418.0	200	200	52800	33900	-4.6	ACIDO	0.13
4566	CHQ-698	418.0	420.0	200	200	52800	33900	-4.6	ACIDO	0.17
4567	CHQ-698	420.0	424.0	400	200	56600	44600	-6.0	ACIDO	0.11
4568	CHQ-700	284.0	291.9	1360	200	480	200	0.1	INERTE	0.13
4569	CHQ-700	292.0	300.0	820	200	1230	200	0.1	INERTE	0.75
4570	CHQ-700	316.0	324.0	690	200	890	520	0.0	INERTE	0.11
4571	CHQ-700	324.0	332.0	760	200	720	200	0.1	INERTE	0.15
4572	CHQ-700	332.0	340.0	660	200	480	220	0.0	INERTE	0.21
4573	CHQ-700	340.0	348.0	710	200	1340	610	0.0	INERTE	0.22
4574	CHQ-700	348.0	355.6	540	200	2570	2320	-0.2	LIGERAMENTE ACIDO	0.36
4575	CHQ-700	355.6	356.0	870	310	35900	33080	-4.4	ACIDO	0.32
4576	CHQ-700	356.0	364.0	870	310	35900	33080	-4.4	ACIDO	0.24
4577	CHQ-700	364.0	372.0	200	200	60890	55870	-7.6	ACIDO	0.14
4578	CHQ-702	150.0	154.0	560	60	1420	280	0.0	INERTE	0.22
4579	CHQ-702	154.0	158.0	560	60	1420	280	0.0	INERTE	0.14
4580	CHQ-702	158.0	162.0	390	40	910	240	0.0	INERTE	0.10
4581	CHQ-702	162.0	166.0	390	40	910	240	0.0	INERTE	0.12
4582	CHQ-702	166.0	170.0	490	60	2030	200	0.0	INERTE	0.17
4583	CHQ-702	170.0	174.0	490	60	2030	200	0.0	INERTE	0.23
4584	CHQ-702	174.0	178.0	640	70	1470	0	0.0	INERTE	0.15
4585	CHQ-702	178.0	182.0	640	70	1470	0	0.0	INERTE	0.13
4586	CHQ-702	186.0	189.4	590	120	830	0	0.0	INERTE	0.18
4587	CHQ-702	194.0	198.0	1100	50	930	10	0.0	INERTE	0.28
4588	CHQ-702	198.0	202.0	590	120	1360	0	0.0	INERTE	0.23
4589	CHQ-702	202.0	206.0	590	120	1360	0	0.0	INERTE	0.13
4590	CHQ-702	222.0	224.0	390	60	360	10	0.0	INERTE	0.11

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
4591	CHQ-702	249.2	250.0	430	110	6100	4550	-0.6	LIGERAMENTE ACIDO	0.14
4592	CHQ-702	250.0	254.0	430	110	6100	4550	-0.6	LIGERAMENTE ACIDO	0.18
4593	CHQ-702	254.0	258.0	430	110	6100	4550	-0.6	LIGERAMENTE ACIDO	0.20
4594	CHQ-702	258.0	262.0	390	30	13140	11780	-1.6	ACIDO	0.16
4595	CHQ-702	262.0	266.0	390	30	13140	11780	-1.6	ACIDO	0.18
4596	CHQ-702	266.0	270.0	360	50	16700	15110	-2.1	ACIDO	0.14
4597	CHQ-702	270.0	274.0	360	50	16700	15110	-2.1	ACIDO	0.15
4598	CHQ-702	274.0	278.0	490	120	19580	18090	-2.4	ACIDO	0.18
4599	CHQ-702	278.0	282.0	490	120	19580	18090	-2.4	ACIDO	0.16
4600	CHQ-702	282.0	286.0	380	170	21340	19600	-2.6	ACIDO	0.17
4601	CHQ-702	286.0	290.0	380	170	21340	19600	-2.6	ACIDO	0.16
4602	CHQ-702	290.0	290.7	380	170	21340	19600	-2.6	ACIDO	0.14
4603	CHQ-702	290.7	294.0	310	50	25150	24300	-3.3	ACIDO	0.11
4604	CHQ-702	294.0	298.0	310	50	25150	24300	-3.3	ACIDO	0.15
4605	CHQ-702	298.0	302.0	370	60	17000	15390	-2.1	ACIDO	0.15
4606	CHQ-702	302.0	306.0	370	60	17000	15390	-2.1	ACIDO	0.13
4607	CHQ-702	306.0	310.0	440	20	25620	23500	-3.2	ACIDO	0.13
4608	CHQ-702	310.0	313.5	440	20	25620	23500	-3.2	ACIDO	0.18
4609	CHQ-702	313.5	314.0	280	10	26720	22620	-3.1	ACIDO	0.32
4610	CHQ-702	314.0	318.0	280	10	26720	22620	-3.1	ACIDO	0.24
4611	CHQ-702	318.0	322.0	280	10	26720	22620	-3.1	ACIDO	0.17
4612	CHQ-702	322.0	326.0	320	60	34270	21270	-2.9	ACIDO	0.29
4613	CHQ-702	326.0	330.0	320	60	34270	21270	-2.9	ACIDO	0.23
4614	CHQ-702	330.0	330.9	320	60	34270	21270	-2.9	ACIDO	0.19
4615	CHQ-702	330.9	334.0	300	30	29620	27070	-3.7	ACIDO	0.30
4616	CHQ-702	334.0	338.0	300	30	29620	27070	-3.7	ACIDO	0.40
4617	CHQ-702	338.0	339.0	300	30	29620	27070	-3.7	ACIDO	0.43
4618	CHQ-702	339.0	342.0	320	50	28290	21210	-2.9	ACIDO	0.37
4619	CHQ-702	342.0	346.0	320	50	28290	21210	-2.9	ACIDO	0.31
4620	CHQ-702	346.0	347.4	320	50	28290	21210	-2.9	ACIDO	0.29
4621	CHQ-702	347.4	350.0	130	130	46860	28240	-3.8	ACIDO	0.27
4622	CHQ-702	350.0	354.0	130	130	46860	28240	-3.8	ACIDO	0.36
4623	CHQ-702	354.0	356.0	130	130	46860	28240	-3.8	ACIDO	0.38
4624	CHQ-702	356.0	358.0	430	20	44680	38420	-5.3	ACIDO	0.53
4625	CHQ-702	358.0	362.0	430	20	44680	38420	-5.3	ACIDO	0.50
4626	CHQ-702	362.0	363.5	430	20	44680	38420	-5.3	ACIDO	0.54
4627	CHQ-702	363.5	366.0	170	40	56860	51450	-7.0	ACIDO	13.33
4628	CHQ-702	366.0	370.0	170	40	56860	51450	-7.0	ACIDO	35.04
4629	CHQ-702	370.0	372.0	170	40	56860	51450	-7.0	ACIDO	8.40
4630	CHQ-702	372.0	374.0	220	10	87780	72910	-10.0	ACIDO	0.44
4631	CHQ-702	374.0	378.0	220	10	87780	72910	-10.0	ACIDO	0.35
4632	CHQ-702	378.0	380.0	220	10	87780	72910	-10.0	ACIDO	0.38
4633	CHQ-702	380.0	382.0	100	60	73060	60950	-8.3	ACIDO	0.36
4634	CHQ-702	382.0	386.0	100	60	73060	60950	-8.3	ACIDO	0.38
4635	CHQ-702	386.0	388.0	100	60	73060	60950	-8.3	ACIDO	0.22
4636	CHQ-702	388.0	390.0	350	30	42650	27030	-3.7	ACIDO	0.11
4637	CHQ-702	394.0	395.0	350	30	42650	27030	-3.7	ACIDO	0.14
4638	CHQ-702	395.0	398.0	440	330	36380	16490	-2.1	ACIDO	0.51
4639	CHQ-702	398.0	402.0	440	330	36380	16490	-2.1	ACIDO	0.60
4640	CHQ-702	402.0	404.0	440	330	36380	16490	-2.1	ACIDO	0.35
4641	CHQ-702	404.0	406.0	350	70	41540	27590	-3.8	ACIDO	0.42
4642	CHQ-702	406.0	410.0	350	70	41540	27590	-3.8	ACIDO	0.79
4643	CHQ-702	410.0	412.0	350	70	41540	27590	-3.8	ACIDO	0.95
4644	CHQ-702	412.0	414.0	420	200	34710	29600	-4.0	ACIDO	0.96
4645	CHQ-702	414.0	416.7	420	200	34710	29600	-4.0	ACIDO	0.73
4646	CHQ-703	214.0	221.5	370	200	470	200	0.1	INERTE	0.22
4647	CHQ-703	221.5	228.7	270	200	440	200	0.1	INERTE	0.26
4648	CHQ-703	228.7	236.0	910	200	490	200	0.1	INERTE	0.44
4649	CHQ-703	236.0	244.0	340	200	490	200	0.1	INERTE	0.23
4650	CHQ-703	244.0	252.0	350	200	360	200	0.1	INERTE	0.27
4651	CHQ-703	252.0	260.0	380	200	260	200	0.1	INERTE	0.59
4652	CHQ-703	260.0	268.2	290	200	320	200	0.1	INERTE	0.42
4653	CHQ-703	268.2	276.0	240	200	290	200	0.1	INERTE	0.37
4654	CHQ-703	276.0	284.0	310	200	450	200	0.1	INERTE	0.45
4655	CHQ-703	284.0	292.0	560	230	720	200	0.1	INERTE	0.28
4656	CHQ-703	292.0	300.0	290	200	900	200	0.1	INERTE	0.27
4657	CHQ-703	300.0	308.0	220	200	580	200	0.1	INERTE	0.35
4658	CHQ-703	308.0	316.0	250	200	660	200	0.1	INERTE	0.41
4659	CHQ-703	316.0	324.0	310	200	740	200	0.1	INERTE	0.21
4660	CHQ-703	324.0	331.5	280	200	300	200	0.1	INERTE	0.15
4661	CHQ-703	331.5	340.0	270	200	270	200	0.1	INERTE	0.12
4662	CHQ-703	340.0	348.0	240	200	330	200	0.1	INERTE	0.11
4663	CHQ-703	348.0	356.0	260	200	380	200	0.1	INERTE	0.13
4664	CHQ-703	356.0	364.0	200	200	270	200	0.1	INERTE	0.10
4665	CHQ-703	364.0	372.0	240	200	320	200	0.1	INERTE	0.11
4666	CHQ-703	372.0	380.0	230	200	430	200	0.0	INERTE	0.19
4667	CHQ-703	380.0	382.0	350	200	300	200	0.1	INERTE	0.28
4668	CHQ-703	382.0	384.0	350	200	300	200	0.1	INERTE	0.33
4669	CHQ-703	384.0	386.0	350	200	300	200	0.1	INERTE	0.21
4670	CHQ-703	386.0	387.5	350	200	300	200	0.1	INERTE	0.19
4671	CHQ-703	387.5	388.0	580	200	370	200	0.1	INERTE	0.44
4672	CHQ-703	388.0	390.0	580	200	370	200	0.1	INERTE	0.33
4673	CHQ-703	390.0	392.0	580	200	370	200	0.1	INERTE	0.12
4674	CHQ-703	392.0	394.0	580	200	370	200	0.1	INERTE	0.14
4675	CHQ-703	394.0	396.0	580	200	370	200	0.1	INERTE	0.21
4676	CHQ-703	396.0	398.0	300	200	530	200	0.1	INERTE	0.41
4677	CHQ-703	398.0	400.0	300	200	530	200	0.1	INERTE	0.22
4678	CHQ-703	400.0	402.0	300	200	530	200	0.1	INERTE	1.03
4679	CHQ-703	402.0	404.0	300	200	530	200	0.1	INERTE	0.62
4680	CHQ-703	404.0	406.0	320	200	540	200	0.1	INERTE	0.80
4681	CHQ-703	406.0	408.0	320	200	540	200	0.1	INERTE	0.26
4682	CHQ-703	408.0	410.0	320	200	540	200	0.1	INERTE	0.34
4683	CHQ-703	410.0	412.0	320	200	540	200	0.1	INERTE	0.42
4684	CHQ-703	412.0	414.0	390	200	930	200	0.1	INERTE	0.33
4685	CHQ-703	414.0	416.0	390	200	930	200	0.1	INERTE	1.57
4686	CHQ-703	416.0	418.0	390	200	930	200	0.1	INERTE	3.28
4687	CHQ-703	418.0	418.2	390	200	930	200	0.1	INERTE	2.97
4688	CHQ-703	420.0	422.0	490	200	25300	22510	-3.0	ACIDO	2.38
4689	CHQ-703	422.0	424.0	490	200	25300	22510	-3.0	ACIDO	1.75
4690	CHQ-703	424.0	426.0	490	200	25300	22510	-3.0	ACIDO	1.62
4691	CHQ-703	426.0	428.0	490	200	25300	22510	-3.0	ACIDO	1.48
4692	CHQ-703	428.0	430.0	350	200	79640	76540	-10.4	ACIDO	1.42
4693	CHQ-703	430.0	432.0	350	200	79640	76540	-10.4	ACIDO	0.79
4694	CHQ-703	432.0	434.0	350	200	79640	76540	-10.4	ACIDO	1.20
4695	CHQ-703	434.0	436.0	350	200	79640	76540	-10.4	ACIDO	1.01
4696	CHQ-703	436.0	438.0	420	200	91230	88350	-12.0	ACIDO	1.08
4697	CHQ-703	438.0	440.0	420	200	91230	88350	-12.0	ACIDO	1.56
4698	CHQ-703	440.0	442.0	420	200	91230	88350	-12.0	ACIDO	1.64
4699	CHQ-703	442.0	444.0	420	200	91230	88350	-12.0	ACIDO	1.10
4700	CHQ-703	444.0	446.0	390	200	64110	61730	-8.4	ACIDO	0.95
4701	CHQ-703	446.0	448.0	390	200	64110	61730	-8.4	ACIDO	0.48
4702	CHQ-703	448.0	450.0	390	200	64110	61730	-8.4	ACIDO	0.55
4703	CHQ-703	450.0	451.5	390	200	64110	61730	-8.4	ACIDO	0.78
4704	CHQ-703	451.5	452.0	390	200	92070	89480	-12.2	ACIDO	0.47
4705	CHQ-703	452.0	454.0	390	200	92070	89480	-12.2	ACIDO	0.47
4706	CHQ-703	454.0	456.0	390	200	92070	89480	-12.2	ACIDO	0.61
4707	CHQ-703	456.0	458.0	390	200	92070	89480	-12.2	ACIDO	1.15
4708	CHQ-703	458.0	460.0	390	200	92070	89480	-12.2	ACIDO	0.75
4709	CHQ-703	460.0	462.0	370	200	118230	115450	-15.7	ACIDO	1.00
4710	CHQ-703	462.0	464.0	370	200	118230	115450	-15.7	ACIDO	1.55

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
4711	CHQ-703	464.0	466.0	370	200	118230	115450	-15.7	ACIDO	1.36
4712	CHQ-703	466.0	468.0	370	200	118230	115450	-15.7	ACIDO	1.70
4713	CHQ-703	468.0	470.0	360	200	130890	113590	-15.5	ACIDO	1.27
4714	CHQ-703	470.0	472.0	360	200	130890	113590	-15.5	ACIDO	1.77
4715	CHQ-703	472.0	474.0	360	200	130890	113590	-15.5	ACIDO	0.77
4716	CHQ-703	474.0	476.0	360	200	130890	113590	-15.5	ACIDO	0.60
4717	CHQ-703	476.0	485.0	540	200	148260	88090	-12.0	ACIDO	0.47
4718	CHQ-703	485.0	493.5	570	200	42900	38170	-5.2	ACIDO	0.34
4719	CHQ-705	200.0	208.0	530	200	350	200	0.1	INERTE	0.36
4720	CHQ-705	208.0	217.5	520	200	260	200	0.1	INERTE	0.63
4721	CHQ-705	217.5	226.0	530	200	340	200	0.1	INERTE	1.05
4722	CHQ-705	226.0	234.0	400	200	250	200	0.1	INERTE	1.40
4723	CHQ-705	234.0	241.5	330	200	300	200	0.1	INERTE	0.63
4724	CHQ-705	241.5	250.0	500	200	280	200	0.1	INERTE	0.66
4725	CHQ-705	250.0	258.0	390	200	290	200	0.1	INERTE	0.50
4726	CHQ-705	258.0	266.0	500	200	330	200	0.1	INERTE	0.64
4727	CHQ-705	266.0	274.0	450	200	310	200	0.1	INERTE	3.62
4728	CHQ-705	274.0	282.0	470	200	430	200	0.1	INERTE	7.22
4729	CHQ-705	282.0	290.6	480	200	380	200	0.1	INERTE	0.60
4730	CHQ-705	290.6	298.0	370	200	540	200	0.1	INERTE	0.48
4731	CHQ-705	298.0	306.0	410	200	690	200	0.0	INERTE	0.61
4732	CHQ-705	306.0	314.0	420	200	410	200	0.1	INERTE	0.88
4733	CHQ-705	314.0	322.0	390	200	390	200	0.1	INERTE	0.83
4734	CHQ-705	322.0	330.0	480	200	420	200	0.1	INERTE	1.14
4735	CHQ-705	330.0	334.0	530	200	800	200	0.1	INERTE	0.85
4736	CHQ-705	334.0	336.0	530	200	800	200	0.1	INERTE	0.68
4737	CHQ-705	336.0	338.0	530	200	800	200	0.1	INERTE	1.08
4738	CHQ-705	338.0	340.0	460	200	450	200	0.1	INERTE	0.64
4739	CHQ-705	340.0	342.0	460	200	450	200	0.1	INERTE	1.01
4740	CHQ-705	342.0	344.0	460	200	450	200	0.1	INERTE	1.38
4741	CHQ-705	344.0	346.0	460	200	450	200	0.1	INERTE	2.74
4742	CHQ-705	346.0	346.9	460	200	450	200	0.1	INERTE	3.19
4743	CHQ-705	346.9	348.0	520	200	1020	200	0.1	INERTE	5.20
4744	CHQ-705	348.0	350.0	520	200	1020	200	0.1	INERTE	3.13
4745	CHQ-705	350.0	352.0	520	200	1020	200	0.1	INERTE	1.77
4746	CHQ-705	352.0	354.0	520	200	1020	200	0.1	INERTE	3.87
4747	CHQ-705	354.0	356.0	470	200	830	200	0.1	INERTE	2.08
4748	CHQ-705	356.0	358.0	470	200	830	200	0.1	INERTE	2.55
4749	CHQ-705	358.0	360.0	470	200	830	200	0.1	INERTE	1.49
4750	CHQ-705	360.0	362.0	470	200	830	200	0.1	INERTE	1.67
4751	CHQ-705	362.0	364.0	550	200	1910	200	0.1	INERTE	1.71
4752	CHQ-705	364.0	366.0	550	200	1910	200	0.1	INERTE	1.31
4753	CHQ-705	366.0	368.0	550	200	1910	200	0.1	INERTE	1.78
4754	CHQ-705	368.0	370.0	550	200	1910	200	0.1	INERTE	2.42
4755	CHQ-705	370.0	372.0	630	200	2500	260	0.0	INERTE	3.49
4756	CHQ-705	372.0	374.0	630	200	2500	260	0.0	INERTE	3.99
4757	CHQ-705	374.0	376.0	630	200	2500	260	0.0	INERTE	4.56
4758	CHQ-705	376.0	378.0	630	200	2500	260	0.0	INERTE	5.12
4759	CHQ-705	378.0	380.0	510	200	2070	200	0.1	INERTE	3.10
4760	CHQ-705	380.0	382.0	510	200	2070	200	0.1	INERTE	3.80
4761	CHQ-705	382.0	384.0	510	200	2070	200	0.1	INERTE	3.34
4762	CHQ-705	384.0	386.0	510	200	2070	200	0.1	INERTE	1.96
4763	CHQ-705	386.0	388.0	780	200	2930	260	0.0	INERTE	1.37
4764	CHQ-705	388.0	390.0	780	200	2930	260	0.0	INERTE	1.48
4765	CHQ-705	390.0	392.0	780	200	2930	260	0.0	INERTE	0.77
4766	CHQ-705	392.0	394.0	780	200	2930	260	0.0	INERTE	1.26
4767	CHQ-705	394.0	396.0	640	200	2170	200	0.0	INERTE	0.68
4768	CHQ-705	396.0	398.0	640	200	2170	200	0.0	INERTE	0.48
4769	CHQ-705	398.0	400.0	640	200	2170	200	0.0	INERTE	0.86
4770	CHQ-705	400.0	402.0	640	200	2170	200	0.0	INERTE	0.66
4771	CHQ-705	402.0	404.0	2040	610	31400	27400	-3.5	ACIDO	0.48
4772	CHQ-705	404.0	406.0	2040	610	31400	27400	-3.5	ACIDO	0.56
4773	CHQ-705	406.0	408.0	2040	610	31400	27400	-3.5	ACIDO	0.62
4774	CHQ-705	408.0	410.0	2040	610	31400	27400	-3.5	ACIDO	0.55
4775	CHQ-705	410.0	410.5	2040	610	31400	27400	-3.5	ACIDO	0.46
4776	CHQ-705	410.5	412.0	580	200	74730	52530	-7.1	ACIDO	0.58
4777	CHQ-705	412.0	414.0	580	200	74730	52530	-7.1	ACIDO	1.22
4778	CHQ-705	414.0	416.0	580	200	74730	52530	-7.1	ACIDO	0.97
4779	CHQ-705	416.0	418.0	580	200	74730	52530	-7.1	ACIDO	0.56
4780	CHQ-705	418.0	418.5	580	200	74730	52530	-7.1	ACIDO	0.48
4781	CHQ-705	418.5	420.0	530	200	91760	44340	-6.0	ACIDO	0.31
4782	CHQ-705	420.0	426.0	530	200	91760	44340	-6.0	ACIDO	0.52
4783	CHQ-705	426.0	434.0	560	200	76980	45480	-6.2	ACIDO	0.47
4784	CHQ-705	434.0	442.0	470	200	68350	34750	-4.7	ACIDO	0.46
4785	CHQ-705	442.0	451.3	490	200	71200	35100	-4.7	ACIDO	0.40
4786	CHQ-707	157.0	159.0	200	200	490	200	0.1	INERTE	0.12
4787	CHQ-707	159.0	161.0	200	200	490	200	0.1	INERTE	0.13
4788	CHQ-707	161.0	162.0	200	200	490	200	0.1	INERTE	0.14
4789	CHQ-707	162.0	163.0	200	200	490	200	0.1	INERTE	0.10
4790	CHQ-707	163.0	165.0	200	200	490	200	0.1	INERTE	0.10
4791	CHQ-707	177.0	178.5	200	200	600	200	0.1	INERTE	0.10
4792	CHQ-707	178.5	179.0	200	200	2970	2520	-0.3	LIGERAMENTE ACIDO	0.16
4793	CHQ-707	179.0	181.0	200	200	2970	2520	-0.3	LIGERAMENTE ACIDO	0.11
4794	CHQ-707	186.8	187.0	200	200	460	200	0.1	INERTE	0.14
4795	CHQ-707	187.0	189.0	200	200	460	200	0.1	INERTE	0.13
4796	CHQ-707	194.0	195.0	200	200	750	200	0.1	INERTE	0.12
4797	CHQ-707	195.0	197.0	200	200	750	200	0.1	INERTE	0.12
4798	CHQ-707	199.0	201.0	200	200	750	200	0.1	INERTE	0.11
4799	CHQ-707	201.0	202.8	200	200	750	200	0.1	INERTE	0.15
4800	CHQ-707	211.0	213.0	200	200	15900	14780	-2.0	ACIDO	0.13
4801	CHQ-707	227.0	229.0	200	200	27600	27020	-3.6	ACIDO	0.12
4802	CHQ-707	229.0	231.0	200	200	27600	27020	-3.6	ACIDO	0.12
4803	CHQ-707	241.0	243.0	200	200	15800	12240	-1.6	ACIDO	0.11
4804	CHQ-707	243.0	245.0	200	200	15800	12240	-1.6	ACIDO	0.22
4805	CHQ-707	245.0	247.0	200	200	15800	12240	-1.6	ACIDO	0.21
4806	CHQ-707	247.0	248.0	200	200	15800	12240	-1.6	ACIDO	0.17
4807	CHQ-707	248.0	249.0	270	200	12900	11260	-1.5	ACIDO	0.15
4808	CHQ-707	249.0	251.0	270	200	12900	11260	-1.5	ACIDO	0.16
4809	CHQ-707	251.0	253.0	270	200	12900	11260	-1.5	ACIDO	0.21
4810	CHQ-707	253.0	255.0	270	200	12900	11260	-1.5	ACIDO	0.19
4811	CHQ-707	255.0	256.1	270	200	12900	11260	-1.5	ACIDO	0.17
4812	CHQ-707	259.0	261.0	200	200	11100	9210	-1.2	ACIDO	0.11
4813	CHQ-707	261.0	263.0	200	200	11100	9210	-1.2	ACIDO	0.14
4814	CHQ-707	263.0	264.6	200	200	11100	9210	-1.2	ACIDO	0.16
4815	CHQ-707	264.6	265.0	200	200	10200	8960	-1.2	ACIDO	0.11
4816	CHQ-707	265.0	267.0	200	200	10200	8960	-1.2	ACIDO	0.11
4817	CHQ-707	267.0	269.0	200	200	10200	8960	-1.2	ACIDO	0.14
4818	CHQ-707	269.0	271.0	200	200	10200	8960	-1.2	ACIDO	0.12
4819	CHQ-707	273.0	275.0	200	200	44500	43430	-5.9	ACIDO	0.11
4820	CHQ-707	275.0	277.0	200	200	44500	43430	-5.9	ACIDO	0.13
4821	CHQ-707	277.0	279.0	200	200	44500	43430	-5.9	ACIDO	0.15
4822	CHQ-707	279.0	279.2	200	200	44500	43430	-5.9	ACIDO	0.15
4823	CHQ-707	279.2	281.0	610	200	70330	67900	-9.2	ACIDO	0.13
4824	CHQ-707	281.0	283.0	610	200	70330	67900	-9.2	ACIDO	0.15
4825	CHQ-707	283.0	285.0	610	200	70330	67900	-9.2	ACIDO	0.15
4826	CHQ-707	285.0	287.0	610	200	70330	67900	-9.2	ACIDO	0.15
4827	CHQ-707	287.0	288.3	610	200	70330	67900	-9.2	ACIDO	0.15
4828	CHQ-707	288.3	289.0	680	200	75180	73410	-10.0	ACIDO	0.19
4829	CHQ-707	289.0	291.0	680	200	75180	73410	-10.0	ACIDO	0.19
4830	CHQ-707	291.0	293.0	680	200	75180	73410	-10.0	ACIDO	0.15

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
4831	CHQ-707	293.0	295.0	680	200	75180	73410	-10.0	ACIDO	0.15
4832	CHQ-707	295.0	296.0	680	200	75180	73410	-10.0	ACIDO	0.17
4833	CHQ-707	296.0	297.0	580	200	85580	83560	-11.4	ACIDO	0.18
4834	CHQ-707	297.0	299.0	580	200	85580	83560	-11.4	ACIDO	0.27
4835	CHQ-707	299.0	301.0	580	200	85580	83560	-11.4	ACIDO	0.39
4836	CHQ-707	301.0	303.0	580	200	85580	83560	-11.4	ACIDO	0.22
4837	CHQ-707	303.0	304.0	580	200	85580	83560	-11.4	ACIDO	0.17
4838	CHQ-707	304.0	305.0	590	220	57700	54840	-7.4	ACIDO	0.12
4839	CHQ-707	305.0	307.0	590	220	57700	54840	-7.4	ACIDO	0.13
4840	CHQ-707	307.0	309.0	590	220	57700	54840	-7.4	ACIDO	0.20
4841	CHQ-707	309.0	311.0	590	220	57700	54840	-7.4	ACIDO	0.20
4842	CHQ-707	311.0	312.0	590	220	57700	54840	-7.4	ACIDO	0.19
4843	CHQ-707	312.0	313.0	730	200	62540	60320	-8.2	ACIDO	0.16
4844	CHQ-707	313.0	315.0	730	200	62540	60320	-8.2	ACIDO	0.16
4845	CHQ-707	315.0	317.0	730	200	62540	60320	-8.2	ACIDO	0.18
4846	CHQ-707	317.0	319.0	730	200	62540	60320	-8.2	ACIDO	0.20
4847	CHQ-707	319.0	320.4	730	200	62540	60320	-8.2	ACIDO	0.20
4848	CHQ-707	320.4	321.0	650	200	64450	59580	-8.1	ACIDO	0.24
4849	CHQ-707	321.0	323.0	650	200	64450	59580	-8.1	ACIDO	0.25
4850	CHQ-707	323.0	325.0	650	200	64450	59580	-8.1	ACIDO	0.23
4851	CHQ-707	325.0	327.0	650	200	64450	59580	-8.1	ACIDO	0.24
4852	CHQ-707	327.0	327.3	650	200	64450	59580	-8.1	ACIDO	0.26
4853	CHQ-707	327.3	329.0	650	200	91860	87660	-11.9	ACIDO	0.35
4854	CHQ-707	329.0	331.0	650	200	91860	87660	-11.9	ACIDO	0.38
4855	CHQ-707	331.0	333.0	650	200	91860	87660	-11.9	ACIDO	0.29
4856	CHQ-707	333.0	335.0	650	200	91860	87660	-11.9	ACIDO	0.29
4857	CHQ-707	335.0	336.0	650	200	91860	87660	-11.9	ACIDO	0.27
4858	CHQ-707	336.0	337.0	570	200	100750	94730	-12.9	ACIDO	0.29
4859	CHQ-707	337.0	339.0	570	200	100750	94730	-12.9	ACIDO	0.41
4860	CHQ-707	339.0	341.0	570	200	100750	94730	-12.9	ACIDO	0.75
4861	CHQ-707	341.0	343.0	570	200	100750	94730	-12.9	ACIDO	0.30
4862	CHQ-707	343.0	344.0	570	200	100750	94730	-12.9	ACIDO	0.33
4863	CHQ-707	344.0	345.0	590	200	119750	114730	-15.6	ACIDO	0.32
4864	CHQ-707	345.0	347.0	590	200	119750	114730	-15.6	ACIDO	0.24
4865	CHQ-707	347.0	349.0	590	200	119750	114730	-15.6	ACIDO	0.19
4866	CHQ-707	349.0	351.0	590	200	119750	114730	-15.6	ACIDO	0.25
4867	CHQ-707	351.0	352.0	590	200	119750	114730	-15.6	ACIDO	0.28
4868	CHQ-707	352.0	353.0	670	200	113810	105140	-14.3	ACIDO	0.24
4869	CHQ-707	353.0	355.0	670	200	113810	105140	-14.3	ACIDO	0.31
4870	CHQ-707	355.0	357.0	670	200	113810	105140	-14.3	ACIDO	0.36
4871	CHQ-707	357.0	359.0	670	200	113810	105140	-14.3	ACIDO	0.43
4872	CHQ-707	359.0	360.0	670	200	113810	105140	-14.3	ACIDO	0.53
4873	CHQ-707	360.0	361.0	830	200	66540	47540	-6.4	ACIDO	0.31
4874	CHQ-707	361.0	363.0	830	200	66540	47540	-6.4	ACIDO	0.32
4875	CHQ-707	363.0	365.0	830	200	66540	47540	-6.4	ACIDO	0.46
4876	CHQ-707	365.0	367.0	830	200	66540	47540	-6.4	ACIDO	0.40
4877	CHQ-707	367.0	367.4	830	200	66540	47540	-6.4	ACIDO	0.33
4878	CHQ-707	367.4	369.0	310	200	74640	58540	-7.9	ACIDO	0.36
4879	CHQ-707	369.0	371.0	310	200	74640	58540	-7.9	ACIDO	0.60
4880	CHQ-707	371.0	373.0	310	200	74640	58540	-7.9	ACIDO	0.55
4881	CHQ-707	373.0	374.0	310	200	74640	58540	-7.9	ACIDO	0.53
4882	CHQ-707	374.0	375.0	610	200	78580	51580	-7.0	ACIDO	0.51
4883	CHQ-707	375.0	377.0	610	200	78580	51580	-7.0	ACIDO	0.48
4884	CHQ-707	377.0	379.0	610	200	78580	51580	-7.0	ACIDO	0.43
4885	CHQ-707	379.0	381.0	610	200	78580	51580	-7.0	ACIDO	0.69
4886	CHQ-707	381.0	383.0	1050	200	109180	46270	-6.3	ACIDO	0.54
4887	CHQ-707	383.0	385.0	1050	200	109180	46270	-6.3	ACIDO	0.73
4888	CHQ-707	385.0	387.0	1050	200	109180	46270	-6.3	ACIDO	0.82
4889	CHQ-707	387.0	388.3	1050	200	109180	46270	-6.3	ACIDO	1.21
4890	CHQ-707	388.3	389.0	520	200	125300	68200	-9.3	ACIDO	0.50
4891	CHQ-707	389.0	391.0	520	200	125300	68200	-9.3	ACIDO	0.59
4892	CHQ-707	391.0	393.0	520	200	125300	68200	-9.3	ACIDO	0.81
4893	CHQ-707	393.0	395.0	520	200	125300	68200	-9.3	ACIDO	1.22
4894	CHQ-707	395.0	397.0	520	200	125300	68200	-9.3	ACIDO	1.38
4895	CHQ-707	397.0	399.0	340	200	83090	41390	-5.6	ACIDO	0.48
4896	CHQ-707	399.0	401.0	340	200	83090	41390	-5.6	ACIDO	0.41
4897	CHQ-707	401.0	403.0	340	200	83090	41390	-5.6	ACIDO	0.46
4898	CHQ-707	403.0	407.0	340	200	83090	41390	-5.6	ACIDO	0.24
4899	CHQ-707	407.0	415.8	660	600	63970	40370	-5.3	ACIDO	0.28
4900	CHQ-709	200.0	202.0	1010	200	8530	1160	-0.1	INERTE	0.23
4901	CHQ-709	202.0	204.0	1010	200	8530	1160	-0.1	INERTE	0.32
4902	CHQ-709	204.0	206.0	1010	200	8530	1160	-0.1	INERTE	0.54
4903	CHQ-709	206.0	207.0	1010	200	8530	1160	-0.1	INERTE	0.53
4904	CHQ-709	207.0	208.0	600	200	4110	1580	-0.1	LIGERAMENTE ACIDO	0.33
4905	CHQ-709	208.0	210.0	600	200	4110	1580	-0.1	LIGERAMENTE ACIDO	0.20
4906	CHQ-709	210.0	212.0	600	200	4110	1580	-0.1	LIGERAMENTE ACIDO	0.41
4907	CHQ-709	212.0	214.0	600	200	4110	1580	-0.1	LIGERAMENTE ACIDO	0.53
4908	CHQ-709	214.0	216.0	680	200	1470	200	0.1	INERTE	0.10
4909	CHQ-709	216.0	218.0	680	200	1470	200	0.1	INERTE	0.11
4910	CHQ-709	218.0	220.0	680	200	1470	200	0.1	INERTE	0.24
4911	CHQ-709	220.0	222.0	680	200	1470	200	0.1	INERTE	0.22
4912	CHQ-709	222.0	224.0	200	200	1480	200	0.1	INERTE	0.31
4913	CHQ-709	224.0	226.0	200	200	1480	200	0.1	INERTE	0.79
4914	CHQ-709	226.0	228.0	200	200	1480	200	0.1	INERTE	0.31
4915	CHQ-709	228.0	230.0	200	200	1480	200	0.1	INERTE	1.25
4916	CHQ-709	230.0	232.0	230	200	1020	200	0.1	INERTE	0.38
4917	CHQ-709	232.0	234.0	230	200	1020	200	0.1	INERTE	0.35
4918	CHQ-709	237.5	238.0	200	200	1840	200	0.1	INERTE	0.13
4919	CHQ-709	238.0	240.0	200	200	1840	200	0.1	INERTE	0.13
4920	CHQ-709	240.0	242.0	200	200	1840	200	0.1	INERTE	0.27
4921	CHQ-709	242.0	244.0	200	200	1840	200	0.1	INERTE	0.37
4922	CHQ-709	244.0	245.0	200	200	1840	200	0.1	INERTE	0.32
4923	CHQ-709	245.0	246.0	1440	200	1630	200	0.1	INERTE	0.48
4924	CHQ-709	246.0	252.0	1440	200	1630	200	0.1	INERTE	0.16
4925	CHQ-709	252.0	260.0	300	200	660	230	0.0	INERTE	0.13
4926	CHQ-709	260.0	267.3	200	200	2090	1660	-0.2	LIGERAMENTE ACIDO	0.14
4927	CHQ-709	267.3	276.3	850	200	270	200	0.1	INERTE	0.26
4928	CHQ-709	276.3	284.5	200	200	200	200	0.1	INERTE	0.10
4929	CHQ-709	292.0	300.5	370	200	210	200	0.1	INERTE	0.16
4930	CHQ-709	300.5	308.0	500	200	200	200	0.1	INERTE	0.17
4931	CHQ-709	308.0	316.0	760	200	200	200	0.1	INERTE	0.21
4932	CHQ-709	316.0	324.0	200	200	28100	27370	-3.7	ACIDO	0.28
4933	CHQ-709	324.0	331.8	440	200	24700	23270	-3.1	ACIDO	0.24
4934	CHQ-709	331.8	340.0	200	200	26700	26100	-3.5	ACIDO	0.37
4935	CHQ-709	340.0	348.0	870	200	29800	29270	-3.9	ACIDO	0.35
4936	CHQ-709	348.0	350.0	1000	200	23900	22810	-3.1	ACIDO	0.30
4937	CHQ-709	350.0	352.0	1000	200	23900	22810	-3.1	ACIDO	0.31
4938	CHQ-709	352.0	354.0	1000	200	23900	22810	-3.1	ACIDO	0.35
4939	CHQ-709	354.0	356.0	1000	200	23900	22810	-3.1	ACIDO	0.43
4940	CHQ-709	356.0	356.5	1000	200	23900	22810	-3.1	ACIDO	0.47
4941	CHQ-709	356.5	358.0	320	200	22000	20170	-2.7	ACIDO	0.43
4942	CHQ-709	358.0	360.0	320	200	22000	20170	-2.7	ACIDO	0.39
4943	CHQ-709	360.0	362.0	320	200	22000	20170	-2.7	ACIDO	0.43
4944	CHQ-709	362.0	364.0	320	200	22000	20170	-2.7	ACIDO	0.57
4945	CHQ-709	364.0	364.5	320	200	22000	20170	-2.7	ACIDO	0.61
4946	CHQ-709	364.5	366.0	200	200	16100	6710	-0.8	LIGERAMENTE ACIDO	0.49
4947	CHQ-709	366.0	368.0	200	200	16100	6710	-0.8	LIGERAMENTE ACIDO	0.87
4948	CHQ-709	368.0	370.0	200	200	16100	6710	-0.8	LIGERAMENTE ACIDO	0.76
4949	CHQ-709	370.0	372.0	200	200	16100	6710	-0.8	LIGERAMENTE ACIDO	0.48
4950	CHQ-709	372.0	373.0	200	200	16100	6710	-0.8	LIGERAMENTE ACIDO	0.47

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
4951	CHQ-709	373.0	374.0	210	200	39100	14400	-1.9	ACIDO	0.78
4952	CHQ-709	374.0	376.0	210	200	39100	14400	-1.9	ACIDO	0.68
4953	CHQ-709	376.0	378.0	210	200	39100	14400	-1.9	ACIDO	0.81
4954	CHQ-709	378.0	380.0	210	200	39100	14400	-1.9	ACIDO	0.74
4955	CHQ-709	380.0	381.0	210	200	39100	14400	-1.9	ACIDO	0.41
4956	CHQ-709	381.0	382.0	720	200	51200	36800	-5.0	ACIDO	0.67
4957	CHQ-709	382.0	384.0	720	200	51200	36800	-5.0	ACIDO	1.13
4958	CHQ-709	384.0	386.0	720	200	51200	36800	-5.0	ACIDO	1.50
4959	CHQ-709	386.0	388.0	720	200	51200	36800	-5.0	ACIDO	1.35
4960	CHQ-709	388.0	389.4	720	200	51200	36800	-5.0	ACIDO	1.28
4961	CHQ-709	389.4	390.0	780	200	46300	26600	-3.6	ACIDO	0.62
4962	CHQ-709	390.0	392.0	780	200	46300	26600	-3.6	ACIDO	0.77
4963	CHQ-709	392.0	394.0	780	200	46300	26600	-3.6	ACIDO	0.70
4964	CHQ-709	394.0	396.0	780	200	46300	26600	-3.6	ACIDO	0.18
4965	CHQ-709	396.0	398.0	780	200	46300	26600	-3.6	ACIDO	0.26
4966	CHQ-709	398.0	400.0	200	200	40400	17900	-2.4	ACIDO	0.54
4967	CHQ-709	400.0	402.0	200	200	40400	17900	-2.4	ACIDO	1.15
4968	CHQ-709	402.0	404.0	200	200	40400	17900	-2.4	ACIDO	0.91
4969	CHQ-709	404.0	406.0	200	200	40400	17900	-2.4	ACIDO	0.46
4970	CHQ-709	406.0	407.0	200	200	40400	17900	-2.4	ACIDO	0.34
4971	CHQ-709	407.0	408.0	200	200	44700	18700	-2.5	ACIDO	0.49
4972	CHQ-709	408.0	410.0	200	200	44700	18700	-2.5	ACIDO	0.48
4973	CHQ-709	410.0	412.0	200	200	44700	18700	-2.5	ACIDO	0.50
4974	CHQ-709	412.0	414.0	200	200	44700	18700	-2.5	ACIDO	0.65
4975	CHQ-709	414.0	416.0	470	200	46900	27200	-3.7	ACIDO	0.51
4976	CHQ-709	416.0	418.0	470	200	46900	27200	-3.7	ACIDO	0.65
4977	CHQ-709	418.0	420.0	470	200	46900	27200	-3.7	ACIDO	0.43
4978	CHQ-709	420.0	422.0	470	200	46900	27200	-3.7	ACIDO	1.04
4979	CHQ-709	422.0	424.0	200	200	44300	27100	-3.6	ACIDO	1.05
4980	CHQ-709	424.0	426.0	200	200	44300	27100	-3.6	ACIDO	1.13
4981	CHQ-709	426.0	428.0	200	200	44300	27100	-3.6	ACIDO	1.82
4982	CHQ-709	428.0	430.0	200	200	44300	27100	-3.6	ACIDO	1.14
4983	CHQ-709	430.0	432.0	490	200	27500	9300	-1.2	ACIDO	0.47
4984	CHQ-709	432.0	434.0	490	200	27500	9300	-1.2	ACIDO	0.54
4985	CHQ-709	434.0	436.0	490	200	27500	9300	-1.2	ACIDO	0.49
4986	CHQ-709	436.0	437.0	490	200	27500	9300	-1.2	ACIDO	0.66
4987	CHQ-709	437.0	438.0	1350	200	53300	37800	-5.1	ACIDO	0.46
4988	CHQ-709	438.0	440.0	1350	200	53300	37800	-5.1	ACIDO	0.39
4989	CHQ-709	440.0	442.0	1350	200	53300	37800	-5.1	ACIDO	0.34
4990	CHQ-709	442.0	444.7	1350	200	53300	37800	-5.1	ACIDO	0.65
4991	CHQ-710	30.0	40.0	1200	100	200	0	0.0	INERTE	0.13
4992	CHQ-710	50.0	60.0	200	200	200	0	0.1	INERTE	0.11
4993	CHQ-710	154.0	156.0	200	200	360	200	0.1	INERTE	0.13
4994	CHQ-710	156.0	158.0	200	200	360	200	0.1	INERTE	0.15
4995	CHQ-710	158.0	160.0	200	200	440	200	0.1	INERTE	0.15
4996	CHQ-710	162.0	164.0	200	200	440	200	0.1	INERTE	0.65
4997	CHQ-710	164.0	166.0	200	200	440	200	0.1	INERTE	0.47
4998	CHQ-710	166.0	168.0	200	200	450	200	0.1	INERTE	0.15
4999	CHQ-710	168.0	170.0	200	200	450	200	0.1	INERTE	0.32
5000	CHQ-710	170.0	172.0	200	200	450	200	0.1	INERTE	0.21
5001	CHQ-710	174.0	176.0	200	200	380	200	0.1	INERTE	0.14
5002	CHQ-710	178.0	180.0	200	200	380	200	0.1	INERTE	0.11
5003	CHQ-710	182.5	184.0	200	200	300	200	0.1	INERTE	0.21
5004	CHQ-710	186.0	188.0	200	200	300	200	0.1	INERTE	0.17
5005	CHQ-710	188.0	190.0	200	200	300	200	0.1	INERTE	0.29
5006	CHQ-710	190.0	192.0	200	200	340	200	0.1	INERTE	0.30
5007	CHQ-710	192.0	194.0	200	200	340	200	0.1	INERTE	0.33
5008	CHQ-710	194.0	196.0	200	200	340	200	0.1	INERTE	0.25
5009	CHQ-710	196.0	198.0	200	200	340	200	0.1	INERTE	0.29
5010	CHQ-710	198.0	200.0	380	200	570	200	0.1	INERTE	0.50
5011	CHQ-710	200.0	202.0	380	200	570	200	0.1	INERTE	0.42
5012	CHQ-710	202.0	204.0	380	200	570	200	0.1	INERTE	0.11
5013	CHQ-710	204.0	206.0	380	200	570	200	0.1	INERTE	0.15
5014	CHQ-710	206.0	208.0	200	200	290	200	0.1	INERTE	0.12
5015	CHQ-710	210.0	212.0	200	200	290	200	0.1	INERTE	0.12
5016	CHQ-710	213.5	214.0	200	200	610	200	0.1	INERTE	0.11
5017	CHQ-710	214.0	216.0	200	200	610	200	0.1	INERTE	0.11
5018	CHQ-710	216.0	218.0	200	200	610	200	0.1	INERTE	0.11
5019	CHQ-710	222.0	224.0	200	200	370	200	0.1	INERTE	0.12
5020	CHQ-710	224.0	226.0	200	200	370	200	0.1	INERTE	0.12
5021	CHQ-710	226.0	228.0	200	200	370	200	0.1	INERTE	0.15
5022	CHQ-710	230.0	232.0	200	200	540	200	0.1	INERTE	0.13
5023	CHQ-710	232.0	234.0	200	200	540	200	0.1	INERTE	0.14
5024	CHQ-710	234.0	236.0	200	200	540	200	0.1	INERTE	0.14
5025	CHQ-710	236.0	238.0	200	200	540	200	0.1	INERTE	0.17
5026	CHQ-710	238.0	240.0	200	200	350	200	0.1	INERTE	0.17
5027	CHQ-710	240.0	242.0	200	200	350	200	0.1	INERTE	0.18
5028	CHQ-710	242.0	244.0	200	200	350	200	0.1	INERTE	0.16
5029	CHQ-710	244.0	246.0	200	200	350	200	0.1	INERTE	0.17
5030	CHQ-710	246.0	248.0	1150	200	360	200	0.1	INERTE	0.18
5031	CHQ-710	248.0	250.0	1150	200	360	200	0.1	INERTE	0.21
5032	CHQ-710	250.0	252.0	1150	200	360	200	0.1	INERTE	0.26
5033	CHQ-710	252.0	254.0	1150	200	360	200	0.1	INERTE	0.36
5034	CHQ-710	254.0	256.0	200	200	280	200	0.1	INERTE	0.29
5035	CHQ-710	256.0	258.0	200	200	280	200	0.1	INERTE	0.22
5036	CHQ-710	258.0	260.0	200	200	280	200	0.1	INERTE	0.26
5037	CHQ-710	260.0	262.0	200	200	280	200	0.1	INERTE	0.19
5038	CHQ-710	262.0	264.0	200	200	450	200	0.1	INERTE	0.25
5039	CHQ-710	264.0	266.0	200	200	450	200	0.1	INERTE	0.21
5040	CHQ-710	266.0	268.0	200	200	450	200	0.1	INERTE	0.27
5041	CHQ-710	268.0	270.0	200	200	450	200	0.1	INERTE	0.31
5042	CHQ-710	270.0	272.0	200	200	450	200	0.1	INERTE	0.45
5043	CHQ-710	272.0	274.0	200	200	450	200	0.1	INERTE	0.17
5044	CHQ-710	274.0	276.0	200	200	450	200	0.1	INERTE	0.24
5045	CHQ-710	276.0	278.0	200	200	450	200	0.1	INERTE	0.42
5046	CHQ-710	278.0	280.0	200	200	540	200	0.1	INERTE	0.31
5047	CHQ-710	280.0	282.0	200	200	540	200	0.1	INERTE	0.21
5048	CHQ-710	282.0	284.0	200	200	540	200	0.1	INERTE	0.44
5049	CHQ-710	284.0	286.0	200	200	540	200	0.1	INERTE	0.28
5050	CHQ-710	286.0	288.0	370	200	380	200	0.1	INERTE	0.38
5051	CHQ-710	288.0	290.0	370	200	380	200	0.1	INERTE	0.52
5052	CHQ-710	290.0	292.0	370	200	380	200	0.1	INERTE	0.52
5053	CHQ-710	292.0	294.0	370	200	380	200	0.1	INERTE	0.74
5054	CHQ-710	294.0	296.0	200	200	310	200	0.1	INERTE	0.36
5055	CHQ-710	296.0	298.0	200	200	310	200	0.1	INERTE	0.19
5056	CHQ-710	298.0	300.0	200	200	310	200	0.1	INERTE	0.20
5057	CHQ-710	300.0	302.0	200	200	310	200	0.1	INERTE	0.20
5058	CHQ-710	302.0	304.0	200	200	320	200	0.1	INERTE	0.22
5059	CHQ-710	304.0	306.0	200	200	320	200	0.1	INERTE	0.29
5060	CHQ-710	306.0	308.0	200	200	320	200	0.1	INERTE	0.16
5061	CHQ-710	308.0	310.0	200	200	320	200	0.1	INERTE	0.18
5062	CHQ-710	310.0	312.0	200	200	330	200	0.1	INERTE	0.49
5063	CHQ-710	312.0	314.0	200	200	330	200	0.1	INERTE	0.17
5064	CHQ-710	314.0	316.0	200	200	330	200	0.1	INERTE	0.16
5065	CHQ-710	316.0	318.0	200	200	330	200	0.1	INERTE	0.14
5066	CHQ-710	318.0	320.0	200	200	350	200	0.1	INERTE	0.16
5067	CHQ-710	320.0	322.0	200	200	350	200	0.1	INERTE	0.36
5068	CHQ-710	322.0	324.0	200	200	350	200	0.1	INERTE	0.19
5069	CHQ-710	324.0	326.0	200	200	350	200	0.1	INERTE	0.14
5070	CHQ-710	326.0	328.0	200	200	380	200	0.1	INERTE	0.14
5071	CHQ-710	328.0	330.0	200	200	380	200	0.1	INERTE	0.17
5072	CHQ-710	330.0	332.0	200	200	380	200	0.1	INERTE	0.31
5073	CHQ-710	332.0	334.0	200	200	380	200	0.1	INERTE	0.13
5074	CHQ-710	334.0	336.0	200	200	370	200	0.1	INERTE	0.15
5075	CHQ-710	336.0	338.0	200	200	370	200	0.1	INERTE	0.16
5076	CHQ-710	338.0	340.0	200	200	370	200	0.1	INERTE	0.23
5077	CHQ-710	340.0	342.0	200	200	370	200	0.1	INERTE	0.17
5078	CHQ-710	342.0	344.0	200	200	340	200	0.1	INERTE	0.20
5079	CHQ-710	344.0	346.0	200	200	340	200	0.1	INERTE	0.28
5080	CHQ-710	346.0	348.0	200	200	340	200	0.1	INERTE	0.52
5081	CHQ-710	348.0	350.0	200	200	340	200	0.1	INERTE	0.33
5082	CHQ-710	350.0	352.0	200	200	470	200	0.1	INERTE	0.24
5083	CHQ-710	352.0	354.0	200	200	470	200	0.1	INERTE	0.15
5084	CHQ-710	354.0	356.0	200	200	470	200	0.1	INERTE	0.17
5085	CHQ-710	356.0	358.0	200	200	470	200	0.1	INERTE	0.17
5086	CHQ-710	358.0	360.0	200	200	310	200	0.1	INERTE	0.19
5087	CHQ-710	360.0	362.0	200	200	310	200	0.1	INERTE	0.44
5088	CHQ-710	362.0	364.0	200	200	310	200	0.1	INERTE	0.97
5089	CHQ-710	364.0	366.0	200	200	310	200	0.1	INERTE	1.90
5090	CHQ-710	366.0	368.0	200	200	380	200	0.1	INERTE	0.21
5091	CHQ-710	368.0	370.0	200	200	380	200	0.1	INERTE	0.21
5092	CHQ-710	370.0	372.0	200	200	380	200	0.1	INERTE	0.19
5093	CHQ-710	372.0	374.0	200	200	380	200	0.1	INERTE	0.30
5094	CHQ-710	374.0	376.0	200	200	830	200	0.1	INERTE	0.24
5095	CHQ-710	376.0	378.0	200	200	830	200	0.1	INERTE	0.25
5096	CHQ-710	378.0	380.0	200	200	830	200	0.1	INERTE	0.37
5097	CHQ-710	380.0	382.0	200	200	830	200	0.1	INERTE	0.21
5098	CHQ-710	382.0	384.0	200	200	760	200	0.1	INERTE	0.37
5099	CHQ-710	384.0	386.0	200	200	760	200	0.1	INERTE	0.19
5100	CHQ-710	386.0	388.0	200	200	760	200	0.1	INERTE	0.23
5101	CHQ-710	388.0	390.0	200	200	760	200	0.1	INERTE	0.40
5102	CHQ-710	390.0	392.0	250	200	260	200	0.1	INERTE	0.22
5103	CHQ-710	392.0	394.0	250	200	260	200	0.1	INERTE	0.28
5104	CHQ-710	394.0	396.0	250	200	260	200	0.1	INERTE	0.38
5105	CHQ-710	396.0	398.0	250	200	260	200	0.1	INERTE	0.37
5106	CHQ-710	398.0	400.0	200	200	450	200	0.1	INERTE	0.68
5107	CHQ-710	400.0	402.0	200	200	450	200	0.1	INERTE	0.25
5108	CHQ-710	402.0	404.0	200	200	450	200	0.1	INERTE	1.23
5109	CHQ-710	404.0	405.8	200	200	450	200	0.1	INERTE	0.88
5110	CHQ-710	405.8	406.0	2320	1330	710	200	0.5	LIGERAMENTE BASICO	1.78
5111	CHQ-710	406.0	408.0	2320	1330	710	200	0.5	LIGERAMENTE BASICO	1.78
5112	CHQ-710	408.0	410.0	2320	1330	710	200	0.5	LIGERAMENTE BASICO	2.72
5113	CHQ-710	410.0	412.0	2320	1330	710	200	0.5	LIGERAMENTE BASICO	1.31
5114	CHQ-710	412.0	414.0	2320	1330	710	200	0.5	LIGERAMENTE BASICO	1.53
5115	CHQ-710	414.0	416.0	470	200	7080	5510	-0.7	LIGERAMENTE ACIDO	1.81
5116	CHQ-710	416.0	418.0	470	200	7080	5510	-0.7	LIGERAMENTE ACIDO	5.18
5117	CHQ-710	418.0	420.0	470	200	7080	5510	-0.7	LIGERAMENTE ACIDO	3.74
5118	CHQ-710	420.0	421.5	470	200	7080	5510	-0.7	LIGERAMENTE ACIDO	4.02
5119	CHQ-710	421.5	422.0	250	200	104900	97810	-13.3	ACIDO	12.16
5120	CHQ-710	422.0	424.0	250	200	104900	97810	-13.3	ACIDO	12.16
5121	CHQ-710	424.0	426.0	250	200	104900	97810	-13.3	ACIDO	7.62
5122	CHQ-710	426.0	428.0	250	200	104900	97810	-13.3	ACIDO	4.99
5123	CHQ-710	428.0	430.0	250	200	104900	97810	-13.3	ACIDO	8.11
5124	CHQ-710	430.0	432.0	200	200	97100	91400	-12.4	ACIDO	7.77
5125	CHQ-710	432.0	434.0	200	200	97100	91400	-12.4	ACIDO	4.86
5126	CHQ-710	434.0	436.0	200	200	97100	91400	-12.4	ACIDO	5.71
5127	CHQ-710	436.0	438.0	200	200	97100	91400	-12.4	ACIDO	3.82
5128	CHQ-710	438.0	440.0	200	200	75230	71750	-9.8	ACIDO	1.18
5129	CHQ-710	440.0	442.0	200	200	75230	71750	-9.8	ACIDO	0.77
5130	CHQ-710	442.0	444.0	200	200	75230	71750	-9.8	ACIDO	0.67
5131	CHQ-710	444.0	446.0	200	200	75230	71750	-9.8	ACIDO	1.09
5132	CHQ-710	446.0	448.0	290	200	141000	133270	-18.2	ACIDO	1.91
5133	CHQ-710	448.0	450.0	290	200	141000	133270	-18.2	ACIDO	2.73
5134	CHQ-710	450.0	452.0	290	200	141000	133270	-18.2	ACIDO	4.15
5135	CHQ-710	452.0	454.0	290	200	141000	133270	-18.2	ACIDO	1.87
5136	CHQ-710	454.0	456.0	550	200	101100	93960	-12.8	ACIDO	2.47
5137	CHQ-710	456.0	458.0	550	200	101100	93960	-12.8	ACIDO	3.62
5138	CHQ-710	458.0	460.0	550	200	101100	93960	-12.8	ACIDO	0.93
5139	CHQ-710	460.0	462.0	550	200	101100	93960	-12.8	ACIDO	0.82
5140	CHQ-710	462.0	464.0	200	200	89850	84690	-11.5	ACIDO	0.59
5141	CHQ-710	464.0	466.0	200	200	89850	84690	-11.5	ACIDO	0.57
5142	CHQ-710	466.0	468.0	200	200	89850	84690	-11.5	ACIDO	0.68
5143	CHQ-710	468.0	470.0	200	200	89850	84690	-11.5	ACIDO	0.81
5144	CHQ-710	470.0	472.0	530	200	158700	151610	-20.7	ACIDO	1.51
5145	CHQ-710	472.0	473.9	530	200	158700	151610	-20.7	ACIDO	1.03
5146	CHQ-711	128.0	136.0	830	200	640	200	0.1	INERTE	0.23
5147	CHQ-711	136.0	144.0	630	200	600	200	0.1	INERTE	0.29
5148	CHQ-711	144.0	152.0	890	200	920	200	0.1	INERTE	0.23
5149	CHQ-711	152.0	160.0	1100	200	870	200	0.1	INERTE	0.45
5150	CHQ-711	160.0	168.0	630	200	1060	200	0.1	INERTE	0.46
5151	CHQ-712	144.0	152.0	800	200	1410	200	0.1	INERTE	0.22
5152	CHQ-712	152.0	160.3	640	200	1410	200	0.1	INERTE	0.25
5153	CHQ-712	160.3	170.1	550	200	1280	200	0.0	INERTE	0.34
5154	CHQ-715	160.0	168.3	670	200	420	80	0.1	INERTE	0.20
5155	CHQ-715	168.3	176.0	840	200	370	50	0.1	INERTE	0.18
5156	CHQ-715	176.0	184.0	770	200	380	70	0.1	INERTE	0.11
5157	CHQ-715	184.0	192.0	930	200	310	0	0.1	INERTE	0.13
5158	CHQ-715	192.0	200.0	700	200	280	0	0.1	INERTE	0.27
5159	CHQ-716	88.0	96.0	360	200	1560	60	0.1	INERTE	0.11
5160	CHQ-716	104.0	112.0	2480	200	1170	70	0.1	INERTE	0.21
5161	CHQ-716	118.0	120.0	300	200	520	20	0.1	INERTE	0.11
5162	CHQ-716	120.0	122.0	230	200	390	190	0.0	INERTE	0.15
5163	CHQ-716	122.0	124.0	230	200	390	190	0.0	INERTE	0.14
5164	CHQ-716	124.0	126.0	230	200	390	190	0.0	INERTE	0.15
5165	CHQ-716	142.0	144.0	280	200	340	140	0.1	INERTE	0.14
5166	CHQ-716	216.0	218.0	460	200	1520	10	0.1	INERTE	0.79
5167	CHQ-716	218.0	220.0	460	200	1520	10	0.1	INERTE	0.11
5168	CHQ-716	220.0	222.0	460	200	1520	10	0.1	INERTE	0.12
5169	CHQ-716	222.0	224.0	460	200	1520	10	0.1	INERTE	0.11
5170	CHQ-716	230.0	232.0	300	200	870	160	0.1	INERTE	0.13
5171	CHQ-716	232.0	234.0	200	200	1840	40	0.1	INERTE	0.13
5172	CHQ-716	234.0	236.0	200	200	1840	40	0.1	INERTE	0.12
5173	CHQ-716	236.0	238.0	200	200	1840	40	0.1	INERTE	0.15
5174	CHQ-716	238.0	240.0	200	200	1840	40	0.1	INERTE	0.13
5175	CHQ-716	240.0	242.0	440	200	2830	1940	-0.2	LIGERAMENTE ACIDO	0.19
5176	CHQ-716	244.0	246.0	440	200	2830	1940	-0.2	LIGERAMENTE ACIDO	0.12
5177	CHQ-716	246.0	248.0	440	200	2830	1940	-0.2	LIGERAMENTE ACIDO	0.12
5178	CHQ-716	248.0	250.0	410	200	10640	8950	-1.2	ACIDO	0.14
5179	CHQ-716	256.0	258.0	370	200	1010	260	0.0	INERTE	0.11
5180	CHQ-716	258.0	260.0	370	200	1010	260	0.0	INERTE	0.14
5181	CHQ-716	260.0	262.0	370	200	1010	260	0.0	INERTE	0.18
5182	CHQ-716	262.0	264.0	370	200	1010	260	0.0	INERTE	0.17
5183	CHQ-716	264.0	266.0	200	200	2250	990	-0.1	INERTE	0.22
5184	CHQ-716	266.0	268.0	200	200	2250	990	-0.1	INERTE	0.38
5185	CHQ-716	268.0	270.0	200	200	2250	990	-0.1	INERTE	0.25
5186	CHQ-716	270.0	272.0	200	200	2250	990	-0.1	INERTE	0.25
5187	CHQ-717	122.0	124.0	230	200	670	140	0.1	INERTE	0.14
5188	CHQ-717	124.0	126.0	230	200	670	140	0.1	INERTE	0.18
5189	CHQ-717	126.0	128.0	230	200	670	140	0.1	INERTE	0.16
5190	CHQ-717	128.0	130.0	200	200	980	80	0.1	INERTE	0.31
5191	CHQ-717	130.0	132.0	200	200	980	80	0.1	INERTE	0.25
5192	CHQ-717	132.0	134.0	200	200	980	80	0.1	INERTE	0.24
5193	CHQ-717	134.0	136.0	200	200	980	80	0.1	INERTE	0.16
5194	CHQ-717	136.0	138.0	200	200	950	50	0.1	INERTE	0.33
5195	CHQ-717	138.0	140.0	200	200	950	50	0.1	INERTE	0.16
5196	CHQ-717	140.0	142.0	200	200	950	50	0.1	INERTE	0.18
5197	CHQ-717	142.0	144.0	200	200	950	50	0.1	INERTE	0.16
5198	CHQ-717	144.0	146.0	200	200	1100	60	0.1	INERTE	0.14
5199	CHQ-717	146.0	148.0	200	200	1100	60	0.1	INERTE	0.21
5200	CHQ-717	148.0	150.0	200	200	1100	60	0.1	INERTE	0.14
5201	CHQ-717	150.0	152.0	200	200	1100	60	0.1	INERTE	0.17
5202	CHQ-717	152.0	154.0	600	200	1010	70	0.1	INERTE	0.23
5203	CHQ-717	154.0	156.0	600	200	1010	70	0.1	INERTE	0.20
5204	CHQ-717	156.0	158.0	600	200	1010	70	0.1	INERTE	0.29
5205	CHQ-717	158.0	160.0	600	200	1010	70	0.1	INERTE	0.37
5206	CHQ-717	160.0	162.0	200	200	1420	100	0.1	INERTE	0.31
5207	CHQ-717	162.0	164.0	200	200	1420	100	0.1	INERTE	0.57
5208	CHQ-717	164.0	166.0	200	200	1420	100	0.1	INERTE	0.23
5209	CHQ-717	166.0	168.0	200	200	1420	100	0.1	INERTE	0.29
5210	CHQ-717	168.0	170.0	240	200	1340	10	0.1	INERTE	0.47
5211	CHQ-717	170.0	172.0	240	200	1340	10	0.1	INERTE	0.31
5212	CHQ-717	172.0	174.0	240	200	1340	10	0.1	INERTE	0.16
5213	CHQ-717	174.0	176.0	240	200	1340	10	0.1	INERTE	0.16
5214	CHQ-717	176.0	178.0	210	200	710	10	0.1	INERTE	0.32
5215	CHQ-717	178.0	180.0	210	200	710	10	0.1	INERTE	0.13
5216	CHQ-717	180.0	182.0	210	200	710	10	0.1	INERTE	0.11
5217	CHQ-717	182.0	184.0	210	200	710	10	0.1	INERTE	0.12
5218	CHQ-717	184.0	184.2	210	200	710	10	0.1	INERTE	0.12
5219	CHQ-717	184.2	186.0	200	200	230	30	0.1	INERTE	0.14
5220	CHQ-717	186.0	188.0	200	200	230	30	0.1	INERTE	0.19
5221	CHQ-717	188.0	190.0	200	200	230	30	0.1	INERTE	0.12
5222	CHQ-717	190.0	192.0	200	200	230	30	0.1	INERTE	0.13
5223	CHQ-717	192.0	194.0	200	200	250	40	0.1	INERTE	0.12
5224	CHQ-717	194.0	196.0	200	200	250	40	0.1	INERTE	0.12
5225	CHQ-717	196.0	198.0	200	200	250	40	0.1	INERTE	0.13
5226	CHQ-717	198.0	200.0	200	200	250	40	0.1	INERTE	0.11
5227	CHQ-717	200.0	202.0	360	200	1400	1030	-0.1	INERTE	0.12
5228	CHQ-717	202.0	204.0	500	500	3810	3310	-0.3	LIGERAMENTE ACIDO	0.13
5229	CHQ-717	204.0	206.0	360	200	1400	1030	-0.1	INERTE	0.12
5230	CHQ-717	208.1	210.0	200	200	8550	7140	-0.9	LIGERAMENTE ACIDO	0.11
5231	CHQ-717	210.0	212.0	200	200	8550	7140	-0.9	LIGERAMENTE ACIDO	0.12
5232	CHQ-717	212.0	214.0	200	200	8550	7140	-0.9	LIGERAMENTE ACIDO	0.11
5233	CHQ-717	214.0	216.0	200	200	8550	7140	-0.9	LIGERAMENTE ACIDO	0.12
5234	CHQ-717	216.0	218.0	300	200	2160	1570	-0.1	LIGERAMENTE ACIDO	0.11
5235	CHQ-717	218.0	220.0	300	200	2160	1570	-0.1	LIGERAMENTE ACIDO	0.14
5236	CHQ-717	220.0	222.0	300	200	2160	1570	-0.1	LIGERAMENTE ACIDO	0.13
5237	CHQ-717	222.0	224.0	300	200	2160	1570	-0.1	LIGERAMENTE ACIDO	0.13
5238	CHQ-717	224.0	226.0	370	200	6380	4730	-0.6	LIGERAMENTE ACIDO	0.17
5239	CHQ-717	226.0	226.3	370	200	6380	4730	-0.6	LIGERAMENTE ACIDO	0.17
5240	CHQ-717	226.3	228.0	500	500	4770	1490	0.0	INERTE	0.17
5241	CHQ-717	228.0	230.0	370	200	6380	4730	-0.6	LIGERAMENTE ACIDO	0.21
5242	CHQ-717	230.0	231.6	370	200	6380	4730	-0.6	LIGERAMENTE ACIDO	0.20
5243	CHQ-717	231.6	232.0	200	200	4470	3570	-0.4	LIGERAMENTE ACIDO	0.17
5244	CHQ-717	232.0	234.0	200	200	4470	3570	-0.4	LIGERAMENTE ACIDO	0.17
5245	CHQ-717	234.0	236.0	200	200	4470	3570	-0.4	LIGERAMENTE ACIDO	0.12
5246	CHQ-717	236.0	238.0	200	200	4470	3570	-0.4	LIGERAMENTE ACIDO	0.21
5247	CHQ-717	238.0	240.0	200	200	4470	3570	-0.4	LIGERAMENTE ACIDO	0.21
5248	CHQ-717	240.0	242.0	200	200	2720	1940	-0.2	LIGERAMENTE ACIDO	0.56
5249	CHQ-717	242.0	244.0	200	200	2720	1940	-0.2	LIGERAMENTE ACIDO	0.22
5250	CHQ-717	244.0	246.0	200	200	2720	1940	-0.2	LIGERAMENTE ACIDO	0.17
5251	CHQ-717	246.0	248.0	200	200	2720	1940	-0.2	LIGERAMENTE ACIDO	0.10
5252	CHQ-717	250.0	252.0	200	200	5250	3620	-0.4	LIGERAMENTE ACIDO	0.12
5253	CHQ-717	252.0	254.0	200	200	5250	3620	-0.4	LIGERAMENTE ACIDO	0.18
5254	CHQ-717	254.0	255.7	500	500	4820	0	0.2	LIGERAMENTE BASICO	0.19
5255	CHQ-717	255.7	256.0	200	200	19990	18680	-2.5	ACIDO	0.19
5256	CHQ-717	256.0	258.0	200	200	19990	18680	-2.5	ACIDO	0.19
5257	CHQ-717	258.0	260.0	200	200	19990	18680	-2.5	ACIDO	0.14
5258	CHQ-717	260.0	262.0	200	200	19990	18680	-2.5	ACIDO	0.12
5259	CHQ-717	262.0	264.0	200	200	19990	18680	-2.5	ACIDO	0.14
5260	CHQ-717	264.0	264.2	200	200	19990	18680	-2.5	ACIDO	0.14
5261	CHQ-717	264.2	266.0	200	200	16310	15580	-2.1	ACIDO	0.14
5262	CHQ-717	266.0	268.0	200	200	16310	15580	-2.1	ACIDO	0.14
5263	CHQ-717	268.0	270.0	200	200	16310	15580	-2.1	ACIDO	0.17
5264	CHQ-717	270.0	272.0	200	200	16310	15580	-2.1	ACIDO	0.18
5265	CHQ-717	272.0	274.0	200	200	26710	25780	-3.5	ACIDO	0.33
5266	CHQ-717	274.0	276.0	200	200	26710	25780	-3.5	ACIDO	0.67
5267	CHQ-717	276.0	278.0	200	200	26710	25780	-3.5	ACIDO	0.23
5268	CHQ-717	278.0	280.0	200	200	26710	25780	-3.5	ACIDO	0.15
5269	CHQ-717	280.0	282.0	200	200	27900	27120	-3.6	ACIDO	0.16
5270	CHQ-717	282.0	284.0	200	200	27900	27120	-3.6	ACIDO	0.19
5271	CHQ-717	284.0	286.0	200	200	27900	27120	-3.6	ACIDO	0.12
5272	CHQ-717	286.0	288.0	200	200	27900	27120	-3.6	ACIDO	0.16
5273	CHQ-717	288.0	290.0	200	200	24590	23780	-3.2	ACIDO	0.21
5274	CHQ-717	290.0	292.0	200	200	24590	23780	-3.2	ACIDO	0.48
5275	CHQ-717	292.0	294.0	200	200	24590	23780	-3.2	ACIDO	0.24
5276	CHQ-717	294.0	296.0	200	200	24590	23780	-3.2	ACIDO	0.30
5277	CHQ-717	296.0	298.0	200	200	26810	25510	-3.4	ACIDO	0.39
5278	CHQ-717	298.0	300.0	200	200	26810	25510	-3.4	ACIDO	0.61
5279	CHQ-717	300.0	302.0	200	200	26810	25510	-3.4	ACIDO	2.73
5280	CHQ-717	302.0	304.0	200	200	26810	25510	-3.4	ACIDO	0.95
5281	CHQ-717	304.0	306.0	200	200	49460	41270	-5.6	ACIDO	0.90
5282	CHQ-717	306.0	307.4	500	500	78790	76880	-10.3	ACIDO	0.76
5283	CHQ-717	307.4	308.0	200	200	49460	41270	-5.6	ACIDO	0.78
5284	CHQ-717	308.0	310.0	200	200	49460	41270	-5.6	ACIDO	1.22
5285	CHQ-717	310.0	312.0	200	200	49460	41270	-5.6	ACIDO	0.87
5286	CHQ-717	398.0	400.0	500	500	51390	32150	-4.2	ACIDO	1.60
5287	CHQ-717	406.0	407.6	500	500	35220	30050	-3.9	ACIDO	0.83
5288	CHQ-718	272.0	273.4	500	500	1790	0	0.2	LIGERAMENTE BASICO	0.16
5289	CHQ-718	278.0	280.0	500	500	23620	17190	-2.2	ACIDO	0.71
5290	CHQ-718	296.0	298.1	500	500	35180	23400	-3.0	ACIDO	1.12
5291	CHQ-718	322.0	323.3	500	500	56180	53300	-7.1	ACIDO	1.98
5292	CHQ-719	136.0	144.0	200	200	390	70	0.1	INERTE	0.15
5293	CHQ-719	144.0	152.0	200	200	550	0	0.1	INERTE	0.28
5294	CHQ-721	124.0	132.0	200	200	330	0	0.1	INERTE	0.11
5295	CHQ-721	132.0	140.0	200	200	240	0	0.1	INERTE	1.35
5296	CHQ-721	140.0	145.0	200	200	210	10	0.1	INERTE	1.06
5297	CHQ-724	90.0	96.0	370	200	790	0	0.1	INERTE	0.14
5298	CHQ-724	96.0	100.2	670	200	460	0	0.1	INERTE	0.33
5299	CHQ-742	10.0	20.0	21780	560	9150	1220	0.0	INERTE	0.17
5300	CHQ-742	40.0	50.0	420	200	2670	270	0.0	INERTE	0.13
5301	CHQ-742	150.0	160.0	900	200	480	0	0.1	INERTE	0.16
5302	CHQ-742	160.0	170.0	720	200	420	0	0.1	INERTE	0.17
5303	CHQ-742	170.0	180.0	830	200	720	0	0.1	INERTE	0.21
5304	CHQ-742	180.0	190.0	800	200	600	0	0.1	INERTE	0.28
5305	CHQ-742	190.0	200.0	780	200	490	0	0.1	INERTE	0.37
5306	CHQ-742	200.0	209.5	200	200	260	0	0.1	INERTE	0.94
5307	CHQ-742	209.5	220.0	200	200	230	0	0.1	INERTE	0.59
5308	CHQ-742	220.0	229.8	200	200	300	0	0.1	INERTE	0.52
5309	CHQ-742	229.8	240.5	200	200	440	0	0.1	INERTE	1.03
5310	CHQ-742	240.5	249.1	280	200	330	0	0.1	INERTE	0.83

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
5311	CHQ-742	249.1	260.0	230	200	300	0	0.1	INERTE	0.83
5312	CHQ-742	260.0	270.5	200	200	340	0	0.1	INERTE	0.61
5313	CHQ-742	270.5	280.0	200	200	1150	0	0.1	INERTE	0.62
5314	CHQ-742	280.0	290.0	200	200	1290	0	0.1	INERTE	0.48
5315	CHQ-742	290.0	300.0	200	200	940	40	0.1	INERTE	0.68
5316	CHQ-742	300.0	309.8	200	200	1220	30	0.1	INERTE	0.90
5317	CHQ-742	309.8	310.5	200	200	1220	30	0.1	INERTE	0.81
5318	CHQ-742	310.5	312.0	380	200	940	130	0.1	INERTE	0.93
5319	CHQ-742	312.0	314.0	380	200	940	130	0.1	INERTE	0.85
5320	CHQ-742	314.0	316.0	380	200	940	130	0.1	INERTE	0.88
5321	CHQ-742	316.0	318.0	380	200	940	130	0.1	INERTE	1.22
5322	CHQ-742	318.0	320.0	380	200	940	130	0.1	INERTE	1.65
5323	CHQ-742	320.0	322.0	630	200	940	0	0.1	INERTE	2.00
5324	CHQ-742	322.0	324.0	630	200	940	0	0.1	INERTE	1.52
5325	CHQ-742	324.0	326.0	630	200	940	0	0.1	INERTE	3.53
5326	CHQ-742	326.0	328.0	630	200	940	0	0.1	INERTE	5.16
5327	CHQ-742	328.0	330.0	630	200	940	0	0.1	INERTE	3.51
5328	CHQ-742	330.0	332.0	770	200	740	0	0.1	INERTE	3.85
5329	CHQ-742	332.0	334.0	770	200	740	0	0.1	INERTE	4.08
5330	CHQ-742	334.0	336.0	770	200	740	0	0.1	INERTE	2.68
5331	CHQ-742	336.0	338.0	770	200	740	0	0.1	INERTE	1.80
5332	CHQ-742	338.0	340.0	770	200	740	0	0.1	INERTE	1.84
5333	CHQ-742	340.0	340.5	770	200	740	0	0.1	INERTE	1.84
5334	CHQ-742	340.5	342.9	550	200	850	300	0.0	INERTE	1.83
5335	CHQ-742	342.9	349.5	550	200	850	300	0.0	INERTE	1.97
5336	CHQ-742	349.5	360.6	430	200	730	0	0.1	INERTE	2.39
5337	CHQ-742	360.6	368.6	670	200	810	270	0.0	INERTE	2.60
5338	CHQ-742	368.6	378.0	210	200	480	30	0.1	INERTE	1.61
5339	CHQ-742	378.0	388.7	240	200	1400	150	0.1	INERTE	2.43
5340	CHQ-742	388.7	398.9	420	200	920	0	0.1	INERTE	4.94
5341	CHQ-742	398.9	407.3	360	200	2220	60	0.1	INERTE	2.84
5342	CHQ-742	407.3	418.2	580	200	1470	0	0.1	INERTE	2.59
5343	CHQ-742	418.2	428.0	690	200	4300	300	0.0	INERTE	7.28
5344	CHQ-742	428.0	432.0	750	200	34790	24600	-3.3	ACIDO	1.63
5345	CHQ-742	432.0	434.0	750	200	34790	24600	-3.3	ACIDO	1.77
5346	CHQ-742	434.0	436.0	750	200	34790	24600	-3.3	ACIDO	1.41
5347	CHQ-742	436.0	438.0	750	200	34790	24600	-3.3	ACIDO	3.36
5348	CHQ-742	438.0	440.0	690	200	73470	54930	-7.5	ACIDO	1.74
5349	CHQ-742	440.0	442.0	690	200	73470	54930	-7.5	ACIDO	0.88
5350	CHQ-742	442.0	444.0	690	200	73470	54930	-7.5	ACIDO	3.84
5351	CHQ-742	444.0	446.0	690	200	73470	54930	-7.5	ACIDO	14.51
5352	CHQ-742	446.0	448.0	690	200	73470	54930	-7.5	ACIDO	11.96
5353	CHQ-742	448.0	450.0	640	200	84540	71350	-9.7	ACIDO	5.55
5354	CHQ-742	450.0	452.0	640	200	84540	71350	-9.7	ACIDO	2.19
5355	CHQ-742	452.0	454.0	640	200	84540	71350	-9.7	ACIDO	0.90
5356	CHQ-742	454.0	456.0	640	200	84540	71350	-9.7	ACIDO	3.38
5357	CHQ-742	456.0	457.6	640	200	84540	71350	-9.7	ACIDO	4.46
5358	CHQ-742	457.6	458.0	410	200	148700	122300	-16.7	ACIDO	4.05
5359	CHQ-742	458.0	460.0	410	200	148700	122300	-16.7	ACIDO	4.05
5360	CHQ-742	460.0	462.0	410	200	148700	122300	-16.7	ACIDO	2.73
5361	CHQ-742	462.0	464.0	410	200	148700	122300	-16.7	ACIDO	2.74
5362	CHQ-742	464.0	466.0	410	200	148700	122300	-16.7	ACIDO	0.72
5363	CHQ-742	466.0	467.5	410	200	148700	122300	-16.7	ACIDO	0.38
5364	CHQ-742	467.5	468.0	450	200	38930	23690	-3.2	ACIDO	0.30
5365	CHQ-742	468.0	470.0	450	200	38930	23690	-3.2	ACIDO	0.52
5366	CHQ-742	470.0	472.0	450	200	38930	23690	-3.2	ACIDO	0.71
5367	CHQ-742	472.0	474.0	450	200	38930	23690	-3.2	ACIDO	0.27
5368	CHQ-742	474.0	476.0	450	200	38930	23690	-3.2	ACIDO	0.18
5369	CHQ-742	476.0	478.0	450	200	38930	23690	-3.2	ACIDO	0.26
5370	CHQ-742	478.0	478.6	450	200	38930	23690	-3.2	ACIDO	0.28
5371	CHQ-742	478.6	480.0	690	200	25670	3800	-0.4	LIGERAMENTE ACIDO	1.12
5372	CHQ-742	480.0	482.0	690	200	25670	3800	-0.4	LIGERAMENTE ACIDO	0.92
5373	CHQ-742	482.0	484.0	690	200	25670	3800	-0.4	LIGERAMENTE ACIDO	1.21
5374	CHQ-742	484.0	486.0	690	200	25670	3800	-0.4	LIGERAMENTE ACIDO	0.81
5375	CHQ-742	486.0	488.0	690	200	25670	3800	-0.4	LIGERAMENTE ACIDO	0.87
5376	CHQ-742	488.0	490.0	530	200	34670	3040	-0.3	LIGERAMENTE ACIDO	0.66
5377	CHQ-742	490.0	492.0	530	200	34670	3040	-0.3	LIGERAMENTE ACIDO	0.60
5378	CHQ-742	492.0	494.0	530	200	34670	3040	-0.3	LIGERAMENTE ACIDO	0.47
5379	CHQ-742	494.0	497.3	530	200	34670	3040	-0.3	LIGERAMENTE ACIDO	0.59
5380	CHQ-742	497.3	508.5	440	200	59500	32430	-4.4	ACIDO	0.16
5381	CHQ-755	100.0	110.0	280	200	330	130	0.1	INERTE	0.11
5382	CHQ-755	149.5	150.0	200	200	200	0	0.1	INERTE	0.15
5383	CHQ-755	180.0	190.0	220	200	720	0	0.1	INERTE	0.14
5384	CHQ-755	190.0	200.0	250	200	2610	0	0.1	INERTE	0.34
5385	CHQ-755	200.0	210.0	200	200	1170	0	0.1	INERTE	0.46
5386	CHQ-755	210.0	220.0	200	200	2250	10	0.1	INERTE	0.39
5387	CHQ-755	220.0	230.0	200	200	1670	0	0.1	INERTE	0.29
5388	CHQ-755	230.0	240.0	410	200	1240	0	0.1	INERTE	1.31
5389	CHQ-755	240.0	249.7	490	200	1060	0	0.1	INERTE	1.60
5390	CHQ-755	249.7	250.0	200	200	340	0	0.1	INERTE	0.74
5391	CHQ-755	250.0	260.0	200	200	340	0	0.1	INERTE	0.43
5392	CHQ-755	260.0	260.7	200	200	340	0	0.1	INERTE	0.22
5393	CHQ-755	260.7	270.0	220	200	210	10	0.1	INERTE	0.25
5394	CHQ-755	270.0	280.0	250	200	200	0	0.1	INERTE	0.21
5395	CHQ-755	280.0	290.0	410	200	200	0	0.1	INERTE	0.60
5396	CHQ-755	290.0	300.0	250	200	200	0	0.1	INERTE	1.63
5397	CHQ-755	300.0	300.5	250	200	200	0	0.1	INERTE	2.12
5398	CHQ-755	300.5	310.0	420	200	200	0	0.1	INERTE	0.84
5399	CHQ-755	310.0	310.2	420	200	200	0	0.1	INERTE	0.25
5400	CHQ-755	310.2	320.0	210	200	200	0	0.1	INERTE	0.99
5401	CHQ-755	320.0	330.0	250	200	200	0	0.1	INERTE	0.49
5402	CHQ-755	330.0	340.0	350	200	450	60	0.1	INERTE	0.43
5403	CHQ-755	340.0	350.0	450	200	310	40	0.1	INERTE	1.38
5404	CHQ-755	350.0	359.1	720	200	790	270	0.0	INERTE	0.69
5405	CHQ-755	359.1	360.0	580	200	540	320	0.0	INERTE	1.03
5406	CHQ-755	360.0	366.2	580	200	540	320	0.0	INERTE	0.60
5407	CHQ-755	366.2	370.0	240	200	200	0	0.1	INERTE	0.80
5408	CHQ-755	370.0	372.0	240	200	200	0	0.1	INERTE	0.48
5409	CHQ-755	372.0	380.0	250	200	200	0	0.1	INERTE	0.29
5410	CHQ-755	380.0	380.5	250	200	200	0	0.1	INERTE	0.27
5411	CHQ-755	380.5	390.0	240	200	200	0	0.1	INERTE	0.66
5412	CHQ-755	390.0	400.0	200	200	200	0	0.1	INERTE	0.77
5413	CHQ-755	400.0	400.3	200	200	200	0	0.1	INERTE	1.54
5414	CHQ-755	400.3	410.0	210	200	370	0	0.1	INERTE	0.94
5415	CHQ-755	410.0	420.0	280	200	940	0	0.1	INERTE	3.03
5416	CHQ-755	420.0	421.0	280	200	940	0	0.1	INERTE	4.51
5417	CHQ-755	421.0	428.5	400	200	30190	27700	-3.7	ACIDO	1.64
5418	CHQ-755	428.5	430.0	500	500	54540	49250	-6.6	ACIDO	1.14
5419	CHQ-755	430.0	434.4	840	200	65750	62730	-8.5	ACIDO	2.31
5420	CHQ-755	434.4	436.0	500	500	82810	76130	-10.2	ACIDO	1.38
5421	CHQ-755	436.0	440.0	840	200	65750	62730	-8.5	ACIDO	1.30
5422	CHQ-755	440.0	440.5	840	200	65750	62730	-8.5	ACIDO	1.40
5423	CHQ-755	440.5	444.5	440	200	103000	99220	-13.5	ACIDO	1.86
5424	CHQ-755	444.5	446.0	500	500	77040	65270	-8.8	ACIDO	2.46
5425	CHQ-755	446.0	450.0	440	200	103000	99220	-13.5	ACIDO	2.74
5426	CHQ-755	450.0	452.0	500	500	130800	124110	-16.8	ACIDO	1.26
5427	CHQ-755	452.0	456.0	380	200	139400	110330	-15.0	ACIDO	0.76
5428	CHQ-755	456.0	458.4	500	500	103100	90350	-12.2	ACIDO	1.37
5429	CHQ-755	458.4	460.0	380	200	139400	110330	-15.0	ACIDO	1.11
5430	CHQ-755	460.0	462.9	380	200	139400	110330	-15.0	ACIDO	1.06

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
5431	CHQ-760	0.0	10.0	1580	380	660	240	0.1	LIGERAMENTE BASICO	0.12
5432	CHQ-760	10.0	20.0	810	360	1170	450	0.1	INERTE	0.16
5433	CHQ-760	70.0	80.0	1290	340	450	50	0.1	LIGERAMENTE BASICO	0.13
5434	CHQ-760	80.0	90.0	1800	330	330	30	0.1	LIGERAMENTE BASICO	0.96
5435	CHQ-760	90.0	100.0	1340	360	370	90	0.1	LIGERAMENTE BASICO	0.61
5436	CHQ-760	100.0	110.0	2630	400	440	0	0.1	LIGERAMENTE BASICO	0.19
5437	CHQ-760	110.0	120.0	1100	440	610	40	0.2	LIGERAMENTE BASICO	0.19
5438	CHQ-760	120.0	130.0	940	440	320	0	0.2	LIGERAMENTE BASICO	0.52
5439	CHQ-760	130.0	140.0	1410	380	340	40	0.1	LIGERAMENTE BASICO	2.05
5440	CHQ-760	140.0	150.0	870	340	660	60	0.1	LIGERAMENTE BASICO	1.94
5441	CHQ-760	150.0	160.0	660	320	230	30	0.1	LIGERAMENTE BASICO	0.15
5442	CHQ-760	220.0	230.0	1200	330	320	0	0.1	LIGERAMENTE BASICO	0.12
5443	CHQ-762	0.0	10.0	950	200	570	270	0.0	INERTE	0.26
5444	CHQ-762	10.0	20.0	1510	200	200	0	0.1	INERTE	0.30
5445	CHQ-762	20.0	30.0	780	200	200	0	0.1	INERTE	0.49
5446	CHQ-762	30.0	40.0	1040	200	580	170	0.1	INERTE	0.77
5447	CHQ-762	80.0	90.0	1300	200	580	20	0.1	INERTE	0.10
5448	CHQ-762	90.0	100.0	1100	200	520	100	0.1	INERTE	0.30
5449	CHQ-762	100.0	110.0	1410	200	470	50	0.1	INERTE	0.11
5450	CHQ-762	120.0	130.0	1560	200	590	40	0.1	INERTE	0.16
5451	CHQ-762	130.0	140.0	810	200	200	0	0.1	INERTE	0.15
5452	CHQ-762	140.0	150.0	1640	200	490	20	0.1	INERTE	0.18
5453	CHQ-762	150.0	160.0	1000	200	1050	10	0.1	INERTE	0.53
5454	CHQ-762	160.0	170.0	740	200	560	40	0.1	INERTE	0.12
5455	CHQ-762	180.0	190.0	1440	200	360	70	0.1	INERTE	0.16
5456	CHQ-762	190.0	200.0	780	200	310	50	0.1	INERTE	0.20
5457	CHQ-764	280.0	289.7	2100	200	6340	4850	-0.6	LIGERAMENTE ACIDO	0.12
5458	CHQ-764	309.6	320.0	1440	200	49220	47130	-6.4	ACIDO	0.13
5459	CHQ-764	320.0	330.6	1490	200	49570	47280	-6.4	ACIDO	0.11
5460	CHQ-764	330.6	341.0	510	540	32110	29850	-3.9	ACIDO	0.25
5461	CHQ-764	341.0	350.4	490	560	38760	32770	-4.3	ACIDO	0.31
5462	CHQ-764	350.4	361.0	700	690	59830	48850	-6.4	ACIDO	0.45
5463	CHQ-764	361.0	371.9	520	620	64270	57240	-7.6	ACIDO	0.51
5464	CHQ-764	371.9	381.3	430	520	67400	60590	-8.1	ACIDO	0.46
5465	CHQ-764	381.3	390.8	420	670	52680	43030	-5.6	ACIDO	0.59
5466	CHQ-764	390.8	401.0	380	520	55790	43490	-5.8	ACIDO	0.85
5467	CHQ-764	401.0	411.1	410	1380	61310	55570	-7.1	ACIDO	0.48
5468	CHQ-764	411.1	421.0	420	560	66120	60800	-8.1	ACIDO	1.61
5469	CHQ-764	421.0	431.0	380	480	70890	60240	-8.1	ACIDO	0.63
5470	CHQ-764	431.0	441.0	390	520	98300	90580	-12.2	ACIDO	0.34
5471	CHQ-764	441.0	450.1	390	550	98860	92390	-12.5	ACIDO	0.15
5472	CHQ-769	2.0	10.0	1180	390	13330	1080	0.0	INERTE	0.18
5473	CHQ-769	10.0	20.0	1620	290	19490	3850	-0.4	LIGERAMENTE ACIDO	0.18
5474	CHQ-790	0.0	10.0	500	500	12880	2410	-0.1	LIGERAMENTE ACIDO	0.22
5475	CHQ-790	10.0	20.0	200	50	13700	2200	-0.3	LIGERAMENTE ACIDO	0.16
5476	CHQ-792	140.0	150.0	200	200	440	30	0.1	INERTE	0.14
5477	CHQ-792	150.0	160.0	200	200	480	20	0.1	INERTE	0.15
5478	CHQ-792	160.0	170.0	200	200	480	80	0.1	INERTE	0.19
5479	CHQ-792	170.0	180.0	200	200	500	70	0.1	INERTE	0.15
5480	CHQ-792	180.0	190.0	200	200	450	10	0.1	INERTE	0.16
5481	CHQ-792	190.0	200.0	240	200	390	10	0.1	INERTE	0.41
5482	CHQ-792	200.0	209.5	200	200	320	40	0.1	INERTE	0.39
5483	CHQ-792	209.5	219.8	310	200	650	210	0.0	INERTE	0.40
5484	CHQ-792	219.8	229.5	270	200	620	210	0.0	INERTE	0.80
5485	CHQ-792	229.5	240.0	270	200	660	120	0.1	INERTE	0.60
5486	CHQ-792	240.0	251.0	220	200	800	130	0.1	INERTE	0.77
5487	CHQ-792	251.0	259.9	200	200	610	210	0.0	INERTE	0.98
5488	CHQ-792	259.9	270.0	200	200	770	240	0.0	INERTE	0.47
5489	CHQ-792	270.0	280.0	200	200	670	220	0.0	INERTE	0.46
5490	CHQ-792	280.0	289.5	290	200	730	340	0.0	INERTE	0.39
5491	CHQ-792	289.5	300.0	200	200	650	130	0.1	INERTE	0.87
5492	CHQ-792	300.0	310.0	280	200	3740	130	0.1	INERTE	1.22
5493	CHQ-792	310.0	320.9	300	200	920	140	0.1	INERTE	0.83
5494	CHQ-792	320.9	330.0	360	200	360	120	0.1	INERTE	0.34
5495	CHQ-792	330.0	340.7	380	200	330	20	0.1	INERTE	0.20
5496	CHQ-792	340.7	350.1	380	200	410	60	0.1	INERTE	0.95
5497	CHQ-792	350.1	359.7	610	200	520	0	0.1	INERTE	1.82
5498	CHQ-792	359.7	371.0	240	240	510	150	0.1	INERTE	1.83
5499	CHQ-792	371.0	381.5	330	200	1150	170	0.1	INERTE	7.16
5500	CHQ-792	381.5	390.0	620	200	123900	112060	-15.3	ACIDO	3.30
5501	CHQ-792	390.0	400.3	670	200	119700	110440	-15.1	ACIDO	0.97
5502	CHQ-792	400.3	409.5	830	200	134100	126510	-17.3	ACIDO	0.43
5503	CHQ-792	409.5	420.0	480	200	113400	97200	-13.2	ACIDO	0.54
5504	CHQ-792	420.0	429.3	610	200	98450	74470	-10.1	ACIDO	0.44
5505	CHQ-792	429.3	433.5	480	200	123200	95960	-13.1	ACIDO	0.56
5506	CHQ-829	150.0	160.0	280	200	420	0	0.1	INERTE	0.48
5507	CHQ-829	160.0	169.7	200	200	430	0	0.1	INERTE	0.29
5508	CHQ-829	169.7	177.9	210	200	420	0	0.1	INERTE	0.28
5509	CHQ-829	177.9	190.0	400	200	770	130	0.1	INERTE	0.48
5510	CHQ-829	190.0	199.9	370	200	500	0	0.1	INERTE	0.67
5511	CHQ-829	199.9	210.0	730	200	560	0	0.1	INERTE	0.54
5512	CHQ-829	210.0	220.0	740	200	460	0	0.1	INERTE	0.53
5513	CHQ-829	220.0	229.8	930	200	470	0	0.1	INERTE	0.28
5514	CHQ-829	229.8	240.0	200	200	570	0	0.1	INERTE	0.37
5515	CHQ-829	240.0	250.5	200	200	480	0	0.1	INERTE	0.60
5516	CHQ-829	250.5	259.5	200	200	630	0	0.1	INERTE	0.91
5517	CHQ-829	259.5	270.5	200	200	580	0	0.1	INERTE	0.87
5518	CHQ-829	270.5	280.0	200	200	810	200	0.0	INERTE	0.49
5519	CHQ-829	280.0	290.0	200	200	1660	230	0.0	INERTE	6.68
5520	CHQ-829	290.0	300.0	200	200	1370	0	0.1	INERTE	4.67
5521	CHQ-829	300.0	310.0	200	200	1100	300	0.0	INERTE	0.86
5522	CHQ-829	310.0	319.9	200	200	870	370	0.0	INERTE	0.64
5523	CHQ-829	319.9	329.7	200	200	960	30	0.1	INERTE	0.88
5524	CHQ-829	329.7	334.0	300	200	950	-50	0.1	INERTE	1.22
5525	CHQ-829	334.0	336.0	300	200	950	-50	0.1	INERTE	2.94
5526	CHQ-829	336.0	338.0	300	200	950	-50	0.1	INERTE	3.21
5527	CHQ-829	338.0	340.0	300	200	950	-50	0.1	INERTE	5.26
5528	CHQ-829	340.0	342.0	260	200	4060	2100	-0.2	LIGERAMENTE ACIDO	5.21
5529	CHQ-829	342.0	344.0	260	200	4060	2100	-0.2	LIGERAMENTE ACIDO	7.10
5530	CHQ-829	344.0	346.0	260	200	4060	2100	-0.2	LIGERAMENTE ACIDO	9.51
5531	CHQ-829	346.0	348.0	260	200	4060	2100	-0.2	LIGERAMENTE ACIDO	6.42
5532	CHQ-829	348.0	350.0	260	200	4060	2100	-0.2	LIGERAMENTE ACIDO	21.30
5533	CHQ-829	350.0	350.5	260	200	4060	2100	-0.2	LIGERAMENTE ACIDO	21.30
5534	CHQ-829	350.5	352.0	400	200	14010	9430	-1.2	ACIDO	11.07
5535	CHQ-829	352.0	354.0	400	200	14010	9430	-1.2	ACIDO	6.97
5536	CHQ-829	354.0	356.0	400	200	14010	9430	-1.2	ACIDO	2.99
5537	CHQ-829	356.0	358.0	400	200	14010	9430	-1.2	ACIDO	2.55
5538	CHQ-829	358.0	360.0	400	200	14010	9430	-1.2	ACIDO	3.06
5539	CHQ-829	360.0	362.0	270	200	22280	19050	-2.5	ACIDO	3.01
5540	CHQ-829	362.0	364.0	270	200	22280	19050	-2.5	ACIDO	2.97
5541	CHQ-829	364.0	366.0	270	200	22280	19050	-2.5	ACIDO	2.65
5542	CHQ-829	366.0	368.0	270	200	22280	19050	-2.5	ACIDO	3.14
5543	CHQ-829	368.0	370.0	270	200	22280	19050	-2.5	ACIDO	2.28
5544	CHQ-829	370.0	372.0	220	200	98150	93000	-12.7	ACIDO	2.72
5545	CHQ-829	372.0	374.0	220	200	98150	93000	-12.7	ACIDO	2.36
5546	CHQ-829	374.0	376.0	220	200	98150	93000	-12.7	ACIDO	1.42
5547	CHQ-829	376.0	378.0	220	200	98150	93000	-12.7	ACIDO	1.52
5548	CHQ-829	378.0	380.0	220	200	98150	93000	-12.7	ACIDO	7.10
5549	CHQ-829	380.0	382.0	200	200	115800	100220	-13.7	ACIDO	8.89
5550	CHQ-829	382.0	384.0	200	200	115800	100220	-13.7	ACIDO	2.22

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
5551	CHQ-829	384.0	386.0	200	200	115800	100220	-13.7	ACIDO	0.88
5552	CHQ-829	386.0	388.0	200	200	115800	100220	-13.7	ACIDO	0.46
5553	CHQ-829	388.0	389.5	200	200	115800	100220	-13.7	ACIDO	0.52
5554	CHQ-829	389.5	390.0	250	200	104200	88880	-12.1	ACIDO	0.69
5555	CHQ-829	390.0	392.0	250	200	104200	88880	-12.1	ACIDO	0.64
5556	CHQ-829	392.0	394.0	250	200	104200	88880	-12.1	ACIDO	0.42
5557	CHQ-829	394.0	396.0	250	200	104200	88880	-12.1	ACIDO	0.29
5558	CHQ-829	396.0	398.0	250	200	104200	88880	-12.1	ACIDO	0.61
5559	CHQ-829	398.0	399.8	250	200	104200	88880	-12.1	ACIDO	0.33
5560	CHQ-829	399.8	400.0	260	200	84820	48460	-6.6	ACIDO	0.13
5561	CHQ-829	400.0	402.0	260	200	84820	48460	-6.6	ACIDO	0.14
5562	CHQ-829	402.0	404.0	260	200	84820	48460	-6.6	ACIDO	0.15
5563	CHQ-829	404.0	406.0	260	200	84820	48460	-6.6	ACIDO	0.13
5564	CHQ-829	408.0	410.0	260	200	84820	48460	-6.6	ACIDO	0.21
5565	CHQ-983	30.0	40.0	600	100	900	300	0.0	INERTE	0.12
5566	CHQ-983	80.0	90.0	300	50	600	200	0.0	INERTE	0.11
5567	CHQ-CNX-001	50.0	52.0	700	20	390	0	0.0	INERTE	0.81
5568	CHQ-CNX-001	52.0	60.0	680	40	400	0	0.0	INERTE	0.39
5569	CHQ-CNX-001	76.0	80.0	300	40	340	10	0.0	INERTE	0.22
5570	CHQ-CNX-001	80.0	84.0	300	40	340	10	0.0	INERTE	0.11
5571	CHQ-CNX-001	150.0	152.0	1510	90	490	140	0.0	INERTE	0.16
5572	CHQ-CNX-002	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.10
5573	CHQ-CNX-002	190.0	196.0	1200	500	500	0	0.2	LIGERAMENTE BASICO	0.14
5574	CHQPZ-0003	312.0	320.0	580	200	1620	1060	-0.1	INERTE	0.16
5575	CHQPZ-0003	320.0	328.0	200	200	3170	2370	-0.3	LIGERAMENTE ACIDO	0.17
5576	CHQPZ-0003	336.0	344.0	200	200	2200	610	0.0	INERTE	0.13
5577	CHQPZ-0003	344.0	352.0	420	200	5440	1400	-0.1	LIGERAMENTE ACIDO	1.10
5578	CHQPZ-0003	352.0	360.0	420	200	17700	8950	-1.2	ACIDO	0.90
5579	ESC-003	0.0	10.0	2500	50	15400	10500	-1.4	ACIDO	0.20
5580	ESC-003	10.0	20.0	3200	50	33600	26900	-3.7	ACIDO	0.44
5581	ESC-003	20.0	30.0	2200	50	34300	25700	-3.5	ACIDO	0.55
5582	ESC-003	30.0	40.0	1900	50	31400	25400	-3.5	ACIDO	0.54
5583	ESC-003	40.0	50.0	1100	50	27200	18000	-2.4	ACIDO	0.74
5584	ESC-003	50.0	60.0	1300	800	38300	30000	-3.8	ACIDO	0.85
5585	ESC-003	60.0	70.0	1000	50	27600	18000	-2.4	ACIDO	0.49
5586	ESC-003	90.0	100.0	500	50	34800	26200	-3.6	ACIDO	0.40
5587	ESC-003	100.0	110.0	400	50	37400	30100	-4.1	ACIDO	0.44
5588	ESC-003	110.0	120.0	400	50	38000	30300	-4.1	ACIDO	0.43
5589	ESC-003	120.0	130.0	400	50	36000	28800	-3.9	ACIDO	0.44
5590	ESC-003	130.0	140.0	400	50	36400	29600	-4.0	ACIDO	0.62
5591	ESC-003	140.0	150.0	400	50	38000	29700	-4.1	ACIDO	0.47
5592	ESC-004	240.0	250.0	300	50	300	100	0.0	INERTE	0.10
5593	ESC-004	250.0	260.0	400	50	1300	700	-0.1	INERTE	0.11
5594	ESC-004	280.0	290.0	300	50	700	100	0.0	INERTE	0.11
5595	ESC-004	290.0	300.0	300	50	500	0	0.0	INERTE	0.30
5596	ESC-004	300.0	310.0	200	50	600	200	0.0	INERTE	0.14
5597	ESC-005	4.0	10.0	1300	50	200	100	0.0	INERTE	0.10
5598	ESC-005	10.0	19.9	500	50	100	50	0.0	INERTE	0.39
5599	ESC-005	19.9	30.0	1100	50	200	100	0.0	INERTE	0.18
5600	ESC-005	30.0	40.0	1200	50	1800	100	0.0	INERTE	0.11
5601	ESC-005	40.0	49.4	1100	50	8400	300	0.0	INERTE	0.35
5602	ESC-005	49.4	60.0	1400	50	38600	3200	-0.4	LIGERAMENTE ACIDO	0.22
5603	ESC-005	60.0	69.8	2500	50	15900	600	-0.1	INERTE	0.31
5604	ESC-005	69.8	80.0	2500	50	2600	100	0.0	INERTE	0.29
5605	ESC-005	80.0	90.0	700	50	2500	100	0.0	INERTE	0.22
5606	ESC-005	90.0	100.0	3000	50	31000	25100	-3.4	ACIDO	0.26
5607	ESC-005	100.0	110.0	4800	50	43500	37400	-5.1	ACIDO	0.26
5608	ESC-005	110.0	120.0	2300	50	42900	37300	-5.1	ACIDO	0.30
5609	ESC-005	120.0	130.0	2600	50	40900	36500	-5.0	ACIDO	0.27
5610	ESC-005	130.0	140.5	2000	50	20400	16900	-2.3	ACIDO	0.34
5611	ESC-005	140.5	150.0	3000	50	21800	17800	-2.4	ACIDO	1.15
5612	ESC-005	150.0	160.0	5400	50	29000	24600	-3.4	ACIDO	0.64
5613	ESC-005	160.0	170.0	1400	50	3000	100	0.0	INERTE	0.62
5614	ESC-005	170.0	179.8	2600	50	7000	3200	-0.4	LIGERAMENTE ACIDO	0.29
5615	ESC-005	179.8	190.7	700	50	46800	6800	-0.9	LIGERAMENTE ACIDO	0.28
5616	ESC-005	190.7	200.1	1300	50	20800	3500	-0.5	LIGERAMENTE ACIDO	0.61
5617	ESC-005	200.1	210.0	800	50	15100	1800	-0.2	LIGERAMENTE ACIDO	0.81
5618	ESC-005	210.0	220.0	2200	50	14300	2500	-0.3	LIGERAMENTE ACIDO	0.40
5619	ESC-005	220.0	230.0	3900	50	8500	700	-0.1	INERTE	0.44
5620	ESC-005	230.0	240.0	1100	50	37600	4800	-0.6	LIGERAMENTE ACIDO	0.51
5621	ESC-005	240.0	250.2	1100	50	49900	4600	-0.6	LIGERAMENTE ACIDO	0.43
5622	ESC-005	250.2	260.0	1300	50	46000	5700	-0.8	LIGERAMENTE ACIDO	0.74
5623	ESC-005	260.0	270.0	1100	50	41300	6300	-0.8	LIGERAMENTE ACIDO	0.26
5624	ESC-005	270.0	280.0	700	50	42300	5700	-0.8	LIGERAMENTE ACIDO	0.30
5625	ESC-005	280.0	290.0	900	50	30900	6100	-0.8	LIGERAMENTE ACIDO	0.42
5626	ESC-005	290.0	300.0	900	50	35300	6600	-0.9	LIGERAMENTE ACIDO	0.35
5627	ESC-005	300.0	309.3	1000	50	34700	5800	-0.8	LIGERAMENTE ACIDO	0.47
5628	ESC-005	309.3	320.0	300	50	22600	4900	-0.7	LIGERAMENTE ACIDO	0.52
5629	ESC-005	320.0	329.8	400	50	14800	3100	-0.4	LIGERAMENTE ACIDO	0.78
5630	ESC-005	329.8	340.0	500	50	34300	6300	-0.8	LIGERAMENTE ACIDO	0.51
5631	ESC-005	340.0	350.0	500	50	76900	6800	-0.9	LIGERAMENTE ACIDO	1.33
5632	ESC-005	350.0	360.0	400	50	76900	9400	-1.3	ACIDO	1.03
5633	ESC-005	360.0	370.5	700	50	67500	8400	-1.1	ACIDO	0.67
5634	ESC-005	370.5	380.0	800	50	75800	10500	-1.4	ACIDO	0.66
5635	ESC-005	380.0	389.6	400	50	58300	7900	-1.1	ACIDO	1.32
5636	GEO-004	20.0	30.0	300	200	1100	200	0.0	INERTE	0.15
5637	GEO-004	40.0	50.0	600	200	34900	1100	-0.1	INERTE	0.16
5638	GEO-004	50.0	60.0	200	100	29500	3600	-0.5	LIGERAMENTE ACIDO	0.29
5639	GEO-004	60.0	70.0	1500	200	7400	300	0.0	INERTE	0.29
5640	LL-001	30.0	40.0	450	200	550	60	0.1	INERTE	0.14
5641	LL-001	40.0	50.0	480	200	710	20	0.1	INERTE	0.21
5642	LL-001	50.0	60.0	410	200	500	30	0.1	INERTE	0.14
5643	LL-001	60.0	70.0	330	200	400	10	0.1	INERTE	0.12
5644	LL-001	79.7	90.0	520	200	600	90	0.1	INERTE	0.19
5645	LL-001	110.0	120.0	200	200	520	20	0.1	INERTE	2.13
5646	LL-001	190.0	200.0	320	200	860	20	0.1	INERTE	0.26
5647	LL-001	200.0	210.0	370	200	2160	1650	-0.2	LIGERAMENTE ACIDO	1.04
5648	LL-001	210.0	221.5	540	200	1300	1000	-0.1	INERTE	1.67
5649	LL-001	221.5	233.5	200	200	460	150	0.1	INERTE	1.02
5650	LL-001	233.5	236.0	250	200	178000	173440	-23.7	ACIDO	1.45
5651	LL-001	236.0	238.0	250	200	178000	173440	-23.7	ACIDO	1.17
5652	LL-001	238.0	239.8	250	200	178000	173440	-23.7	ACIDO	2.24
5653	LL-001	239.8	240.0	1400	200	120000	116610	-15.9	ACIDO	1.64
5654	LL-001	240.0	242.0	1400	200	120000	116610	-15.9	ACIDO	1.64
5655	LL-001	242.0	244.0	1400	200	120000	116610	-15.9	ACIDO	3.36
5656	LL-001	244.0	246.0	1400	200	120000	116610	-15.9	ACIDO	5.06
5657	LL-001	246.0	248.0	1400	200	120000	116610	-15.9	ACIDO	1.63
5658	LL-001	248.0	250.0	1400	200	120000	116610	-15.9	ACIDO	3.93
5659	LL-001	250.0	252.0	550	200	131000	128600	-17.5	ACIDO	11.77
5660	LL-001	252.0	254.0	550	200	131000	128600	-17.5	ACIDO	2.33
5661	LL-001	254.0	256.0	550	200	131000	128600	-17.5	ACIDO	1.97
5662	LL-001	256.0	258.0	550	200	131000	128600	-17.5	ACIDO	8.71
5663	LL-001	258.0	259.9	550	200	131000	128600	-17.5	ACIDO	1.63
5664	LL-001	259.9	260.0	200	200	45700	42210	-5.7	ACIDO	0.31
5665	LL-001	260.0	262.0	200	200	45700	42210	-5.7	ACIDO	0.31
5666	LL-001	262.0	264.0	200	200	45700	42210	-5.7	ACIDO	0.37
5667	LL-001	264.0	266.0	200	200	45700	42210	-5.7	ACIDO	3.17
5668	LL-001	266.0	268.0	200	200	45700	42210	-5.7	ACIDO	3.65
5669	LL-001	268.0	270.0	200	200	45700	42210	-5.7	ACIDO	0.64
5670	LL-001	270.0	272.0	200	200	51300	43880	-5.9	ACIDO	0.17

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
5671	LL-001	272.0	274.0	200	200	51300	43880	-5.9	ACIDO	0.26
5672	LL-001	274.0	276.0	200	200	51300	43880	-5.9	ACIDO	0.32
5673	LL-001	276.0	278.0	200	200	51300	43880	-5.9	ACIDO	0.15
5674	LL-001	278.0	279.7	200	200	51300	43880	-5.9	ACIDO	0.22
5675	LL-001	279.7	280.0	280	200	78800	53070	-7.2	ACIDO	5.66
5676	LL-001	280.0	282.0	280	200	78800	53070	-7.2	ACIDO	5.41
5677	LL-001	282.0	284.0	280	200	78800	53070	-7.2	ACIDO	0.60
5678	LL-001	284.0	286.0	280	200	78800	53070	-7.2	ACIDO	0.15
5679	LL-001	288.0	290.0	280	200	78800	53070	-7.2	ACIDO	0.12
5680	LL-001	290.0	292.0	800	200	29300	26230	-3.5	ACIDO	0.57
5681	LL-001	292.0	294.0	800	200	29300	26230	-3.5	ACIDO	0.68
5682	LL-001	294.0	296.0	800	200	29300	26230	-3.5	ACIDO	0.12
5683	LL-001	296.0	298.0	800	200	29300	26230	-3.5	ACIDO	0.14
5684	LL-001	299.8	300.0	380	200	33000	26600	-3.6	ACIDO	0.14
5685	LL-001	300.0	302.0	380	200	33000	26600	-3.6	ACIDO	0.20
5686	LL-001	302.0	304.0	380	200	33000	26600	-3.6	ACIDO	0.32
5687	LL-001	304.0	306.0	380	200	33000	26600	-3.6	ACIDO	0.14
5688	LL-001	310.0	320.0	340	200	54700	32800	-4.4	ACIDO	0.27
5689	LL-001	320.0	326.1	1570	200	64700	27230	-3.7	ACIDO	0.21
5690	LL-002	0.0	10.0	1290	370	1530	0	0.1	LIGERAMENTE BASICO	0.12
5691	LL-002	10.0	20.0	760	200	960	0	0.1	INERTE	0.12
5692	LL-002	20.0	30.0	390	200	520	0	0.1	INERTE	0.25
5693	LL-002	30.0	40.0	260	200	600	0	0.1	INERTE	0.14
5694	LL-002	40.0	50.0	470	200	840	0	0.1	INERTE	0.17
5695	LL-002	90.0	100.0	1240	200	300	0	0.1	INERTE	0.28
5696	LL-002	100.0	110.0	530	200	530	0	0.1	INERTE	0.17
5697	LL-002	110.0	120.0	390	390	440	0	0.1	LIGERAMENTE BASICO	0.14
5698	LL-002	120.0	130.0	830	200	710	0	0.1	INERTE	0.40
5699	LL-002	140.0	150.0	550	200	890	0	0.1	INERTE	0.17
5700	LL-002	150.0	160.0	370	200	610	40	0.1	INERTE	2.20
5701	LL-002	160.0	170.0	200	200	390	0	0.1	INERTE	0.70
5702	LL-002	170.0	180.4	450	200	3880	30	0.1	INERTE	0.26
5703	LL-002	230.0	240.0	340	200	4130	0	0.1	INERTE	0.31
5704	LL-002	240.0	250.0	200	200	1600	0	0.1	INERTE	0.18
5705	LL-002	250.0	260.0	490	200	4730	610	0.0	INERTE	0.40
5706	LL-002	260.0	270.0	1820	200	9750	6130	-0.8	LIGERAMENTE ACIDO	2.39
5707	LL-002	270.0	275.8	980	200	3820	1010	-0.1	INERTE	1.42
5708	LL-002	275.8	280.0	600	200	50200	32190	-4.3	ACIDO	0.84
5709	LL-002	280.0	290.0	680	200	57000	35500	-4.8	ACIDO	1.40
5710	LL-002	290.0	300.0	1690	200	59200	22510	-3.0	ACIDO	1.27
5711	LL-002	300.0	311.5	670	200	34100	9750	-1.3	ACIDO	0.26
5712	LL-003	160.0	170.0	200	200	1150	170	0.1	INERTE	0.97
5713	LL-003	170.0	180.0	220	200	2630	540	0.0	INERTE	0.35
5714	LL-003	180.0	190.0	200	200	1890	470	0.0	INERTE	0.24
5715	LL-003	190.0	200.6	3110	200	4540	2750	-0.3	LIGERAMENTE ACIDO	0.25
5716	LL-003	220.0	229.7	200	200	1430	20	0.1	INERTE	0.11
5717	LL-003	240.0	247.5	290	200	2280	550	0.0	INERTE	0.21
5718	LL-003	247.5	250.0	300	200	64650	56340	-7.6	ACIDO	1.37
5719	LL-003	250.0	252.0	300	200	64650	56340	-7.6	ACIDO	1.26
5720	LL-003	252.0	253.2	300	200	64650	56340	-7.6	ACIDO	1.39
5721	LL-003	253.2	259.6	300	200	64650	56340	-7.6	ACIDO	7.35
5722	LL-003	259.6	260.8	200	200	9940	9110	-1.2	ACIDO	9.40
5723	LL-003	260.8	262.0	200	200	9940	9110	-1.2	ACIDO	9.40
5724	LL-003	262.0	264.0	200	200	9940	9110	-1.2	ACIDO	1.74
5725	LL-003	264.0	266.0	200	200	9940	9110	-1.2	ACIDO	0.80
5726	LL-003	266.0	268.0	200	200	9940	9110	-1.2	ACIDO	2.25
5727	LL-003	268.0	270.0	200	200	9940	9110	-1.2	ACIDO	3.57
5728	LL-003	270.0	270.5	200	200	9940	9110	-1.2	ACIDO	3.57
5729	LL-003	270.5	272.0	200	200	59280	58290	-7.9	ACIDO	4.47
5730	LL-003	272.0	274.0	200	200	59280	58290	-7.9	ACIDO	3.82
5731	LL-003	274.0	276.0	200	200	59280	58290	-7.9	ACIDO	3.41
5732	LL-003	276.0	278.0	200	200	59280	58290	-7.9	ACIDO	1.47
5733	LL-003	278.0	280.0	200	200	59280	58290	-7.9	ACIDO	1.51
5734	LL-003	280.0	282.0	200	200	56380	54760	-7.4	ACIDO	0.57
5735	LL-003	282.0	284.0	200	200	56380	54760	-7.4	ACIDO	0.47
5736	LL-003	284.0	286.0	200	200	56380	54760	-7.4	ACIDO	0.40
5737	LL-003	286.0	288.0	200	200	56380	54760	-7.4	ACIDO	0.35
5738	LL-003	288.0	290.0	200	200	56380	54760	-7.4	ACIDO	0.37
5739	LL-003	290.0	292.0	200	200	7170	5050	-0.6	LIGERAMENTE ACIDO	0.66
5740	LL-003	292.0	294.0	200	200	7170	5050	-0.6	LIGERAMENTE ACIDO	0.59
5741	LL-003	294.0	296.0	200	200	7170	5050	-0.6	LIGERAMENTE ACIDO	0.26
5742	LL-003	296.0	298.0	200	200	7170	5050	-0.6	LIGERAMENTE ACIDO	0.15
5743	LL-003	298.0	300.0	200	200	7170	5050	-0.6	LIGERAMENTE ACIDO	0.15
5744	LL-003	300.0	302.0	200	200	34730	34120	-4.6	ACIDO	0.17
5745	LL-003	304.0	306.0	200	200	34730	34120	-4.6	ACIDO	0.12
5746	LL-003	306.0	308.0	200	200	34730	34120	-4.6	ACIDO	0.19
5747	LL-003	308.0	310.0	200	200	34730	34120	-4.6	ACIDO	0.50
5748	LL-003	310.0	312.0	200	200	38000	37190	-5.0	ACIDO	0.23
5749	LL-003	312.0	314.0	200	200	38000	37190	-5.0	ACIDO	0.14
5750	LL-003	314.0	316.0	200	200	38000	37190	-5.0	ACIDO	0.65
5751	LL-003	316.0	318.0	200	200	38000	37190	-5.0	ACIDO	2.62
5752	LL-003	318.0	320.0	200	200	38000	37190	-5.0	ACIDO	4.27
5753	LL-003	320.0	322.0	200	200	28920	28410	-3.8	ACIDO	1.70
5754	LL-003	322.0	324.0	200	200	28920	28410	-3.8	ACIDO	0.45
5755	LL-003	324.0	326.0	200	200	28920	28410	-3.8	ACIDO	0.32
5756	LL-003	326.0	328.0	200	200	28920	28410	-3.8	ACIDO	0.63
5757	LL-003	328.0	329.6	200	200	28920	28410	-3.8	ACIDO	0.96
5758	LL-003	329.6	330.0	200	200	8170	4320	-0.5	LIGERAMENTE ACIDO	1.10
5759	LL-003	330.0	332.0	200	200	8170	4320	-0.5	LIGERAMENTE ACIDO	1.10
5760	LL-003	332.0	334.0	200	200	8170	4320	-0.5	LIGERAMENTE ACIDO	0.32
5761	LL-003	334.0	336.0	200	200	8170	4320	-0.5	LIGERAMENTE ACIDO	0.27
5762	LL-003	336.0	338.0	200	200	8170	4320	-0.5	LIGERAMENTE ACIDO	0.32
5763	LL-003	338.0	340.0	200	200	8170	4320	-0.5	LIGERAMENTE ACIDO	0.87
5764	LL-003	340.0	342.0	200	200	5380	3440	-0.4	LIGERAMENTE ACIDO	0.97
5765	LL-003	342.0	344.0	200	200	5380	3440	-0.4	LIGERAMENTE ACIDO	0.35
5766	LL-003	344.0	346.0	200	200	5380	3440	-0.4	LIGERAMENTE ACIDO	0.30
5767	LL-003	346.0	348.0	200	200	5380	3440	-0.4	LIGERAMENTE ACIDO	0.24
5768	LL-003	348.0	350.0	200	200	5380	3440	-0.4	LIGERAMENTE ACIDO	0.22
5769	LL-003	350.0	350.0	200	200	11850	10330	-1.3	ACIDO	0.37
5770	LL-003	350.0	352.0	200	200	11850	10330	-1.3	ACIDO	0.31
5771	LL-003	352.0	354.0	200	200	11850	10330	-1.3	ACIDO	0.27
5772	LL-003	354.0	356.0	200	200	11850	10330	-1.3	ACIDO	0.41
5773	LL-003	356.0	358.0	200	200	11850	10330	-1.3	ACIDO	0.38
5774	LL-003	358.0	360.0	200	200	11850	10330	-1.3	ACIDO	0.37
5775	QCMYBH1301	270.0	280.0	500	500	9280	3080	-0.2	LIGERAMENTE ACIDO	0.22
5776	QCMYBH1301	280.0	290.0	500	500	21610	15400	-1.9	ACIDO	0.95
5777	QCMYBH1301	290.0	300.3	500	500	7920	2920	-0.2	LIGERAMENTE ACIDO	0.27
5778	QCMYBH1303	130.0	140.0	500	500	10740	4010	-0.4	LIGERAMENTE ACIDO	0.25
5779	QCMYBH1303	140.0	150.0	500	500	13630	0	0.2	LIGERAMENTE BASICO	0.27
5780	QCMYBH1303	150.0	160.0	500	500	35570	27060	-3.5	ACIDO	0.21
5781	QCMYBH1303	160.0	170.0	500	500	34960	27820	-3.6	ACIDO	0.16
5782	QCMYBH1303	170.0	180.0	500	500	41360	35280	-4.6	ACIDO	0.12
5783	QCMYBH1303	180.0	190.0	500	500	39180	36080	-4.8	ACIDO	0.14
5784	QCMYBH1303	200.0	210.0	500	500	39240	35470	-4.7	ACIDO	0.21
5785	QCMYBH1303	210.0	220.0	500	500	35850	32700	-4.3	ACIDO	0.15
5786	QCMYBH1303	239.7	250.0	500	500	49280	38250	-5.1	ACIDO	0.17
5787	QCMYBH1303	250.0	260.0	500	500	26110	18730	-2.4	ACIDO	0.15
5788	QCMYBH1303	260.0	270.0	500	500	21120	18090	-2.3	ACIDO	0.18
5789	QCMYBH1303	270.0	280.1	500	500	58990	45030	-6.0	ACIDO	0.34
5790	QCMYBH1303	280.1	289.4	500	500	11600	4720	-0.5	LIGERAMENTE ACIDO	0.25

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
5791	QCMYBH1303	289.4	300.0	500	500	49870	35890	-4.7	ACIDO	0.20
5792	QCMYBH1501	410.2	420.0	400	100	200	100	0.0	INERTE	0.15
5793	QCMYBH1501	420.0	430.0	400	100	200	100	0.0	INERTE	0.19
5794	QCMYBH1501	470.0	480.0	1000	200	6000	5100	-0.6	LIGERAMENTE ACIDO	0.14
5795	QCMYBH1501	480.0	490.0	300	200	200	100	0.1	INERTE	0.14
5796	QCMYBH1501	490.0	500.0	400	50	400	100	0.0	INERTE	0.29
5797	QCMYBH1501	500.0	510.0	500	100	900	100	0.0	INERTE	2.13
5798	QCMYBH1501	510.0	520.0	400	100	700	100	0.0	INERTE	1.67
5799	QCMYBH1501	520.0	530.0	400	200	1200	300	0.0	INERTE	1.62
5800	QCMYBH1501	530.0	539.3	600	100	4000	2800	-0.3	LIGERAMENTE ACIDO	0.36
5801	QCMYBH1501	539.3	550.0	400	100	44300	40500	-5.5	ACIDO	0.14
5802	QCMYBH1501	550.0	560.0	500	200	51500	42800	-5.8	ACIDO	0.20
5803	QCMYBH1501	560.0	570.0	500	50	14500	10600	-1.4	ACIDO	0.18
5804	QCMYBH1501	570.0	577.7	800	100	35400	28200	-3.8	ACIDO	0.12
5805	QCMYBH1502	320.0	330.0	200	100	2300	1300	-0.1	LIGERAMENTE ACIDO	0.11
5806	QCMYBH1502	330.0	340.0	200	50	35300	14700	-2.0	ACIDO	0.16
5807	QCMYBH1502	340.0	350.0	200	50	67600	31200	-4.3	ACIDO	0.23
5808	QCMYBH1502	350.0	360.0	300	50	73800	44900	-6.1	ACIDO	0.12
5809	QCMYBH1502	360.0	370.0	300	50	46300	21700	-3.0	ACIDO	0.12
5810	QCMYBH1502	390.0	400.0	200	50	31900	23200	-3.2	ACIDO	0.15
5811	QCMYBH1502	480.0	489.7	100	50	42100	29500	-4.0	ACIDO	0.11
5812	QCMYBH1504	1.3	10.0	2400	200	10100	6100	-0.8	LIGERAMENTE ACIDO	0.59
5813	QCMYBH1504	10.0	20.0	2900	100	11900	8700	-1.2	ACIDO	0.33
5814	QCMYBH1504	20.0	30.0	4300	100	45300	41300	-5.6	ACIDO	0.17
5815	QCMYBH1504	30.0	40.0	7600	100	48100	45300	-6.2	ACIDO	0.31
5816	QCMYBH1504	40.0	50.0	7500	100	52500	50100	-6.8	ACIDO	0.34
5817	QCMYBH1504	50.0	60.0	900	100	31700	29400	-4.0	ACIDO	0.75
5818	QCMYBH1504	60.0	70.2	1000	50	27700	25200	-3.4	ACIDO	0.57
5819	QCMYBH1504	70.2	80.0	800	50	44400	41400	-5.7	ACIDO	0.46
5820	QCMYBH1504	80.0	90.0	700	50	36400	33500	-4.6	ACIDO	0.25
5821	QCMYBH1504	90.0	100.0	300	50	44400	42100	-5.7	ACIDO	0.27
5822	QCMYBH1504	100.0	110.0	1300	50	48500	46500	-6.4	ACIDO	0.20
5823	QCMYBH1504	110.0	119.7	1200	100	65700	63700	-8.7	ACIDO	0.24
5824	QCMYBH1504	119.7	129.8	900	100	3800	2000	-0.2	LIGERAMENTE ACIDO	0.45
5825	QCMYBH1504	129.8	140.0	600	50	20500	10600	-1.4	ACIDO	0.38
5826	QCMYBH1504	140.0	150.0	900	100	13900	7400	-1.0	LIGERAMENTE ACIDO	0.49
5827	QCMYBH1504	150.0	160.0	6700	50	16300	14000	-1.9	ACIDO	0.15
5828	QCMYBH1504	160.0	170.2	1000	50	46300	25800	-3.5	ACIDO	0.27
5829	QCMYBH1504	170.2	180.0	400	50	27500	13900	-1.9	ACIDO	0.29
5830	QCMYBH1504	180.0	190.0	600	50	35500	16800	-2.3	ACIDO	0.32
5831	QCMYBH1504	190.0	200.0	1000	50	4300	1400	-0.2	LIGERAMENTE ACIDO	0.17
5832	QCMYBH1504	200.0	210.0	700	50	36500	14200	-1.9	ACIDO	0.30
5833	QCMYBH1504	210.0	220.0	600	50	30600	17200	-2.3	ACIDO	0.46
5834	QCMYBH1504	220.0	230.0	1000	50	41600	19500	-2.7	ACIDO	0.58
5835	QCMYBH1504	230.0	240.0	1200	50	24500	14400	-2.0	ACIDO	0.38
5836	QCMYBH1504	240.0	250.0	1300	50	20800	14500	-2.0	ACIDO	0.33
5837	QCMYBH1504	250.0	260.0	800	50	26000	19100	-2.6	ACIDO	0.37
5838	QCMYBH1504	260.0	269.8	200	50	500	200	0.0	INERTE	0.18
5839	QCMYBH1504	269.8	280.0	300	100	19900	9800	-1.3	ACIDO	0.12
5840	QCMYBH1504	290.0	299.7	1000	50	42400	35600	-4.9	ACIDO	0.10
5841	QCMYBH1504	299.7	310.0	200	50	18900	10400	-1.4	ACIDO	0.33
5842	QCMYBH1504	340.5	346.1	700	50	39500	27500	-3.7	ACIDO	0.11
5843	QUE-001	10.0	20.0	600	600	100	0	0.2	LIGERAMENTE BASICO	0.13
5844	QUE-001	20.0	30.0	900	200	400	0	0.1	INERTE	0.14
5845	QUE-001	40.0	50.0	700	50	200	0	0.0	INERTE	0.11
5846	QUE-001	50.0	60.0	600	50	300	100	0.0	INERTE	0.14
5847	QUE-001	60.0	70.0	600	100	200	0	0.0	INERTE	0.14
5848	QUE-001	80.0	90.0	700	100	200	0	0.0	INERTE	0.17
5849	QUE-001	120.0	130.0	400	50	200	0	0.0	INERTE	0.19
5850	QUE-001	140.0	150.0	900	200	600	0	0.1	INERTE	0.17
5851	QUE-001	150.0	160.0	1600	50	1000	0	0.0	INERTE	0.56
5852	QUE-001	160.0	170.0	1100	50	1400	0	0.0	INERTE	0.47
5853	QUE-001	170.0	180.0	500	50	700	0	0.0	INERTE	0.18
5854	QUE-001	180.0	189.8	1200	50	900	0	0.0	INERTE	0.28
5855	QUE-001	189.8	200.0	800	100	800	100	0.0	INERTE	0.27
5856	QUE-001	200.0	210.0	1200	100	400	100	0.0	INERTE	0.24
5857	QUE-001	210.0	220.0	1100	200	100	50	0.1	INERTE	0.24
5858	QUE-001E	90.0	100.0	900	50	100	0	0.0	INERTE	0.15
5859	QUE-001E	100.0	110.0	1400	100	100	0	0.0	INERTE	0.12
5860	QUE-001E	110.0	120.0	1300	50	100	0	0.0	INERTE	0.13
5861	QUE-001E	120.0	130.0	1200	50	100	0	0.0	INERTE	0.25
5862	QUE-001E	130.0	140.0	1900	50	100	0	0.0	INERTE	0.26
5863	QUE-001E	140.0	150.0	1300	300	100	0	0.1	LIGERAMENTE BASICO	0.27
5864	QUE-001E	150.0	160.0	700	50	200	0	0.0	INERTE	0.47
5865	QUE-001E	160.0	170.0	1100	50	200	0	0.0	INERTE	0.57
5866	QUE-001E	170.0	180.0	1400	50	200	0	0.0	INERTE	0.26
5867	QUE-001E	180.0	190.0	1400	50	200	0	0.0	INERTE	0.44
5868	QUE-001E	190.0	200.0	1500	50	200	0	0.0	INERTE	0.26
5869	QUE-002	0.5	10.0	1100	100	10000	5100	-0.7	LIGERAMENTE ACIDO	0.56
5870	QUE-002	10.0	20.0	700	100	19400	13600	-1.8	ACIDO	0.32
5871	QUE-002	20.0	30.0	1300	100	33600	26700	-3.6	ACIDO	0.57
5872	QUE-002	30.0	40.0	900	100	42000	34700	-4.7	ACIDO	0.37
5873	QUE-002	40.0	50.0	700	100	50500	42900	-5.8	ACIDO	0.21
5874	QUE-002	50.0	59.0	800	100	12000	1400	-0.2	LIGERAMENTE ACIDO	0.73
5875	QUE-002	61.5	70.0	800	100	700	100	0.0	INERTE	0.45
5876	QUE-002	70.0	80.0	400	100	600	100	0.0	INERTE	0.20
5877	QUE-002	80.0	90.0	600	100	500	100	0.0	INERTE	0.31
5878	QUE-002	90.0	100.0	800	100	600	100	0.0	INERTE	0.11
5879	QUE-002	100.0	109.9	700	100	600	100	0.0	INERTE	0.15
5880	QUE-003	90.0	100.0	3900	50	26900	17100	-2.3	ACIDO	0.11
5881	QUE-003	129.5	140.0	1900	50	28600	4600	-0.6	LIGERAMENTE ACIDO	0.12
5882	QUE-003	150.0	160.0	1000	50	40000	5100	-0.7	LIGERAMENTE ACIDO	0.28
5883	QUE-003	160.0	170.0	800	50	54500	4900	-0.7	LIGERAMENTE ACIDO	0.12
5884	QUE-003	170.0	179.9	500	50	66300	8500	-1.1	ACIDO	0.16
5885	QUE-003	179.9	190.0	500	50	47300	9500	-1.3	ACIDO	0.23
5886	QUE-003	190.0	200.0	300	50	56200	6600	-0.9	LIGERAMENTE ACIDO	0.28
5887	QUE-003	200.0	210.0	300	50	46800	6300	-0.8	LIGERAMENTE ACIDO	0.51
5888	QUE-003	210.0	220.0	400	50	42200	4400	-0.6	LIGERAMENTE ACIDO	0.31
5889	QUE-003	220.0	230.0	500	50	32300	4200	-0.6	LIGERAMENTE ACIDO	0.24
5890	QUE-003	230.0	240.0	400	50	20700	4000	-0.5	LIGERAMENTE ACIDO	0.27
5891	QUE-003	240.0	249.8	700	50	17700	2700	-0.4	LIGERAMENTE ACIDO	0.53
5892	QUE-003	249.8	259.8	700	50	22800	4000	-0.5	LIGERAMENTE ACIDO	0.30
5893	QUE-003	259.8	270.0	700	50	41200	10500	-1.4	ACIDO	0.45
5894	QUE-003	270.0	280.0	1000	50	29900	20800	-2.8	ACIDO	0.48
5895	QUE-003	280.0	290.0	2500	50	36700	25000	-3.4	ACIDO	0.65
5896	QUE-003	290.0	300.4	2000	50	4200	200	0.0	INERTE	0.84
5897	QUE-003	300.4	306.0	600	50	33900	7200	-1.0	LIGERAMENTE ACIDO	0.98
5898	QUE-004	6.0	10.2	1000	50	21500	2500	-0.3	LIGERAMENTE ACIDO	0.15
5899	QUE-004	20.0	30.0	200	50	400	200	0.0	INERTE	0.11
5900	QUE-004	30.0	40.0	100	50	300	200	0.0	INERTE	0.27
5901	QUE-004	40.0	50.0	200	50	300	250	0.0	INERTE	0.28
5902	QUE-004	50.0	60.0	100	50	300	200	0.0	INERTE	0.34
5903	QUE-004	60.0	70.0	500	50	500	0	0.0	INERTE	0.39
5904	QUE-004	70.0	80.0	600	50	600	100	0.0	INERTE	0.40
5905	QUE-004	80.0	90.0	300	50	900	200	0.0	INERTE	0.86
5906	QUE-004	90.0	100.0	400	50	600	100	0.0	INERTE	0.81
5907	QUE-004	100.0	110.0	100	50	500	200	0.0	INERTE	0.80
5908	QUE-004	110.0	120.0	300	50	500	100	0.0	INERTE	0.59
5909	QUE-004	120.0	130.0	400	50	800	200	0.0	INERTE	0.68
5910	QUE-004	130.0	140.0	400	50	1000	0	0.0	INERTE	0.40

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
5911	QUE-004	140.0	149.8	500	50	800	0	0.0	INERTE	0.78
5912	QUE-004	149.8	160.0	600	50	2200	0	0.0	INERTE	0.73
5913	QUE-004	160.0	170.3	700	50	2100	0	0.0	INERTE	0.86
5914	QUE-004	170.3	180.0	800	50	1400	0	0.0	INERTE	0.76
5915	QUE-004	180.0	190.0	600	50	700	0	0.0	INERTE	0.60
5916	QUE-004	190.0	200.0	500	50	400	0	0.0	INERTE	0.53
5917	QUE-004	200.0	210.0	300	50	500	0	0.0	INERTE	0.84
5918	QUE-004	210.0	220.0	400	50	400	0	0.0	INERTE	0.78
5919	QUE-004	220.0	230.2	300	50	500	100	0.0	INERTE	0.32
5920	QUE-004	230.2	240.0	200	50	300	100	0.0	INERTE	0.13
5921	QUE-004	240.0	250.2	400	50	300	0	0.0	INERTE	0.11
5922	QUE-004	290.0	300.0	600	100	200	100	0.0	INERTE	0.13
5923	QUE-004	300.0	310.0	400	300	200	100	0.1	INERTE	0.14
5924	QUE-004	310.0	320.0	500	100	200	100	0.0	INERTE	0.15
5925	QUE-005	16.0	20.0	300	100	300	100	0.0	INERTE	0.15
5926	QUE-005	70.0	80.0	200	50	200	100	0.0	INERTE	0.12
5927	QUE-005	100.0	110.0	200	50	200	100	0.0	INERTE	0.28
5928	QUE-005	110.0	120.0	50	50	300	100	0.0	INERTE	0.26
5929	QUE-005	120.0	130.0	200	50	200	100	0.0	INERTE	0.88
5930	QUE-005	130.0	140.0	300	50	200	100	0.0	INERTE	0.77
5931	QUE-005	140.0	150.0	200	50	200	100	0.0	INERTE	0.31
5932	QUE-005	150.0	160.0	300	50	1300	200	0.0	INERTE	0.28
5933	QUE-005	160.0	170.0	400	50	200	100	0.0	INERTE	0.39
5934	QUE-005	170.0	180.0	300	50	100	50	0.0	INERTE	0.38
5935	QUE-005	180.0	190.0	300	50	100	50	0.0	INERTE	0.32
5936	QUE-005	190.0	200.0	300	50	200	100	0.0	INERTE	0.30
5937	QUE-005	200.0	210.0	200	50	100	50	0.0	INERTE	0.17
5938	QUE-005	210.0	220.0	200	50	100	50	0.0	INERTE	0.12
5939	QUE-005	220.0	230.0	100	50	100	50	0.0	INERTE	0.11
5940	QUE-005	230.0	239.7	300	50	200	100	0.0	INERTE	0.20
5941	QUE-005	239.7	249.9	100	50	100	50	0.0	INERTE	0.77
5942	QUE-005	249.9	260.0	100	50	200	100	0.0	INERTE	1.57
5943	QUE-005	260.0	270.0	200	50	200	100	0.0	INERTE	2.01
5944	QUE-005	270.0	280.0	300	50	800	100	0.0	INERTE	0.89
5945	QUE-005	280.0	290.0	50	50	300	100	0.0	INERTE	0.48
5946	QUE-005	290.0	296.0	100	50	1200	300	0.0	INERTE	0.31
5947	QUE-005	300.3	310.0	500	500	1340	140	0.2	LIGERAMENTE BASICO	0.37
5948	QUE-005	310.0	319.7	500	500	1980	50	0.2	LIGERAMENTE BASICO	1.04
5949	QUE-005	319.7	330.0	500	500	1580	270	0.1	LIGERAMENTE BASICO	0.38
5950	QUE-005	330.0	340.3	500	500	1260	120	0.2	LIGERAMENTE BASICO	0.58
5951	QUE-005	340.3	350.0	500	500	4710	150	0.2	LIGERAMENTE BASICO	1.22
5952	QUE-005	350.0	360.0	500	500	15520	570	0.1	LIGERAMENTE BASICO	1.24
5953	QUE-005	360.0	370.0	500	500	34580	28400	-3.7	ACIDO	0.68
5954	QUE-005	370.0	380.0	500	500	55330	49880	-6.7	ACIDO	0.76
5955	QUE-007	0.0	10.0	2100	50	1200	0	0.0	INERTE	0.12
5956	QUE-007	10.0	19.8	2100	50	600	0	0.0	INERTE	0.14
5957	QUE-007	19.8	30.0	900	50	4300	100	0.0	INERTE	0.16
5958	QUE-007	40.5	50.0	700	50	500	0	0.0	INERTE	0.17
5959	QUE-007	50.0	60.0	900	50	400	0	0.0	INERTE	0.12
5960	QUE-007	70.0	80.0	600	50	400	0	0.0	INERTE	0.16
5961	QUE-007	80.0	90.0	800	50	300	0	0.0	INERTE	0.18
5962	QUE-007	90.0	100.0	1100	50	300	0	0.0	INERTE	0.18
5963	QUE-007	100.0	110.0	800	50	400	0	0.0	INERTE	0.21
5964	QUE-007	110.0	120.4	1500	50	13500	2000	-0.3	LIGERAMENTE ACIDO	0.20
5965	QUE-007	120.4	125.1	900	50	30500	5000	-0.7	LIGERAMENTE ACIDO	0.13
5966	QUE-007	140.2	150.5	900	50	30300	3100	-0.4	LIGERAMENTE ACIDO	0.21
5967	QUE-007	150.5	160.0	1300	50	5800	0	0.0	INERTE	0.12
5968	QUE-007	210.0	212.0	400	50	700	0	0.0	INERTE	0.16
5969	QUE-007	212.0	220.0	400	50	700	0	0.0	INERTE	0.14
5970	QUE-007	230.0	239.8	1200	100	1400	200	0.0	INERTE	0.10
5971	QUE-007	239.8	250.0	100	50	800	200	0.0	INERTE	0.14
5972	QUE-007	250.0	259.7	200	100	200	100	0.0	INERTE	0.19
5973	QUE-007	259.7	269.5	300	50	200	0	0.0	INERTE	0.23
5974	QUE-007	269.5	280.0	200	100	100	50	0.0	INERTE	0.14
5975	QUE-009	99.9	110.4	700	50	49900	6200	-0.8	LIGERAMENTE ACIDO	0.26
5976	QUE-009	110.4	120.0	400	50	44800	4400	-0.6	LIGERAMENTE ACIDO	0.23
5977	QUE-009	120.0	130.0	900	50	51000	7000	-0.9	LIGERAMENTE ACIDO	0.18
5978	QUE-009	130.0	140.8	700	50	32400	5900	-0.8	LIGERAMENTE ACIDO	0.11
5979	QUE-009	150.0	160.3	800	50	47800	7900	-1.1	ACIDO	0.22
5980	QUE-009	160.3	170.0	1200	50	55700	8900	-1.2	ACIDO	0.33
5981	QUE-009	170.0	180.0	900	50	45000	9200	-1.2	ACIDO	0.42
5982	QUE-009	180.0	190.0	1300	50	21600	3700	-0.5	LIGERAMENTE ACIDO	0.39
5983	QUE-009	200.0	209.9	1100	50	32800	20900	-2.8	ACIDO	0.20
5984	QUE-009	209.9	220.0	1100	50	13500	1900	-0.2	LIGERAMENTE ACIDO	0.22
5985	QUE-009	220.0	230.0	1900	50	18500	2700	-0.4	LIGERAMENTE ACIDO	0.13
5986	QUE-009	230.0	240.0	1200	50	19100	3200	-0.4	LIGERAMENTE ACIDO	0.15
5987	QUE-009	240.0	248.0	1700	50	21700	4000	-0.5	LIGERAMENTE ACIDO	0.15
5988	QUE-009	250.0	260.0	500	500	17460	3180	-0.3	LIGERAMENTE ACIDO	0.11
5989	QUE-009	270.0	280.0	500	500	42000	32580	-4.3	ACIDO	0.10
5990	QUE-011	230.0	240.0	100	50	17900	3600	-0.5	LIGERAMENTE ACIDO	0.11
5991	QUE-011	270.0	279.7	200	50	7200	2100	-0.3	LIGERAMENTE ACIDO	0.10
5992	QUE-011	279.7	289.4	500	400	11600	2600	-0.2	LIGERAMENTE ACIDO	0.19
5993	QUE-011	289.4	300.0	100	50	8200	2400	-0.3	LIGERAMENTE ACIDO	0.15
5994	QUE-013	16.0	20.0	500	50	500	200	0.0	INERTE	0.18
5995	QUE-013	20.0	30.0	500	50	500	200	0.0	INERTE	0.21
5996	QUE-013	30.0	40.0	400	50	600	200	0.0	INERTE	0.18
5997	QUE-013	170.0	180.0	400	50	400	350	0.0	INERTE	0.11
5998	QUE-017	2.0	10.0	1700	50	4400	300	0.0	INERTE	0.30
5999	QUE-017	10.0	20.0	1200	50	41300	6900	-0.9	LIGERAMENTE ACIDO	0.26
6000	QUE-017	20.0	30.0	1000	50	50100	8000	-1.1	ACIDO	0.45
6001	QUE-017	30.0	40.0	900	50	48600	4100	-0.5	LIGERAMENTE ACIDO	0.15
6002	QUE-017	40.0	50.0	900	50	62100	4900	-0.7	LIGERAMENTE ACIDO	0.54
6003	QUE-017	50.0	60.0	1000	50	54100	5500	-0.7	LIGERAMENTE ACIDO	0.18
6004	QUE-017	60.0	70.0	700	50	44600	7500	-1.0	ACIDO	0.31
6005	QUE-017	70.0	80.0	500	50	47200	8400	-1.1	ACIDO	0.70
6006	QUE-017	80.0	90.0	200	50	57300	8600	-1.2	ACIDO	0.39
6007	QUE-017	90.0	100.0	500	50	63600	9500	-1.3	ACIDO	0.45
6008	QUE-017	100.0	110.0	500	50	52200	8600	-1.2	ACIDO	0.21
6009	QUE-017	110.0	120.0	500	50	57200	8900	-1.2	ACIDO	0.16
6010	QUE-017	120.0	129.8	800	50	44700	7400	-1.0	LIGERAMENTE ACIDO	0.17
6011	QUE-017	210.0	220.0	600	50	1100	200	0.0	INERTE	0.40
6012	QUE-017	220.0	230.0	500	50	900	100	0.0	INERTE	0.24
6013	QUE-017	230.0	240.0	500	50	1100	100	0.0	INERTE	0.31
6014	QUE-017	240.0	250.0	300	50	500	100	0.0	INERTE	0.94
6015	QUE-017	250.0	260.0	500	100	500	0	0.0	INERTE	3.45
6016	QUE-017	260.0	270.0	400	100	300	0	0.0	INERTE	0.99
6017	QUE-017	270.0	279.9	300	100	400	200	0.0	INERTE	0.98
6018	QUE-017	279.9	290.0	600	100	300	100	0.0	INERTE	1.28
6019	QUE-017	290.0	300.0	700	50	600	0	0.0	INERTE	1.81
6020	QUE-017	300.0	310.0	400	50	600	0	0.0	INERTE	2.11
6021	QUE-017	310.0	320.0	900	50	500	0	0.0	INERTE	2.32
6022	QUE-017	320.0	330.0	300	50	600	100	0.0	INERTE	1.17
6023	QUE-017	330.0	340.0	500	50	1000	0	0.0	INERTE	2.27
6024	QUE-017	340.0	350.0	700	50	900	0	0.0	INERTE	1.36
6025	QUE-017	350.0	360.0	500	50	800	0	0.0	INERTE	0.74
6026	QUE-017	360.0	369.8	500	50	1000	0	0.0	INERTE	0.79
6027	QUE-017	369.8	380.0	400	50	900	0	0.0	INERTE	0.76
6028	QUE-017	380.0	390.0	300	50	32200	30600	-4.2	ACIDO	0.54
6029	QUE-017	390.0	400.0	500	500	43460	42960	-5.7	ACIDO	0.41
6030	QUE-017	400.0	410.0	500	500	12750	12250	-1.5	ACIDO	0.48

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
6031	QUE-017	410.0	420.0	500	500	1530	1030	0.0	INERTE	0.30
6032	QUE-017	420.0	430.0	300	50	64400	20200	-2.7	ACIDO	0.48
6033	QUE-017	430.0	440.0	200	100	73500	17200	-2.3	ACIDO	0.89
6034	QUE-017	440.0	446.5	2100	400	45100	30700	-4.1	ACIDO	0.16
6035	QUE-020	0.0	10.0	700	100	2600	900	-0.1	INERTE	0.12
6036	QUE-020	70.0	80.0	200	100	200	100	0.0	INERTE	0.11
6037	QUE-020	80.0	90.0	100	50	100	50	0.0	INERTE	0.27
6038	QUE-020	90.0	100.0	300	100	100	50	0.0	INERTE	0.29
6039	QUE-020	102.2	109.8	500	50	200	0	0.0	INERTE	0.58
6040	QUE-020	109.8	120.0	400	50	300	0	0.0	INERTE	0.69
6041	QUE-020	120.0	129.6	500	50	300	0	0.0	INERTE	0.49
6042	QUE-020	129.6	139.0	400	50	300	0	0.0	INERTE	0.47
6043	QUE-020	140.8	150.5	500	50	300	100	0.0	INERTE	0.44
6044	QUE-020	150.5	160.0	600	50	400	0	0.0	INERTE	0.40
6045	QUE-020	160.0	170.0	500	50	300	0	0.0	INERTE	0.31
6046	QUE-020	180.0	190.0	300	50	200	0	0.0	INERTE	0.11
6047	QUE-020	190.0	199.5	400	50	200	100	0.0	INERTE	0.23
6048	QUE-020	199.5	210.0	300	50	300	100	0.0	INERTE	0.22
6049	QUE-020	210.0	220.0	300	100	300	100	0.0	INERTE	0.28
6050	QUE-020	220.0	230.0	500	100	200	0	0.0	INERTE	0.31
6051	QUE-020	230.0	240.0	400	50	300	100	0.0	INERTE	0.22
6052	QUE-020	240.0	250.0	400	50	200	0	0.0	INERTE	0.25
6053	QUE-020	250.0	260.0	500	50	300	0	0.0	INERTE	0.70
6054	QUE-020	260.0	270.0	200	50	200	0	0.0	INERTE	0.51
6055	QUE-020	270.0	278.0	300	50	200	100	0.0	INERTE	0.48
6056	QUE-020	280.0	290.0	400	100	300	100	0.0	INERTE	0.47
6057	QUE-020	290.0	300.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.39
6058	QUE-020	300.0	310.0	400	50	500	0	0.0	INERTE	0.93
6059	QUE-020	310.0	320.0	400	50	900	200	0.0	INERTE	0.94
6060	QUE-020	320.0	330.0	400	100	700	0	0.0	INERTE	0.71
6061	QUE-020	330.0	340.0	500	50	1300	0	0.0	INERTE	1.16
6062	QUE-020	340.0	350.0	500	50	2300	800	-0.1	INERTE	0.38
6063	QUE-021	0.0	10.0	900	50	2800	1200	-0.1	LIGERAMENTE ACIDO	0.12
6064	QUE-021	100.0	110.0	400	50	500	300	0.0	INERTE	0.12
6065	QUE-021	110.0	120.0	600	50	400	300	0.0	INERTE	0.20
6066	QUE-021	120.0	130.0	300	50	400	350	0.0	INERTE	0.13
6067	QUE-021	130.0	140.0	300	50	300	250	0.0	INERTE	0.18
6068	QUE-021	140.0	150.0	400	50	300	200	0.0	INERTE	0.16
6069	QUE-021	150.0	160.0	300	50	200	150	0.0	INERTE	0.18
6070	QUE-021	160.0	170.0	300	50	200	150	0.0	INERTE	0.20
6071	QUE-021	170.0	180.0	500	50	300	200	0.0	INERTE	0.37
6072	QUE-021	180.0	189.6	400	50	300	200	0.0	INERTE	0.23
6073	QUE-021	189.6	200.0	300	50	400	200	0.0	INERTE	0.23
6074	QUE-021	200.0	210.0	200	50	100	50	0.0	INERTE	0.13
6075	QUE-021	210.0	220.0	300	50	200	150	0.0	INERTE	0.12
6076	QUE-021	220.0	230.0	400	50	200	150	0.0	INERTE	0.11
6077	QUE-021	230.0	240.0	400	50	200	150	0.0	INERTE	0.18
6078	QUE-021	240.0	250.0	600	50	100	50	0.0	INERTE	0.12
6079	QUE-021	250.0	260.3	500	50	200	100	0.0	INERTE	0.62
6080	QUE-021	260.3	270.0	400	50	200	100	0.0	INERTE	0.26
6081	QUE-021	270.0	280.0	400	50	200	150	0.0	INERTE	0.34
6082	QUE-021	280.0	288.0	200	50	200	100	0.0	INERTE	0.41
6083	QUE-021	290.0	300.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
6084	QUE-021	300.0	310.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
6085	QUE-02E	40.0	50.0	600	50	200	0	0.0	INERTE	0.13
6086	QUE-02E	90.0	100.0	700	300	200	0	0.1	LIGERAMENTE BASICO	0.14
6087	QUE-02E	100.0	110.0	500	500	100	0	0.2	LIGERAMENTE BASICO	0.12
6088	QUE-02E	110.0	120.0	600	100	100	0	0.0	INERTE	0.17
6089	QUE-02E	180.0	190.0	800	800	200	0	0.3	LIGERAMENTE BASICO	0.17
6090	QUE-02E	190.0	200.0	800	500	100	0	0.2	LIGERAMENTE BASICO	0.10
6091	QUE-030	19.7	30.0	300	300	800	500	0.0	INERTE	0.10
6092	QUE-030	130.0	140.4	500	400	1200	0	0.1	LIGERAMENTE BASICO	0.15
6093	QUE-030	140.4	150.0	1000	50	1800	0	0.0	INERTE	0.23
6094	QUE-030	150.0	160.0	300	50	1700	100	0.0	INERTE	0.16
6095	QUE-030	160.0	170.0	400	50	600	100	0.0	INERTE	0.26
6096	QUE-030	170.0	180.0	500	50	800	0	0.0	INERTE	0.34
6097	QUE-030	180.0	192.1	500	50	400	100	0.0	INERTE	0.20
6098	QUE-032	80.3	90.0	700	50	600	100	0.0	INERTE	0.11
6099	QUE-035	140.0	150.0	400	50	44500	7900	-1.1	ACIDO	0.42
6100	QUE-035	150.0	160.0	900	50	29900	5700	-0.8	LIGERAMENTE ACIDO	0.84
6101	QUE-035	160.0	170.0	900	50	9900	2000	-0.3	LIGERAMENTE ACIDO	0.13
6102	QUE-035	170.0	180.0	1400	50	3200	200	0.0	INERTE	0.79
6103	QUE-035	180.0	190.0	800	50	1300	0	0.0	INERTE	0.38
6104	QUE-035	190.0	200.4	700	50	1000	0	0.0	INERTE	0.25
6105	QUE-041	10.0	20.0	400	200	38000	10600	-1.4	ACIDO	0.21
6106	QUE-041	40.0	50.0	400	50	42700	5400	-0.7	LIGERAMENTE ACIDO	0.25
6107	QUE-041	50.0	60.0	400	50	52000	9300	-1.3	ACIDO	0.41
6108	QUE-041	60.0	70.0	700	500	57900	8200	-0.9	LIGERAMENTE ACIDO	0.69
6109	QUE-041	70.0	80.0	500	200	59600	7700	-1.0	LIGERAMENTE ACIDO	0.21
6110	QUE-041	80.0	90.2	600	50	57300	9600	-1.3	ACIDO	0.41
6111	QUE-041	90.2	100.0	1000	100	46000	9600	-1.3	ACIDO	0.25
6112	QUE-041	100.0	110.4	600	50	50500	8300	-1.1	ACIDO	0.41
6113	QUE-041	110.4	120.0	500	50	60800	24400	-3.3	ACIDO	0.47
6114	QUE-041	120.0	129.6	1200	50	47300	9200	-1.2	ACIDO	0.55
6115	QUE-041	129.6	140.0	900	50	48800	9300	-1.3	ACIDO	0.81
6116	QUE-041	140.0	149.8	1100	50	48600	7500	-1.0	ACIDO	0.39
6117	QUE-041	149.8	160.2	700	50	40300	8900	-1.2	ACIDO	0.39
6118	QUE-041	160.2	170.0	800	100	42500	8600	-1.1	ACIDO	0.23
6119	QUE-041	170.0	180.0	1400	50	31700	6700	-0.9	LIGERAMENTE ACIDO	0.50
6120	QUE-041	180.0	190.0	700	50	3100	500	-0.1	INERTE	0.27
6121	QUE-041	190.0	200.0	1000	200	27100	7000	-0.9	LIGERAMENTE ACIDO	0.36
6122	QUE-041	200.0	210.2	1300	50	10000	7300	-1.0	LIGERAMENTE ACIDO	0.25
6123	QUE-041	210.2	220.0	1100	50	7700	1400	-0.2	LIGERAMENTE ACIDO	0.44
6124	QUE-041	220.0	230.0	50	50	2900	1000	-0.1	LIGERAMENTE ACIDO	0.47
6125	QUE-041	230.0	240.0	600	50	25600	100	0.0	INERTE	0.37
6126	QUE-041	240.0	250.0	16400	6200	37700	100	2.3	BASICO	0.64
6127	QUE-041	250.0	260.0	500	50	5900	2300	-0.3	LIGERAMENTE ACIDO	0.26
6128	QUE-041	260.0	270.0	500	50	800	0	0.0	INERTE	0.32
6129	QUE-041	270.0	280.0	200	100	3100	1000	-0.1	LIGERAMENTE ACIDO	0.33
6130	QUE-041	280.0	290.0	100	50	100	0	0.0	INERTE	0.34
6131	QUE-041	290.0	300.0	100	50	100	0	0.0	INERTE	0.32
6132	QUE-041	300.0	302.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.24
6133	QUE-041	302.0	310.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.63
6134	QUE-041	310.0	320.0	500	500	20490	7260	-0.8	LIGERAMENTE ACIDO	2.00
6135	QUE-041	320.0	330.0	500	500	62930	30720	-4.0	ACIDO	0.65
6136	QUE-041	330.0	338.0	500	500	54990	26840	-3.5	ACIDO	0.36
6137	QUE-041	338.0	340.0	500	500	54990	26840	-3.5	ACIDO	0.26
6138	QUE-041	340.0	350.0	600	200	47800	9800	-1.3	ACIDO	0.63
6139	QUE-041	350.0	360.0	300	100	11200	900	-0.1	INERTE	0.23
6140	QUE-041	360.0	370.0	400	300	5300	700	0.0	INERTE	0.17
6141	QUE-043	50.0	60.0	100	100	60600	8200	-1.1	ACIDO	0.11
6142	QUE-043	60.0	70.0	400	200	53500	9700	-1.3	ACIDO	0.32
6143	QUE-043	70.0	80.0	600	50	38900	6500	-0.9	LIGERAMENTE ACIDO	0.51
6144	QUE-043	80.0	90.0	700	50	46700	11300	-1.5	ACIDO	0.28
6145	QUE-043	90.0	100.0	800	50	59300	16300	-2.2	ACIDO	0.35
6146	QUE-043	100.0	110.0	300	50	66700	20800	-2.8	ACIDO	0.23
6147	QUE-043	110.0	119.6	100	50	34800	6500	-0.9	LIGERAMENTE ACIDO	0.21
6148	QUE-043	119.6	130.0	900	50	1400	400	0.0	INERTE	0.29
6149	QUE-043	130.0	140.0	1100	100	39200	6100	-0.8	LIGERAMENTE ACIDO	0.32
6150	QUE-043	140.0	149.4	1300	900	13400	2700	0.0	INERTE	0.33
6151	QUE-043	150.0	159.8	300	50	3900	1400	-0.2	LIGERAMENTE ACIDO	0.67
6152	QUE-043	159.8	170.4	100	50	18500	4700	-0.6	LIGERAMENTE ACIDO	0.43
6153	QUE-043	170.4	180.0	100	50	26300	6600	-0.9	LIGERAMENTE ACIDO	0.20
6154	QUE-043	180.0	190.0	400	50	4000	1500	-0.2	LIGERAMENTE ACIDO	0.17
6155	QUE-043	190.0	196.3	100	50	37400	8100	-1.1	ACIDO	0.28
6156	QUE-047	60.0	69.7	700	50	53100	8900	-1.2	ACIDO	0.26
6157	QUE-047	69.7	80.0	500	50	43400	10200	-1.4	ACIDO	0.38
6158	QUE-047	80.0	90.5	100	50	46800	10500	-1.4	ACIDO	0.14
6159	QUE-047	90.5	97.5	500	50	48000	8400	-1.1	ACIDO	0.51
6160	QUE-047	103.7	110.3	1300	50	86200	34500	-4.7	ACIDO	0.15
6161	QUE-047	110.3	120.0	500	50	44900	9700	-1.3	ACIDO	0.27
6162	QUE-047	120.0	132.9	600	200	54200	7000	-0.9	LIGERAMENTE ACIDO	0.46
6163	QUE-047	163.4	166.5	100	50	8300	2200	-0.3	LIGERAMENTE ACIDO	0.39
6164	QUE-047	187.4	198.0	500	50	51200	5500	-0.7	LIGERAMENTE ACIDO	0.24
6165	QUE-047	198.0	210.2	50	50	35800	5400	-0.7	LIGERAMENTE ACIDO	0.18
6166	QUE-047	210.2	220.0	100	50	18700	5300	-0.7	LIGERAMENTE ACIDO	0.16
6167	QUE-047	220.0	230.0	100	50	14500	4700	-0.6	LIGERAMENTE ACIDO	0.11
6168	QUE-047	230.0	240.0	200	50	5800	2100	-0.3	LIGERAMENTE ACIDO	0.12
6169	QUE-047	240.0	250.0	400	50	6100	2000	-0.3	LIGERAMENTE ACIDO	0.13
6170	QUE-047	250.0	260.0	800	50	5200	1300	-0.2	LIGERAMENTE ACIDO	0.32
6171	QUE-047	260.0	270.0	300	50	200	100	0.0	INERTE	0.44
6172	QUE-047	270.0	278.0	200	50	200	0	0.0	INERTE	0.53
6173	QUE-047	280.0	290.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.30
6174	QUE-047	290.0	300.0	500	500	500	0	0.2	LIGERAMENTE BASICO	2.27
6175	QUE-047	300.0	310.0	500	500	1120	0	0.2	LIGERAMENTE BASICO	6.67
6176	QUE-047	310.0	320.0	500	500	3150	240	0.2	LIGERAMENTE BASICO	2.65
6177	QUE-047	320.0	330.0	500	500	49140	6900	-0.8	LIGERAMENTE ACIDO	0.74
6178	QUE-047	330.0	340.0	500	500	30600	5560	-0.6	LIGERAMENTE ACIDO	0.33
6179	QUE-047	340.0	350.0	500	500	40170	13740	-1.7	ACIDO	0.44
6180	QUE-047	350.0	360.0	500	500	55400	45770	-6.1	ACIDO	1.43
6181	QUE-047	360.0	368.0	1100	500	34260	28870	-3.8	ACIDO	0.40
6182	QUE-047	370.0	380.2	400	200	85100	33500	-4.5	ACIDO	1.43
6183	QUE-047	380.2	390.0	700	100	41900	10400	-1.4	ACIDO	0.71
6184	QUE-047	390.0	399.7	700	200	50200	33900	-4.6	ACIDO	0.10
6185	QUE-048	190.0	200.1	100	50	36300	8900	-1.2	ACIDO	0.17
6186	QUE-048	200.1	210.2	100	50	300	100	0.0	INERTE	0.49
6187	QUE-048	210.2	220.0	100	50	500	100	0.0	INERTE	0.63
6188	QUE-048	220.0	230.0	100	50	1400	200	0.0	INERTE	0.23
6189	QUE-048	230.0	239.8	700	50	1400	200	0.0	INERTE	1.26
6190	QUE-048	239.8	250.0	500	50	900	0	0.0	INERTE	2.17
6191	QUE-048	250.0	260.0	400	50	2800	1000	-0.1	LIGERAMENTE ACIDO	0.95
6192	QUE-048	260.0	270.0	300	50	3300	1200	-0.1	LIGERAMENTE ACIDO	1.59
6193	QUE-048	270.0	280.0	300	50	7800	2900	-0.4	LIGERAMENTE ACIDO	1.65
6194	QUE-048	280.0	290.0	300	50	700	200	0.0	INERTE	0.29
6195	QUE-048	290.0	299.7	400	50	50	0	0.0	INERTE	0.32
6196	QUE-048	299.7	310.0	200	100	300	100	0.0	INERTE	0.25
6197	QUE-048	310.0	316.0	100	50	200	100	0.0	INERTE	0.14
6198	QUE-048	320.0	330.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.19
6199	QUE-048	330.0	340.0	500	500	8480	1310	0.0	INERTE	1.47
6200	QUE-048	340.0	350.3	500	500	8230	1440	0.0	INERTE	0.69
6201	QUE-048	350.3	360.0	500	500	3910	710	0.1	INERTE	0.42
6202	QUE-048	360.0	370.0	500	500	7380	560	0.1	LIGERAMENTE BASICO	0.49
6203	QUE-048	370.0	379.6	400	100	28000	12800	-1.7	ACIDO	0.16
6204	QUE-052	140.0	150.0	1600	100	33800	20700	-2.8	ACIDO	0.12
6205	QUE-053	0.0	10.0	2600	50	37800	8800	-1.2	ACIDO	0.29
6206	QUE-053	10.0	20.0	1400	50	21900	5700	-0.8	LIGERAMENTE ACIDO	0.19
6207	QUE-053	20.0	30.0	2700	50	700	0	0.0	INERTE	0.43
6208	QUE-053	30.0	40.0	1700	50	600	100	0.0	INERTE	0.42
6209	QUE-053	40.0	50.0	900	200	900	100	0.1	INERTE	0.23
6210	QUE-053	50.0	60.0	1000	50	500	100	0.0	INERTE	0.25
6211	QUE-053	60.0	70.0	1600	50	500	200	0.0	INERTE	0.38
6212	QUE-053	70.0	80.0	1200	50	400	100	0.0	INERTE	0.13
6213	QUE-053	80.0	90.0	800	50	400	100	0.0	INERTE	0.17
6214	QUE-053	100.0	110.0	1100	50	600	100	0.0	INERTE	0.12
6215	QUE-059	10.0	20.0	2200	400	9500	6500	-0.7	LIGERAMENTE ACIDO	0.14
6216	QUE-059	40.0	50.0	1300	500	2200	100	0.2	LIGERAMENTE BASICO	0.19
6217	QUE-059	60.0	70.0	1100	300	8100	900	0.0	INERTE	0.13
6218	QUE-060	60.0	70.0	50	50	1900	700	-0.1	INERTE	0.15
6219	QUE-060	80.0	90.0	600	50	22300	4200	-0.6	LIGERAMENTE ACIDO	0.14
6220	QUE-060	90.0	100.0	400	50	28500	6600	-0.9	LIGERAMENTE ACIDO	0.58
6221	QUE-060	100.0	110.0	500	50	21700	5400	-0.7	LIGERAMENTE ACIDO	0.98
6222	QUE-060	110.0	120.0	500	50	36800	8500	-1.1	ACIDO	1.11
6223	QUE-060	120.0	130.0	400	50	6900	1700	-0.2	LIGERAMENTE ACIDO	1.29
6224	QUE-060	130.0	140.0	400	50	700	0	0.0	INERTE	0.56
6225	QUE-060	140.0	150.0	400	50	800	100	0.0	INERTE	0.81
6226	QUE-060	150.0	160.0	300	50	900	0	0.0	INERTE	0.57
6227	QUE-060	160.0	170.1	600	50	1300	200	0.0	INERTE	0.24
6228	QUE-060	170.1	180.0	600	50	25600	5400	-0.7	LIGERAMENTE ACIDO	0.13
6229	QUE-060	180.0	190.0	50	50	3200	700	-0.1	INERTE	0.11
6230	QUE-060	190.0	200.0	300	50	27400	5600	-0.7	LIGERAMENTE ACIDO	0.14
6231	QUE-060	220.0	230.0	100	50	300	0	0.0	INERTE	0.11
6232	QUE-060	230.0	240.0	100	50	200	0	0.0	INERTE	0.22
6233	QUE-060	240.0	250.0	100	50	400	0	0.0	INERTE	0.35
6234	QUE-060	250.0	260.0	200	50	300	100	0.0	INERTE	0.25
6235	QUE-060	260.0	270.0	300	50	300	100	0.0	INERTE	0.13
6236	QUE-060	270.0	280.0	300	50	400	100	0.0	INERTE	0.26
6237	QUE-060	280.0	290.0	500	50	700	0	0.0	INERTE	0.26
6238	QUE-060	290.0	300.0	100	50	800	0	0.0	INERTE	0.53
6239	QUE-060	300.0	310.0	200	50	1000	100	0.0	INERTE	0.88
6240	QUE-060	310.0	320.0	300	50	1500	100	0.0	INERTE	1.51
6241	QUE-060	320.0	324.0	500	500	1370	0	0.2	LIGERAMENTE BASICO	0.65
6242	QUE-060	324.0	330.0	500	500	1370	0	0.2	LIGERAMENTE BASICO	1.57
6243	QUE-060	330.0	339.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.58
6244	QUE-060	339.6	349.8	500	500	49850	14140	-1.8	ACIDO	0.73
6245	QUE-060	349.8	360.3	500	500	25300	4270	-0.4	LIGERAMENTE ACIDO	0.73
6246	QUE-060	360.3	366.0	500	500	1060	560	0.1	LIGERAMENTE BASICO	0.22
6247	QUE-063	4.0	10.0	700	50	35200	8000	-1.1	ACIDO	0.17
6248	QUE-063	10.0	20.0	1700	50	24000	17500	-2.4	ACIDO	0.15
6249	QUE-063	20.0	30.0	3200	50	21800	15800	-2.1	ACIDO	0.20
6250	QUE-063	30.0	40.0	3000	100	45800	38900	-5.3	ACIDO	0.14
6251	QUE-063	40.0	50.0	2000	50	47000	40400	-5.5	ACIDO	0.16
6252	QUE-063	70.0	80.0	1700	50	39600	33200	-4.5	ACIDO	0.12
6253	QUE-063	80.0	90.0	2000	50	35600	30400	-4.1	ACIDO	0.24
6254	QUE-063	90.0	100.0	2100	50	38700	34100	-4.7	ACIDO	0.26
6255	QUE-063	120.0	129.9	1900	50	5800	3300	-0.4	LIGERAMENTE ACIDO	0.21
6256	QUE-063	129.9	140.1	1800	50	2000	0	0.0	INERTE	0.35
6257	QUE-063	140.1	150.0	300	50	28500	8200	-1.1	ACIDO	0.97
6258	QUE-063	150.0	160.0	400	50	14300	4000	-0.5	LIGERAMENTE ACIDO	0.61
6259	QUE-063	160.0	170.3	2000	50	11800	2900	-0.4	LIGERAMENTE ACIDO	0.38
6260	QUE-063	170.3	180.0	2200	50	1700	300	0.0	INERTE	0.52
6261	QUE-063	180.0	190.3	2300	100	16600	9000	-1.2	ACIDO	0.78
6262	QUE-063	190.3	200.0	300	50	8300	700	-0.1	INERTE	0.76
6263	QUE-063	200.0	210.0	2000	100	31300	25500	-3.5	ACIDO	0.61
6264	QUE-063	210.0	220.0	1000	50	13400	1700	-0.2	LIGERAMENTE ACIDO	1.00
6265	QUE-063	220.0	230.0	300	50	36500	7100	-1.0	LIGERAMENTE ACIDO	2.88
6266	QUE-063	230.0	240.0	200	50	36000	5000	-0.7	LIGERAMENTE ACIDO	1.94
6267	QUE-063	240.0	250.0	400	50	16700	4200	-0.6	LIGERAMENTE ACIDO	1.63
6268	QUE-063	250.0	260.0	200	50	55000	9000	-1.2	ACIDO	0.98
6269	QUE-063	260.0	270.0	200	50	54700	6800	-0.9	LIGERAMENTE ACIDO	1.03
6270	QUE-063	270.0	280.0	500	50	33100	5600	-0.7	LIGERAMENTE ACIDO	1.42
6271	QUE-063	280.0	290.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.89
6272	QUE-063	290.0	300.0	400	100	300	100	0.0	INERTE	0.50
6273	QUE-063	300.0	310.0	400	50	300	100	0.0	INERTE	0.47
6274	QUE-063	310.0	320.0	400	100	300	100	0.0	INERTE	0.79
6275	QUE-065	4.0	10.0	2000	50	6800	2700	-0.4	LIGERAMENTE ACIDO	0.12
6276	QUE-066	10.0	20.0	800	500	11800	4100	-0.4	LIGERAMENTE ACIDO	0.12
6277	QUE-066	20.0	30.0	1300	100	35000	7300	-1.0	LIGERAMENTE ACIDO	0.14
6278	QUE-066	50.0	60.0	800	100	22000	5900	-0.8	LIGERAMENTE ACIDO	0.11
6279	QUE-066	60.0	70.0	1500	200	35500	9000	-1.2	ACIDO	0.12
6280	QUE-066	70.0	80.0	800	50	23800	5300	-0.7	LIGERAMENTE ACIDO	0.22
6281	QUE-066	90.0	100.0	1000	100	23000	5000	-0.6	LIGERAMENTE ACIDO	0.15
6282	QUE-066	100.0	110.0	1000	50	12800	2100	-0.3	LIGERAMENTE ACIDO	0.29
6283	QUE-066	110.0	120.0	4100	100	11100	1900	-0.2	LIGERAMENTE ACIDO	0.27
6284	QUE-066	120.0	130.0	2000	100	47100	40900	-5.6	ACIDO	0.17
6285	QUE-066	130.0	140.0	1600	50	41400	36500	-5.0	ACIDO	0.28
6286	QUE-066	140.0	150.0	2200	50	57300	53600	-7.3	ACIDO	0.17
6287	QUE-066	150.0	160.0	2800	300	51400	48000	-6.5	ACIDO	0.49
6288	QUE-066	160.0	170.0	2500	50	57600	53600	-7.3	ACIDO	0.48
6289	QUE-066	170.0	180.0	1900	100	43200	31300	-4.3	ACIDO	0.46
6290	QUE-066	180.0	190.0	1000	300	30100	25900	-3.4	ACIDO	0.50
6291	QUE-066	190.0	200.0	2500	50	50800	46500	-6.4	ACIDO	0.35
6292	QUE-066	200.0	210.0	6200	100	49900	45200	-6.2	ACIDO	0.29
6293	QUE-066	210.0	220.0	4200	50	31300	14800	-2.0	ACIDO	0.27
6294	QUE-066	220.0	230.0	1600	50	48500	11500	-1.6	ACIDO	0.63
6295	QUE-066	230.0	240.0	1400	400	29700	16100	-2.1	ACIDO	0.32
6296	QUE-066	240.0	248.0	200	50	5600	4200	-0.6	LIGERAMENTE ACIDO	0.28
6297	QUE-066	248.0	250.0	600	50	7500	4500	-0.6	LIGERAMENTE ACIDO	0.47
6298	QUE-066	250.0	254.0	500	500	10210	7540	-0.8	LIGERAMENTE ACIDO	0.23
6299	QUE-066	254.0	260.0	500	500	10210	7540	-0.8	LIGERAMENTE ACIDO	0.22
6300	QUE-066	260.0	270.0	500	500	9550	4950	-0.5	LIGERAMENTE ACIDO	0.26
6301	QUE-066	270.0	280.0	500	500	21920	10370	-1.2	ACIDO	0.62
6302	QUE-066	280.0	290.0	500	500	33760	25080	-3.3	ACIDO	1.27
6303	QUE-066	290.0	300.0	1190	500	33240	29050	-3.8	ACIDO	1.02
6304	QUE-067	200.0	209.8	500	500	80210	24070	-3.1	ACIDO	0.14
6305	QUE-067	209.8	220.0	500	500	60230	8710	-1.0	ACIDO	0.13
6306	QUE-067	220.0	230.0	500	500	9090	1670	0.0	INERTE	0.13
6307	QUE-067	230.0	240.0	500	500	16490	2540	-0.2	LIGERAMENTE ACIDO	0.60
6308	QUE-067	240.0	250.0	500	500	11170	1310	0.0	INERTE	0.57
6309	QUE-067	250.0	260.0	500	500	58580	17660	-2.2	ACIDO	0.22
6310	QUE-067	260.0	270.0	1180	500	34180	3260	-0.3	LIGERAMENTE ACIDO	0.24
6311	QUE-067	270.0	280.0	1480	500	68060	17880	-2.3	ACIDO	0.29
6312	QUE-067	280.0	290.0	500	500	16830	9360	-1.1	ACIDO	0.59
6313	QUE-067	290.0	300.0	500	500	5330	660	0.1	INERTE	0.63
6314	QUE-067	300.0	310.0	500	500	6210	1490	0.0	INERTE	0.70
6315	QUE-067	310.0	318.0	500	500	6950	1940	-0.1	INERTE	0.88
6316	QUE-070	110.0	120.0	500	100	100	50	0.0	INERTE	0.20
6317	QUE-070	120.0	130.1	200	50	100	0	0.0	INERTE	0.11
6318	QUE-070	139.6	150.0	100	50	100	0	0.0	INERTE	0.20
6319	QUE-070	150.0	160.0	50	50	100	0	0.0	INERTE	0.20
6320	QUE-070	160.0	170.0	300	100	100	0	0.0	INERTE	0.22
6321	QUE-070	170.0	180.0	300	50	200	0	0.0	INERTE	0.21
6322	QUE-070	180.0	190.0	300	100	300	100	0.0	INERTE	0.14
6323	QUE-070	190.0	200.0	50	50	100	0	0.0	INERTE	0.12
6324	QUE-070	200.0	210.0	100	100	100	0	0.0	INERTE	0.18
6325	QUE-070	210.0	220.0	400	200	100	0	0.1	INERTE	0.31
6326	QUE-070	220.0	230.0	300	200	400	100	0.1	INERTE	0.29
6327	QUE-070	230.0	238.0	100	50	100	0	0.0	INERTE	0.37
6328	QUE-070	238.0	240.0	400	50	200	100	0.0	INERTE	0.16
6329	QUE-070	240.0	244.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.42
6330	QUE-070	244.0	250.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
6331	QUE-070	250.0	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.35
6332	QUE-070	260.0	270.0	500	300	300	100	0.1	INERTE	0.53
6333	QUE-070	270.0	280.0	400	300	300	100	0.1	INERTE	0.39
6334	QUE-070	280.0	290.0	600	300	400	100	0.1	INERTE	0.32
6335	QUE-070	290.0	300.0	400	200	1300	1000	-0.1	INERTE	0.27
6336	QUE-072	0.0	10.0	1100	100	6100	2100	-0.3	LIGERAMENTE ACIDO	0.10
6337	QUE-072	10.0	20.0	800	50	800	200	0.0	INERTE	0.18
6338	QUE-072	20.0	30.3	100	50	3300	900	-0.1	LIGERAMENTE ACIDO	0.12
6339	QUE-072	40.0	50.0	200	50	100	0	0.0	INERTE	0.13
6340	QUE-072	50.0	60.0	500	50	100	0	0.0	INERTE	0.17
6341	QUE-072	60.0	70.0	100	50	200	0	0.0	INERTE	0.24
6342	QUE-072	70.0	80.0	700	100	6300	1900	-0.2	LIGERAMENTE ACIDO	0.13
6343	QUE-072	80.0	90.0	1300	50	900	200	0.0	INERTE	0.26
6344	QUE-072	90.0	100.0	800	50	200	100	0.0	INERTE	0.41
6345	QUE-072	100.0	110.0	1000	50	200	0	0.0	INERTE	0.32
6346	QUE-072	110.0	120.0	1400	50	400	0	0.0	INERTE	0.31
6347	QUE-072	120.0	130.0	1300	50	300	0	0.0	INERTE	0.17
6348	QUE-072	130.0	139.6	2000	50	500	0	0.0	INERTE	0.10
6349	QUE-072	139.6	150.2	1200	50	300	0	0.0	INERTE	0.17
6350	QUE-072	150.2	160.0	300	50	200	0	0.0	INERTE	0.11
6351	QUE-072	170.1	180.0	500	50	200	0	0.0	INERTE	0.14
6352	QUE-072	180.0	190.1	200	50	200	0	0.0	INERTE	0.20
6353	QUE-072	190.1	200.0	400	50	200	0	0.0	INERTE	0.30
6354	QUE-072	209.7	214.0	500	300	300	100	0.1	INERTE	0.22
6355	QUE-072	214.0	220.0	500	300	300	100	0.1	INERTE	0.12
6356	QUE-072	220.0	230.0	500	300	200	100	0.1	INERTE	0.14
6357	QUE-072	230.0	240.0	500	200	300	100	0.1	INERTE	0.29
6358	QUE-072	240.0	250.0	500	200	200	100	0.1	INERTE	0.35
6359	QUE-072	250.0	260.0	700	200	400	100	0.1	INERTE	0.41
6360	QUE-074	220.0	230.0	500	500	35890	30210	-4.0	ACIDO	0.11
6361	QUE-086	0.0	9.7	700	50	25800	7200	-1.0	LIGERAMENTE ACIDO	0.15
6362	QUE-086	9.7	20.0	400	50	33900	9400	-1.3	ACIDO	0.18
6363	QUE-086	20.0	30.0	400	50	52300	11500	-1.6	ACIDO	0.19
6364	QUE-086	30.0	40.0	600	50	36400	10300	-1.4	ACIDO	0.25
6365	QUE-086	40.0	50.0	500	50	29400	8300	-1.1	ACIDO	0.27
6366	QUE-086	50.0	60.0	400	50	50300	8300	-1.1	ACIDO	0.19
6367	QUE-086	60.0	70.0	400	200	41200	9200	-1.2	ACIDO	0.21
6368	QUE-086	70.0	80.0	600	50	57900	9100	-1.2	ACIDO	0.21
6369	QUE-086	80.0	90.3	900	50	42000	8500	-1.1	ACIDO	0.24
6370	QUE-086	90.3	100.0	700	50	41300	10200	-1.4	ACIDO	0.20
6371	QUE-086	100.0	110.0	600	50	7800	100	0.0	INERTE	0.46
6372	QUE-086	110.0	120.0	600	50	32600	6800	-0.9	LIGERAMENTE ACIDO	0.39
6373	QUE-086	120.0	130.0	400	100	44500	8000	-1.1	ACIDO	0.36
6374	QUE-086	130.0	140.0	600	100	11600	500	0.0	INERTE	0.22
6375	QUE-086	150.0	160.0	1000	50	8900	2800	-0.4	LIGERAMENTE ACIDO	0.14
6376	QUE-086	160.0	170.0	500	50	15200	4300	-0.6	LIGERAMENTE ACIDO	0.42
6377	QUE-086	170.0	180.0	600	50	38200	7500	-1.0	ACIDO	0.51
6378	QUE-086	180.0	190.0	600	50	28900	6800	-0.9	LIGERAMENTE ACIDO	0.39
6379	QUE-086	190.0	200.0	400	50	33200	7100	-1.0	LIGERAMENTE ACIDO	0.57
6380	QUE-086	200.0	210.0	400	50	41100	9500	-1.3	ACIDO	1.02
6381	QUE-086	210.0	220.0	700	200	48100	11300	-1.5	ACIDO	1.63
6382	QUE-086	220.0	220.6	500	500	45470	3650	-0.3	LIGERAMENTE ACIDO	1.08
6383	QUE-086	220.6	230.2	500	500	45470	3650	-0.3	LIGERAMENTE ACIDO	0.67
6384	QUE-086	230.2	232.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.61
6385	QUE-086	232.0	240.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.05
6386	QUE-086	240.0	250.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
6387	QUE-086	250.0	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.21
6388	QUE-086	260.0	268.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
6389	QUE-093	120.0	130.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.13
6390	QUE-093	140.0	150.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.16

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
6391	QUE-093	150.0	160.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.11
6392	QUE-093	160.0	170.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.12
6393	QUE-093	170.0	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.19
6394	QUE-093	180.0	190.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
6395	QUE-093	190.0	200.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.23
6396	QUE-093	200.0	210.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.32
6397	QUE-093	210.0	220.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.32
6398	QUE-093	220.0	230.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.32
6399	QUE-093	230.0	240.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.72
6400	QUE-093	240.0	250.0	500	500	1160	0	0.2	LIGERAMENTE BASICO	2.33
6401	QUE-093	250.0	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.34
6402	QUE-093	260.0	270.0	500	500	1250	750	0.1	INERTE	1.24
6403	QUE-093	270.0	280.0	1000	500	500	0	0.2	LIGERAMENTE BASICO	0.53
6404	QUE-093	280.0	290.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.60
6405	QUE-093	290.0	298.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.50
6406	QUE-094	50.0	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.11
6407	QUE-094	60.0	70.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
6408	QUE-094	90.0	100.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.27
6409	QUE-094	100.0	110.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
6410	QUE-094	110.0	120.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.22
6411	QUE-094	120.0	130.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.11
6412	QUE-095	12.0	22.0	1200	100	53500	7900	-1.0	ACIDO	0.14
6413	QUE-096	40.0	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.13
6414	QUE-096	110.0	120.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.40
6415	QUE-096	120.0	130.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.17
6416	QUE-096	160.3	170.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
6417	QUE-096	190.0	200.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.29
6418	QUE-096	200.0	210.0	500	500	1310	0	0.2	LIGERAMENTE BASICO	0.27
6419	QUE-096	210.0	220.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.10
6420	QUE-096	220.0	230.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.22
6421	QUE-096	230.0	240.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.44
6422	QUE-096	240.0	250.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.30
6423	QUE-096	250.0	260.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.86
6424	QUE-096	260.0	270.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.54
6425	QUE-096	270.0	280.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.32
6426	QUE-096	280.0	290.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.56
6427	QUE-096	290.0	300.3	500	500	500	0	0.2	LIGERAMENTE BASICO	1.28
6428	QUE-096	300.3	309.9	500	500	500	0	0.2	LIGERAMENTE BASICO	4.14
6429	QUE-096	309.9	320.0	500	500	500	0	0.2	LIGERAMENTE BASICO	2.67
6430	QUE-096	320.0	329.7	500	500	500	0	0.2	LIGERAMENTE BASICO	3.74
6431	QUE-096	329.7	340.0	500	500	1040	0	0.2	LIGERAMENTE BASICO	5.63
6432	QUE-096	344.9	354.2	500	50	17200	15600	-2.1	ACIDO	3.65
6433	QUE-096	354.2	360.0	500	50	41200	38600	-5.3	ACIDO	2.23
6434	QUE-096	360.0	364.5	500	500	34800	30290	-4.0	ACIDO	5.10
6435	QUE-096	364.5	370.0	500	500	34800	30290	-4.0	ACIDO	1.28
6436	QUE-096	370.0	380.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.56
6437	QUE-096	380.0	390.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.58
6438	QUE-096	390.0	400.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.06
6439	QUE-096	400.0	410.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.80
6440	QUE-098	216.0	220.0	1700	700	200	0	0.3	LIGERAMENTE BASICO	0.10
6441	QUE-098	220.0	230.4	400	100	200	0	0.0	INERTE	0.11
6442	QUE-098	230.4	239.7	500	50	300	0	0.0	INERTE	0.26
6443	QUE-098	239.7	250.5	500	50	200	0	0.0	INERTE	0.18
6444	QUE-098	250.5	260.0	800	50	300	0	0.0	INERTE	0.62
6445	QUE-098	260.0	262.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.19
6446	QUE-098	262.0	270.2	500	500	500	0	0.2	LIGERAMENTE BASICO	0.28
6447	QUE-098	270.2	280.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.48
6448	QUE-098	280.0	290.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.45
6449	QUE-098	290.0	300.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.65
6450	QUE-098	300.0	310.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.52
6451	QUE-098	310.0	320.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.28
6452	QUE-098	320.0	330.0	500	500	29560	27280	-3.6	ACIDO	0.31
6453	QUE-098	330.0	340.0	500	500	2330	1830	-0.1	INERTE	0.86
6454	QUE-098	340.0	350.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.68
6455	QUE-098	350.0	360.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.69
6456	QUE-098	360.0	370.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.42
6457	QUE-098	370.0	380.0	500	500	1250	0	0.2	LIGERAMENTE BASICO	1.19
6458	QUE-098	392.0	400.0	1000	600	6100	300	0.2	LIGERAMENTE BASICO	1.25
6459	QUE-098	400.0	410.8	1100	800	38800	8500	-0.9	LIGERAMENTE ACIDO	1.06
6460	QUE-098	410.8	420.0	1000	200	48300	26300	-3.5	ACIDO	1.18
6461	QUE-098	420.0	429.0	600	200	57300	27200	-3.7	ACIDO	1.36
6462	QUE-099	80.0	90.0	300	50	30000	6200	-0.8	LIGERAMENTE ACIDO	0.13
6463	QUE-099	90.0	100.0	200	100	31600	5800	-0.8	LIGERAMENTE ACIDO	0.13
6464	QUE-099	110.0	120.0	300	50	17300	3500	-0.5	LIGERAMENTE ACIDO	0.13
6465	QUE-099	120.0	130.0	300	50	1500	0	0.0	INERTE	0.18
6466	QUE-099	130.0	140.0	300	50	1400	100	0.0	INERTE	0.16
6467	QUE-099	140.0	150.0	400	50	2200	0	0.0	INERTE	0.15
6468	QUE-099	150.0	160.3	400	50	5200	500	-0.1	INERTE	0.26
6469	QUE-099	160.3	170.0	400	50	3200	600	-0.1	INERTE	0.25
6470	QUE-099	170.0	180.0	500	50	10900	6600	-0.9	LIGERAMENTE ACIDO	0.32
6471	QUE-099	180.0	190.0	400	50	24500	1100	-0.1	LIGERAMENTE ACIDO	0.49
6472	QUE-099	190.0	200.0	300	50	53800	8500	-1.1	ACIDO	0.51
6473	QUE-099	200.0	210.0	500	50	33200	8500	-1.1	ACIDO	0.46
6474	QUE-099	210.0	220.0	400	50	38300	6200	-0.8	LIGERAMENTE ACIDO	0.94
6475	QUE-099	220.0	230.0	400	50	48700	5300	-0.7	LIGERAMENTE ACIDO	1.06
6476	QUE-099	230.0	236.0	400	50	47400	7400	-1.0	LIGERAMENTE ACIDO	1.53
6477	QUE-099	240.0	250.0	500	500	6020	90	0.2	LIGERAMENTE BASICO	0.72
6478	QUE-099	250.0	260.0	500	500	35230	0	0.2	LIGERAMENTE BASICO	1.02
6479	QUE-099	260.0	270.0	500	500	45690	0	0.2	LIGERAMENTE BASICO	1.72
6480	QUE-099	270.0	280.0	1050	500	36710	0	0.2	LIGERAMENTE BASICO	1.27
6481	QUE-099	280.0	290.0	500	500	22750	1060	0.0	INERTE	0.77
6482	QUE-099	290.0	300.0	500	500	62820	2310	-0.1	LIGERAMENTE ACIDO	1.24
6483	QUE-099	300.0	310.0	500	500	70930	3390	-0.3	LIGERAMENTE ACIDO	0.40
6484	QUE-099	310.0	319.7	1010	500	48030	0	0.2	LIGERAMENTE BASICO	0.62
6485	QUE-099	319.7	330.0	500	500	4510	0	0.2	LIGERAMENTE BASICO	2.05
6486	QUE-099	330.0	340.0	1100	500	56330	15950	-2.0	ACIDO	0.68
6487	QUE-099	340.0	350.0	1230	1040	21290	11280	-1.2	ACIDO	0.13
6488	QUE-100	21.0	28.4	390	200	260	100	0.1	INERTE	0.25
6489	QUE-100	68.1	76.0	270	200	200	100	0.1	INERTE	0.16
6490	QUE-100	76.0	84.0	470	200	200	100	0.1	INERTE	0.27
6491	QUE-100	84.0	92.0	700	200	300	100	0.1	INERTE	0.12
6492	QUE-100	92.0	100.0	300	200	300	100	0.1	INERTE	0.26
6493	QUE-100	108.0	116.0	500	200	600	100	0.1	INERTE	0.19
6494	QUE-100	116.0	124.0	300	200	200	100	0.1	INERTE	0.10
6495	QUE-100	132.0	140.0	300	200	200	100	0.1	INERTE	0.11
6496	QUE-100	148.0	156.0	600	200	200	100	0.1	INERTE	0.10
6497	QUE-100	156.0	164.0	200	200	200	100	0.1	INERTE	0.11
6498	QUE-100	164.0	172.0	200	200	200	100	0.1	INERTE	0.12
6499	QUE-100	172.0	180.0	300	200	200	100	0.1	INERTE	0.20
6500	QUE-100	180.0	188.0	670	200	270	100	0.1	INERTE	0.11
6501	QUE-100	196.0	204.0	600	200	200	100	0.1	INERTE	0.11
6502	QUE-100	220.5	228.3	850	200	200	100	0.1	INERTE	0.13
6503	QUE-100	228.3	236.0	610	200	200	100	0.1	INERTE	0.13
6504	QUE-100	236.0	244.0	780	300	200	100	0.1	LIGERAMENTE BASICO	0.29
6505	QUE-100	244.0	251.6	1270	200	200	100	0.1	INERTE	0.17
6506	QUE-100	251.6	260.0	490	200	520	100	0.1	INERTE	0.17
6507	QUE-100	260.0	268.0	280	200	400	100	0.1	INERTE	0.20
6508	QUE-100	268.0	276.0	300	200	420	100	0.1	INERTE	0.12
6509	QUE-100	276.0	283.9	400	200	390	100	0.1	INERTE	0.23
6510	QUE-100	283.9	292.2	220	200	310	100	0.1	INERTE	0.35
6511	QUE-100	292.2	300.0	330	200	640	100	0.1	INERTE	0.62
6512	QUE-100	300.0	308.0	580	200	540	100	0.1	INERTE	0.41
6513	QUE-100	308.0	316.0	300	200	700	100	0.1	INERTE	0.33
6514	QUE-100	316.0	324.0	330	200	770	100	0.1	INERTE	0.91
6515	QUE-100	324.0	332.0	430	200	600	100	0.1	INERTE	0.91
6516	QUE-100	332.0	340.0	230	200	1170	100	0.1	INERTE	0.95
6517	QUE-100	340.0	348.0	260	200	19500	16380	-2.2	ACIDO	0.78
6518	QUE-100	348.0	356.0	200	200	64200	58830	-8.0	ACIDO	1.12
6519	QUE-100	356.0	364.0	200	200	54500	49380	-6.7	ACIDO	0.84
6520	QUE-100	364.0	372.3	740	200	53100	47230	-6.4	ACIDO	1.57
6521	QUE-100	372.3	380.0	470	200	5660	4560	-0.6	LIGERAMENTE ACIDO	0.62
6522	QUE-100	380.0	388.0	200	200	89500	82340	-11.2	ACIDO	1.03
6523	QUE-100	388.0	396.0	200	200	86600	51300	-7.0	ACIDO	2.62
6524	QUE-100	396.0	400.0	500	200	50900	39300	-5.3	ACIDO	0.18
6525	QUE-101	62.4	70.0	230	200	200	100	0.1	INERTE	0.11
6526	QUE-101	118.0	126.0	800	200	200	100	0.1	INERTE	0.14
6527	QUE-101	126.0	134.0	300	200	600	100	0.1	INERTE	0.11
6528	QUE-101	134.0	142.0	200	200	200	100	0.1	INERTE	0.15
6529	QUE-101	142.0	150.0	400	200	200	100	0.1	INERTE	0.11
6530	QUE-101	157.8	166.0	200	200	200	100	0.1	INERTE	0.15
6531	QUE-101	166.0	174.0	200	200	200	100	0.1	INERTE	0.16
6532	QUE-101	174.0	182.0	200	200	200	100	0.1	INERTE	0.13
6533	QUE-101	182.0	189.7	470	300	200	100	0.1	LIGERAMENTE BASICO	0.23
6534	QUE-101	189.7	198.0	200	200	200	100	0.1	INERTE	0.17
6535	QUE-101	198.0	206.0	610	300	200	100	0.1	LIGERAMENTE BASICO	0.12
6536	QUE-101	206.0	214.0	2290	300	220	100	0.1	LIGERAMENTE BASICO	0.11
6537	QUE-101	214.0	222.0	450	200	200	100	0.1	INERTE	0.15
6538	QUE-101	222.0	230.0	640	200	220	100	0.1	INERTE	1.23
6539	QUE-101	230.0	238.2	550	200	210	100	0.1	INERTE	0.98
6540	QUE-101	238.2	246.0	650	200	200	100	0.1	INERTE	0.36
6541	QUE-101	246.0	254.0	1210	200	240	100	0.1	INERTE	0.52
6542	QUE-101	254.0	262.0	540	200	200	100	0.1	INERTE	0.11
6543	QUE-101	262.0	270.0	550	200	360	100	0.1	INERTE	0.13
6544	QUE-101	270.0	278.0	680	200	200	100	0.1	INERTE	0.23
6545	QUE-101	278.0	286.0	500	200	200	100	0.1	INERTE	0.28
6546	QUE-101	286.0	294.0	610	200	200	100	0.1	INERTE	0.17
6547	QUE-101	294.0	302.0	530	200	200	100	0.1	INERTE	0.19
6548	QUE-101	302.0	310.0	640	200	200	100	0.1	INERTE	0.20
6549	QUE-101	310.0	318.0	530	200	200	100	0.1	INERTE	0.20
6550	QUE-101	318.0	326.0	370	200	200	100	0.1	INERTE	0.18
6551	QUE-101	326.0	333.7	2260	200	390	100	0.1	INERTE	0.20
6552	QUE-101	333.7	341.9	620	200	1130	520	0.0	INERTE	0.13
6553	QUE-101	341.9	350.0	270	200	420	100	0.1	INERTE	0.16
6554	QUE-101	350.0	357.7	630	200	390	100	0.1	INERTE	0.19
6555	QUE-101	357.7	366.0	240	200	370	100	0.1	INERTE	0.17
6556	QUE-101	366.0	374.0	290	200	450	100	0.1	INERTE	0.18
6557	QUE-101	374.0	381.8	290	200	420	100	0.1	INERTE	0.14
6558	QUE-101	381.8	390.0	300	200	600	100	0.1	INERTE	0.13
6559	QUE-101	390.0	398.0	370	200	8280	6960	-0.9	LIGERAMENTE ACIDO	0.17
6560	QUE-101	398.0	406.0	200	200	53600	49200	-6.7	ACIDO	0.19
6561	QUE-101	406.0	414.0	200	200	64100	59530	-8.1	ACIDO	0.14
6562	QUE-101	414.0	420.0	200	200	52500	49280	-6.7	ACIDO	0.17
6563	QUE-102	176.0	180.0	400	200	7300	300	0.0	INERTE	0.15
6564	QUE-102	180.0	184.0	400	200	7300	300	0.0	INERTE	0.28
6565	QUE-102	184.0	189.8	400	200	35100	5900	-0.7	LIGERAMENTE ACIDO	0.47
6566	QUE-102	189.8	192.0	400	200	35100	5900	-0.7	LIGERAMENTE ACIDO	0.31
6567	QUE-102	192.0	200.2	200	200	20700	3000	-0.3	LIGERAMENTE ACIDO	0.17
6568	QUE-102	200.2	208.5	400	200	1700	400	0.0	INERTE	0.26
6569	QUE-102	208.5	210.0	700	200	2900	100	0.1	INERTE	0.43
6570	QUE-102	210.0	216.0	700	200	2900	100	0.1	INERTE	0.35
6571	QUE-102	216.0	220.0	1000	200	3800	100	0.1	INERTE	0.44
6572	QUE-102	220.0	224.2	1000	200	3800	100	0.1	INERTE	0.62
6573	QUE-102	224.2	230.0	1300	200	48700	11100	-1.4	ACIDO	0.45
6574	QUE-102	230.0	232.0	1300	200	48700	11100	-1.4	ACIDO	0.34
6575	QUE-102	232.0	240.0	1700	200	66200	11500	-1.5	ACIDO	1.01
6576	QUE-102	240.0	248.0	700	200	55100	10900	-1.4	ACIDO	1.06
6577	QUE-102	248.0	249.9	700	200	49400	13400	-1.8	ACIDO	1.48
6578	QUE-102	249.9	256.0	700	200	49400	13400	-1.8	ACIDO	1.22
6579	QUE-102	256.0	258.0	390	200	17200	3600	-0.4	LIGERAMENTE ACIDO	1.19
6580	QUE-102	258.0	264.0	390	200	17200	3600	-0.4	LIGERAMENTE ACIDO	1.76
6581	QUE-102	264.0	272.0	380	200	290	100	0.1	INERTE	1.16
6582	QUE-102	272.0	280.4	460	200	300	100	0.1	INERTE	1.74
6583	QUE-102	280.4	288.0	560	200	250	100	0.1	INERTE	1.53
6584	QUE-102	288.0	296.0	400	200	330	100	0.1	INERTE	2.98
6585	QUE-102	296.0	304.0	360	200	300	100	0.1	INERTE	2.24
6586	QUE-102	304.0	312.0	370	200	430	100	0.1	INERTE	1.82
6587	QUE-102	312.0	320.0	430	200	370	100	0.1	INERTE	3.72
6588	QUE-102	320.0	327.6	490	200	270	100	0.1	INERTE	1.82
6589	QUE-102	327.6	335.6	290	200	240	100	0.1	INERTE	1.11
6590	QUE-102	335.6	344.0	200	200	220	100	0.1	INERTE	0.95
6591	QUE-102	344.0	352.0	1070	200	1170	270	0.0	INERTE	0.50
6592	QUE-102	352.0	360.0	1310	300	2790	100	0.1	INERTE	1.68
6593	QUE-102	360.0	368.0	390	200	47000	41400	-5.6	ACIDO	0.84
6594	QUE-102	368.0	376.0	1300	200	1570	100	0.1	INERTE	0.79
6595	QUE-102	376.0	384.0	940	200	500	100	0.1	INERTE	0.34
6596	QUE-102	384.0	392.0	310	200	60400	35500	-4.8	ACIDO	0.50
6597	QUE-102	392.0	400.0	300	200	92400	62100	-8.4	ACIDO	0.32
6598	QUE-102	400.0	408.0	320	300	63300	28700	-3.8	ACIDO	0.30
6599	QUE-102	408.0	416.0	1020	200	3570	100	0.1	INERTE	0.28
6600	QUE-102	416.0	424.0	200	200	76000	41900	-5.7	ACIDO	0.16
6601	QUE-103	8.0	16.0	260	200	460	100	0.1	INERTE	0.12
6602	QUE-103	16.0	24.0	530	300	520	100	0.1	LIGERAMENTE BASICO	0.14
6603	QUE-103	24.0	32.0	240	200	470	100	0.1	INERTE	0.13
6604	QUE-103	32.0	40.0	260	200	470	100	0.1	INERTE	0.11
6605	QUE-103	48.0	56.0	240	200	490	100	0.1	INERTE	0.14
6606	QUE-103	56.0	64.0	650	300	430	100	0.1	LIGERAMENTE BASICO	0.12
6607	QUE-103	64.0	72.0	400	200	450	100	0.1	INERTE	0.10
6608	QUE-103	72.0	80.0	220	200	590	100	0.1	INERTE	0.20
6609	QUE-103	80.0	87.7	380	200	470	100	0.1	INERTE	0.22
6610	QUE-103	87.7	96.0	500	200	760	100	0.1	INERTE	0.24
6611	QUE-103	96.0	104.0	630	200	800	100	0.1	INERTE	0.24
6612	QUE-103	104.0	111.6	900	200	780	100	0.1	INERTE	0.54
6613	QUE-103	111.6	120.1	1060	200	2980	100	0.1	INERTE	0.36
6614	QUE-103	120.1	128.0	430	200	750	100	0.1	INERTE	0.72
6615	QUE-103	128.0	135.7	520	300	830	100	0.1	LIGERAMENTE BASICO	1.15
6616	QUE-103	135.7	144.0	1960	200	270	100	0.1	INERTE	0.66
6617	QUE-103	144.0	152.0	1430	200	320	100	0.1	INERTE	0.18
6618	QUE-103	152.0	160.0	980	200	230	100	0.1	INERTE	0.35
6619	QUE-103	160.0	168.0	870	200	240	100	0.1	INERTE	0.25
6620	QUE-103	168.0	176.0	930	200	520	100	0.1	INERTE	0.27
6621	QUE-103	176.0	184.2	920	200	610	100	0.1	INERTE	0.16
6622	QUE-103	184.2	192.0	850	200	580	100	0.1	INERTE	0.12
6623	QUE-103	208.0	216.0	840	200	200	100	0.1	INERTE	0.25
6624	QUE-103	216.0	224.0	940	200	250	100	0.1	INERTE	0.63
6625	QUE-103	224.0	232.0	1000	200	220	100	0.1	INERTE	0.58
6626	QUE-103	232.0	240.0	1170	200	350	100	0.1	INERTE	2.02
6627	QUE-103	240.0	248.0	710	200	200	100	0.1	INERTE	0.26
6628	QUE-103	248.0	256.0	800	200	200	100	0.1	INERTE	0.24
6629	QUE-103	256.0	264.0	600	200	200	100	0.1	INERTE	0.37
6630	QUE-103	264.0	272.0	610	200	300	100	0.1	INERTE	0.27
6631	QUE-103	272.0	280.0	660	200	200	100	0.1	INERTE	0.23
6632	QUE-103	280.0	288.0	700	200	200	100	0.1	INERTE	0.32
6633	QUE-103	288.0	295.9	980	200	210	100	0.1	INERTE	0.59
6634	QUE-103	295.9	304.0	600	200	300	100	0.1	INERTE	0.55
6635	QUE-103	304.0	312.0	900	200	900	400	0.0	INERTE	0.29
6636	QUE-103	312.0	320.0	700	200	2100	1800	-0.2	LIGERAMENTE ACIDO	0.11
6637	QUE-103	320.0	328.0	1100	200	500	100	0.1	INERTE	0.59
6638	QUE-103	328.0	336.0	900	200	500	100	0.1	INERTE	0.39
6639	QUE-103	336.0	344.0	900	200	500	100	0.1	INERTE	0.29
6640	QUE-103	344.0	352.0	1400	200	700	100	0.1	INERTE	0.22
6641	QUE-103	352.0	359.7	600	200	500	100	0.1	INERTE	0.18
6642	QUE-103	384.2	391.7	700	200	18100	2800	-0.3	LIGERAMENTE ACIDO	0.20
6643	QUE-103	400.0	408.0	600	200	7600	400	0.0	INERTE	0.11
6644	QUE-103	416.2	423.8	800	200	24000	2400	-0.3	LIGERAMENTE ACIDO	0.15
6645	QUE-104	80.0	88.0	2700	200	36400	33100	-4.5	ACIDO	0.11
6646	QUE-104	128.0	130.0	7200	200	33600	30600	-4.1	ACIDO	0.14
6647	QUE-104	130.0	136.0	7200	200	33600	30600	-4.1	ACIDO	0.13
6648	QUE-104	141.0	148.0	1100	200	34000	27800	-3.7	ACIDO	0.11
6649	QUE-104	164.0	170.0	4400	200	42700	37800	-5.1	ACIDO	0.12
6650	QUE-104	170.0	172.0	4400	200	42700	37800	-5.1	ACIDO	0.19
6651	QUE-104	172.0	180.0	3300	200	34600	30800	-4.1	ACIDO	0.20
6652	QUE-104	188.0	190.0	1100	200	19900	5800	-0.7	LIGERAMENTE ACIDO	0.13
6653	QUE-104	190.0	196.0	1100	200	19900	5800	-0.7	LIGERAMENTE ACIDO	0.13
6654	QUE-104	196.0	200.0	400	200	39200	12000	-1.6	ACIDO	0.13
6655	QUE-104	200.0	204.0	400	200	39200	12000	-1.6	ACIDO	0.18
6656	QUE-104	204.0	210.0	700	200	55500	12600	-1.7	ACIDO	0.32
6657	QUE-104	210.0	212.0	700	200	55500	12600	-1.7	ACIDO	0.16
6658	QUE-104	212.0	220.0	1000	200	52900	12500	-1.6	ACIDO	0.31
6659	QUE-104	220.0	228.0	800	300	49100	11400	-1.5	ACIDO	0.38
6660	QUE-104	228.0	229.7	800	200	48600	13700	-1.8	ACIDO	0.35
6661	QUE-104	229.7	236.0	800	200	48600	13700	-1.8	ACIDO	0.41
6662	QUE-104	236.0	240.0	700	300	54800	14300	-1.8	ACIDO	0.69
6663	QUE-104	240.0	244.0	700	300	54800	14300	-1.8	ACIDO	0.16
6664	QUE-104	244.0	252.0	800	200	25800	6000	-0.7	LIGERAMENTE ACIDO	0.21
6665	QUE-104	252.0	260.0	800	200	13600	3100	-0.4	LIGERAMENTE ACIDO	0.52
6666	QUE-104	260.0	268.0	500	200	500	100	0.1	INERTE	0.33
6667	QUE-104	268.0	276.0	200	300	11600	1500	-0.1	INERTE	0.52
6668	QUE-104	276.0	284.0	570	200	12000	800	0.0	INERTE	1.41
6669	QUE-104	284.0	292.1	410	200	2000	100	0.1	INERTE	1.05
6670	QUE-104	292.1	300.0	410	200	16300	2100	-0.2	LIGERAMENTE ACIDO	1.86
6671	QUE-104	300.0	308.0	400	200	3360	360	0.0	INERTE	3.92
6672	QUE-104	308.0	316.0	460	200	1170	100	0.1	INERTE	4.19
6673	QUE-104	316.0	324.0	390	200	2480	480	0.0	INERTE	3.81
6674	QUE-104	324.0	332.0	200	200	2040	100	0.1	INERTE	0.64
6675	QUE-104	332.0	340.0	720	200	24700	3900	-0.5	LIGERAMENTE ACIDO	0.13
6676	QUE-104	340.0	348.0	450	200	12800	1000	-0.1	INERTE	0.58
6677	QUE-104	348.0	356.0	530	200	31000	19100	-2.5	ACIDO	0.23
6678	QUE-104	364.0	372.2	580	200	56500	31900	-4.3	ACIDO	0.17
6679	QUE-104	372.2	380.0	470	200	900	100	0.0	INERTE	0.19
6680	QUE-104	380.0	388.2	400	200	14900	1800	-0.2	LIGERAMENTE ACIDO	0.36
6681	QUE-104	388.2	396.0	620	200	50700	17300	-2.3	ACIDO	0.32
6682	QUE-104	396.0	402.2	720	200	57500	39300	-5.3	ACIDO	0.44
6683	QUE-105	0.5	8.0	200	200	360	100	0.1	INERTE	0.12
6684	QUE-105	8.0	16.0	380	200	820	320	0.0	INERTE	0.17
6685	QUE-105	24.0	32.0	240	200	330	100	0.1	INERTE	0.15
6686	QUE-105	32.0	40.7	200	200	360	100	0.1	INERTE	0.21
6687	QUE-105	48.0	56.0	100	200	200	100	0.1	INERTE	0.13
6688	QUE-105	56.0	64.0	100	200	230	100	0.1	INERTE	0.14
6689	QUE-105	88.0	96.0	420	200	210	100	0.1	INERTE	0.11
6690	QUE-105	96.0	103.7	100	200	200	100	0.1	INERTE	0.11
6691	QUE-105	103.7	112.0	330	200	230	100	0.1	INERTE	0.16
6692	QUE-105	112.0	120.0	700	200	300	100	0.1	INERTE	0.18
6693	QUE-105	128.4	136.0	700	200	1500	100	0.1	INERTE	0.25
6694	QUE-105	136.0	144.0	1700	200	1000	100	0.1	INERTE	0.37
6695	QUE-105	144.0	152.0	1100	200	1400	100	0.1	INERTE	0.58
6696	QUE-105	152.0	160.0	600	200	600	200	0.0	INERTE	0.32
6697	QUE-105	160.0	168.0	400	200	900	100	0.1	INERTE	0.22
6698	QUE-105	168.0	176.0	400	200	300	100	0.1	INERTE	0.23
6699	QUE-105	176.0	184.0	500	200	300	100	0.1	INERTE	0.20
6700	QUE-105	184.0	192.1	440	200	220	100	0.1	INERTE	0.19
6701	QUE-105	192.1	200.0	340	200	210	100	0.1	INERTE	0.15
6702	QUE-105	200.0	208.0	380	200	200	100	0.1	INERTE	0.17
6703	QUE-105	232.0	240.0	530	200	200	100	0.1	INERTE	0.15
6704	QUE-105	240.0	248.0	800	200	200	100	0.1	INERTE	0.13
6705	QUE-105	248.0	256.0	870	200	290	100	0.1	INERTE	0.20
6706	QUE-105	256.0	264.0	880	200	310	100	0.1	INERTE	0.28
6707	QUE-105	264.0	272.0	600	200	260	100	0.1	INERTE	0.25
6708	QUE-105	272.0	280.0	910	200	570	100	0.1	INERTE	0.19
6709	QUE-105	280.0	287.8	630	200	810	100	0.1	INERTE	0.17
6710	QUE-105	287.8	296.0	480	200	36000	9100	-1.2	ACIDO	0.21
6711	QUE-105	296.0	304.0	530	200	17800	3300	-0.4	LIGERAMENTE ACIDO	0.44
6712	QUE-105	304.0	312.0	830	200	31400	5200	-0.6	LIGERAMENTE ACIDO	0.31
6713	QUE-105	312.0	319.7	520	200	4210	100	0.1	INERTE	0.17
6714	QUE-106	8.0	16.0	4080	200	6730	1630	-0.1	LIGERAMENTE ACIDO	0.13
6715	QUE-106	16.0	24.0	6710	200	7210	910	-0.1	INERTE	0.12
6716	QUE-106	56.0	64.0	910	200	220	100	0.1	INERTE	0.15
6717	QUE-106	64.0	72.0	770	200	200	100	0.1	INERTE	0.16
6718	QUE-106	106.0	114.0	1200	200	200	100	0.1	INERTE	0.11
6719	QUE-106	114.0	122.0	1150	200	200	100	0.1	INERTE	0.13
6720	QUE-106	122.0	130.0	1040	200	380	100	0.0	INERTE	0.14
6721	QUE-106	130.0	138.0	750	400	200	100	0.1	LIGERAMENTE BASICO	0.11
6722	QUE-106	138.0	146.0	630	200	200	100	0.1	INERTE	0.11
6723	QUE-106	146.0	150.0	830	200	200	100	0.1	INERTE	0.14
6724	QUE-106	150.0	158.0	690	200	200	100	0.1	INERTE	0.13
6725	QUE-106	158.0	166.0	1100	200	200	100	0.1	INERTE	0.11
6726	QUE-106	166.0	174.0	260	200	200	100	0.1	INERTE	0.11
6727	QUE-106	174.0	182.0	400	200	200	100	0.1	INERTE	0.12
6728	QUE-106	182.0	189.8	290	200	200	100	0.1	INERTE	0.16
6729	QUE-106	189.8	198.0	370	200	200	100	0.1	INERTE	0.15
6730	QUE-106	198.0	206.0	390	200	200	100	0.1	INERTE	0.11
6731	QUE-106	206.0	214.1	390	200	200	100	0.1	INERTE	0.16
6732	QUE-106	214.1	222.0	410	200	200	100	0.1	INERTE	0.11
6733	QUE-106	222.0	230.0	250	200	200	100	0.1	INERTE	0.19
6734	QUE-106	230.0	238.0	420	200	200	100	0.1	INERTE	0.34
6735	QUE-106	238.0	245.8	840	200	200	100	0.1	INERTE	1.17
6736	QUE-106	245.8	254.0	1080	300	390	100	0.1	INERTE	1.55
6737	QUE-106	254.0	262.5	610	200	560	100	0.1	INERTE	0.85
6738	QUE-106	262.5	270.0	220	200	270	100	0.1	INERTE	0.60
6739	QUE-106	270.0	277.7	660	200	1050	100	0.1	INERTE	0.85
6740	QUE-106	277.7	286.2	350	200	690	100	0.0	INERTE	0.61
6741	QUE-106	286.2	293.9	500	200	380	100	0.1	INERTE	0.20
6742	QUE-106	293.9	302.0	250	300	710	100	0.1	LIGERAMENTE BASICO	0.35
6743	QUE-106	302.0	310.7	260	200	660	100	0.1	INERTE	1.24
6744	QUE-106	310.7	318.0	260	200	500	100	0.0	INERTE	0.41
6745	QUE-106	318.0	326.2	220	200	200	100	0.1	INERTE	0.67
6746	QUE-106	326.2	333.8	250	200	200	100	0.1	INERTE	0.41
6747	QUE-106	333.8	342.0	290	300	310	100	0.1	LIGERAMENTE BASICO	0.62
6748	QUE-106	342.0	349.9	810	200	450	100	0.1	INERTE	1.37
6749	QUE-106	349.9	357.6	830	200	270	100	0.1	INERTE	2.06
6750	QUE-106	357.6	366.0	1010	200	280	100	0.1	INERTE	1.14

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
6751	QUE-106	366.0	376.0	560	300	360	100	0.1	LIGERAMENTE BASICO	2.21
6752	QUE-106	376.0	384.0	410	200	230	100	0.1	INERTE	1.80
6753	QUE-106	384.0	392.0	260	200	220	100	0.1	INERTE	0.68
6754	QUE-106	392.0	400.0	340	200	1470	670	0.0	INERTE	4.58
6755	QUE-106	400.0	408.0	300	200	23600	21900	-2.9	ACIDO	1.31
6756	QUE-106	408.0	416.0	310	200	24600	23200	-3.1	ACIDO	0.49
6757	QUE-106	416.0	420.0	310	200	45400	43300	-5.9	ACIDO	0.38
6758	QUE-107	96.0	104.0	970	200	13500	3200	-0.4	LIGERAMENTE ACIDO	0.19
6759	QUE-107	104.0	112.0	520	200	1270	100	0.1	INERTE	0.15
6760	QUE-107	120.0	128.0	410	200	270	100	0.1	INERTE	0.21
6761	QUE-107	128.0	136.0	440	200	300	100	0.1	INERTE	0.12
6762	QUE-107	144.0	152.0	740	200	640	100	0.1	INERTE	0.12
6763	QUE-107	168.0	176.0	440	200	1010	100	0.1	INERTE	0.11
6764	QUE-107	200.0	208.0	540	200	370	100	0.1	INERTE	0.28
6765	QUE-107	232.0	240.0	270	200	1060	260	0.0	INERTE	0.11
6766	QUE-107	240.0	248.0	400	200	720	100	0.1	INERTE	0.12
6767	QUE-107	248.0	256.0	240	200	670	100	0.1	INERTE	0.18
6768	QUE-107	256.0	264.0	290	200	290	100	0.1	INERTE	0.11
6769	QUE-107	264.0	272.0	470	200	370	100	0.1	INERTE	0.12
6770	QUE-107	272.0	280.0	270	200	340	100	0.1	INERTE	0.12
6771	QUE-107	280.0	288.0	280	200	230	100	0.1	INERTE	0.10
6772	QUE-107	304.0	312.0	260	200	1490	390	0.0	INERTE	0.19
6773	QUE-107	312.0	320.0	340	200	630	100	0.1	INERTE	0.14
6774	QUE-107	320.0	328.0	290	200	320	100	0.1	INERTE	0.11
6775	QUE-107	328.0	336.0	290	200	430	100	0.1	INERTE	0.14
6776	QUE-107	336.0	344.0	260	200	5570	1670	-0.2	LIGERAMENTE ACIDO	0.13
6777	QUE-107	344.0	352.4	240	200	9430	4630	-0.6	LIGERAMENTE ACIDO	0.27
6778	QUE-107	352.4	360.0	320	200	6760	1360	-0.1	LIGERAMENTE ACIDO	0.50
6779	QUE-107	360.0	368.0	260	200	790	100	0.1	INERTE	0.41
6780	QUE-107	368.0	376.0	1860	300	2070	1270	-0.1	INERTE	0.20
6781	QUE-107	376.0	383.6	330	200	1450	100	0.1	INERTE	0.22
6782	QUE-107	383.6	392.0	260	200	6260	3260	-0.4	LIGERAMENTE ACIDO	0.39
6783	QUE-107	392.0	399.8	330	200	29000	21800	-2.9	ACIDO	0.50
6784	QUE-107	399.8	408.0	230	200	98400	56200	-7.6	ACIDO	0.52
6785	QUE-107	408.0	415.6	310	200	64200	46400	-6.3	ACIDO	0.44
6786	QUE-107	415.6	422.3	390	200	78200	57300	-7.8	ACIDO	0.78
6787	QUE-141	0.0	10.0	1000	100	23900	7400	-1.0	LIGERAMENTE ACIDO	0.21
6788	QUE-141	10.0	20.0	1100	100	15300	3200	-0.4	LIGERAMENTE ACIDO	0.11
6789	QUE-141	20.0	30.0	2300	300	44200	40200	-5.4	ACIDO	0.19
6790	QUE-141	30.0	40.0	1800	200	32700	29200	-3.9	ACIDO	0.16
6791	QUE-141	50.0	60.0	1300	300	32600	29900	-4.0	ACIDO	0.15
6792	QUE-141	60.0	70.0	1300	200	39000	36600	-4.9	ACIDO	0.13
6793	QUE-141	70.0	80.0	1300	200	38600	36600	-4.9	ACIDO	0.13
6794	QUE-141	90.0	100.0	400	100	20300	5400	-0.7	LIGERAMENTE ACIDO	0.19
6795	QUE-141	100.0	110.0	700	200	20200	4800	-0.6	LIGERAMENTE ACIDO	0.32
6796	QUE-141	110.0	120.0	1200	200	31100	27700	-3.7	ACIDO	0.42
6797	QUE-141	120.0	130.0	600	100	18200	10700	-1.4	ACIDO	0.41
6798	QUE-141	130.0	140.0	400	100	34300	7700	-1.0	ACIDO	0.34
6799	QUE-141	140.0	150.0	700	100	11500	2500	-0.3	LIGERAMENTE ACIDO	0.19
6800	QUE-141	150.0	160.0	1100	100	23500	5300	-0.7	LIGERAMENTE ACIDO	0.36
6801	QUE-141	160.0	170.0	1100	100	1900	100	0.0	INERTE	0.38
6802	QUE-141	170.0	180.0	1200	100	7800	800	-0.1	INERTE	0.44
6803	QUE-141	180.0	188.0	400	200	18940	200	0.1	INERTE	0.46
6804	QUE-141	188.0	190.0	390	200	24850	250	0.0	INERTE	0.52
6805	QUE-141	190.0	196.0	390	200	24850	250	0.0	INERTE	0.52
6806	QUE-141	196.0	200.2	410	200	20790	7690	-1.0	LIGERAMENTE ACIDO	0.56
6807	QUE-141	200.2	204.0	410	200	20790	7690	-1.0	LIGERAMENTE ACIDO	0.24
6808	QUE-141	204.0	210.0	270	200	34210	23610	-3.2	ACIDO	0.61
6809	QUE-141	210.0	212.0	270	200	34210	23610	-3.2	ACIDO	0.85
6810	QUE-141	212.0	220.0	320	250	13140	2440	-0.2	LIGERAMENTE ACIDO	1.02
6811	QUE-141	220.0	228.0	320	200	45660	26660	-3.6	ACIDO	1.45
6812	QUE-141	228.0	230.0	300	200	44580	40150	-5.4	ACIDO	1.02
6813	QUE-141	230.0	236.0	300	200	44580	40150	-5.4	ACIDO	1.47
6814	QUE-141	236.0	240.0	220	200	38850	35410	-4.8	ACIDO	0.49
6815	QUE-141	240.0	244.0	220	200	38850	35410	-4.8	ACIDO	0.56
6816	QUE-141	244.0	250.0	250	200	30390	8890	-1.1	ACIDO	1.01
6817	QUE-141	250.0	252.0	250	200	30390	8890	-1.1	ACIDO	0.88
6818	QUE-141	252.0	260.0	200	200	14920	200	0.1	INERTE	2.34
6819	QUE-141	260.0	266.0	310	200	8550	2540	-0.3	LIGERAMENTE ACIDO	1.67
6820	QUE-141	266.0	268.0	310	200	8550	2540	-0.3	LIGERAMENTE ACIDO	4.78
6821	QUE-141	268.0	274.0	310	200	280	200	0.1	INERTE	6.66
6822	QUE-141	274.0	276.0	310	200	280	200	0.1	INERTE	4.20
6823	QUE-141	276.0	282.0	240	200	18870	200	0.1	INERTE	2.24
6824	QUE-141	282.0	284.0	240	200	18870	200	0.1	INERTE	1.86
6825	QUE-141	284.0	290.0	430	200	46650	41560	-5.6	ACIDO	2.00
6826	QUE-141	290.0	292.0	430	200	46650	41560	-5.6	ACIDO	2.66
6827	QUE-141	292.0	298.0	410	200	34390	31060	-4.2	ACIDO	1.10
6828	QUE-141	298.0	299.8	410	200	34390	31060	-4.2	ACIDO	1.22
6829	QUE-141	299.8	306.0	230	200	13970	1690	-0.2	LIGERAMENTE ACIDO	1.27
6830	QUE-141	306.0	308.0	230	200	13970	1690	-0.2	LIGERAMENTE ACIDO	0.45
6831	QUE-141	308.0	314.0	200	200	210	200	0.1	INERTE	0.32
6832	QUE-141	314.0	316.0	200	200	210	200	0.1	INERTE	0.35
6833	QUE-141	316.0	322.0	200	200	1070	690	0.0	INERTE	0.64
6834	QUE-141	322.0	324.0	200	200	1070	690	0.0	INERTE	2.10
6835	QUE-141	324.0	330.0	200	200	2090	200	0.1	INERTE	1.42
6836	QUE-141	330.0	332.0	200	200	2090	200	0.1	INERTE	1.94
6837	QUE-141	332.0	338.0	340	200	860	200	0.1	INERTE	1.71
6838	QUE-141	338.0	340.2	340	200	860	200	0.1	INERTE	0.81
6839	QUE-141	340.2	346.0	290	200	11980	1640	-0.2	LIGERAMENTE ACIDO	1.39
6840	QUE-141	346.0	348.0	290	200	11980	1640	-0.2	LIGERAMENTE ACIDO	1.48
6841	QUE-141	348.0	356.0	200	200	38760	31070	-4.2	ACIDO	1.51
6842	QUE-141	356.0	364.0	200	200	47290	42730	-5.8	ACIDO	0.52
6843	QUE-141	364.0	372.0	200	200	42240	39290	-5.3	ACIDO	0.31
6844	QUE-141	372.0	380.0	200	200	41020	38310	-5.2	ACIDO	1.13
6845	QUE-141	380.0	388.0	280	200	46910	43760	-5.9	ACIDO	0.45
6846	QUE-141	388.0	396.0	230	200	44550	38180	-5.2	ACIDO	0.40
6847	QUE-141	396.0	404.0	200	200	44640	35820	-4.8	ACIDO	0.27
6848	QUE-141	404.0	408.4	200	200	37960	28370	-3.8	ACIDO	0.18
6849	QUE-144	0.0	10.0	2100	400	20500	16500	-2.1	ACIDO	0.23
6850	QUE-144	10.0	20.0	1200	100	11800	900	-0.1	INERTE	0.16
6851	QUE-144	20.0	30.0	1500	100	12500	900	-0.1	INERTE	0.60
6852	QUE-144	30.0	40.0	2000	100	5000	200	0.0	INERTE	0.43
6853	QUE-144	40.0	50.0	1300	100	1400	100	0.0	INERTE	0.25
6854	QUE-144	50.0	60.0	1000	100	23100	4400	-0.6	LIGERAMENTE ACIDO	1.04
6855	QUE-144	60.0	70.0	1100	100	31000	8200	-1.1	ACIDO	0.59
6856	QUE-144	70.0	80.0	1100	100	22400	4100	-0.5	LIGERAMENTE ACIDO	0.88
6857	QUE-144	80.0	90.0	700	100	3400	0	0.0	INERTE	0.61
6858	QUE-144	90.0	100.0	600	100	1000	200	0.0	INERTE	0.85
6859	QUE-144	100.0	110.0	600	100	1200	500	0.0	INERTE	0.33
6860	QUE-144	110.0	120.0	1200	100	800	200	0.0	INERTE	1.17
6861	QUE-144	120.0	130.0	700	100	700	200	0.0	INERTE	0.66
6862	QUE-144	130.0	140.0	600	100	700	200	0.0	INERTE	0.99
6863	QUE-144	140.0	150.0	1000	100	16400	4800	-0.6	LIGERAMENTE ACIDO	0.54
6864	QUE-144	150.0	160.0	1400	100	5200	1500	-0.2	LIGERAMENTE ACIDO	0.32
6865	QUE-144	160.0	170.0	1400	100	21500	18100	-2.4	ACIDO	0.37
6866	QUE-144	170.0	176.0	1300	100	22400	18500	-2.5	ACIDO	0.39
6867	QUE-144	180.0	190.0	2000	400	3400	100	0.1	LIGERAMENTE BASICO	0.40
6868	QUE-144	190.0	200.0	500	500	8920	1560	0.0	INERTE	0.59
6869	QUE-144	201.0	208.0	700	200	9630	200	0.1	INERTE	0.37
6870	QUE-144	209.7	216.0	660	200	38900	15300	-2.0	ACIDO	0.26
6871	QUE-144	218.0	224.0	690	200	30300	10400	-1.4	ACIDO	0.33
6872	QUE-144	224.0	226.0	690	200	30300	10400	-1.4	ACIDO	0.56
6873	QUE-144	226.0	232.0	790	200	38300	2600	-0.3	LIGERAMENTE ACIDO	0.38
6874	QUE-144	232.0	234.0	790	200	38300	2600	-0.3	LIGERAMENTE ACIDO	0.40
6875	QUE-144	234.0	240.0	740	200	35000	3200	-0.4	LIGERAMENTE ACIDO	0.26
6876	QUE-144	240.0	242.0	740	200	35000	3200	-0.4	LIGERAMENTE ACIDO	0.33
6877	QUE-144	242.0	248.0	930	210	19400	1400	-0.1	LIGERAMENTE ACIDO	0.18
6878	QUE-144	248.0	250.0	930	210	19400	1400	-0.1	LIGERAMENTE ACIDO	0.41
6879	QUE-144	250.0	256.0	1230	200	200	200	0.1	INERTE	0.29
6880	QUE-144	256.0	258.0	1230	200	200	200	0.1	INERTE	0.11
6881	QUE-144	258.0	264.0	780	200	200	200	0.1	INERTE	0.14
6882	QUE-144	266.0	272.0	1100	200	200	200	0.1	INERTE	0.12
6883	QUE-144	272.0	274.4	1100	200	200	200	0.1	INERTE	0.13
6884	QUE-144	274.4	280.0	870	200	37200	23200	-3.1	ACIDO	0.10
6885	QUE-144	298.0	304.0	200	200	710	200	0.1	INERTE	0.25
6886	QUE-144	304.0	306.0	200	200	710	200	0.1	INERTE	0.14
6887	QUE-144	306.0	312.0	200	200	10340	560	0.0	INERTE	0.45
6888	QUE-144	312.0	314.0	200	200	10340	560	0.0	INERTE	0.11
6889	QUE-144	314.0	320.0	200	200	23860	6460	-0.8	LIGERAMENTE ACIDO	0.19
6890	QUE-144	320.0	322.0	200	200	23860	6460	-0.8	LIGERAMENTE ACIDO	0.10
6891	QUE-144	322.0	328.0	570	200	21910	200	0.1	INERTE	0.20
6892	QUE-144	328.0	331.2	570	200	21910	200	0.1	INERTE	0.17
6893	QUE-144	331.2	336.0	200	200	9020	2010	-0.2	LIGERAMENTE ACIDO	0.14
6894	QUE-144	356.0	360.0	200	200	240	200	0.1	INERTE	0.16
6895	QUE-144	364.2	368.0	200	200	41240	2330	-0.2	LIGERAMENTE ACIDO	0.14
6896	QUE-144	368.0	372.0	200	200	41240	2330	-0.2	LIGERAMENTE ACIDO	0.11
6897	QUE-144	387.8	392.0	260	200	38970	2590	-0.3	LIGERAMENTE ACIDO	0.10
6898	QUE-144	396.0	400.0	200	200	35360	200	0.1	INERTE	0.12
6899	QUE-144	404.0	408.0	1630	200	35890	22310	-3.0	ACIDO	0.12
6900	QUE-144	432.0	436.0	200	200	33950	5920	-0.7	LIGERAMENTE ACIDO	0.12
6901	QUE-145	0.0	8.0	2710	400	12300	5380	-0.6	LIGERAMENTE ACIDO	0.22
6902	QUE-145	8.0	10.0	1470	880	24280	22030	-2.7	ACIDO	0.25
6903	QUE-145	10.0	16.0	1470	880	24280	22030	-2.7	ACIDO	0.28
6904	QUE-145	16.0	20.0	1000	210	21290	17750	-2.4	ACIDO	0.91
6905	QUE-145	20.0	24.0	1000	210	21290	17750	-2.4	ACIDO	0.59
6906	QUE-145	24.0	30.0	1170	420	28970	25830	-3.4	ACIDO	0.46
6907	QUE-145	30.0	32.0	1170	420	28970	25830	-3.4	ACIDO	0.36
6908	QUE-145	32.0	40.0	1000	290	41040	37530	-5.0	ACIDO	0.31
6909	QUE-145	40.0	48.0	1110	500	40960	37950	-5.0	ACIDO	0.35
6910	QUE-145	48.0	50.0	1000	290	38260	35440	-4.7	ACIDO	0.35
6911	QUE-145	50.0	56.0	1000	290	38260	35440	-4.7	ACIDO	0.35
6912	QUE-145	56.0	56.2	1000	290	38260	35440	-4.7	ACIDO	0.29
6913	QUE-145	56.2	60.0	1000	150	39050	36730	-5.0	ACIDO	0.18
6914	QUE-145	60.0	64.0	1000	150	39050	36730	-5.0	ACIDO	0.48
6915	QUE-145	64.0	70.0	1000	160	37700	35030	-4.7	ACIDO	0.37
6916	QUE-145	70.0	72.0	1000	160	37700	35030	-4.7	ACIDO	0.38
6917	QUE-145	72.0	80.0	1000	150	44120	41380	-5.6	ACIDO	0.31
6918	QUE-145	80.0	88.0	1000	240	42700	39660	-5.3	ACIDO	0.32
6919	QUE-145	88.0	90.0	1000	440	42610	39810	-5.3	ACIDO	0.32
6920	QUE-145	90.0	96.0	1000	440	42610	39810	-5.3	ACIDO	0.60
6921	QUE-145	96.0	100.0	1000	1000	42800	41550	-5.3	ACIDO	0.79
6922	QUE-145	100.0	104.0	1000	1000	42800	41550	-5.3	ACIDO	0.38
6923	QUE-145	104.0	110.0	1000	1000	34800	32500	-4.1	ACIDO	0.22
6924	QUE-145	110.0	112.0	1000	1000	34800	32500	-4.1	ACIDO	0.17
6925	QUE-145	112.0	120.0	1000	1000	44800	41140	-5.3	ACIDO	0.66
6926	QUE-145	120.0	128.0	1000	1000	41100	35580	-4.5	ACIDO	0.27
6927	QUE-145	128.0	130.0	1000	1000	22430	2480	0.0	INERTE	0.15
6928	QUE-145	130.0	136.0	1000	1000	22430	2480	0.0	INERTE	0.27
6929	QUE-145	136.0	140.1	1000	1000	10570	580	0.3	LIGERAMENTE BASICO	0.45
6930	QUE-145	140.1	144.0	1000	1000	10570	580	0.3	LIGERAMENTE BASICO	0.24
6931	QUE-145	144.0	152.0	1000	1000	12830	2150	0.1	INERTE	0.20
6932	QUE-145	152.0	160.0	1000	1000	1660	0	0.4	LIGERAMENTE BASICO	0.13
6933	QUE-145	168.2	176.0	1000	1000	29610	4700	-0.3	LIGERAMENTE ACIDO	0.14
6934	QUE-145	176.0	176.4	1000	1000	29610	4700	-0.3	LIGERAMENTE ACIDO	0.15
6935	QUE-145	176.4	184.0	1000	1000	4820	30	0.4	LIGERAMENTE BASICO	0.11
6936	QUE-145	200.0	208.0	960	200	7870	4880	-0.6	LIGERAMENTE ACIDO	0.14
6937	QUE-145	208.0	216.0	440	90	5560	10	0.0	INERTE	0.11
6938	QUE-145	216.0	224.0	530	40	22970	10	0.0	INERTE	0.16
6939	QUE-145	224.0	232.0	330	40	410	0	0.0	INERTE	0.18
6940	QUE-145	232.0	240.0	390	60	340	10	0.0	INERTE	0.12
6941	QUE-145	248.0	255.7	500	40	24340	10	0.0	INERTE	0.20
6942	QUE-145	264.0	272.0	540	60	17130	430	0.0	INERTE	0.16
6943	QUE-146	8.0	16.0	2350	680	20050	16190	-2.0	ACIDO	0.13
6944	QUE-146	16.0	24.0	810	200	2440	200	0.1	INERTE	0.10
6945	QUE-146	24.0	32.0	1710	600	26010	24000	-3.1	ACIDO	0.15
6946	QUE-146	32.0	40.0	480	200	6150	200	0.1	INERTE	0.24
6947	QUE-146	40.0	48.0	710	200	22560	240	0.0	INERTE	0.21
6948	QUE-146	48.0	56.0	550	200	19700	200	0.1	INERTE	0.25
6949	QUE-146	56.0	64.0	1730	200	7030	200	0.1	INERTE	0.23
6950	QUE-146	64.0	72.0	400	200	11900	9310	-1.2	ACIDO	0.20
6951	QUE-146	72.0	80.0	1420	1020	6330	200	0.4	LIGERAMENTE BASICO	0.16
6952	QUE-146	80.0	88.0	300	200	18860	1600	-0.1	LIGERAMENTE ACIDO	0.17
6953	QUE-146	88.0	96.0	330	200	31270	21480	-2.9	ACIDO	0.27
6954	QUE-146	96.0	104.0	270	200	25040	200	0.1	INERTE	0.19
6955	QUE-146	104.0	112.0	810	270	33340	26040	-3.5	ACIDO	0.12
6956	QUE-146	112.0	120.0	500	200	39180	31280	-4.2	ACIDO	0.17
6957	QUE-146	120.0	128.0	1080	200	43830	30200	-4.1	ACIDO	0.23
6958	QUE-146	128.0	136.0	460	200	44410	34020	-4.6	ACIDO	0.32
6959	QUE-146	136.0	144.0	200	200	39680	12290	-1.6	ACIDO	0.38
6960	QUE-146	144.0	150.0	240	200	45160	28360	-3.8	ACIDO	0.39
6961	QUE-146	150.0	158.0	390	200	42000	35400	-4.8	ACIDO	0.29
6962	QUE-146	158.0	166.0	340	200	38400	30930	-4.2	ACIDO	0.39
6963	QUE-146	166.0	174.0	840	200	37100	32660	-4.4	ACIDO	0.25
6964	QUE-146	174.0	182.0	350	200	36500	33400	-4.5	ACIDO	0.15
6965	QUE-146	182.0	190.0	320	200	32900	28830	-3.9	ACIDO	0.15
6966	QUE-146	190.0	198.0	260	200	34800	30950	-4.2	ACIDO	0.16
6967	QUE-146	198.0	206.0	460	200	37200	29980	-4.0	ACIDO	0.29
6968	QUE-146	206.0	214.0	580	200	36200	29360	-3.9	ACIDO	0.24
6969	QUE-146	214.0	222.0	400	200	38300	34160	-4.6	ACIDO	0.38
6970	QUE-146	222.0	230.0	420	200	45730	34830	-4.7	ACIDO	0.38
6971	QUE-146	230.0	238.0	700	200	64930	44130	-6.0	ACIDO	0.43
6972	QUE-146	238.0	246.0	410	200	55750	35350	-4.8	ACIDO	0.70
6973	QUE-146	246.0	253.8	360	200	71950	66630	-9.1	ACIDO	1.07
6974	QUE-146	253.8	254.0	330	200	47630	29730	-4.0	ACIDO	0.51
6975	QUE-146	254.0	262.0	330	200	47630	29730	-4.0	ACIDO	0.67
6976	QUE-146	262.0	262.4	330	200	47630	29730	-4.0	ACIDO	0.35
6977	QUE-146	262.4	270.0	430	200	41300	25600	-3.4	ACIDO	0.46
6978	QUE-146	270.0	278.0	340	200	30400	24430	-3.3	ACIDO	0.42
6979	QUE-146	278.0	286.0	380	200	48540	43870	-5.9	ACIDO	0.35
6980	QUE-146	286.0	294.0	630	200	61550	50650	-6.9	ACIDO	0.58
6981	QUE-146	294.0	302.0	440	200	68700	44500	-6.0	ACIDO	0.64
6982	QUE-146	302.0	310.0	450	200	53190	36590	-4.9	ACIDO	0.58
6983	QUE-146	310.0	318.0	320	200	1630	1250	-0.1	INERTE	0.12
6984	QUE-146	333.8	334.0	450	200	1010	730	0.0	INERTE	0.14
6985	QUE-146	334.0	340.0	450	200	1010	730	0.0	INERTE	0.12
6986	QUE-146	340.0	342.0	550	200	7050	1480	-0.1	LIGERAMENTE ACIDO	0.13
6987	QUE-146	342.0	348.0	550	200	7050	1480	-0.1	LIGERAMENTE ACIDO	0.18
6988	QUE-146	348.0	350.0	620	200	9960	2110	-0.2	LIGERAMENTE ACIDO	0.23
6989	QUE-146	350.0	356.0	620	200	9960	2110	-0.2	LIGERAMENTE ACIDO	0.11
6990	QUE-146	356.0	358.0	1100	200	74250	52150	-7.1	ACIDO	0.15
6991	QUE-146	358.0	363.8	1100	200	74250	52150	-7.1	ACIDO	0.21
6992	QUE-146	363.8	366.0	710	200	73460	48160	-6.5	ACIDO	0.25
6993	QUE-146	366.0	372.0	710	200	73460	48160	-6.5	ACIDO	0.47
6994	QUE-146	372.0	374.0	580	200	57420	38920	-5.3	ACIDO	0.18
6995	QUE-146	374.0	380.0	580	200	57420	38920	-5.3	ACIDO	0.17
6996	QUE-146	380.0	382.0	440	200	20200	11750	-1.5	ACIDO	0.21
6997	QUE-146	382.0	387.9	440	200	20200	11750	-1.5	ACIDO	0.24
6998	QUE-146	387.9	390.0	590	200	75770	54270	-7.4	ACIDO	0.27
6999	QUE-146	390.0	396.0	590	200	75770	54270	-7.4	ACIDO	0.17
7000	QUE-146	396.0	398.0	490	200	57310	45710	-6.2	ACIDO	0.16
7001	QUE-146	398.0	404.0	490	200	57310	45710	-6.2	ACIDO	0.17
7002	QUE-146	414.0	420.1	530	200	61930	32330	-4.4	ACIDO	0.15
7003	QUE-146	420.1	422.0	600	200	28800	3900	-0.5	LIGERAMENTE ACIDO	0.12
7004	QUE-146	422.0	428.0	600	200	28800	3900	-0.5	LIGERAMENTE ACIDO	0.12
7005	QUE-146	428.0	430.0	470	200	57460	18460	-2.5	ACIDO	0.11
7006	QUE-146	430.0	436.0	470	200	57460	18460	-2.5	ACIDO	0.15
7007	QUE-146	436.0	438.0	590	200	63590	35190	-4.7	ACIDO	0.13
7008	QUE-146	446.0	452.0	940	200	65590	40390	-5.5	ACIDO	0.11
7009	QUE-146	467.7	470.0	780	200	45260	26660	-3.6	ACIDO	0.15
7010	QUE-146	470.0	476.0	780	200	45260	26660	-3.6	ACIDO	0.12
7011	QUE-146	476.0	478.0	600	200	63510	39710	-5.4	ACIDO	0.11
7012	QUE-146	478.0	484.0	600	200	63510	39710	-5.4	ACIDO	0.11
7013	QUE-146	484.0	486.0	550	200	46920	18920	-2.5	ACIDO	0.12
7014	QUE-146	492.3	494.0	530	200	48950	22250	-3.0	ACIDO	0.20
7015	QUE-153	49.6	60.3	500	500	25670	3550	-0.3	LIGERAMENTE ACIDO	0.12
7016	QUE-153	80.3	90.0	500	500	26970	3280	-0.3	LIGERAMENTE ACIDO	0.14
7017	QUE-153	90.0	100.2	500	500	26920	24560	-3.2	ACIDO	0.10
7018	QUE-153	110.0	120.0	500	500	37390	21140	-2.7	ACIDO	0.13
7019	QUE-153	140.0	150.0	1070	500	32980	27670	-3.6	ACIDO	0.11
7020	QUE-153	180.0	190.0	500	500	17080	13300	-1.6	ACIDO	0.15
7021	QUE-153	190.0	200.0	500	500	25810	12720	-1.6	ACIDO	0.15
7022	QUE-153	200.0	210.0	1520	500	42330	21340	-2.7	ACIDO	0.10
7023	QUE-153	210.0	220.0	500	500	35710	1610	0.0	INERTE	0.27
7024	QUE-153	220.0	231.4	500	500	2200	0	0.2	LIGERAMENTE BASICO	0.23
7025	QUE-154	0.8	10.0	500	500	37990	5510	-0.6	LIGERAMENTE ACIDO	0.23
7026	QUE-154	10.0	20.0	1440	500	46540	10140	-1.2	ACIDO	0.14
7027	QUE-154	30.0	40.0	500	500	36340	30320	-4.0	ACIDO	0.16
7028	QUE-154	40.0	50.0	500	500	42340	33360	-4.4	ACIDO	0.14
7029	QUE-154	80.0	90.0	500	500	15490	7190	-0.8	LIGERAMENTE ACIDO	0.15
7030	QUE-154	90.0	100.0	500	500	15970	4340	-0.4	LIGERAMENTE ACIDO	0.32
7031	QUE-154	100.0	110.0	500	500	21700	12300	-1.5	ACIDO	0.13
7032	QUE-154	110.0	120.0	500	500	87130	45480	-6.0	ACIDO	0.28
7033	QUE-154	120.0	130.5	500	500	58390	30430	-4.0	ACIDO	0.12
7034	QUE-154	130.5	140.0	500	500	33790	29740	-3.9	ACIDO	0.15
7035	QUE-155	0.3	10.5	1730	500	3510	0	0.2	LIGERAMENTE BASICO	0.73
7036	QUE-155	10.5	19.5	2960	500	500	0	0.2	LIGERAMENTE BASICO	0.94
7037	QUE-155	19.5	30.5	3200	500	5710	0	0.2	LIGERAMENTE BASICO	0.88
7038	QUE-155	30.5	40.0	2590	500	1490	0	0.2	LIGERAMENTE BASICO	0.50
7039	QUE-155	40.0	50.0	500	500	4360	0	0.2	LIGERAMENTE BASICO	0.45
7040	QUE-155	50.0	59.8	500	500	7060	290	0.1	LIGERAMENTE BASICO	0.71
7041	QUE-155	59.8	70.0	500	500	25320	21080	-2.7	ACIDO	0.94
7042	QUE-155	70.0	80.2	2710	500	35570	32100	-4.2	ACIDO	0.81
7043	QUE-155	80.2	90.5	1180	500	39660	37190	-4.9	ACIDO	0.12
7044	QUE-155	90.5	100.0	500	500	36240	33330	-4.4	ACIDO	0.87
7045	QUE-155	100.0	110.5	500	500	24900	21570	-2.8	ACIDO	0.77
7046	QUE-155	110.5	120.0	500	500	77880	73800	-9.9	ACIDO	2.61
7047	QUE-155	120.0	130.0	500	500	47510	43950	-5.8	ACIDO	1.06
7048	QUE-155	130.0	140.0	500	500	47560	44160	-5.9	ACIDO	1.64
7049	QUE-155	140.0	150.0	1190	500	25950	23170	-3.0	ACIDO	1.51
7050	QUE-155	150.0	160.7	500	500	17090	14170	-1.8	ACIDO	0.55
7051	QUE-155	160.7	170.0	1010	500	3640	1310	0.0	INERTE	0.76
7052	QUE-155	170.0	180.5	500	500	9760	1400	0.0	INERTE	5.68
7053	QUE-155	180.5	190.0	500	500	3930	40	0.2	LIGERAMENTE BASICO	1.65
7054	QUE-155	190.0	200.8	500	500	26450	4930	-0.5	LIGERAMENTE ACIDO	2.30
7055	QUE-155	200.8	210.2	500	500	23870	2530	-0.2	LIGERAMENTE ACIDO	1.65
7056	QUE-155	210.2	220.0	500	500	35490	6690	-0.7	LIGERAMENTE ACIDO	0.74
7057	QUE-155	220.0	230.6	500	500	33750	30570	-4.0	ACIDO	0.49
7058	QUE-155	230.6	240.0	500	500	21950	19780	-2.5	ACIDO	0.18
7059	QUE-155	240.0	250.5	500	500	14250	7910	-0.9	LIGERAMENTE ACIDO	0.16
7060	QUE-155	250.5	260.0	500	500	20660	5240	-0.5	LIGERAMENTE ACIDO	0.82
7061	QUE-155	260.0	270.3	500	500	60590	9960	-1.2	ACIDO	0.94
7062	QUE-155	270.3	280.9	500	500	4000	0	0.2	LIGERAMENTE BASICO	0.56
7063	QUE-155	280.9	290.0	500	500	29850	27500	-3.6	ACIDO	0.30
7064	QUE-155	290.0	300.0	500	500	37580	31870	-4.2	ACIDO	0.90
7065	QUE-156	0.0	10.3	500	500	44150	11230	-1.4	ACIDO	0.47
7066	QUE-156	10.3	20.0	1000	1140	6360	210	0.4	LIGERAMENTE BASICO	0.57
7067	QUE-156	20.0	30.0	1370	500	34890	5910	-0.6	LIGERAMENTE ACIDO	0.41
7068	QUE-156	30.0	39.2	2390	500	4950	0	0.2	LIGERAMENTE BASICO	1.16
7069	QUE-156	39.2	50.0	500	500	4780	410	0.1	LIGERAMENTE BASICO	0.49
7070	QUE-156	50.0	60.0	500	500	15010	3190	-0.3	LIGERAMENTE ACIDO	0.23
7071	QUE-156	60.0	70.0	500	500	9050	0	0.2	LIGERAMENTE BASICO	0.59
7072	QUE-156	70.0	80.5	500	500	33320	7990	-0.9	LIGERAMENTE ACIDO	0.34
7073	QUE-156	80.5	90.0	500	500	35710	6150	-0.7	LIGERAMENTE ACIDO	0.26
7074	QUE-156	90.0	99.9	500	500	14310	3570	-0.3	LIGERAMENTE ACIDO	0.44
7075	QUE-156	99.9	110.0	500	500	10650	1700	0.0	INERTE	0.24
7076	QUE-156	110.0	119.9	500	500	31730	2740	-0.2	LIGERAMENTE ACIDO	0.17
7077	QUE-156	119.9	130.7	500	500	24640	3230	-0.3	LIGERAMENTE ACIDO	0.15
7078	QUE-157	0.0	11.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.13
7079	QUE-157	41.0	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
7080	QUE-157	50.0	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.11
7081	QUE-157	60.0	70.0	500	500	15730	3020	-0.2	LIGERAMENTE ACIDO	0.11
7082	QUE-157	170.0	180.5	500	500	15890	12940	-1.6	ACIDO	0.13
7083	QUE-157	180.5	190.8	500	500	37460	33410	-4.4	ACIDO	0.26
7084	QUE-157	190.8	200.0	500	500	30030	19590	-2.5	ACIDO	0.13
7085	QUE-157	200.0	210.5	500	500	41410	22270	-2.9	ACIDO	0.18
7086	QUE-157	210.5	216.7	500	500	53500	39850	-5.3	ACIDO	0.16
7087	QUE-157	216.7	224.0	500	500	42870	38550	-5.1	ACIDO	0.33
7088	QUE-157	224.0	232.0	500	500	20980	18910	-2.4	ACIDO	0.21
7089	QUE-157	232.0	240.0	500	500	16140	13960	-1.7	ACIDO	0.16
7090	QUE-157	240.0	248.0	500	500	19860	18170	-2.3	ACIDO	0.17
7091	QUE-157	248.0	257.0	500	500	10200	9090	-1.1	ACIDO	0.19
7092	QUE-158	110.0	119.9	500	500	18990	0	0.2	LIGERAMENTE BASICO	0.15
7093	QUE-158	119.9	130.4	500	500	45590	4000	-0.4	LIGERAMENTE ACIDO	0.36
7094	QUE-158	130.4	140.5	500	500	28410	17580	-2.2	ACIDO	0.35
7095	QUE-158	140.5	150.0	500	500	37440	3480	-0.3	LIGERAMENTE ACIDO	0.17
7096	QUE-158	150.0	159.5	500	500	40530	1410	0.0	INERTE	0.15
7097	QUE-159	0.8	10.0	3530	500	28260	24680	-3.2	ACIDO	0.12
7098	QUE-159	10.0	20.0	500	500	35040	31890	-4.2	ACIDO	0.54
7099	QUE-159	20.0	30.0	2730	500	36480	33500	-4.4	ACIDO	0.15
7100	QUE-159	30.0	40.0	500	500	27950	25530	-3.3	ACIDO	0.14
7101	QUE-159	40.0	50.0	500	500	27440	24880	-3.2	ACIDO	0.26
7102	QUE-159	50.0	60.0	500	500	21310	18890	-2.4	ACIDO	0.31
7103	QUE-159	60.0	70.0	500	500	27310	24520	-3.2	ACIDO	0.25
7104	QUE-159	70.0	80.0	500	500	29220	26370	-3.4	ACIDO	0.12
7105	QUE-159	100.0	110.0	500	500	32930	30050	-3.9	ACIDO	0.30
7106	QUE-159	130.0	140.0	500	500	28230	26020	-3.4	ACIDO	0.15
7107	QUE-159	140.0	150.0	500	500	22930	19520	-2.5	ACIDO	0.24
7108	QUE-159	150.0	160.0	500	500	17410	15230	-1.9	ACIDO	0.24
7109	QUE-159	160.0	170.0	500	500	16450	13590	-1.7	ACIDO	0.14
7110	QUE-159	170.0	180.0	2180	500	6970	0	0.2	LIGERAMENTE BASICO	0.21

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
7111	QUE-159	190.0	200.0	500	500	27900	25920	-3.4	ACIDO	0.14
7112	QUE-159	200.0	210.0	500	500	12860	10560	-1.3	ACIDO	0.13
7113	QUE-159	210.0	219.8	500	500	4710	0	0.2	LIGERAMENTE BASICO	0.22
7114	QUE-159	219.8	230.5	500	500	44400	1380	0.0	INERTE	0.52
7115	QUE-159	230.5	240.5	500	500	25390	3110	-0.2	LIGERAMENTE ACIDO	0.24
7116	QUE-159	240.5	250.5	500	500	20340	17230	-2.2	ACIDO	0.13
7117	QUE-159	250.5	260.0	500	500	25760	22710	-2.9	ACIDO	0.10
7118	QUE-159	260.0	270.0	500	500	15300	2210	-0.1	LIGERAMENTE ACIDO	0.25
7119	QUE-159	270.0	280.9	500	500	31040	27970	-3.6	ACIDO	1.25
7120	QUE-159	280.9	290.0	500	500	34280	27570	-3.6	ACIDO	1.56
7121	QUE-160	1.6	10.4	500	500	37440	2580	-0.2	LIGERAMENTE ACIDO	0.10
7122	QUE-160	10.4	21.2	500	500	39570	3560	-0.3	LIGERAMENTE ACIDO	0.11
7123	QUE-160	21.2	30.5	500	500	22150	1400	0.0	INERTE	0.12
7124	QUE-160	30.5	40.4	500	500	1710	0	0.2	LIGERAMENTE BASICO	0.21
7125	QUE-160	40.4	50.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.12
7126	QUE-160	50.0	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.16
7127	QUE-160	60.0	70.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.36
7128	QUE-160	70.0	80.0	500	500	1740	60	0.2	LIGERAMENTE BASICO	0.52
7129	QUE-160	80.0	90.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.52
7130	QUE-160	90.0	100.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
7131	QUE-160	100.0	110.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
7132	QUE-160	110.0	114.9	500	500	500	0	0.2	LIGERAMENTE BASICO	0.12
7133	QUE-160	116.9	125.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.13
7134	QUE-160	125.5	129.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.23
7135	QUE-160	130.3	132.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
7136	QUE-160	160.0	171.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.13
7137	QUE-160	260.0	270.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.18
7138	QUE-161	50.2	60.5	500	500	61780	6830	-0.8	LIGERAMENTE ACIDO	0.16
7139	QUE-161	60.5	70.0	500	500	63570	5490	-0.6	LIGERAMENTE ACIDO	0.11
7140	QUE-161	70.0	81.6	500	500	65070	6600	-0.7	LIGERAMENTE ACIDO	0.55
7141	QUE-161	81.6	91.6	500	500	54160	8430	-1.0	LIGERAMENTE ACIDO	0.28
7142	QUE-161	91.6	100.0	500	500	43260	5500	-0.6	LIGERAMENTE ACIDO	0.27
7143	QUE-161	100.0	110.4	500	500	57820	5600	-0.6	LIGERAMENTE ACIDO	0.39
7144	QUE-161	110.4	120.0	500	500	58880	6380	-0.7	LIGERAMENTE ACIDO	0.41
7145	QUE-161	120.0	130.0	500	500	34490	5610	-0.6	LIGERAMENTE ACIDO	0.24
7146	QUE-161	130.0	141.0	500	500	49100	10350	-1.2	ACIDO	0.33
7147	QUE-161	141.0	151.5	500	500	23490	5670	-0.6	LIGERAMENTE ACIDO	0.39
7148	QUE-161	151.5	160.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.42
7149	QUE-161	160.0	171.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.66
7150	QUE-161	171.0	180.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.41
7151	QUE-161	180.6	190.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
7152	QUE-161	190.6	200.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.42
7153	QUE-161	200.5	210.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.26
7154	QUE-161	210.5	219.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.45
7155	QUE-161	219.6	230.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.16
7156	QUE-161	240.6	250.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.13
7157	QUE-161	270.0	280.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.18
7158	QUE-161	280.0	290.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
7159	QUE-161	290.0	300.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.50
7160	QUE-161	300.0	310.0	500	500	500	0	0.2	LIGERAMENTE BASICO	1.77
7161	QUE-161	310.0	320.3	500	500	500	0	0.2	LIGERAMENTE BASICO	0.83
7162	QUE-161	320.3	330.5	500	500	500	0	0.2	LIGERAMENTE BASICO	1.04
7163	QUE-161	330.5	336.7	500	500	28790	16580	-2.1	ACIDO	1.62
7164	QUE-162	0.0	10.4	500	500	3750	200	0.2	LIGERAMENTE BASICO	0.22
7165	QUE-162	10.4	20.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.30
7166	QUE-162	20.0	30.0	500	500	4290	0	0.2	LIGERAMENTE BASICO	0.40
7167	QUE-162	81.0	90.5	500	500	4900	0	0.2	LIGERAMENTE BASICO	0.38
7168	QUE-162	90.5	100.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.41
7169	QUE-162	100.0	111.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.34
7170	QUE-162	111.5	121.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
7171	QUE-162	121.0	130.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.23
7172	QUE-162	130.0	140.0	1020	500	500	0	0.2	LIGERAMENTE BASICO	0.15
7173	QUE-162	150.6	160.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.10
7174	QUE-162	160.0	170.8	500	500	500	0	0.2	LIGERAMENTE BASICO	0.11
7175	QUE-162	170.8	178.1	1220	500	500	0	0.2	LIGERAMENTE BASICO	0.16
7176	QUE-162	190.0	200.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.11
7177	QUE-162	200.5	208.7	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
7178	QUE-163	0.0	10.0	500	500	40750	1820	-0.1	INERTE	0.11
7179	QUE-163	10.0	19.4	500	500	25630	0	0.2	LIGERAMENTE BASICO	0.38
7180	QUE-163	19.4	29.7	500	500	55290	4480	-0.4	LIGERAMENTE ACIDO	0.14
7181	QUE-163	29.7	39.5	500	500	32920	3530	-0.3	LIGERAMENTE ACIDO	0.11
7182	QUE-163	49.5	60.0	500	500	18480	350	0.1	LIGERAMENTE BASICO	0.11
7183	QUE-163	70.0	80.0	500	500	50860	2390	-0.1	LIGERAMENTE ACIDO	0.19
7184	QUE-163	80.0	90.9	500	500	52190	16030	-2.0	ACIDO	0.20
7185	QUE-163	130.3	140.0	500	500	13520	1920	-0.1	INERTE	0.15
7186	QUE-164	2.5	10.2	1070	500	2510	0	0.2	LIGERAMENTE BASICO	0.24
7187	QUE-164	10.2	20.0	2790	1200	50930	47980	-6.1	ACIDO	0.20
7188	QUE-164	31.5	40.0	1780	1140	18410	15270	-1.7	ACIDO	0.13
7189	QUE-164	40.0	49.9	1630	1130	19400	17460	-2.0	ACIDO	0.42
7190	QUE-164	49.9	60.0	1740	1000	34280	31440	-3.9	ACIDO	0.31
7191	QUE-164	60.0	70.0	500	500	11110	3190	-0.3	LIGERAMENTE ACIDO	0.39
7192	QUE-164	70.0	80.2	500	500	28200	10430	-1.2	ACIDO	0.29
7193	QUE-164	80.2	90.0	1220	500	10560	8470	-1.0	LIGERAMENTE ACIDO	0.38
7194	QUE-164	90.0	100.0	1360	500	18120	15960	-2.0	ACIDO	0.31
7195	QUE-164	100.0	110.4	1700	500	28870	26980	-3.5	ACIDO	0.38
7196	QUE-164	110.4	120.2	1110	500	30190	28270	-3.7	ACIDO	0.21
7197	QUE-164	120.2	130.5	500	500	36040	33480	-4.4	ACIDO	0.24
7198	QUE-164	130.5	140.0	500	500	32990	31080	-4.1	ACIDO	0.22
7199	QUE-164	140.0	150.0	500	500	4060	2190	-0.1	LIGERAMENTE ACIDO	0.17
7200	QUE-164	150.0	159.5	500	500	10160	1510	0.0	INERTE	0.33
7201	QUE-164	159.5	170.1	500	500	41690	5400	-0.6	LIGERAMENTE ACIDO	0.89
7202	QUE-164	170.1	181.0	500	500	51790	7460	-0.8	LIGERAMENTE ACIDO	0.49
7203	QUE-164	181.0	190.0	500	500	36910	6400	-0.7	LIGERAMENTE ACIDO	0.35
7204	QUE-164	200.6	210.0	500	500	41400	6730	-0.7	LIGERAMENTE ACIDO	0.14
7205	QUE-164	210.0	220.5	500	500	40080	3000	-0.2	LIGERAMENTE ACIDO	0.18
7206	QUE-164	281.4	287.9	500	500	3220	890	0.1	INERTE	0.15
7207	QUE-165	90.2	100.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.11
7208	QUE-165	100.0	110.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.11
7209	QUE-165	140.2	150.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.12
7210	QUE-165	150.0	160.9	500	500	500	0	0.2	LIGERAMENTE BASICO	0.15
7211	QUE-165	160.9	170.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.13
7212	QUE-165	170.0	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.17
7213	QUE-165	180.0	189.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.34
7214	QUE-165	189.6	200.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.42
7215	QUE-165	200.0	210.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.14
7216	QUE-165	210.0	220.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.27
7217	QUE-165	220.0	230.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.63
7218	QUE-165	230.5	240.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.73
7219	QUE-165	240.0	251.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.16
7220	QUE-165	270.0	280.1	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
7221	QUE-165	280.1	284.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.25
7222	QUE-166	109.5	119.1	400	50	39700	21100	-2.9	ACIDO	0.11
7223	QUE-166	200.0	210.0	300	50	900	200	0.0	INERTE	0.11
7224	QUE-166	210.0	220.5	400	200	800	700	0.0	INERTE	0.11
7225	QUE-166	220.5	229.0	300	50	200	100	0.0	INERTE	0.11
7226	QUE-166	229.0	240.5	300	50	200	100	0.0	INERTE	0.11
7227	QUE-166	240.5	250.0	300	50	200	100	0.0	INERTE	0.16
7228	QUE-166	250.0	260.5	300	50	200	100	0.0	INERTE	0.30
7229	QUE-166	260.5	270.5	400	50	500	100	0.0	INERTE	1.16
7230	QUE-166	270.5	280.0	400	50	700	100	0.0	INERTE	1.32
7231	QUE-166	280.0	290.8	400	50	800	200	0.0	INERTE	2.03
7232	QUE-166	290.8	300.0	500	50	600	100	0.0	INERTE	2.41
7233	QUE-166	300.0	309.0	300	50	400	100	0.0	INERTE	1.10
7234	QUE-166	309.0	320.1	300	50	300	100	0.0	INERTE	1.04
7235	QUE-166	320.1	330.5	500	50	800	300	0.0	INERTE	2.95
7236	QUE-166	330.5	340.5	400	50	700	200	0.0	INERTE	6.56
7237	QUE-166	340.5	350.5	300	50	700	100	0.0	INERTE	2.62
7238	QUE-166	350.5	360.5	400	50	3200	2200	-0.3	LIGERAMENTE ACIDO	2.14
7239	QUE-166	360.5	369.5	500	50	900	300	0.0	INERTE	2.51
7240	QUE-166	369.5	380.0	400	100	800	200	0.0	INERTE	1.21
7241	QUE-166	380.0	389.7	300	50	2100	1200	-0.1	LIGERAMENTE ACIDO	1.70
7242	QUE-166	389.7	400.0	400	50	36300	35300	-4.8	ACIDO	1.60
7243	QUE-166	400.0	410.5	300	50	21200	20200	-2.7	ACIDO	3.05
7244	QUE-166	410.5	420.8	400	50	13000	9200	-1.2	ACIDO	0.89
7245	QUE-166	420.8	427.5	1900	50	81300	72200	-9.9	ACIDO	0.97
7246	QUE-166	427.5	432.3	700	50	109000	84400	-11.5	ACIDO	0.55
7247	QUE-166	434.3	439.3	400	50	107300	84300	-11.5	ACIDO	1.09
7248	QUE-166	439.3	450.6	600	50	51100	42400	-5.8	ACIDO	0.62
7249	QUE-166	450.6	453.0	900	100	47400	43800	-6.0	ACIDO	0.11
7250	QUE-167	109.0	119.0	500	50	300	100	0.0	INERTE	0.10
7251	QUE-167	119.0	129.0	200	50	300	100	0.0	INERTE	0.13
7252	QUE-167	129.0	135.6	200	50	300	100	0.0	INERTE	0.20
7253	QUE-168	150.5	159.7	400	50	2000	900	-0.1	LIGERAMENTE ACIDO	0.26
7254	QUE-168	159.7	169.5	600	50	29300	13700	-1.9	ACIDO	0.16
7255	QUE-168	169.5	179.2	600	50	28100	16300	-2.2	ACIDO	0.20
7256	QUE-168	179.2	189.0	400	50	1600	500	-0.1	INERTE	0.28
7257	QUE-168	189.0	199.0	400	50	900	200	0.0	INERTE	0.50
7258	QUE-168	199.0	210.0	400	50	700	100	0.0	INERTE	0.31
7259	QUE-168	210.0	221.1	300	50	900	100	0.0	INERTE	0.33
7260	QUE-168	221.1	231.5	300	50	500	0	0.0	INERTE	1.41
7261	QUE-168	231.5	241.1	300	100	700	0	0.0	INERTE	1.36
7262	QUE-168	241.1	251.5	300	50	600	100	0.0	INERTE	1.26
7263	QUE-168	251.5	261.5	200	50	300	100	0.0	INERTE	1.19
7264	QUE-168	261.5	271.3	200	50	200	0	0.0	INERTE	0.76
7265	QUE-168	271.3	280.8	400	50	400	100	0.0	INERTE	0.67
7266	QUE-168	280.8	291.5	300	100	300	100	0.0	INERTE	0.91
7267	QUE-168	291.5	301.0	400	50	400	200	0.0	INERTE	1.88
7268	QUE-168	301.0	311.0	400	100	800	100	0.0	INERTE	1.67
7269	QUE-168	311.0	321.2	300	100	500	0	0.0	INERTE	0.63
7270	QUE-168	321.2	331.5	300	50	400	100	0.0	INERTE	0.91
7271	QUE-168	331.5	341.0	300	100	600	100	0.0	INERTE	0.76
7272	QUE-168	341.0	350.5	200	100	500	0	0.0	INERTE	0.43
7273	QUE-168	350.5	360.5	200	100	700	0	0.0	INERTE	0.44
7274	QUE-168	360.5	371.0	400	100	900	200	0.0	INERTE	0.58
7275	QUE-168	371.0	381.3	400	100	900	300	0.0	INERTE	1.16
7276	QUE-168	381.3	390.5	300	100	6000	5600	-0.7	LIGERAMENTE ACIDO	1.76
7277	QUE-168	390.5	401.2	300	100	79900	78500	-10.7	ACIDO	1.04
7278	QUE-168	401.2	411.0	300	50	93600	91500	-12.5	ACIDO	0.61
7279	QUE-168	411.0	421.0	300	50	96900	94800	-13.0	ACIDO	0.27
7280	QUE-168	421.0	430.6	300	50	99700	97800	-13.4	ACIDO	0.20
7281	QUE-169	130.5	140.0	400	50	300	100	0.0	INERTE	0.14
7282	QUE-169	140.0	149.5	300	50	100	50	0.0	INERTE	0.21
7283	QUE-169	149.5	159.6	300	50	300	200	0.0	INERTE	0.23
7284	QUE-169	159.6	169.5	300	50	200	100	0.0	INERTE	0.30
7285	QUE-169	169.5	179.5	400	100	300	200	0.0	INERTE	0.15
7286	QUE-169	179.5	189.0	300	200	200	100	0.1	INERTE	0.15
7287	QUE-169	189.0	199.0	300	100	200	100	0.0	INERTE	0.12
7288	QUE-169	210.0	220.6	300	50	200	100	0.0	INERTE	0.12
7289	QUE-169	220.6	229.5	400	50	300	200	0.0	INERTE	0.12
7290	QUE-169	239.5	249.5	300	50	200	100	0.0	INERTE	0.11
7291	QUE-169	249.5	260.0	300	50	300	200	0.0	INERTE	0.17
7292	QUE-169	260.0	269.0	300	50	200	100	0.0	INERTE	0.20
7293	QUE-169	269.0	280.5	300	50	300	100	0.0	INERTE	0.18
7294	QUE-169	280.5	289.0	400	50	400	100	0.0	INERTE	0.28
7295	QUE-169	289.0	300.0	300	100	300	0	0.0	INERTE	0.24
7296	QUE-169	300.0	310.5	200	50	300	0	0.0	INERTE	0.41
7297	QUE-169	310.5	320.0	400	50	2700	2650	-0.3	LIGERAMENTE ACIDO	0.10
7298	QUE-169	320.0	330.0	300	50	17200	17100	-2.3	ACIDO	0.10
7299	QUE-169	340.0	350.0	300	50	13000	12800	-1.7	ACIDO	0.16
7300	QUE-169	350.0	360.0	400	100	2200	2000	-0.2	LIGERAMENTE ACIDO	0.24
7301	QUE-169	360.0	369.9	400	50	500	400	0.0	INERTE	0.88
7302	QUE-169	369.9	380.0	200	50	300	100	0.0	INERTE	1.33
7303	QUE-169	380.0	389.5	400	50	500	100	0.0	INERTE	3.92
7304	QUE-169	389.5	400.5	300	200	500	100	0.1	INERTE	5.15
7305	QUE-169	400.5	411.0	300	50	1100	300	0.0	INERTE	1.49
7306	QUE-169	411.0	421.7	600	50	2000	500	-0.1	INERTE	2.28
7307	QUE-169	421.7	430.0	500	50	1000	300	0.0	INERTE	1.43
7308	QUE-169	430.0	439.2	300	50	1000	200	0.0	INERTE	2.00
7309	QUE-169	439.2	449.0	700	50	1400	400	0.0	INERTE	3.17
7310	QUE-169	449.0	460.4	600	50	2700	1100	-0.1	LIGERAMENTE ACIDO	1.10
7311	QUE-169	460.4	470.0	400	50	31900	21900	-3.0	ACIDO	0.58
7312	QUE-169	470.0	480.6	400	50	49400	36400	-5.0	ACIDO	0.39
7313	QUE-169	480.6	490.5	300	50	102000	69500	-9.5	ACIDO	0.51
7314	QUE-169	490.5	498.2	500	50	87000	80400	-11.0	ACIDO	0.35
7315	QUE-169	498.2	503.0	400	50	122000	96700	-13.2	ACIDO	0.33
7316	QUE-170	210.0	216.0	300	50	24900	12700	-1.7	ACIDO	0.26
7317	QUE-170	217.0	223.1	500	50	3200	1800	-0.2	LIGERAMENTE ACIDO	0.25
7318	QUE-170	223.1	230.5	900	100	5200	2700	-0.3	LIGERAMENTE ACIDO	0.28
7319	QUE-170	230.5	239.6	500	50	40800	15600	-2.1	ACIDO	0.24
7320	QUE-170	239.6	249.7	500	50	33800	15400	-2.1	ACIDO	0.35
7321	QUE-170	249.7	259.7	300	100	15100	7500	-1.0	LIGERAMENTE ACIDO	0.28
7322	QUE-170	259.7	270.9	400	50	800	400	0.0	INERTE	0.26
7323	QUE-170	270.9	279.6	500	50	8800	4500	-0.6	LIGERAMENTE ACIDO	0.36
7324	QUE-170	279.6	289.5	400	50	3200	1900	-0.2	LIGERAMENTE ACIDO	0.69
7325	QUE-170	289.5	300.0	500	50	3500	1800	-0.2	LIGERAMENTE ACIDO	1.62
7326	QUE-170	300.0	311.0	500	50	4600	2300	-0.3	LIGERAMENTE ACIDO	3.39
7327	QUE-170	311.0	320.0	600	50	1700	500	-0.1	INERTE	7.89
7328	QUE-170	320.0	330.5	900	100	1900	800	-0.1	NEUTRAL	4.13
7329	QUE-170	330.5	340.0	400	50	15800	8500	-1.1	ACIDO	1.25
7330	QUE-170	341.0	350.6	2400	50	44300	39600	-5.4	ACIDO	2.66
7331	QUE-170	350.6	361.0	2200	50	35300	33900	-4.6	ACIDO	1.96
7332	QUE-170	361.0	370.0	1900	50	50800	49500	-6.8	ACIDO	5.95
7333	QUE-170	370.0	381.0	2100	50	49600	48200	-6.6	ACIDO	1.58
7334	QUE-170	381.0	390.0	1500	50	47000	45400	-6.2	ACIDO	1.77
7335	QUE-170	390.0	399.5	900	50	57000	40700	-5.6	ACIDO	1.29
7336	QUE-170	399.5	410.5	1100	50	12200	6200	-0.8	LIGERAMENTE ACIDO	1.70
7337	QUE-170	410.5	420.5	700	50	15300	8500	-1.1	ACIDO	0.31
7338	QUE-170	420.5	430.5	500	50	2700	1600	-0.2	LIGERAMENTE ACIDO	0.65
7339	QUE-170	430.5	438.8	400	50	4600	3600	-0.5	LIGERAMENTE ACIDO	0.36
7340	QUE-171	109.5	119.5	900	50	24800	12200	-1.7	ACIDO	0.11
7341	QUE-171	119.5	130.5	200	100	56700	28200	-3.8	ACIDO	0.12
7342	QUE-171	139.5	149.4	1100	50	18900	7300	-1.0	LIGERAMENTE ACIDO	0.12
7343	QUE-171	149.4	159.0	200	100	45700	32700	-4.4	ACIDO	0.19
7344	QUE-171	159.0	170.4	1800	50	44200	41000	-5.6	ACIDO	0.42
7345	QUE-171	170.4	180.0	700	100	27000	17800	-2.4	ACIDO	0.47
7346	QUE-171	180.0	190.5	1200	200	29900	27000	-3.6	ACIDO	0.65
7347	QUE-171	190.5	200.5	3200	100	34900	32700	-4.4	ACIDO	0.97
7348	QUE-171	200.5	210.9	1700	100	28000	20500	-2.8	ACIDO	1.12
7349	QUE-171	210.9	220.4	400	50	54300	19200	-2.6	ACIDO	0.92
7350	QUE-171	220.4	230.5	600	50	11800	5300	-0.7	LIGERAMENTE ACIDO	1.20
7351	QUE-171	230.5	239.0	300	50	27400	12400	-1.7	ACIDO	1.08
7352	QUE-171	239.0	249.0	400	100	28300	12200	-1.6	ACIDO	1.68
7353	QUE-171	249.0	260.6	700	100	28200	14400	-1.9	ACIDO	1.97
7354	QUE-171	260.6	269.0	600	50	24600	17500	-2.4	ACIDO	1.08
7355	QUE-171	269.0	280.0	600	300	31300	11800	-1.5	ACIDO	3.65
7356	QUE-171	280.0	290.0	400	50	30500	13000	-1.8	ACIDO	1.38
7357	QUE-171	290.0	300.5	400	50	26400	11400	-1.5	ACIDO	2.85
7358	QUE-171	300.5	309.8	200	50	1000	500	-0.1	INERTE	0.26
7359	QUE-171	309.8	320.2	100	50	600	300	0.0	INERTE	0.58
7360	QUE-171	320.2	329.0	300	50	1400	700	-0.1	INERTE	0.28
7361	QUE-171	329.0	338.7	300	50	300	100	0.0	INERTE	0.46
7362	QUE-171	338.7	349.5	400	200	23800	18500	-2.5	ACIDO	0.52
7363	QUE-171	349.5	359.0	1000	100	85000	41000	-5.6	ACIDO	0.71
7364	QUE-171	359.0	369.2	500	50	1100	400	0.0	INERTE	1.02
7365	QUE-171	369.2	379.4	300	200	500	200	0.0	INERTE	1.03
7366	QUE-171	379.4	389.0	600	50	15700	12400	-1.7	ACIDO	0.57
7367	QUE-171	389.0	400.0	700	200	106000	101000	-13.8	ACIDO	0.96
7368	QUE-171	400.0	409.0	600	200	59600	56800	-7.7	ACIDO	0.71
7369	QUE-171	409.0	413.0	2100	100	49500	48200	-6.6	ACIDO	0.45
7370	QUE-172	101.5	110.0	400	200	52500	21000	-2.8	ACIDO	0.22
7371	QUE-172	110.0	120.9	700	100	29200	12400	-1.7	ACIDO	0.20
7372	QUE-172	120.9	131.0	500	100	10000	4900	-0.6	LIGERAMENTE ACIDO	0.21
7373	QUE-172	131.0	140.6	200	100	600	200	0.0	INERTE	0.18
7374	QUE-172	159.5	169.5	200	200	300	250	0.0	INERTE	0.12
7375	QUE-172	169.5	180.8	100	100	500	450	0.0	INERTE	0.16
7376	QUE-172	180.8	190.3	300	200	1000	950	-0.1	NEUTRAL	0.20
7377	QUE-172	190.3	199.7	500	300	1100	300	0.1	NEUTRAL	0.22
7378	QUE-172	199.7	210.3	300	300	1200	200	0.1	NEUTRAL	0.45
7379	QUE-172	211.9	220.3	500	50	6900	3600	-0.5	LIGERAMENTE ACIDO	0.50
7380	QUE-172	220.3	230.5	400	50	8400	4500	-0.6	LIGERAMENTE ACIDO	1.06
7381	QUE-172	230.5	240.6	200	100	700	200	0.0	INERTE	1.04
7382	QUE-172	240.6	251.0	200	100	600	0	0.0	INERTE	0.36
7383	QUE-172	251.0	260.0	200	200	200	0	0.1	INERTE	0.21
7384	QUE-172	260.0	270.5	300	300	400	0	0.1	LIGERAMENTE BASICO	0.25
7385	QUE-172	270.5	280.0	200	200	300	0	0.1	INERTE	0.18
7386	QUE-172	280.0	290.9	100	50	200	0	0.0	INERTE	0.23
7387	QUE-172	290.9	299.5	200	200	400	100	0.1	INERTE	0.29
7388	QUE-172	299.5	309.5	200	50	500	400	0.0	INERTE	1.05
7389	QUE-172	309.5	319.7	200	200	600	0	0.1	INERTE	1.43
7390	QUE-172	319.7	329.5	200	50	30600	30100	-4.1	ACIDO	0.30
7391	QUE-172	329.5	338.9	200	100	3700	3200	-0.4	LIGERAMENTE ACIDO	0.46
7392	QUE-172	338.9	349.4	200	200	1400	800	0.0	NEUTRAL	0.68
7393	QUE-172	349.4	359.8	100	100	6300	5600	-0.7	LIGERAMENTE ACIDO	1.05
7394	QUE-172	359.8	370.6	200	200	33300	32500	-4.4	ACIDO	1.55
7395	QUE-172	370.6	380.0	200	50	30300	29800	-4.1	ACIDO	0.64
7396	QUE-172	380.0	389.5	500	100	58300	57300	-7.8	ACIDO	0.75
7397	QUE-172	389.5	399.5	200	200	21400	19200	-2.6	ACIDO	1.26
7398	QUE-172	399.5	409.0	300	100	46700	45900	-6.3	ACIDO	1.10
7399	QUE-172	409.0	419.0	400	100	35900	34800	-4.7	ACIDO	1.15
7400	QUE-172	419.0	429.0	400	100	1700	700	-0.1	INERTE	0.91
7401	QUE-172	429.0	440.0	500	50	1600	500	-0.1	INERTE	1.13
7402	QUE-172	440.0	449.6	300	50	1300	300	0.0	INERTE	0.54
7403	QUE-172	449.6	459.0	200	100	29100	28000	-3.8	ACIDO	0.20
7404	QUE-172	459.0	469.9	200	50	68200	64900	-8.9	ACIDO	0.52
7405	QUE-172	469.9	480.5	100	50	48600	46700	-6.4	ACIDO	0.36
7406	QUE-172	480.5	488.2	100	50	64600	55600	-7.6	ACIDO	0.73
7407	QUE-173	130.7	140.5	100	50	31700	18800	-2.6	ACIDO	0.11
7408	QUE-173	140.5	149.9	300	300	33500	19400	-2.5	ACIDO	0.15
7409	QUE-173	149.9	159.5	600	50	35300	19200	-2.6	ACIDO	0.22
7410	QUE-173	159.5	169.5	300	50	23500	12800	-1.7	ACIDO	0.23
7411	QUE-173	169.5	180.6	200	50	17100	10300	-1.4	ACIDO	0.14
7412	QUE-173	190.0	199.5	200	50	29700	16000	-2.2	ACIDO	0.39
7413	QUE-173	209.0	220.5	6300	100	31500	29800	-4.0	ACIDO	0.19
7414	QUE-173	220.5	231.0	800	100	27600	13600	-1.8	ACIDO	0.46
7415	QUE-173	231.0	239.1	500	50	56300	14000	-1.9	ACIDO	0.41
7416	QUE-173	239.1	249.7	100	50	8700	4100	-0.5	LIGERAMENTE ACIDO	0.28
7417	QUE-173	249.7	260.0	100	50	4800	2600	-0.3	LIGERAMENTE ACIDO	0.27
7418	QUE-173	260.0	270.0	100	50	12300	6300	-0.8	LIGERAMENTE ACIDO	0.72
7419	QUE-173	270.0	280.0	200	50	8200	3900	-0.5	LIGERAMENTE ACIDO	1.21
7420	QUE-173	280.0	289.5	400	50	8500	4200	-0.6	LIGERAMENTE ACIDO	1.49
7421	QUE-173	289.5	299.5	700	50	32100	19800	-2.7	ACIDO	0.77
7422	QUE-173	299.5	309.9	700	100	72300	31400	-4.3	ACIDO	0.63
7423	QUE-173	309.9	319.8	600	50	64200	21400	-2.9	ACIDO	1.16
7424	QUE-173	319.8	330.0	2100	50	44600	43000	-5.9	ACIDO	0.72
7425	QUE-173	330.0	339.0	1600	50	42900	41100	-5.6	ACIDO	0.75
7426	QUE-173	339.0	350.0	500	50	69800	48900	-6.7	ACIDO	0.54
7427	QUE-173	350.0	359.6	100	50	32600	19600	-2.7	ACIDO	0.51
7428	QUE-173	359.6	370.0	300	50	35700	24800	-3.4	ACIDO	0.46
7429	QUE-173	370.0	380.2	200	50	45300	30000	-4.1	ACIDO	0.67
7430	QUE-173	380.2	390.0	500	200	39700	28500	-3.8	ACIDO	0.53
7431	QUE-173	390.0	396.6	2400	100	43400	40900	-5.6	ACIDO	0.45
7432	QUE-174	59.7	69.5	1000	50	25300	16700	-2.3	ACIDO	0.15
7433	QUE-174	69.5	79.0	1100	50	20400	10200	-1.4	ACIDO	0.19
7434	QUE-174	79.0	90.8	1200	50	26000	19200	-2.6	ACIDO	0.35
7435	QUE-174	90.8	99.3	1700	50	14000	7900	-1.1	ACIDO	0.10
7436	QUE-174	99.3	110.9	700	50	35300	19800	-2.7	ACIDO	0.27
7437	QUE-174	110.9	119.0	500	50	54000	25500	-3.5	ACIDO	0.28
7438	QUE-174	119.0	130.4	900	50	38600	20700	-2.8	ACIDO	0.20
7439	QUE-174	140.5	145.7	1500	50	19500	11700	-1.6	ACIDO	0.22
7440	QUE-174	147.0	152.0	1200	50	22100	11700	-1.6	ACIDO	0.53
7441	QUE-174	152.0	160.8	1000	50	32300	16900	-2.3	ACIDO	0.61
7442	QUE-174	160.8	170.8	400	50	53900	24300	-3.3	ACIDO	1.09
7443	QUE-174	170.8	180.7	4800	100	51100	46600	-6.3	ACIDO	0.50
7444	QUE-174	180.7	190.5	4200	50	63500	62500	-8.5	ACIDO	0.41
7445	QUE-174	190.5	200.0	3500	50	61800	60400	-8.3	ACIDO	0.13
7446	QUE-174	200.0	210.0	1700	50	23400	14800	-2.0	ACIDO	0.46
7447	QUE-174	210.0	220.0	400	50	13500	6000	-0.8	LIGERAMENTE ACIDO	0.27
7448	QUE-174	220.0	230.5	3100	50	21000	14300	-1.9	ACIDO	0.34
7449	QUE-174	230.5	239.7	3600	100	29100	27200	-3.7	ACIDO	0.34
7450	QUE-174	239.7	250.2	500	50	13200	6700	-0.9	LIGERAMENTE ACIDO	0.71
7451	QUE-174	250.2	260.2	3600	50	20100	17100	-2.3	ACIDO	0.38
7452	QUE-174	260.2	270.8	1800	50	39000	35500	-4.8	ACIDO	0.46
7453	QUE-174	270.8	279.0	800	50	29800	12800	-1.7	ACIDO	0.37
7454	QUE-174	279.0	289.5	400	50	55400	12700	-1.7	ACIDO	0.15
7455	QUE-174	289.5	300.0	2600	50	45700	15800	-2.1	ACIDO	0.15
7456	QUE-174	300.0	308.9	200	50	6100	3100	-0.4	LIGERAMENTE ACIDO	0.14
7457	QUE-174	308.9	319.9	3100	50	31900	23500	-3.2	ACIDO	0.22
7458	QUE-174	319.9	329.0	2500	50	38300	30300	-4.1	ACIDO	0.23
7459	QUE-174	329.0	340.0	1400	300	48400	44100	-5.9	ACIDO	0.36
7460	QUE-174	340.0	349.9	3100	50	33000	31800	-4.3	ACIDO	0.41
7461	QUE-174	349.9	360.0	600	50	45500	29800	-4.1	ACIDO	0.65
7462	QUE-174	360.0	370.6	2000	50	77100	59800	-8.2	ACIDO	0.27
7463	QUE-174	370.6	379.0	3800	50	23800	21600	-2.9	ACIDO	0.25
7464	QUE-174	379.0	389.1	2200	50	30300	26900	-3.7	ACIDO	0.17
7465	QUE-174	389.1	396.7	3300	50	27300	25900	-3.5	ACIDO	0.18
7466	QUE-175	139.0	150.5	200	50	400	100	0.0	INERTE	0.11
7467	QUE-175	150.5	160.5	100	50	400	100	0.0	INERTE	0.16
7468	QUE-175	160.5	169.0	50	50	300	100	0.0	INERTE	0.12
7469	QUE-175	169.0	179.0	200	50	300	100	0.0	INERTE	0.14
7470	QUE-175	179.0	189.0	100	50	400	200	0.0	INERTE	0.13

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
7471	QUE-175	189.0	200.0	100	50	300	0	0.0	INERTE	0.11
7472	QUE-175	200.0	210.8	300	50	300	100	0.0	INERTE	0.14
7473	QUE-175	210.8	220.5	200	100	400	100	0.0	INERTE	0.23
7474	QUE-175	220.5	230.5	200	50	400	0	0.0	INERTE	0.21
7475	QUE-175	230.5	240.5	200	50	300	0	0.0	INERTE	0.15
7476	QUE-175	240.5	250.0	200	50	2100	1600	-0.2	LIGERAMENTE ACIDO	0.33
7477	QUE-175	250.0	259.0	300	50	300	0	0.0	INERTE	0.46
7478	QUE-175	259.0	269.0	300	50	200	0	0.0	INERTE	0.31
7479	QUE-175	269.0	280.0	200	50	200	0	0.0	INERTE	0.62
7480	QUE-175	280.0	290.0	200	50	200	0	0.0	INERTE	0.34
7481	QUE-175	290.0	300.5	200	50	200	0	0.0	INERTE	0.83
7482	QUE-175	300.5	310.7	300	50	200	0	0.0	INERTE	0.48
7483	QUE-175	310.7	319.0	200	50	200	0	0.0	INERTE	0.44
7484	QUE-175	319.0	329.9	400	50	300	0	0.0	INERTE	1.26
7485	QUE-175	329.9	338.9	300	50	300	0	0.0	INERTE	0.87
7486	QUE-175	338.9	350.2	400	50	1900	900	-0.1	LIGERAMENTE ACIDO	1.88
7487	QUE-175	350.2	357.5	500	50	40400	31500	-4.3	ACIDO	0.56
7488	QUE-175	359.2	370.0	900	50	68100	59200	-8.1	ACIDO	0.32
7489	QUE-175	370.0	380.0	1200	50	48300	45300	-6.2	ACIDO	0.24
7490	QUE-175	380.0	390.0	1900	50	48900	46500	-6.4	ACIDO	0.24
7491	QUE-175	390.0	402.5	1500	50	44900	43100	-5.9	ACIDO	0.17
7492	QUE-176	110.0	119.5	300	50	35700	21700	-3.0	ACIDO	0.10
7493	QUE-176	130.0	139.0	400	50	44400	27500	-3.7	ACIDO	0.10
7494	QUE-176	139.0	147.6	700	50	31300	18100	-2.5	ACIDO	0.12
7495	QUE-176	148.9	160.8	900	50	13000	7200	-1.0	LIGERAMENTE ACIDO	0.15
7496	QUE-176	164.7	170.4	500	50	3000	1900	-0.2	LIGERAMENTE ACIDO	0.17
7497	QUE-176	170.4	179.4	600	50	11300	6400	-0.9	LIGERAMENTE ACIDO	0.24
7498	QUE-176	179.4	189.8	600	50	25700	12700	-1.7	ACIDO	0.21
7499	QUE-176	189.8	199.7	500	50	6100	3300	-0.4	LIGERAMENTE ACIDO	0.27
7500	QUE-176	199.7	210.2	400	100	33000	19600	-2.6	ACIDO	0.44
7501	QUE-176	210.2	219.5	400	50	49400	23100	-3.1	ACIDO	0.45
7502	QUE-176	219.5	230.5	400	50	40200	20700	-2.8	ACIDO	0.20
7503	QUE-176	230.5	240.7	400	50	8900	5500	-0.7	LIGERAMENTE ACIDO	0.29
7504	QUE-176	240.7	250.1	200	50	9800	6000	-0.8	LIGERAMENTE ACIDO	0.15
7505	QUE-176	250.1	261.0	300	50	9800	5900	-0.8	LIGERAMENTE ACIDO	0.33
7506	QUE-176	261.0	270.8	200	50	300	100	0.0	INERTE	0.67
7507	QUE-176	270.8	279.5	200	50	300	100	0.0	INERTE	0.39
7508	QUE-176	279.5	289.4	200	100	300	100	0.0	INERTE	0.48
7509	QUE-176	289.4	299.0	200	50	400	100	0.0	INERTE	0.67
7510	QUE-176	299.0	309.5	300	100	400	100	0.0	INERTE	1.01
7511	QUE-176	309.5	320.2	400	50	500	100	0.0	INERTE	0.82
7512	QUE-176	320.2	330.5	300	200	800	200	0.0	INERTE	1.18
7513	QUE-176	330.5	340.7	500	100	1400	400	0.0	INERTE	0.58
7514	QUE-176	340.7	349.0	300	50	500	100	0.0	INERTE	0.37
7515	QUE-176	349.0	360.0	400	100	700	200	0.0	INERTE	0.34
7516	QUE-176	360.0	370.7	500	50	1100	400	0.0	INERTE	0.56
7517	QUE-176	370.7	380.6	300	50	500	200	0.0	INERTE	0.26
7518	QUE-176	380.6	390.1	800	50	30400	23100	-3.1	ACIDO	0.27
7519	QUE-176	390.1	400.0	2000	100	46500	42500	-5.8	ACIDO	0.15
7520	QUE-176	400.0	410.0	1100	50	82800	64600	-8.8	ACIDO	0.31
7521	QUE-176	410.0	420.7	1200	50	45300	42100	-5.7	ACIDO	0.11
7522	QUE-176	420.7	430.0	300	50	7400	5100	-0.7	LIGERAMENTE ACIDO	0.20
7523	QUE-176	430.0	440.5	500	50	19100	11000	-1.5	ACIDO	1.14
7524	QUE-177	216.0	220.5	300	50	1600	1000	-0.1	LIGERAMENTE ACIDO	0.29
7525	QUE-177	220.5	230.0	600	50	7000	4000	-0.5	LIGERAMENTE ACIDO	0.25
7526	QUE-177	230.0	239.2	500	100	35700	21000	-2.8	ACIDO	0.28
7527	QUE-177	239.2	250.0	300	50	29700	18100	-2.5	ACIDO	0.34
7528	QUE-177	250.0	259.6	300	100	15700	8200	-1.1	ACIDO	0.34
7529	QUE-177	259.6	264.2	300	50	400	200	0.0	INERTE	0.23
7530	QUE-178	13.0	20.6	700	50	8600	3600	-0.5	LIGERAMENTE ACIDO	0.10
7531	QUE-178	20.6	29.4	1400	100	1900	500	0.0	INERTE	0.11
7532	QUE-178	89.0	100.4	500	400	24900	14700	-1.9	ACIDO	0.10
7533	QUE-178	140.0	149.4	500	50	14500	7500	-1.0	ACIDO	0.13
7534	QUE-178	149.4	160.1	500	400	19500	11100	-1.4	ACIDO	0.30
7535	QUE-178	160.1	169.0	800	50	13800	7400	-1.0	LIGERAMENTE ACIDO	0.14
7536	QUE-178	169.0	179.7	300	50	50900	31000	-4.2	ACIDO	0.12
7537	QUE-178	179.7	190.5	400	50	18800	11000	-1.5	ACIDO	0.16
7538	QUE-178	190.5	199.9	1300	50	29600	17300	-2.4	ACIDO	0.26
7539	QUE-178	199.9	209.5	400	50	54900	25600	-3.5	ACIDO	0.23
7540	QUE-178	220.2	229.0	300	50	1000	300	0.0	INERTE	0.47
7541	QUE-178	229.0	240.3	300	50	2200	900	-0.1	LIGERAMENTE ACIDO	0.53
7542	QUE-178	240.3	249.0	300	100	1300	600	0.0	INERTE	0.32
7543	QUE-178	249.0	260.2	300	50	400	100	0.0	INERTE	0.29
7544	QUE-178	260.2	269.9	300	50	800	300	0.0	INERTE	0.32
7545	QUE-178	269.9	280.3	400	100	700	100	0.0	INERTE	1.35
7546	QUE-178	280.3	290.5	400	100	200	0	0.0	INERTE	0.46
7547	QUE-178	290.5	299.5	400	100	300	0	0.0	INERTE	0.96
7548	QUE-178	299.5	310.0	400	100	300	0	0.0	INERTE	1.21
7549	QUE-178	310.0	319.0	300	100	400	100	0.0	INERTE	0.57
7550	QUE-178	319.0	329.5	200	100	500	0	0.0	INERTE	0.55
7551	QUE-178	329.5	340.7	300	100	600	200	0.0	INERTE	0.39
7552	QUE-178	340.7	350.0	300	50	42000	41200	-5.6	ACIDO	0.43
7553	QUE-178	350.0	360.0	400	50	81600	81100	-11.1	ACIDO	0.13
7554	QUE-178	360.0	370.6	300	50	52500	51600	-7.1	ACIDO	0.33
7555	QUE-178	370.6	380.0	400	100	61600	49200	-6.7	ACIDO	0.22
7556	QUE-178	380.0	390.5	400	300	49600	44300	-6.0	ACIDO	0.56
7557	QUE-178	390.5	401.0	500	50	21800	16400	-2.2	ACIDO	0.77
7558	QUE-178	401.0	410.9	500	50	63800	51700	-7.1	ACIDO	0.57
7559	QUE-178	410.9	419.5	400	50	56400	40700	-5.6	ACIDO	0.52
7560	QUE-178	419.5	429.0	400	100	87200	51400	-7.0	ACIDO	0.26
7561	QUE-178	429.0	440.5	400	100	78800	63900	-8.7	ACIDO	0.23
7562	QUE-178	450.0	454.7	600	100	51700	45800	-6.2	ACIDO	0.11
7563	QUE-179	110.0	120.2	100	100	100	0	0.0	INERTE	0.14
7564	QUE-179	240.0	250.2	300	50	700	100	0.0	INERTE	0.21
7565	QUE-179	250.2	260.0	300	50	600	200	0.0	INERTE	0.12
7566	QUE-179	260.0	270.0	200	50	300	200	0.0	INERTE	0.15
7567	QUE-179	270.0	280.0	300	50	100	50	0.0	INERTE	0.39
7568	QUE-179	280.0	290.0	300	50	100	50	0.0	INERTE	0.33
7569	QUE-179	290.0	300.0	100	100	100	50	0.0	INERTE	0.24
7570	QUE-179	300.0	310.0	200	50	200	150	0.0	INERTE	0.33
7571	QUE-179	310.0	320.0	200	50	100	0	0.0	INERTE	0.43
7572	QUE-179	320.0	330.0	300	50	100	50	0.0	INERTE	0.40
7573	QUE-179	330.0	340.0	100	50	100	0	0.0	INERTE	0.52
7574	QUE-179	340.0	350.0	200	50	100	0	0.0	INERTE	1.58
7575	QUE-179	350.0	360.0	200	100	100	0	0.0	INERTE	0.58
7576	QUE-179	360.0	370.0	200	50	100	0	0.0	INERTE	0.45
7577	QUE-179	370.0	380.0	200	50	200	100	0.0	INERTE	0.84
7578	QUE-179	380.0	390.0	200	50	300	100	0.0	INERTE	0.95
7579	QUE-179	390.0	400.0	200	50	200	0	0.0	INERTE	0.88
7580	QUE-179	400.0	410.0	100	50	300	100	0.0	INERTE	0.89
7581	QUE-179	410.0	419.9	200	200	900	200	0.0	INERTE	0.93
7582	QUE-179	419.9	430.0	300	100	1400	600	0.0	INERTE	0.72
7583	QUE-179	430.0	440.0	300	50	1000	400	0.0	INERTE	1.06
7584	QUE-179	440.0	450.0	500	50	900	500	-0.1	INERTE	0.74
7585	QUE-179	450.0	460.0	500	50	1000	500	-0.1	INERTE	0.55
7586	QUE-179	460.0	470.0	400	50	17200	10100	-1.4	ACIDO	0.71
7587	QUE-179	470.0	480.0	500	50	36400	22500	-3.1	ACIDO	0.25
7588	QUE-179	480.0	490.1	1300	50	70900	45500	-6.2	ACIDO	0.15
7589	QUE-179	490.1	500.0	400	50	72600	55200	-7.5	ACIDO	0.24
7590	QUE-179	500.0	510.0	300	50	38700	33000	-4.5	ACIDO	0.26
7591	QUE-179	510.0	519.8	600	50	68900	60900	-8.3	ACIDO	0.10
7592	QUE-180	250.8	253.8	300	50	800	200	0.0	INERTE	0.30
7593	QUE-180	254.2	260.8	500	50	500	100	0.0	INERTE	0.18
7594	QUE-180	260.8	271.0	500	50	1100	300	0.0	INERTE	0.27
7595	QUE-180	271.0	279.0	600	50	1100	300	0.0	INERTE	0.36
7596	QUE-180	279.0	289.8	400	50	2500	1300	-0.2	LIGERAMENTE ACIDO	0.15
7597	QUE-180	289.8	300.8	500	50	7000	3800	-0.5	LIGERAMENTE ACIDO	0.28
7598	QUE-180	300.8	309.0	600	50	2600	1200	-0.1	LIGERAMENTE ACIDO	0.84
7599	QUE-180	309.0	320.0	500	50	1400	500	-0.1	INERTE	0.71
7600	QUE-180	320.0	330.0	500	50	20000	11000	-1.5	ACIDO	0.85
7601	QUE-180	330.0	339.9	500	50	2300	1100	-0.1	LIGERAMENTE ACIDO	0.26
7602	QUE-180	339.9	349.3	500	50	1400	300	0.0	INERTE	1.01
7603	QUE-180	349.3	360.5	800	100	3500	1500	-0.2	LIGERAMENTE ACIDO	1.10
7604	QUE-180	360.5	370.5	500	50	33500	19200	-2.6	ACIDO	0.42
7605	QUE-180	370.5	376.9	600	50	50600	23700	-3.2	ACIDO	0.54
7606	QUE-180	380.9	382.2	900	50	22300	12900	-1.7	ACIDO	0.52
7607	QUE-180	383.5	389.9	2600	50	51800	48900	-6.7	ACIDO	0.34
7608	QUE-180	389.9	400.0	2200	1500	56600	54800	-7.0	ACIDO	0.28
7609	QUE-180	400.0	410.1	3200	50	55800	53800	-7.4	ACIDO	0.51
7610	QUE-180	410.1	420.0	3200	50	78700	76400	-10.4	ACIDO	0.57
7611	QUE-180	420.0	429.5	3200	100	56600	54400	-7.4	ACIDO	0.34
7612	QUE-180	429.5	439.5	1700	50	62600	56300	-7.7	ACIDO	1.05
7613	QUE-180	439.5	443.5	400	50	60700	37200	-5.1	ACIDO	0.70
7614	QUE-180	444.4	450.3	900	50	81700	68300	-9.3	ACIDO	0.66
7615	QUE-180	450.3	460.9	500	50	70100	46800	-6.4	ACIDO	0.52
7616	QUE-180	462.6	470.0	600	100	156800	122900	-16.8	ACIDO	0.34
7617	QUE-180	470.0	480.0	500	50	134400	102400	-14.0	ACIDO	0.39
7618	QUE-180	480.0	490.7	500	50	98400	77300	-10.6	ACIDO	0.45
7619	QUE-180	490.7	496.0	600	50	89100	77300	-10.6	ACIDO	0.53
7620	QUE-180	496.9	501.4	600	50	42700	41300	-5.6	ACIDO	0.87
7621	QUE-180	501.4	510.0	600	50	83400	69200	-9.5	ACIDO	0.63
7622	QUE-180	510.0	521.7	500	50	96200	80800	-11.1	ACIDO	0.77
7623	QUE-181	3.2	11.0	3100	50	4000	900	-0.1	LIGERAMENTE ACIDO	0.42
7624	QUE-181	11.0	21.5	1900	50	13800	7400	-1.0	LIGERAMENTE ACIDO	0.50
7625	QUE-181	21.5	31.0	1900	200	7300	2900	-0.3	LIGERAMENTE ACIDO	0.86
7626	QUE-181	31.0	40.5	2300	50	2600	600	-0.1	INERTE	0.52
7627	QUE-181	40.5	51.0	1200	50	700	300	0.0	INERTE	0.43
7628	QUE-181	51.0	61.7	600	50	500	300	0.0	INERTE	0.17
7629	QUE-181	62.6	71.8	600	50	700	300	0.0	INERTE	0.23
7630	QUE-181	71.8	80.1	600	50	600	300	0.0	INERTE	0.36
7631	QUE-181	80.6	80.9	1100	50	500	300	0.0	INERTE	0.28
7632	QUE-181	81.5	83.0	1100	50	600	200	0.0	INERTE	0.37
7633	QUE-181	84.0	86.9	1500	50	1300	600	-0.1	INERTE	0.40
7634	QUE-181	87.2	91.5	500	50	500	300	0.0	INERTE	0.53
7635	QUE-181	91.5	101.9	600	50	600	200	0.0	INERTE	0.25
7636	QUE-181	101.9	110.7	600	50	500	300	0.0	INERTE	0.26
7637	QUE-181	110.7	119.5	700	50	600	200	0.0	INERTE	0.37
7638	QUE-181	119.5	130.7	400	50	600	300	0.0	INERTE	0.32
7639	QUE-181	130.7	140.0	600	50	41100	21800	-3.0	ACIDO	0.25
7640	QUE-181	140.0	150.0	600	50	54100	27500	-3.7	ACIDO	0.16
7641	QUE-181	150.0	161.0	800	50	36500	18200	-2.5	ACIDO	0.12
7642	QUE-181	161.0	170.5	600	50	34500	15700	-2.1	ACIDO	0.14
7643	QUE-181	170.5	180.0	800	50	12900	5300	-0.7	LIGERAMENTE ACIDO	0.10
7644	QUE-181	210.0	220.0	1500	50	34400	30000	-4.1	ACIDO	0.14
7645	QUE-181	220.0	230.0	1500	50	31700	29300	-4.0	ACIDO	0.14
7646	QUE-181	230.0	240.0	2100	50	26700	24600	-3.4	ACIDO	0.17
7647	QUE-181	260.0	270.0	500	50	39800	28900	-3.9	ACIDO	0.30
7648	QUE-181	270.0	280.0	500	50	51400	29700	-4.1	ACIDO	0.22
7649	QUE-181	280.0	290.0	1800	50	22800	18100	-2.5	ACIDO	0.14
7650	QUE-181	300.0	310.0	2000	50	11900	10600	-1.4	ACIDO	0.43
7651	QUE-181	310.0	320.0	2100	50	32300	29700	-4.1	ACIDO	0.38
7652	QUE-181	320.0	329.0	2400	50	29900	27800	-3.8	ACIDO	0.45
7653	QUE-182	180.0	190.2	400	50	33800	17500	-2.4	ACIDO	0.15
7654	QUE-182	210.0	220.0	200	100	5900	3300	-0.4	LIGERAMENTE ACIDO	0.15
7655	QUE-182	220.0	230.1	200	100	26700	14200	-1.9	ACIDO	0.34
7656	QUE-182	236.3	238.0	800	300	16400	8700	-1.1	ACIDO	0.20
7657	QUE-182	242.4	243.5	900	50	25300	12500	-1.7	ACIDO	0.14
7658	QUE-182	244.5	249.4	400	50	52200	32000	-4.4	ACIDO	0.30
7659	QUE-182	251.5	260.5	400	100	27400	14800	-2.0	ACIDO	0.21
7660	QUE-182	269.9	280.0	200	100	13000	7500	-1.0	LIGERAMENTE ACIDO	0.20
7661	QUE-182	280.0	290.0	300	100	6200	3600	-0.5	LIGERAMENTE ACIDO	0.28
7662	QUE-182	290.0	300.0	300	200	5800	3200	-0.4	LIGERAMENTE ACIDO	0.25
7663	QUE-182	300.0	310.1	200	100	10200	5500	-0.7	LIGERAMENTE ACIDO	0.26
7664	QUE-182	310.1	319.9	500	50	67600	49300	-6.7	ACIDO	0.27
7665	QUE-182	319.9	330.0	2400	50	55100	50400	-6.9	ACIDO	0.11
7666	QUE-182	350.0	359.9	1300	100	65700	58300	-8.0	ACIDO	0.10
7667	QUE-182	359.9	370.0	400	200	32100	17400	-2.3	ACIDO	0.16
7668	QUE-182	380.0	389.7	300	50	47700	15500	-2.1	ACIDO	0.21
7669	QUE-182	400.0	410.0	600	200	49000	44700	-6.1	ACIDO	0.19
7670	QUE-182	410.0	420.2	500	200	54200	49100	-6.7	ACIDO	0.15
7671	QUE-183	100.4	110.0	500	50	35000	18100	-2.5	ACIDO	0.11
7672	QUE-183	110.0	120.0	600	100	19300	10500	-1.4	ACIDO	0.20
7673	QUE-183	120.0	129.7	500	100	25400	19000	-2.6	ACIDO	0.14
7674	QUE-183	140.3	150.0	500	100	37400	27200	-3.7	ACIDO	0.19
7675	QUE-183	150.0	160.0	3100	100	34200	27200	-3.7	ACIDO	0.13
7676	QUE-183	160.0	170.0	500	100	35500	22800	-3.1	ACIDO	0.41
7677	QUE-183	170.0	180.5	500	50	36000	19700	-2.7	ACIDO	0.19
7678	QUE-183	180.5	190.0	500	400	43900	22500	-2.9	ACIDO	0.26
7679	QUE-183	190.0	200.0	400	100	56600	25200	-3.4	ACIDO	0.29
7680	QUE-183	200.0	210.0	400	50	42500	21300	-2.9	ACIDO	0.30
7681	QUE-183	210.0	220.0	500	100	23900	13700	-1.8	ACIDO	0.25
7682	QUE-183	220.0	230.0	600	50	35600	17700	-2.4	ACIDO	0.17
7683	QUE-183	230.0	240.0	600	100	34400	18900	-2.6	ACIDO	0.18
7684	QUE-183	240.0	250.0	800	50	73900	19000	-2.6	ACIDO	0.16
7685	QUE-183	250.0	260.0	600	200	48600	20900	-2.8	ACIDO	0.18
7686	QUE-183	260.0	270.0	800	200	21100	10500	-1.4	ACIDO	0.29
7687	QUE-183	270.0	278.0	600	50	73500	25600	-3.5	ACIDO	0.13
7688	QUE-183	280.8	290.2	500	200	88300	38300	-5.2	ACIDO	0.25
7689	QUE-183	290.2	300.7	900	300	39600	21100	-2.8	ACIDO	0.42
7690	QUE-183	310.0	319.6	2100	100	45900	30000	-4.1	ACIDO	0.22
7691	QUE-183	319.6	330.0	700	200	2900	1400	-0.1	LIGERAMENTE ACIDO	0.75
7692	QUE-183	330.0	340.0	500	200	5400	2800	-0.3	LIGERAMENTE ACIDO	0.66
7693	QUE-183	340.0	350.0	300	200	48900	20400	-2.7	ACIDO	0.51
7694	QUE-183	350.0	360.0	300	50	800	100	0.0	INERTE	0.28
7695	QUE-183	360.0	369.5	300	50	21000	9700	-1.3	ACIDO	0.77
7696	QUE-183	369.5	380.0	400	50	10500	5400	-0.7	LIGERAMENTE ACIDO	0.49
7697	QUE-183	380.0	390.0	400	100	500	100	0.0	INERTE	0.36
7698	QUE-183	390.0	397.4	700	100	48400	32500	-4.4	ACIDO	0.68
7699	QUE-183	398.9	410.0	2600	100	50800	41900	-5.7	ACIDO	0.31
7700	QUE-183	410.0	419.2	2600	200	51300	48400	-6.6	ACIDO	0.19
7701	QUE-183	419.2	429.4	300	50	29100	21400	-2.9	ACIDO	0.27
7702	QUE-183	429.4	440.0	1000	100	25600	23800	-3.2	ACIDO	0.11
7703	QUE-183	440.0	450.0	800	100	37600	31600	-4.3	ACIDO	0.30
7704	QUE-183	450.0	457.1	1800	200	43900	37400	-5.1	ACIDO	0.18
7705	QUE-184	70.0	79.1	300	50	300	100	0.0	INERTE	0.13
7706	QUE-184	79.1	90.2	400	50	300	100	0.0	INERTE	0.11
7707	QUE-184	120.5	130.0	300	50	300	100	0.0	INERTE	0.13
7708	QUE-184	150.0	160.0	300	50	200	100	0.0	INERTE	0.18
7709	QUE-184	160.0	169.9	400	50	200	100	0.0	INERTE	0.25
7710	QUE-184	169.9	180.0	300	100	300	100	0.0	INERTE	0.20
7711	QUE-184	180.0	190.0	300	200	300	100	0.1	INERTE	0.10
7712	QUE-184	190.0	200.4	400	100	300	100	0.0	INERTE	0.14
7713	QUE-184	200.4	210.0	400	50	200	100	0.0	INERTE	0.25
7714	QUE-184	210.0	220.0	400	100	300	100	0.0	INERTE	0.21
7715	QUE-184	220.0	230.0	200	100	300	100	0.0	INERTE	0.18
7716	QUE-184	230.0	240.0	300	50	200	100	0.0	INERTE	0.15
7717	QUE-184	240.0	250.5	300	100	300	100	0.0	INERTE	0.28
7718	QUE-184	250.5	260.0	300	100	200	100	0.0	INERTE	0.73
7719	QUE-184	260.0	269.4	500	50	200	100	0.0	INERTE	0.49
7720	QUE-184	269.4	280.0	300	100	500	100	0.0	INERTE	0.54
7721	QUE-184	280.0	286.8	400	100	700	200	0.0	INERTE	0.51
7722	QUE-185	230.0	240.0	400	100	29100	12600	-1.7	ACIDO	0.14
7723	QUE-185	240.0	250.4	400	50	16900	8700	-1.2	ACIDO	0.15
7724	QUE-185	250.4	259.9	400	50	16800	8300	-1.1	ACIDO	0.17
7725	QUE-185	259.9	270.0	400	50	12000	6200	-0.8	LIGERAMENTE ACIDO	0.24
7726	QUE-185	270.0	280.0	300	50	9200	4600	-0.6	LIGERAMENTE ACIDO	0.14
7727	QUE-185	280.0	290.0	500	100	6100	3600	-0.5	LIGERAMENTE ACIDO	0.45
7728	QUE-185	290.0	300.0	600	50	7300	6500	-0.9	LIGERAMENTE ACIDO	0.64
7729	QUE-185	300.0	310.0	700	50	2500	1700	-0.2	LIGERAMENTE ACIDO	0.35
7730	QUE-185	310.0	320.0	900	50	1400	900	-0.1	LIGERAMENTE ACIDO	1.09
7731	QUE-185	320.0	330.0	600	100	2600	1100	-0.1	LIGERAMENTE ACIDO	1.91
7732	QUE-185	330.0	340.0	600	200	2100	900	0.0	NEUTRAL	0.90
7733	QUE-185	340.0	349.7	500	50	19900	9800	-1.3	ACIDO	0.80
7734	QUE-185	349.7	360.0	600	50	1800	800	-0.1	NEUTRAL	1.44
7735	QUE-185	360.0	370.0	500	50	800	400	0.0	INERTE	0.77
7736	QUE-185	370.0	380.0	900	200	1900	1200	-0.1	NEUTRAL	1.38
7737	QUE-185	380.0	390.0	600	100	1100	100	0.0	INERTE	1.26
7738	QUE-185	390.0	400.0	1700	200	9900	5100	-0.6	LIGERAMENTE ACIDO	0.78
7739	QUE-185	400.0	410.2	600	200	5400	2700	-0.3	LIGERAMENTE ACIDO	0.51
7740	QUE-185	410.2	420.0	500	200	42800	14000	-1.8	ACIDO	0.60
7741	QUE-185	420.0	430.0	500	200	24500	13900	-1.8	ACIDO	0.72
7742	QUE-186	108.0	113.0	300	50	400	100	0.0	INERTE	0.14
7743	QUE-187	70.2	80.0	400	100	500	100	0.0	INERTE	0.13
7744	QUE-187	130.0	140.0	300	50	200	100	0.0	INERTE	0.12
7745	QUE-187	159.9	170.5	400	50	400	200	0.0	INERTE	0.11
7746	QUE-187	170.5	180.0	400	50	400	100	0.0	INERTE	0.16
7747	QUE-187	180.0	190.0	500	50	800	300	0.0	INERTE	0.33
7748	QUE-187	190.0	199.6	400	50	1000	200	0.0	INERTE	0.54
7749	QUE-187	199.6	210.0	300	50	600	100	0.0	INERTE	0.27
7750	QUE-187	210.0	220.4	600	50	800	300	0.0	INERTE	0.22
7751	QUE-187	220.4	230.4	300	50	500	200	0.0	INERTE	0.13
7752	QUE-187	230.4	240.0	400	100	1800	500	0.0	INERTE	0.36
7753	QUE-187	240.0	250.0	400	100	600	200	0.0	INERTE	0.40
7754	QUE-187	250.0	261.0	900	50	800	300	0.0	INERTE	0.54
7755	QUE-187	261.0	270.0	500	50	500	300	0.0	INERTE	0.35
7756	QUE-187	270.0	280.0	500	50	500	300	0.0	INERTE	0.34
7757	QUE-187	280.0	290.0	500	50	400	200	0.0	INERTE	0.35
7758	QUE-187	290.0	300.0	500	50	1200	400	0.0	INERTE	0.39
7759	QUE-187	300.0	310.0	300	50	500	200	0.0	INERTE	0.21
7760	QUE-187	310.0	320.0	300	50	300	100	0.0	INERTE	0.20
7761	QUE-187	320.0	330.0	400	50	300	100	0.0	INERTE	0.22
7762	QUE-187	330.0	340.0	400	50	300	100	0.0	INERTE	0.21
7763	QUE-187	340.0	350.0	200	50	400	300	0.0	INERTE	0.13
7764	QUE-187	360.0	370.0	300	50	300	200	0.0	INERTE	0.21
7765	QUE-187	370.0	380.0	500	50	1100	600	-0.1	INERTE	0.23
7766	QUE-187	380.0	390.0	400	50	1200	700	-0.1	INERTE	0.21
7767	QUE-187	390.0	400.0	700	50	2900	1800	-0.2	LIGERAMENTE ACIDO	0.37
7768	QUE-187	400.0	410.4	500	50	33000	18200	-2.5	ACIDO	0.21
7769	QUE-187	410.4	420.0	600	50	30500	16400	-2.2	ACIDO	0.25
7770	QUE-187	420.0	428.0	600	100	38900	30400	-4.1	ACIDO	0.22
7771	QUE-187	428.0	432.8	600	50	57700	34600	-4.7	ACIDO	0.29
7772	QUE-188	120.5	130.0	300	200	300	0	0.1	INERTE	0.12
7773	QUE-188	130.0	140.0	300	100	300	200	0.0	INERTE	0.19
7774	QUE-188	140.0	150.0	200	100	400	100	0.0	INERTE	0.18
7775	QUE-188	150.0	160.0	400	100	300	100	0.0	INERTE	0.20
7776	QUE-188	160.0	170.0	300	50	400	100	0.0	INERTE	0.11
7777	QUE-188	170.0	180.5	300	50	400	200	0.0	INERTE	0.11
7778	QUE-188	180.5	190.0	200	100	300	0	0.0	INERTE	0.14
7779	QUE-188	190.0	200.0	200	100	200	0	0.0	INERTE	0.29
7780	QUE-188	200.0	210.0	100	50	200	0	0.0	INERTE	0.25
7781	QUE-188	210.0	220.4	200	100	200	0	0.0	INERTE	0.24
7782	QUE-188	220.4	230.0	200	50	200	0	0.0	INERTE	0.95
7783	QUE-188	230.0	240.2	500	200	300	0	0.1	INERTE	0.47
7784	QUE-188	240.2	250.0	200	200	500	0	0.1	INERTE	0.26
7785	QUE-188	250.0	260.0	400	50	700	0	0.0	INERTE	0.31
7786	QUE-188	260.0	270.0	400	200	800	0	0.1	INERTE	0.36
7787	QUE-188	270.0	280.0	300	100	300	0	0.0	INERTE	0.40
7788	QUE-188	280.0	290.0	300	200	400	0	0.1	INERTE	0.33
7789	QUE-188	290.0	299.9	400	200	300	0	0.1	INERTE	0.11
7790	QUE-188	299.9	310.0	200	200	300	0	0.1	INERTE	0.11
7791	QUE-188	310.0	320.0	400	200	500	100	0.1	INERTE	0.33
7792	QUE-188	320.0	330.0	300	100	300	0	0.0	INERTE	0.16
7793	QUE-188	330.0	340.0	300	100	300	100	0.0	INERTE	0.30
7794	QUE-188	340.0	350.0	200	100	200	0	0.0	INERTE	0.37
7795	QUE-188	350.0	360.0	200	200	300	0	0.1	INERTE	0.45
7796	QUE-188	360.0	370.0	300	200	300	0	0.1	INERTE	0.19
7797	QUE-188	370.0	380.3	400	100	300	0	0.0	INERTE	0.11
7798	QUE-188	380.3	390.0	400	200	500	0	0.1	INERTE	0.17
7799	QUE-188	390.0	400.0	200	100	400	100	0.0	INERTE	0.11
7800	QUE-188	400.0	410.0	200	100	600	0	0.0	INERTE	0.40
7801	QUE-188	410.0	420.0	300	200	800	300	0.0	INERTE	0.28
7802	QUE-188	430.0	440.4	500	200	3600	1900	-0.2	LIGERAMENTE ACIDO	0.86
7803	QUE-188	440.4	451.5	400	200	48300	39100	-5.3	ACIDO	0.14
7804	QUE-189	164.6	170.0	400	50	300	0	0.0	INERTE	0.22
7805	QUE-189	170.0	180.0	300	300	300	100	0.1	NEUTRAL	0.26
7806	QUE-189	180.0	190.3	400	50	300	0	0.0	INERTE	0.12
7807	QUE-189	190.3	200.2	300	50	300	100	0.0	INERTE	0.13
7808	QUE-189	200.2	210.0	300	100	200	0	0.0	INERTE	0.38
7809	QUE-189	210.0	220.0	400	200	400	200	0.0	INERTE	0.24
7810	QUE-189	220.0	230.0	300	100	300	0	0.0	INERTE	0.20
7811	QUE-189	240.0	250.0	400	100	200	0	0.0	INERTE	0.29
7812	QUE-189	250.0	260.0	300	100	300	0	0.0	INERTE	0.39
7813	QUE-189	260.0	270.0	300	50	300	200	0.0	INERTE	0.47
7814	QUE-189	270.0	280.0	300	200	400	0	0.1	INERTE	0.49
7815	QUE-189	280.0	289.6	200	50	400	0	0.0	INERTE	0.25
7816	QUE-189	289.6	300.0	300	50	400	200	0.0	INERTE	0.32
7817	QUE-189	300.0	310.0	200	50	400	0	0.0	INERTE	0.24
7818	QUE-189	310.0	320.0	200	50	200	0	0.0	INERTE	0.23
7819	QUE-189	320.0	330.0	200	50	400	200	0.0	INERTE	0.44
7820	QUE-189	330.0	340.1	200	50	500	200	0.0	INERTE	0.54
7821	QUE-189	340.1	350.0	300	100	300	100	0.0	INERTE	0.42
7822	QUE-189	350.0	360.0	300	50	500	200	0.0	INERTE	0.42
7823	QUE-189	360.0	370.0	300	100	900	600	0.0	INERTE	0.16
7824	QUE-189	370.0	380.0	300	100	200	0	0.0	INERTE	0.31
7825	QUE-189	380.0	390.3	300	50	300	0	0.0	INERTE	0.29
7826	QUE-189	390.3	400.0	300	50	400	0	0.0	INERTE	0.44
7827	QUE-189	400.0	410.0	200	50	600	100	0.0	INERTE	0.32
7828	QUE-189	410.0	420.0	300	50	500	200	0.0	INERTE	0.17
7829	QUE-189	440.0	450.3	400	50	66200	65300	-8.9	ACIDO	0.20
7830	QUE-189	450.3	456.3	400	50	134800	134000	-18.3	ACIDO	0.58

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
7831	QUE-190	110.0	120.0	800	50	33800	18500	-2.5	ACIDO	0.25
7832	QUE-190	120.0	130.0	500	100	27100	15800	-2.1	ACIDO	0.49
7833	QUE-190	160.0	170.0	600	50	43600	24600	-3.4	ACIDO	0.11
7834	QUE-190	180.0	190.0	400	100	30700	16300	-2.2	ACIDO	0.11
7835	QUE-190	200.0	210.0	300	50	48200	21600	-2.9	ACIDO	0.13
7836	QUE-190	210.0	219.8	500	100	43200	21300	-2.9	ACIDO	0.25
7837	QUE-190	219.8	230.0	400	100	28500	14900	-2.0	ACIDO	0.19
7838	QUE-190	230.0	240.0	400	50	40400	21000	-2.9	ACIDO	0.30
7839	QUE-190	240.0	249.6	400	50	32700	18000	-2.4	ACIDO	0.65
7840	QUE-190	249.6	260.4	500	100	38800	18700	-2.5	ACIDO	0.81
7841	QUE-191	19.7	30.0	600	50	400	300	0.0	INERTE	0.20
7842	QUE-191	30.0	40.0	300	50	200	150	0.0	INERTE	0.11
7843	QUE-191	40.0	50.0	400	50	400	200	0.0	INERTE	0.14
7844	QUE-191	50.0	60.0	600	50	44700	17500	-2.4	ACIDO	0.12
7845	QUE-191	60.0	70.0	500	50	56100	19100	-2.6	ACIDO	0.19
7846	QUE-191	70.0	80.0	500	50	49200	21700	-3.0	ACIDO	0.37
7847	QUE-191	80.0	90.0	900	50	45400	24500	-3.3	ACIDO	0.21
7848	QUE-191	90.0	99.9	500	50	52900	21300	-2.9	ACIDO	0.35
7849	QUE-191	99.9	109.8	500	50	47800	22100	-3.0	ACIDO	0.27
7850	QUE-191	109.8	120.0	400	50	16400	8300	-1.1	ACIDO	0.41
7851	QUE-191	120.0	130.0	300	50	45800	15100	-2.1	ACIDO	0.29
7852	QUE-191	130.0	140.0	500	50	42400	25900	-3.5	ACIDO	0.21
7853	QUE-191	140.0	150.0	500	50	36900	21600	-2.9	ACIDO	0.32
7854	QUE-191	150.0	160.8	500	50	39300	22000	-3.0	ACIDO	0.30
7855	QUE-191	160.8	170.0	500	50	26800	17000	-2.3	ACIDO	0.26
7856	QUE-191	170.0	180.0	600	50	40500	23200	-3.2	ACIDO	0.32
7857	QUE-191	180.0	190.2	500	50	33900	18700	-2.5	ACIDO	0.60
7858	QUE-191	190.2	200.0	600	50	38000	21600	-2.9	ACIDO	0.46
7859	QUE-191	200.0	209.6	600	50	30600	17300	-2.4	ACIDO	0.25
7860	QUE-191	209.6	220.0	900	50	31400	15800	-2.1	ACIDO	0.21
7861	QUE-191	220.0	230.0	1600	50	9000	5400	-0.7	LIGERAMENTE ACIDO	0.18
7862	QUE-191	230.0	240.0	700	50	36700	19400	-2.6	ACIDO	0.23
7863	QUE-191	240.0	250.0	1700	50	13400	10700	-1.4	ACIDO	0.11
7864	QUE-191	250.0	260.3	500	50	36400	23100	-3.1	ACIDO	0.28
7865	QUE-191	260.3	269.9	1100	50	20200	13800	-1.9	ACIDO	0.19
7866	QUE-191	269.9	280.0	800	50	25200	13900	-1.9	ACIDO	0.33
7867	QUE-191	280.0	290.0	2000	50	7000	5300	-0.7	LIGERAMENTE ACIDO	0.13
7868	QUE-191	290.0	300.0	800	50	8300	5100	-0.7	LIGERAMENTE ACIDO	0.15
7869	QUE-191	300.0	310.1	300	50	700	200	0.0	INERTE	0.23
7870	QUE-191	310.1	320.0	300	50	900	600	-0.1	INERTE	0.47
7871	QUE-191	320.0	330.9	300	50	2400	1500	-0.2	LIGERAMENTE ACIDO	1.26
7872	QUE-191	330.9	340.0	300	50	1000	600	-0.1	INERTE	1.12
7873	QUE-191	340.0	346.0	500	50	1600	1000	-0.1	LIGERAMENTE ACIDO	1.23
7874	QUE-191	346.0	351.7	700	50	17300	13600	-1.8	ACIDO	0.58
7875	QUE-192	130.4	140.0	400	50	300	100	0.0	INERTE	0.11
7876	QUE-192	140.0	150.3	100	50	300	100	0.0	INERTE	0.11
7877	QUE-192	150.3	160.0	200	50	200	100	0.0	INERTE	0.15
7878	QUE-192	160.0	170.0	300	50	200	100	0.0	INERTE	0.22
7879	QUE-192	170.0	180.0	200	50	300	100	0.0	INERTE	0.30
7880	QUE-192	180.0	190.0	300	50	200	100	0.0	INERTE	0.16
7881	QUE-192	190.0	200.0	400	50	200	100	0.0	INERTE	0.37
7882	QUE-192	200.0	210.3	300	50	200	100	0.0	INERTE	0.42
7883	QUE-192	210.3	220.0	300	50	200	100	0.0	INERTE	0.20
7884	QUE-192	220.0	230.0	400	50	200	100	0.0	INERTE	0.24
7885	QUE-192	230.0	240.0	400	50	200	100	0.0	INERTE	0.25
7886	QUE-192	240.0	250.4	300	100	200	100	0.0	INERTE	0.21
7887	QUE-192	250.4	259.6	300	50	100	0	0.0	INERTE	0.38
7888	QUE-192	259.6	270.0	300	100	100	0	0.0	INERTE	0.29
7889	QUE-192	270.0	280.0	400	50	200	100	0.0	INERTE	0.18
7890	QUE-192	280.0	290.0	300	100	200	100	0.0	INERTE	0.19
7891	QUE-192	290.0	300.0	400	100	200	100	0.0	INERTE	0.21
7892	QUE-192	300.0	310.0	300	50	200	100	0.0	INERTE	0.31
7893	QUE-192	310.0	320.0	200	50	200	100	0.0	INERTE	0.31
7894	QUE-192	320.0	330.0	200	50	200	100	0.0	INERTE	0.15
7895	QUE-192	330.0	340.0	400	50	300	100	0.0	INERTE	0.11
7896	QUE-192	360.0	370.3	300	50	300	100	0.0	INERTE	0.11
7897	QUE-192	370.3	380.0	200	100	200	100	0.0	INERTE	0.11
7898	QUE-192	380.0	390.0	300	100	300	100	0.0	INERTE	0.12
7899	QUE-192	390.0	400.0	200	100	200	100	0.0	INERTE	0.21
7900	QUE-192	400.0	410.0	300	50	200	100	0.0	INERTE	0.12
7901	QUE-192	410.0	420.0	300	100	300	100	0.0	INERTE	0.11
7902	QUE-192	420.0	430.0	300	50	300	100	0.0	INERTE	0.11
7903	QUE-192	430.0	436.8	200	100	5400	5100	-0.7	LIGERAMENTE ACIDO	0.11
7904	QUE-193	130.0	140.0	300	50	20100	13600	-1.8	ACIDO	0.11
7905	QUE-193	140.0	150.1	300	50	21900	14700	-2.0	ACIDO	0.10
7906	QUE-193	150.1	160.0	300	50	4200	2600	-0.3	LIGERAMENTE ACIDO	0.45
7907	QUE-193	160.0	169.9	400	50	300	100	0.0	INERTE	0.35
7908	QUE-193	169.9	180.0	400	100	100	0	0.0	INERTE	0.26
7909	QUE-193	180.0	190.0	300	100	200	100	0.0	INERTE	0.41
7910	QUE-193	190.0	200.0	300	50	100	0	0.0	INERTE	0.33
7911	QUE-193	200.0	210.5	300	50	100	0	0.0	INERTE	0.30
7912	QUE-193	210.5	220.0	300	100	100	0	0.0	INERTE	0.10
7913	QUE-193	220.0	230.0	400	50	100	0	0.0	INERTE	0.22
7914	QUE-193	230.0	240.0	300	100	100	0	0.0	INERTE	0.13
7915	QUE-193	240.0	250.0	600	100	100	0	0.0	INERTE	0.60
7916	QUE-193	250.0	260.0	300	50	200	100	0.0	INERTE	0.26
7917	QUE-193	260.0	270.0	200	50	200	100	0.0	INERTE	0.46
7918	QUE-193	270.0	280.3	400	50	400	100	0.0	INERTE	0.38
7919	QUE-193	280.3	290.0	200	50	400	100	0.0	INERTE	0.62
7920	QUE-193	290.0	300.0	300	50	22100	21300	-2.9	ACIDO	0.61
7921	QUE-193	300.0	309.8	300	50	32500	31600	-4.3	ACIDO	0.62
7922	QUE-193	309.8	320.0	300	100	2900	2000	-0.2	LIGERAMENTE ACIDO	1.01
7923	QUE-193	320.0	330.0	200	100	700	100	0.0	INERTE	1.76
7924	QUE-193	330.0	340.0	200	50	900	400	0.0	INERTE	0.76
7925	QUE-193	340.0	350.0	300	100	300	100	0.0	INERTE	0.54
7926	QUE-193	350.0	360.0	400	50	2800	1900	-0.2	LIGERAMENTE ACIDO	1.80
7927	QUE-193	360.0	370.0	500	50	1300	400	0.0	INERTE	3.64
7928	QUE-193	370.0	380.0	500	50	1600	400	0.0	INERTE	2.45
7929	QUE-193	380.0	390.0	300	50	1600	600	-0.1	INERTE	2.29
7930	QUE-193	390.0	399.9	400	50	1200	200	0.0	INERTE	3.31
7931	QUE-193	399.9	410.1	500	100	20900	14800	-2.0	ACIDO	2.57
7932	QUE-193	410.1	416.0	700	50	74900	62000	-8.5	ACIDO	1.60
7933	QUE-193	417.5	422.0	400	50	114900	90800	-12.4	ACIDO	1.54
7934	QUE-193	422.0	429.5	400	50	142800	102500	-14.0	ACIDO	1.82
7935	QUE-193	429.5	440.0	700	50	97900	80400	-11.0	ACIDO	0.75
7936	QUE-193	450.0	460.9	400	50	99900	86900	-11.9	ACIDO	0.43
7937	QUE-193	460.9	470.0	800	50	93200	91700	-12.5	ACIDO	1.30
7938	QUE-193	470.0	480.0	700	100	83900	82100	-11.2	ACIDO	5.50
7939	QUE-193	480.0	490.3	700	50	79100	75000	-10.3	ACIDO	3.46
7940	QUE-193	490.3	495.4	400	50	133400	114100	-15.6	ACIDO	1.50
7941	QUE-194	257.0	261.3	700	50	22400	10800	-1.5	ACIDO	0.62
7942	QUE-194	310.0	320.0	400	50	2300	1400	-0.2	LIGERAMENTE ACIDO	0.30
7943	QUE-194	320.0	330.0	500	50	500	200	0.0	INERTE	0.97
7944	QUE-194	330.0	340.0	300	50	300	100	0.0	INERTE	1.26
7945	QUE-194	340.0	348.7	300	50	400	100	0.0	INERTE	1.48
7946	QUE-195	2.1	10.0	1200	300	22500	11600	-1.5	ACIDO	0.28
7947	QUE-195	10.0	20.0	600	50	31000	15500	-2.1	ACIDO	0.86
7948	QUE-195	20.0	30.0	600	100	3800	900	-0.1	NEUTRAL	0.35
7949	QUE-195	30.0	40.0	3700	100	21700	19800	-2.7	ACIDO	0.35
7950	QUE-195	49.9	60.0	1300	50	33500	32400	-4.4	ACIDO	0.20
7951	QUE-195	60.0	70.0	2200	50	15100	13500	-1.8	ACIDO	0.69
7952	QUE-195	70.0	80.0	3200	100	17600	15900	-2.1	ACIDO	0.79
7953	QUE-195	80.0	90.0	2500	100	22600	20700	-2.8	ACIDO	0.25
7954	QUE-195	90.0	100.0	1200	50	8700	5000	-0.7	LIGERAMENTE ACIDO	0.40
7955	QUE-195	100.0	110.0	500	100	5700	3200	-0.4	LIGERAMENTE ACIDO	0.65
7956	QUE-195	110.0	120.0	400	50	1700	1000	-0.1	LIGERAMENTE ACIDO	0.12
7957	QUE-195	120.0	129.7	400	50	300	100	0.0	INERTE	0.83
7958	QUE-195	129.7	140.0	500	100	24100	13700	-1.8	ACIDO	0.39
7959	QUE-195	140.0	150.0	300	100	9400	5500	-0.7	LIGERAMENTE ACIDO	0.24
7960	QUE-195	150.0	160.0	800	50	13000	7000	-0.9	LIGERAMENTE ACIDO	0.27
7961	QUE-195	160.0	170.2	500	50	11300	5600	-0.7	LIGERAMENTE ACIDO	0.13
7962	QUE-195	170.2	180.0	900	50	42100	16400	-2.2	ACIDO	0.15
7963	QUE-195	180.0	190.0	700	100	35600	12300	-1.6	ACIDO	0.23
7964	QUE-195	190.0	200.0	700	50	20900	9600	-1.3	ACIDO	0.19
7965	QUE-195	200.0	210.0	400	100	1800	900	-0.1	NEUTRAL	0.11
7966	QUE-195	210.0	220.0	400	50	200	150	0.0	INERTE	0.13
7967	QUE-195	270.0	280.0	600	300	300	100	0.1	NEUTRAL	0.13
7968	QUE-195	280.0	290.0	600	300	400	200	0.1	NEUTRAL	0.19
7969	QUE-195	310.0	320.0	900	300	300	200	0.1	NEUTRAL	0.11
7970	QUE-196	10.0	20.0	700	50	40400	22200	-3.0	ACIDO	0.16
7971	QUE-196	40.0	50.0	500	50	53500	33700	-4.6	ACIDO	0.24
7972	QUE-196	50.0	60.0	500	50	63600	33900	-4.6	ACIDO	0.30
7973	QUE-196	60.0	70.0	600	50	65100	35300	-4.8	ACIDO	0.17
7974	QUE-196	70.0	80.0	900	50	30900	17700	-2.4	ACIDO	0.10
7975	QUE-196	80.0	89.6	600	50	42400	26100	-3.6	ACIDO	0.12
7976	QUE-196	89.6	100.0	300	50	49500	31500	-4.3	ACIDO	0.26
7977	QUE-196	100.0	109.6	500	50	44000	29100	-4.0	ACIDO	0.42
7978	QUE-196	109.6	120.0	700	50	25800	15900	-2.2	ACIDO	0.35
7979	QUE-196	120.0	130.0	500	50	52700	35000	-4.8	ACIDO	0.37
7980	QUE-196	130.0	140.0	300	50	57500	34800	-4.7	ACIDO	0.26
7981	QUE-196	140.0	150.0	500	50	50900	32100	-4.4	ACIDO	0.32
7982	QUE-196	150.0	160.0	500	50	21700	12200	-1.7	ACIDO	0.38
7983	QUE-196	160.0	170.0	400	50	33300	19700	-2.7	ACIDO	0.33
7984	QUE-196	170.0	180.3	200	50	9800	5300	-0.7	LIGERAMENTE ACIDO	0.49
7985	QUE-196	180.3	190.7	400	50	1200	200	0.0	INERTE	0.60
7986	QUE-196	190.7	200.4	500	50	8100	4100	-0.5	LIGERAMENTE ACIDO	0.81
7987	QUE-196	200.4	210.0	100	50	17800	8800	-1.2	ACIDO	0.81
7988	QUE-196	210.0	220.0	100	50	2500	1000	-0.1	LIGERAMENTE ACIDO	2.40
7989	QUE-196	220.0	230.0	200	50	700	200	0.0	INERTE	1.28
7990	QUE-196	230.0	240.0	400	50	1000	200	0.0	INERTE	0.63
7991	QUE-196	240.0	250.0	200	50	1000	200	0.0	INERTE	0.86
7992	QUE-196	250.0	260.0	300	50	600	200	0.0	INERTE	0.47
7993	QUE-196	260.0	270.0	200	50	200	100	0.0	INERTE	0.36
7994	QUE-196	270.0	280.0	200	50	200	100	0.0	INERTE	0.40
7995	QUE-196	280.0	290.0	300	50	300	100	0.0	INERTE	0.25
7996	QUE-196	290.0	300.0	200	50	300	100	0.0	INERTE	0.39
7997	QUE-196	300.0	310.0	600	50	200	100	0.0	INERTE	0.38
7998	QUE-196	310.0	320.0	200	50	300	100	0.0	INERTE	0.23
7999	QUE-196	320.0	330.0	300	50	400	100	0.0	INERTE	0.22
8000	QUE-196	330.0	340.0	700	50	500	100	0.0	INERTE	0.46
8001	QUE-196	340.0	350.0	600	50	700	200	0.0	INERTE	0.91
8002	QUE-196	350.0	357.5	2200	100	37700	27900	-3.8	ACIDO	1.27
8003	QUE-197	290.5	300.0	300	50	4100	2500	-0.3	LIGERAMENTE ACIDO	0.13
8004	QUE-197	300.0	310.0	500	50	1200	700	-0.1	INERTE	0.16
8005	QUE-197	310.0	320.0	300	50	1800	1200	-0.1	LIGERAMENTE ACIDO	0.22
8006	QUE-197	320.0	330.0	500	50	300	100	0.0	INERTE	0.71
8007	QUE-197	330.0	340.0	400	50	200	100	0.0	INERTE	0.45
8008	QUE-197	340.0	350.0	400	50	700	300	0.0	INERTE	0.45
8009	QUE-197	350.0	360.0	300	50	1100	200	0.0	INERTE	0.15
8010	QUE-197	360.0	370.3	500	50	30500	21800	-3.0	ACIDO	0.45
8011	QUE-197	370.3	380.0	700	50	70600	59400	-8.1	ACIDO	0.43
8012	QUE-197	380.0	390.0	800	50	46800	36300	-5.0	ACIDO	0.33
8013	QUE-197	390.0	400.0	1100	300	47000	39700	-5.3	ACIDO	0.25
8014	QUE-197	400.0	407.0	700	50	43500	38600	-5.3	ACIDO	0.18
8015	QUE-198	1.0	10.0	800	100	200	100	0.0	INERTE	0.13
8016	QUE-198	20.2	30.8	800	50	25200	14100	-1.9	ACIDO	0.11
8017	QUE-198	50.0	60.0	700	50	24400	14000	-1.9	ACIDO	0.11
8018	QUE-198	60.0	70.0	1200	50	33400	18900	-2.6	ACIDO	0.19
8019	QUE-198	70.0	80.0	800	50	34000	19700	-2.7	ACIDO	0.15
8020	QUE-198	80.0	90.5	600	50	23400	13300	-1.8	ACIDO	0.16
8021	QUE-198	90.5	100.0	700	50	18000	9800	-1.3	ACIDO	0.21
8022	QUE-198	100.0	110.0	700	50	18400	9700	-1.3	ACIDO	0.22
8023	QUE-198	110.0	120.5	700	50	41900	26100	-3.6	ACIDO	0.45
8024	QUE-198	120.5	130.0	700	50	42400	26900	-3.7	ACIDO	0.28
8025	QUE-198	130.0	140.0	500	50	41000	26900	-3.7	ACIDO	0.48
8026	QUE-198	140.0	150.2	600	50	58100	37300	-5.1	ACIDO	0.50
8027	QUE-198	150.2	160.0	500	50	36700	23400	-3.2	ACIDO	0.52
8028	QUE-198	160.0	170.0	700	50	13300	6500	-0.9	LIGERAMENTE ACIDO	0.56
8029	QUE-198	170.0	180.0	600	50	7500	2900	-0.4	LIGERAMENTE ACIDO	0.61
8030	QUE-198	180.0	190.0	600	50	3500	1000	-0.1	LIGERAMENTE ACIDO	0.77
8031	QUE-198	190.0	200.6	400	50	24000	13700	-1.9	ACIDO	0.97
8032	QUE-198	200.6	210.3	400	50	25800	15100	-2.1	ACIDO	2.47
8033	QUE-198	210.3	220.2	500	50	43800	20200	-2.7	ACIDO	3.41
8034	QUE-198	220.2	230.0	400	50	48300	27700	-3.8	ACIDO	1.82
8035	QUE-198	230.0	240.0	500	50	40500	19200	-2.6	ACIDO	1.36
8036	QUE-198	240.0	250.0	400	50	24500	14400	-2.0	ACIDO	1.55
8037	QUE-198	250.0	260.4	200	50	48600	25500	-3.5	ACIDO	3.14
8038	QUE-198	260.4	270.6	300	50	36900	21500	-2.9	ACIDO	1.25
8039	QUE-198	270.6	280.0	600	50	25800	17100	-2.3	ACIDO	1.42
8040	QUE-198	280.0	290.3	300	50	52300	23500	-3.2	ACIDO	1.14
8041	QUE-198	290.3	300.0	200	50	14300	7800	-1.1	ACIDO	0.42
8042	QUE-198	300.0	310.0	300	50	25300	13300	-1.8	ACIDO	0.39
8043	QUE-198	310.0	316.9	700	50	28700	16000	-2.2	ACIDO	0.17
8044	QUE-198	318.0	330.0	600	50	14300	7700	-1.0	ACIDO	0.34
8045	QUE-198	330.0	340.0	400	50	9700	4900	-0.7	LIGERAMENTE ACIDO	0.11
8046	QUE-198	340.0	350.0	300	50	600	200	0.0	INERTE	0.14
8047	QUE-198	350.0	360.0	200	50	600	100	0.0	INERTE	0.15
8048	QUE-198	360.0	370.0	500	50	1600	200	0.0	INERTE	0.47
8049	QUE-198	370.0	380.1	500	50	72700	45300	-6.2	ACIDO	0.51
8050	QUE-198	380.1	387.6	700	50	55800	40800	-5.6	ACIDO	0.25
8051	QUE-199	80.0	90.0	500	50	43700	22800	-3.1	ACIDO	0.30
8052	QUE-199	90.0	100.0	500	50	44900	23800	-3.2	ACIDO	0.13
8053	QUE-199	100.0	109.6	700	50	47100	27500	-3.7	ACIDO	0.18
8054	QUE-199	109.6	120.0	300	50	50000	29400	-4.0	ACIDO	0.39
8055	QUE-199	120.0	130.0	900	50	41800	32000	-4.4	ACIDO	0.27
8056	QUE-199	130.0	140.0	2400	50	31900	30100	-4.1	ACIDO	0.44
8057	QUE-200	170.0	180.0	1200	50	28200	26200	-3.6	ACIDO	0.10
8058	QUE-200	180.0	190.0	1400	50	27700	25700	-3.5	ACIDO	0.10
8059	QUE-200	210.6	220.0	1500	50	17000	12000	-1.6	ACIDO	0.14
8060	QUE-200	220.0	230.4	1300	50	10400	5100	-0.7	LIGERAMENTE ACIDO	0.32
8061	QUE-200	230.4	240.0	200	100	11800	6800	-0.9	LIGERAMENTE ACIDO	0.12
8062	QUE-200	240.0	250.0	800	50	16800	9300	-1.3	ACIDO	0.47
8063	QUE-200	250.0	261.0	500	50	8700	4800	-0.6	LIGERAMENTE ACIDO	0.31
8064	QUE-202	312.5	320.2	400	50	1000	400	0.0	INERTE	0.53
8065	QUE-202	320.2	330.0	500	50	700	300	0.0	INERTE	1.20
8066	QUE-202	330.0	340.0	2000	100	800	400	0.0	INERTE	1.48
8067	QUE-202	340.0	350.6	3400	500	3100	1800	-0.1	NEUTRAL	0.98
8068	QUE-202	350.6	360.0	2100	50	42900	38600	-5.3	ACIDO	0.15
8069	QUE-202	360.0	370.0	3500	50	34100	32300	-4.4	ACIDO	0.21
8070	QUE-202	370.0	380.3	2300	100	54200	43900	-6.0	ACIDO	0.23
8071	QUE-202	380.3	389.1	2200	50	34600	32800	-4.5	ACIDO	0.26
8072	QUE-203	40.0	50.0	300	50	200	0	0.0	INERTE	0.12
8073	QUE-203	50.0	60.0	300	50	200	100	0.0	INERTE	0.14
8074	QUE-203	110.0	120.0	500	50	100	0	0.0	INERTE	0.11
8075	QUE-203	120.0	130.0	300	50	100	0	0.0	INERTE	0.11
8076	QUE-203	130.0	140.0	600	50	100	0	0.0	INERTE	0.10
8077	QUE-203	140.0	150.0	400	50	100	0	0.0	INERTE	0.15
8078	QUE-203	150.0	160.0	600	100	300	100	0.0	INERTE	0.13
8079	QUE-203	160.0	169.7	200	50	200	0	0.0	INERTE	0.12
8080	QUE-203	169.7	180.0	400	50	200	0	0.0	INERTE	0.29
8081	QUE-203	190.0	200.0	400	50	200	0	0.0	INERTE	0.12
8082	QUE-203	220.1	229.2	100	100	200	0	0.0	INERTE	0.11
8083	QUE-203	229.2	240.0	900	50	200	100	0.0	INERTE	0.16
8084	QUE-203	240.0	250.0	500	50	100	0	0.0	INERTE	0.39
8085	QUE-203	250.0	259.9	400	50	200	100	0.0	INERTE	0.96
8086	QUE-203	259.9	270.0	300	100	200	0	0.0	INERTE	0.23
8087	QUE-203	270.0	280.0	400	50	200	100	0.0	INERTE	0.52
8088	QUE-203	280.0	290.0	400	100	200	0	0.0	INERTE	0.25
8089	QUE-203	290.0	300.0	700	50	200	100	0.0	INERTE	0.34
8090	QUE-203	300.0	310.0	600	50	200	0	0.0	INERTE	0.58
8091	QUE-203	310.0	320.2	400	50	200	0	0.0	INERTE	0.57
8092	QUE-203	320.2	330.0	500	50	200	100	0.0	INERTE	0.43
8093	QUE-203	330.0	340.0	700	100	34700	34000	-4.6	ACIDO	0.46
8094	QUE-203	340.0	349.8	300	50	30500	29700	-4.1	ACIDO	0.96
8095	QUE-203	349.8	360.0	700	100	200	100	0.0	INERTE	0.12
8096	QUE-203	360.0	370.0	200	50	200	0	0.0	INERTE	0.16
8097	QUE-203	370.0	380.0	300	50	300	100	0.0	INERTE	0.16
8098	QUE-203	380.0	388.0	400	100	27000	26500	-3.6	ACIDO	0.12
8099	QUE-203	388.0	392.4	500	100	59300	58700	-8.0	ACIDO	0.13
8100	QUE-204	130.0	140.0	600	200	300	100	0.1	INERTE	0.14
8101	QUE-204	140.0	150.0	500	50	300	100	0.0	INERTE	0.11
8102	QUE-204	150.0	160.0	400	100	700	400	0.0	INERTE	0.23
8103	QUE-204	160.0	170.0	900	50	300	100	0.0	INERTE	0.10
8104	QUE-204	170.0	180.0	400	100	200	100	0.0	INERTE	0.16
8105	QUE-204	190.0	200.0	300	50	300	100	0.0	INERTE	0.11
8106	QUE-204	200.0	210.0	100	50	300	100	0.0	INERTE	0.28
8107	QUE-204	210.0	220.0	400	100	400	100	0.0	INERTE	0.30
8108	QUE-204	220.0	229.9	300	50	400	100	0.0	INERTE	0.43
8109	QUE-204	229.9	240.0	400	100	1000	100	0.0	INERTE	0.13
8110	QUE-204	240.0	250.2	600	50	700	200	0.0	INERTE	0.14
8111	QUE-204	250.2	260.0	100	50	300	100	0.0	INERTE	0.16
8112	QUE-204	260.0	270.0	400	50	600	200	0.0	INERTE	0.10
8113	QUE-204	270.0	279.8	300	50	200	100	0.0	INERTE	0.12
8114	QUE-204	279.8	290.0	200	50	200	100	0.0	INERTE	0.15
8115	QUE-204	290.0	300.0	400	50	400	100	0.0	INERTE	0.13
8116	QUE-204	300.0	310.0	500	50	600	200	0.0	INERTE	0.13
8117	QUE-204	330.4	340.0	600	100	300	200	0.0	INERTE	0.10
8118	QUE-204	350.0	360.0	500	50	300	100	0.0	INERTE	0.10
8119	QUE-204	360.0	370.0	400	50	500	200	0.0	INERTE	0.25
8120	QUE-204	370.0	380.0	400	100	600	400	0.0	INERTE	0.32
8121	QUE-204	380.0	390.0	500	50	300	100	0.0	INERTE	0.16
8122	QUE-204	390.0	400.0	400	50	300	100	0.0	INERTE	0.15
8123	QUE-204	400.0	407.4	600	50	12900	12500	-1.7	ACIDO	0.16
8124	QUE-205	0.0	10.0	600	50	9600	3900	-0.5	LIGERAMENTE ACIDO	0.18
8125	QUE-205	10.0	20.0	1300	50	4900	2100	-0.3	LIGERAMENTE ACIDO	0.19
8126	QUE-205	20.0	30.0	600	50	4900	2000	-0.3	LIGERAMENTE ACIDO	0.15
8127	QUE-205	30.0	40.0	200	50	50500	26000	-3.5	ACIDO	0.27
8128	QUE-205	40.0	50.0	300	50	51400	29400	-4.0	ACIDO	0.35
8129	QUE-205	50.0	60.0	200	50	67300	28300	-3.9	ACIDO	0.28
8130	QUE-205	60.0	70.0	300	50	95300	42200	-5.8	ACIDO	0.33
8131	QUE-205	70.0	80.0	400	50	46600	27300	-3.7	ACIDO	0.37
8132	QUE-205	80.0	90.0	300	50	500	200	0.0	INERTE	0.57
8133	QUE-205	90.0	100.0	300	50	400	100	0.0	INERTE	0.55
8134	QUE-205	100.0	105.7	300	50	300	100	0.0	INERTE	0.46
8135	QUE-205	106.7	112.0	400	50	500	100	0.0	INERTE	0.76
8136	QUE-205	112.0	120.0	300	50	500	100	0.0	INERTE	1.22
8137	QUE-205	120.0	130.0	300	50	600	100	0.0	INERTE	0.47
8138	QUE-205	130.0	140.0	600	50	800	100	0.0	INERTE	0.31
8139	QUE-205	140.0	150.0	500	50	600	200	0.0	INERTE	0.46
8140	QUE-205	150.0	160.0	600	100	1400	100	0.0	INERTE	0.50
8141	QUE-205	160.0	170.0	600	50	1600	100	0.0	INERTE	0.48
8142	QUE-205	170.0	180.0	500	50	700	100	0.0	INERTE	0.45
8143	QUE-205	180.0	190.0	1500	50	600	300	0.0	INERTE	0.38
8144	QUE-205	190.0	200.0	500	50	300	200	0.0	INERTE	0.49
8145	QUE-205	200.0	210.0	300	50	200	100	0.0	INERTE	0.36
8146	QUE-205	210.0	219.8	200	50	200	100	0.0	INERTE	0.29
8147	QUE-205	219.8	230.0	300	100	200	100	0.0	INERTE	0.55
8148	QUE-205	230.0	240.0	400	50	300	100	0.0	INERTE	0.52
8149	QUE-205	240.0	250.0	400	100	200	100	0.0	INERTE	0.32
8150	QUE-205	250.0	260.5	300	100	200	100	0.0	INERTE	0.27
8151	QUE-205	260.5	270.0	400	50	200	100	0.0	INERTE	0.44
8152	QUE-205	270.0	280.0	700	100	200	100	0.0	INERTE	0.39
8153	QUE-205	280.0	290.0	300	50	100	50	0.0	INERTE	0.15
8154	QUE-205	300.0	310.0	300	100	800	600	0.0	INERTE	0.18
8155	QUE-205	310.0	320.5	300	100	800	600	0.0	INERTE	0.16
8156	QUE-205	320.5	330.0	300	100	300	100	0.0	INERTE	0.30
8157	QUE-205	330.0	340.0	300	100	500	200	0.0	INERTE	0.17
8158	QUE-205	340.0	350.0	300	50	16700	9000	-1.2	ACIDO	0.17
8159	QUE-205	350.0	356.7	200	100	3100	1700	-0.2	LIGERAMENTE ACIDO	0.12
8160	QUE-206	30.0	40.0	300	50	43300	26100	-3.6	ACIDO	0.15
8161	QUE-206	40.0	50.0	200	50	500	100	0.0	INERTE	0.25
8162	QUE-206	50.0	60.0	200	50	200	0	0.0	INERTE	0.10
8163	QUE-206	70.0	80.0	400	50	38400	23300	-3.2	ACIDO	0.13
8164	QUE-206	80.0	90.0	200	50	47900	25200	-3.4	ACIDO	0.31
8165	QUE-206	90.0	100.0	500	50	61100	28100	-3.8	ACIDO	0.36
8166	QUE-206	100.0	110.0	600	50	19300	10100	-1.4	ACIDO	1.31
8167	QUE-206	110.0	119.6	800	50	1000	300	0.0	INERTE	3.27
8168	QUE-206	119.6	130.2	500	50	900	100	0.0	INERTE	2.17
8169	QUE-206	130.2	140.0	500	50	1300	200	0.0	INERTE	1.76
8170	QUE-206	140.0	150.0	400	50	1000	0	0.0	INERTE	0.66
8171	QUE-206	150.0	160.3	500	100	600	100	0.0	INERTE	0.63
8172	QUE-206	160.3	170.0	200	50	300	100	0.0	INERTE	0.45
8173	QUE-206	170.0	180.0	400	100	600	0	0.0	INERTE	0.79
8174	QUE-206	180.0	190.0	400	50	200	0	0.0	INERTE	0.22
8175	QUE-206	190.0	200.0	200	50	400	0	0.0	INERTE	0.28
8176	QUE-206	200.0	210.0	200	50	700	0	0.0	INERTE	0.57
8177	QUE-206	210.0	220.0	200	50	200	100	0.0	INERTE	0.82
8178	QUE-206	220.0	230.0	300	50	200	0	0.0	INERTE	0.59
8179	QUE-206	230.0	240.0	300	50	300	0	0.0	INERTE	0.53
8180	QUE-206	240.0	250.3	300	100	200	0	0.0	INERTE	0.21
8181	QUE-206	250.3	260.0	200	50	200	0	0.0	INERTE	0.23
8182	QUE-206	260.0	270.0	300	50	200	0	0.0	INERTE	0.56
8183	QUE-206	270.0	280.0	200	50	200	100	0.0	INERTE	0.28
8184	QUE-206	280.0	290.0	300	50	200	100	0.0	INERTE	0.32
8185	QUE-206	290.0	300.0	300	50	300	0	0.0	INERTE	0.83
8186	QUE-206	300.0	310.0	200	50	200	0	0.0	INERTE	0.21
8187	QUE-206	310.0	320.0	400	50	100	0	0.0	INERTE	0.19
8188	QUE-206	320.0	330.0	300	50	100	0	0.0	INERTE	0.19
8189	QUE-206	330.0	340.0	300	100	400	100	0.0	INERTE	0.22
8190	QUE-206	340.0	350.0	500	50	500	300	0.0	INERTE	0.39

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
8191	QUE-206	350.0	360.0	500	50	900	300	0.0	INERTE	1.12
8192	QUE-206	360.0	370.0	400	50	800	200	0.0	INERTE	0.92
8193	QUE-206	370.0	380.0	500	50	1200	300	0.0	INERTE	1.08
8194	QUE-206	380.0	389.3	500	50	48200	36900	-5.0	ACIDO	0.61
8195	QUE-206	389.3	400.0	900	50	71400	55300	-7.6	ACIDO	0.74
8196	QUE-206	400.0	412.0	900	50	43800	40600	-5.5	ACIDO	0.63
8197	QUE-207	30.0	40.0	400	50	200	100	0.0	INERTE	0.13
8198	QUE-207	60.0	66.0	400	100	300	100	0.0	INERTE	0.27
8199	QUE-208	180.0	190.0	900	100	300	100	0.0	INERTE	0.13
8200	QUE-208	190.0	200.0	800	100	200	100	0.0	INERTE	0.17
8201	QUE-208	200.0	210.0	200	50	200	100	0.0	INERTE	0.20
8202	QUE-208	210.0	220.0	400	100	300	100	0.0	INERTE	0.13
8203	QUE-208	220.0	230.0	100	50	200	100	0.0	INERTE	0.42
8204	QUE-208	230.0	240.0	500	100	400	100	0.0	INERTE	0.33
8205	QUE-208	240.0	250.0	300	100	300	100	0.0	INERTE	0.57
8206	QUE-208	250.0	260.0	600	100	400	100	0.0	INERTE	0.65
8207	QUE-208	260.0	270.0	200	100	200	100	0.0	INERTE	0.31
8208	QUE-208	270.0	280.0	400	100	400	100	0.0	INERTE	0.50
8209	QUE-208	280.0	290.0	300	100	300	100	0.0	INERTE	0.26
8210	QUE-208	290.0	300.0	300	100	300	100	0.0	INERTE	0.27
8211	QUE-208	300.0	310.0	300	100	300	100	0.0	INERTE	0.12
8212	QUE-208	310.0	320.3	100	100	300	100	0.0	INERTE	0.12
8213	QUE-208	370.0	380.0	400	100	400	100	0.0	INERTE	0.10
8214	QUE-209	60.0	70.0	600	100	300	100	0.0	INERTE	0.22
8215	QUE-209	70.0	80.4	400	50	300	100	0.0	INERTE	0.11
8216	QUE-210	20.0	30.0	300	200	1200	600	0.0	INERTE	0.22
8217	QUE-210	30.0	40.0	500	50	800	100	0.0	INERTE	0.33
8218	QUE-210	40.0	50.0	700	50	40800	21300	-2.9	ACIDO	0.21
8219	QUE-210	50.0	60.0	1100	50	29600	17500	-2.4	ACIDO	0.13
8220	QUE-210	60.0	70.0	1600	100	18400	9700	-1.3	ACIDO	0.34
8221	QUE-210	70.0	80.0	3000	50	34100	26300	-3.6	ACIDO	0.52
8222	QUE-210	80.0	90.0	4900	50	40900	39500	-5.4	ACIDO	0.16
8223	QUE-210	90.0	100.0	3400	50	14400	9900	-1.3	ACIDO	0.22
8224	QUE-210	100.0	110.0	1700	50	15500	9800	-1.3	ACIDO	0.61
8225	QUE-210	110.0	120.0	2700	100	41400	38900	-5.3	ACIDO	0.68
8226	QUE-210	120.0	130.0	2700	50	42200	39400	-5.4	ACIDO	0.39
8227	QUE-210	130.0	140.0	1800	50	38200	35500	-4.8	ACIDO	0.35
8228	QUE-210	140.0	150.0	2300	50	12400	9900	-1.3	ACIDO	0.34
8229	QUE-210	150.0	160.0	2300	50	2600	300	0.0	INERTE	0.54
8230	QUE-210	160.0	170.0	800	200	32500	15000	-2.0	ACIDO	0.83
8231	QUE-210	170.0	179.6	600	100	45800	21600	-2.9	ACIDO	0.40
8232	QUE-210	179.6	190.5	1000	50	41400	18500	-2.5	ACIDO	0.39
8233	QUE-210	190.5	200.0	1100	100	40800	15700	-2.1	ACIDO	0.34
8234	QUE-210	200.0	210.0	1000	700	47700	18200	-2.2	ACIDO	0.36
8235	QUE-210	210.0	220.0	1500	50	33000	16700	-2.3	ACIDO	0.78
8236	QUE-210	220.0	230.0	1200	50	34900	19500	-2.7	ACIDO	0.66
8237	QUE-210	230.0	240.0	800	200	32300	16600	-2.2	ACIDO	0.44
8238	QUE-210	240.0	250.1	500	100	35500	20400	-2.8	ACIDO	0.57
8239	QUE-210	250.1	260.0	1000	50	21100	12000	-1.6	ACIDO	0.46
8240	QUE-210	260.0	265.7	800	50	33800	17700	-2.4	ACIDO	0.35
8241	QUE-210	266.9	272.5	300	100	32200	19000	-2.6	ACIDO	0.33
8242	QUE-210	272.5	280.0	400	200	25600	16100	-2.1	ACIDO	0.53
8243	QUE-210	280.0	290.0	700	100	34600	19600	-2.6	ACIDO	0.27
8244	QUE-210	290.0	300.0	500	50	4200	2400	-0.3	LIGERAMENTE ACIDO	0.26
8245	QUE-210	300.0	310.0	200	100	300	100	0.0	INERTE	0.40
8246	QUE-210	310.0	320.0	200	100	200	100	0.0	INERTE	0.26
8247	QUE-210	320.0	330.0	300	50	400	200	0.0	INERTE	0.15
8248	QUE-210	330.0	340.0	200	50	500	300	0.0	INERTE	0.31
8249	QUE-210	340.0	350.0	300	100	200	100	0.0	INERTE	0.18
8250	QUE-210	350.0	360.0	300	100	400	200	0.0	INERTE	0.25
8251	QUE-210	360.0	370.0	500	200	500	200	0.0	INERTE	0.41
8252	QUE-210	370.0	380.0	300	100	15300	7400	-1.0	LIGERAMENTE ACIDO	0.86
8253	QUE-210	380.0	390.3	1100	50	15000	8000	-1.1	ACIDO	1.70
8254	QUE-210	390.3	400.0	1100	200	71900	58900	-8.0	ACIDO	0.82
8255	QUE-210	400.0	409.6	1100	100	32600	28800	-3.9	ACIDO	0.42
8256	QUE-210	409.6	419.1	500	50	3600	2300	-0.3	LIGERAMENTE ACIDO	0.48
8257	QUE-210	419.1	430.0	1400	50	32400	27600	-3.8	ACIDO	1.35
8258	QUE-210	430.0	440.0	1500	100	39100	34200	-4.6	ACIDO	0.38
8259	QUE-210	440.0	450.9	1000	50	16500	13300	-1.8	ACIDO	0.56
8260	QUE-211	10.0	20.0	10900	100	19200	17700	-2.4	ACIDO	0.24
8261	QUE-211	30.0	40.0	4100	50	24200	22600	-3.1	ACIDO	0.11
8262	QUE-211	40.0	50.0	1800	50	22700	20700	-2.8	ACIDO	0.16
8263	QUE-211	50.0	60.0	2700	50	37100	34300	-4.7	ACIDO	0.22
8264	QUE-211	60.0	70.0	1400	50	43200	40100	-5.5	ACIDO	0.30
8265	QUE-211	70.0	80.0	900	100	36900	34400	-4.7	ACIDO	0.23
8266	QUE-211	80.0	90.0	700	100	32800	31400	-4.3	ACIDO	0.51
8267	QUE-211	90.0	100.0	1200	50	28000	26500	-3.6	ACIDO	0.34
8268	QUE-211	110.0	120.0	600	100	3900	1400	-0.2	LIGERAMENTE ACIDO	1.06
8269	QUE-211	120.0	130.5	700	100	5800	2100	-0.3	LIGERAMENTE ACIDO	0.20
8270	QUE-211	130.5	140.0	300	100	42900	26500	-3.6	ACIDO	0.34
8271	QUE-211	140.0	150.0	200	100	31600	19000	-2.6	ACIDO	0.19
8272	QUE-211	150.0	160.0	500	50	23500	11400	-1.5	ACIDO	0.41
8273	QUE-211	160.0	170.0	200	100	20600	10100	-1.3	ACIDO	0.31
8274	QUE-211	170.0	180.0	800	100	5200	2500	-0.3	LIGERAMENTE ACIDO	0.23
8275	QUE-211	201.3	212.6	400	50	19700	8600	-1.2	ACIDO	0.11
8276	QUE-212	14.7	20.0	300	100	500	0	0.0	INERTE	0.20
8277	QUE-212	20.0	30.5	300	50	500	200	0.0	INERTE	0.15
8278	QUE-212	60.0	70.0	300	100	200	0	0.0	INERTE	0.11
8279	QUE-212	70.0	80.5	300	100	200	100	0.0	INERTE	0.12
8280	QUE-212	80.5	90.0	600	300	300	0	0.1	LIGERAMENTE BASICO	0.11
8281	QUE-212	120.0	129.7	200	100	200	100	0.0	INERTE	0.13
8282	QUE-212	129.7	140.0	400	200	300	0	0.1	INERTE	0.29
8283	QUE-212	140.0	150.0	400	200	400	100	0.1	INERTE	0.46
8284	QUE-212	150.0	160.0	200	100	400	100	0.0	INERTE	0.57
8285	QUE-212	160.0	165.5	200	100	500	0	0.0	INERTE	0.38
8286	QUE-213	1.3	10.8	1800	100	20000	18100	-2.4	ACIDO	0.16
8287	QUE-213	10.8	20.0	1600	50	35600	33300	-4.5	ACIDO	0.15
8288	QUE-213	40.0	50.0	2300	100	30600	27700	-3.8	ACIDO	0.20
8289	QUE-213	50.0	60.0	1800	50	28600	26300	-3.6	ACIDO	0.21
8290	QUE-213	60.0	70.0	1100	50	35400	33400	-4.6	ACIDO	0.16
8291	QUE-213	70.0	80.2	500	50	30800	29000	-4.0	ACIDO	0.23
8292	QUE-213	80.2	90.0	1000	50	27600	26200	-3.6	ACIDO	0.16
8293	QUE-213	90.0	100.0	700	100	16000	8700	-1.2	ACIDO	0.25
8294	QUE-213	100.0	110.0	200	50	57100	18900	-2.6	ACIDO	0.33
8295	QUE-213	110.0	120.0	300	50	13300	6000	-0.8	LIGERAMENTE ACIDO	0.13
8296	QUE-213	120.0	130.0	400	50	21500	11600	-1.6	ACIDO	0.36
8297	QUE-213	130.0	140.0	500	50	44900	16400	-2.2	ACIDO	0.49
8298	QUE-213	140.0	147.8	1100	50	35400	12800	-1.7	ACIDO	0.68
8299	QUE-213	149.1	160.0	400	100	46500	13800	-1.9	ACIDO	1.98
8300	QUE-213	160.0	170.0	300	50	47900	15600	-2.1	ACIDO	0.51
8301	QUE-213	170.0	180.0	300	50	36200	11300	-1.5	ACIDO	1.94
8302	QUE-213	180.0	190.8	300	100	1900	900	-0.1	NEUTRAL	1.18
8303	QUE-213	190.8	200.3	300	50	1100	600	-0.1	INERTE	0.31
8304	QUE-213	200.3	209.7	300	50	43300	15000	-2.0	ACIDO	0.29
8305	QUE-213	209.7	220.0	400	50	45300	13500	-1.8	ACIDO	0.39
8306	QUE-213	220.0	230.0	300	50	12100	5700	-0.8	LIGERAMENTE ACIDO	0.27
8307	QUE-213	230.0	240.0	300	50	2000	100	0.0	INERTE	0.16
8308	QUE-213	240.0	250.1	400	50	1500	0	0.0	INERTE	0.21
8309	QUE-213	250.1	260.0	500	50	500	200	0.0	INERTE	0.40
8310	QUE-213	260.0	270.9	400	100	400	100	0.0	INERTE	0.24
8311	QUE-214	150.0	160.0	400	100	500	100	0.0	INERTE	0.53
8312	QUE-214	160.0	170.0	300	50	400	100	0.0	INERTE	0.33
8313	QUE-214	170.0	180.0	500	100	300	100	0.0	INERTE	0.74
8314	QUE-214	180.0	189.7	300	100	200	100	0.0	INERTE	0.24
8315	QUE-214	189.7	200.0	400	100	200	100	0.0	INERTE	0.15
8316	QUE-214	200.0	210.0	300	100	100	0	0.0	INERTE	0.17
8317	QUE-214	210.0	220.0	400	200	200	100	0.1	INERTE	0.23
8318	QUE-214	220.0	230.5	300	100	300	100	0.0	INERTE	0.31
8319	QUE-214	230.5	240.0	400	50	300	100	0.0	INERTE	0.37
8320	QUE-214	240.0	250.0	300	200	300	100	0.1	INERTE	0.39
8321	QUE-214	250.0	260.0	400	200	300	100	0.1	INERTE	0.35
8322	QUE-214	260.0	270.0	400	50	300	100	0.0	INERTE	0.31
8323	QUE-214	270.0	280.3	400	300	300	100	0.1	NEUTRAL	0.32
8324	QUE-214	280.3	290.0	400	100	500	100	0.0	INERTE	0.90
8325	QUE-214	290.0	300.0	300	100	700	200	0.0	INERTE	0.72
8326	QUE-214	300.0	310.0	300	50	200	100	0.0	INERTE	0.62
8327	QUE-214	310.0	322.0	300	50	700	200	0.0	INERTE	0.62
8328	QUE-215	220.5	230.4	400	50	18000	7700	-1.0	ACIDO	0.11
8329	QUE-215	240.2	251.1	300	200	600	300	0.0	INERTE	0.10
8330	QUE-216	140.0	150.0	300	200	45100	18000	-2.4	ACIDO	0.11
8331	QUE-216	150.0	160.0	300	100	22200	13300	-1.8	ACIDO	0.12
8332	QUE-216	169.7	180.1	400	100	34100	27600	-3.7	ACIDO	0.17
8333	QUE-216	190.0	200.0	600	100	17300	9400	-1.3	ACIDO	0.11
8334	QUE-216	200.0	209.6	500	50	41200	20600	-2.8	ACIDO	0.11
8335	QUE-216	240.0	250.0	300	50	34400	28000	-3.8	ACIDO	0.13
8336	QUE-216	260.0	270.0	400	50	24200	19700	-2.7	ACIDO	0.14
8337	QUE-216	280.0	290.0	400	100	6200	3600	-0.5	LIGERAMENTE ACIDO	0.12
8338	QUE-216	290.0	300.0	500	100	6400	3500	-0.4	LIGERAMENTE ACIDO	0.19
8339	QUE-216	350.0	360.0	500	100	28300	20000	-2.7	ACIDO	0.25
8340	QUE-216	360.0	370.0	700	100	62500	41800	-5.7	ACIDO	0.49
8341	QUE-217	240.1	250.0	400	300	700	100	0.1	NEUTRAL	0.12
8342	QUE-217	260.0	270.0	300	50	900	100	0.0	INERTE	0.17
8343	QUE-217	270.0	280.1	300	100	600	200	0.0	INERTE	0.19
8344	QUE-217	280.1	290.0	200	300	200	100	0.1	NEUTRAL	0.20
8345	QUE-217	300.0	310.0	200	100	400	200	0.0	INERTE	0.13
8346	QUE-217	310.0	320.0	300	100	700	300	0.0	INERTE	0.14
8347	QUE-217	390.0	400.0	300	100	1300	1200	-0.1	LIGERAMENTE ACIDO	0.17
8348	QUE-217	400.0	410.0	300	100	600	100	0.0	INERTE	1.62
8349	QUE-217	410.0	420.0	500	50	3700	300	0.0	INERTE	15.51
8350	QUE-217	420.0	430.1	500	600	28300	26400	-3.4	ACIDO	4.68
8351	QUE-217	430.1	440.0	500	50	83500	82300	-11.3	ACIDO	2.02
8352	QUE-217	440.0	450.0	400	50	11800	10500	-1.4	ACIDO	0.35
8353	QUE-217	450.0	460.0	500	50	63300	44100	-6.0	ACIDO	0.19
8354	QUE-217	460.0	469.8	300	50	28700	13600	-1.8	ACIDO	0.34
8355	QUE-217	469.8	479.4	400	50	41400	21600	-2.9	ACIDO	0.23
8356	QUE-217	479.4	489.6	300	50	61600	44300	-6.1	ACIDO	0.11
8357	QUE-218	190.0	200.0	300	50	800	200	0.0	INERTE	0.20
8358	QUE-218	200.0	210.0	300	50	1000	200	0.0	INERTE	0.13
8359	QUE-218	300.0	310.4	400	200	36800	32100	-4.3	ACIDO	0.16
8360	QUE-218	310.4	320.4	500	300	87400	79900	-10.8	ACIDO	2.68
8361	QUE-218	320.4	329.4	500	100	108200	104400	-14.3	ACIDO	1.40
8362	QUE-219	120.0	130.0	3600	200	40900	39000	-5.3	ACIDO	0.16
8363	QUE-219	140.0	150.0	1500	100	25200	23900	-3.2	ACIDO	0.20
8364	QUE-219	150.0	160.0	2900	100	37500	35900	-4.9	ACIDO	0.11
8365	QUE-219	160.0	170.0	1800	50	24200	20200	-2.7	ACIDO	0.12
8366	QUE-219	170.0	174.2	500	50	29300	15100	-2.1	ACIDO	0.17
8367	QUE-220	60.0	70.0	200	50	51100	30400	-4.1	ACIDO	0.13
8368	QUE-220	90.0	100.0	300	50	47200	29500	-4.0	ACIDO	0.12
8369	QUE-220	100.0	110.0	200	50	32900	20800	-2.8	ACIDO	0.21
8370	QUE-220	110.0	120.0	300	50	15400	8300	-1.1	ACIDO	0.11
8371	QUE-220	120.0	130.0	400	50	19400	10600	-1.4	ACIDO	0.20
8372	QUE-220	130.0	140.0	400	50	6200	3500	-0.5	LIGERAMENTE ACIDO	0.37
8373	QUE-220	140.0	150.0	500	100	2700	1400	-0.2	LIGERAMENTE ACIDO	0.21
8374	QUE-220	150.0	160.0	400	50	6000	3200	-0.4	LIGERAMENTE ACIDO	0.13
8375	QUE-220	160.0	170.0	400	100	4000	1700	-0.2	LIGERAMENTE ACIDO	0.31
8376	QUE-220	170.0	180.0	400	50	1500	500	-0.1	INERTE	0.27
8377	QUE-220	180.0	190.0	400	50	1200	400	0.0	INERTE	0.59
8378	QUE-220	190.0	200.0	400	50	700	100	0.0	INERTE	0.51
8379	QUE-220	200.0	210.0	300	50	800	100	0.0	INERTE	0.31
8380	QUE-220	210.0	220.0	300	200	900	0	0.1	INERTE	1.38
8381	QUE-220	220.0	230.0	200	50	600	0	0.0	INERTE	1.74
8382	QUE-220	230.0	240.0	300	50	800	0	0.0	INERTE	1.44
8383	QUE-220	240.0	250.0	200	100	200	0	0.0	INERTE	0.27
8384	QUE-220	250.0	260.0	300	200	300	100	0.1	INERTE	0.49
8385	QUE-220	260.0	269.0	300	100	300	0	0.0	INERTE	0.87
8386	QUE-220	269.0	280.0	300	50	400	100	0.0	INERTE	1.49
8387	QUE-220	280.0	290.0	300	50	500	100	0.0	INERTE	1.65
8388	QUE-220	290.0	299.8	300	100	500	100	0.0	INERTE	0.80
8389	QUE-220	299.8	310.0	200	100	500	100	0.0	INERTE	0.44
8390	QUE-220	310.0	320.0	300	100	300	100	0.0	INERTE	0.21
8391	QUE-220	320.0	330.0	200	100	700	0	0.0	INERTE	0.37
8392	QUE-220	330.0	340.3	300	100	500	200	0.0	INERTE	0.43
8393	QUE-220	340.3	350.0	200	100	700	100	0.0	INERTE	0.20
8394	QUE-220	350.0	360.0	300	100	900	200	0.0	INERTE	0.16
8395	QUE-220	360.0	370.2	300	50	75800	74800	-10.2	ACIDO	0.23
8396	QUE-220	370.2	381.2	300	50	84200	83000	-11.4	ACIDO	0.13
8397	QUE-220	381.2	392.2	300	50	94600	93200	-12.8	ACIDO	0.11
8398	QUE-221	159.0	170.0	2000	50	19500	16300	-2.2	ACIDO	0.16
8399	QUE-221	170.0	180.0	600	50	27800	15800	-2.1	ACIDO	0.26
8400	QUE-221	180.0	190.0	400	50	31900	16800	-2.3	ACIDO	0.47
8401	QUE-221	190.0	200.6	300	50	6600	3800	-0.5	LIGERAMENTE ACIDO	0.27
8402	QUE-221	200.6	210.0	400	100	13300	8200	-1.1	ACIDO	0.20
8403	QUE-221	210.0	220.0	200	50	22800	14100	-1.9	ACIDO	0.52
8404	QUE-221	220.0	230.0	200	50	11900	6100	-0.8	LIGERAMENTE ACIDO	0.95
8405	QUE-221	230.0	240.0	300	50	16000	8100	-1.1	ACIDO	0.95
8406	QUE-221	240.0	250.0	200	50	33900	17400	-2.4	ACIDO	0.77
8407	QUE-221	250.0	259.8	200	50	47200	22600	-3.1	ACIDO	0.28
8408	QUE-221	259.8	270.0	300	50	13700	6800	-0.9	LIGERAMENTE ACIDO	0.41
8409	QUE-221	270.0	280.0	200	50	300	100	0.0	INERTE	0.18
8410	QUE-221	280.0	289.7	300	50	9000	4400	-0.6	LIGERAMENTE ACIDO	0.73
8411	QUE-221	289.7	300.0	300	50	42500	14200	-1.9	ACIDO	1.83
8412	QUE-221	300.0	309.7	300	50	11900	6200	-0.8	LIGERAMENTE ACIDO	1.69
8413	QUE-221	309.7	320.0	300	50	9500	4700	-0.6	LIGERAMENTE ACIDO	0.96
8414	QUE-221	320.0	330.0	500	50	3300	1600	-0.2	LIGERAMENTE ACIDO	0.44
8415	QUE-221	330.0	340.0	500	50	700	300	0.0	INERTE	0.53
8416	QUE-221	340.0	346.8	400	50	41200	19800	-2.7	ACIDO	0.28
8417	QUE-221	347.6	352.0	500	50	46400	39800	-5.4	ACIDO	0.23
8418	QUE-221	352.0	360.0	1000	50	24500	23500	-3.2	ACIDO	0.14
8419	QUE-221	360.0	370.0	1500	50	17600	16700	-2.3	ACIDO	0.48
8420	QUE-221	370.0	380.0	1400	50	15900	14300	-1.9	ACIDO	0.27
8421	QUE-221	380.0	390.0	1600	50	30200	28600	-3.9	ACIDO	0.23
8422	QUE-221	390.0	400.0	1600	50	23800	22400	-3.1	ACIDO	0.12
8423	QUE-221	400.0	410.0	1000	50	37000	34700	-4.7	ACIDO	0.14
8424	QUE-221	410.0	420.1	700	50	51500	44000	-6.0	ACIDO	0.11
8425	QUE-221	420.1	430.0	600	50	36300	23700	-3.2	ACIDO	0.25
8426	QUE-222	10.9	20.0	300	50	400	200	0.0	INERTE	0.12
8427	QUE-222	20.0	30.0	300	200	400	300	0.0	INERTE	0.10
8428	QUE-222	30.0	40.0	300	50	200	100	0.0	INERTE	0.11
8429	QUE-222	40.0	50.0	500	100	1200	900	-0.1	NEUTRAL	0.16
8430	QUE-222	50.0	58.0	300	50	400	200	0.0	INERTE	0.19
8431	QUE-222	58.0	63.5	400	100	1100	700	-0.1	INERTE	0.15
8432	QUE-222	70.0	80.0	400	100	200	100	0.0	INERTE	0.23
8433	QUE-222	80.0	88.6	800	200	200	100	0.1	INERTE	0.24
8434	QUE-222	89.6	100.0	600	100	300	200	0.0	INERTE	0.30
8435	QUE-222	100.0	105.5	1200	200	600	400	0.0	INERTE	0.38
8436	QUE-222	106.1	112.0	700	200	400	200	0.0	INERTE	0.24
8437	QUE-222	112.0	120.0	800	300	400	300	0.1	NEUTRAL	0.22
8438	QUE-222	120.0	130.0	600	100	200	100	0.0	INERTE	0.12
8439	QUE-222	220.0	230.0	600	400	300	100	0.1	LIGERAMENTE BASICO	0.13
8440	QUE-223	8.0	12.0	400	50	31300	16600	-2.3	ACIDO	0.12
8441	QUE-223	12.0	20.0	300	50	27000	14700	-2.0	ACIDO	0.11
8442	QUE-223	50.0	60.0	400	50	50200	23300	-3.2	ACIDO	0.11
8443	QUE-223	81.0	89.8	400	50	14600	7200	-1.0	LIGERAMENTE ACIDO	0.12
8444	QUE-223	89.8	100.0	300	50	3500	1800	-0.2	LIGERAMENTE ACIDO	0.11
8445	QUE-223	100.0	110.0	400	50	2800	1500	-0.2	LIGERAMENTE ACIDO	0.11
8446	QUE-223	110.0	120.0	300	50	1000	400	0.0	INERTE	0.13
8447	QUE-223	120.0	129.8	500	50	2600	600	-0.1	INERTE	0.22
8448	QUE-223	129.8	140.4	400	50	1400	200	0.0	INERTE	0.29
8449	QUE-223	140.4	150.0	600	50	2700	900	-0.1	LIGERAMENTE ACIDO	0.29
8450	QUE-223	150.0	160.0	400	50	1400	400	0.0	INERTE	0.17
8451	QUE-223	160.0	170.0	400	50	10600	5400	-0.7	LIGERAMENTE ACIDO	0.19
8452	QUE-223	170.0	180.0	400	50	2200	800	-0.1	NEUTRAL	0.20
8453	QUE-223	200.0	210.0	400	50	500	100	0.0	INERTE	0.14
8454	QUE-223	210.0	220.0	400	50	500	0	0.0	INERTE	0.32
8455	QUE-223	220.0	230.0	400	50	400	100	0.0	INERTE	0.30
8456	QUE-223	230.0	240.0	300	50	500	0	0.0	INERTE	0.28
8457	QUE-223	240.0	250.0	400	50	600	0	0.0	INERTE	0.79
8458	QUE-223	250.0	260.0	400	50	300	0	0.0	INERTE	0.57
8459	QUE-223	260.0	270.0	400	50	100	0	0.0	INERTE	0.20
8460	QUE-223	270.0	280.0	400	50	200	100	0.0	INERTE	0.23
8461	QUE-223	280.0	290.0	300	50	200	100	0.0	INERTE	0.20
8462	QUE-223	290.0	300.0	400	50	400	300	0.0	INERTE	0.16
8463	QUE-223	300.0	310.0	400	50	400	300	0.0	INERTE	0.99
8464	QUE-223	310.0	320.0	400	50	200	100	0.0	INERTE	0.29
8465	QUE-223	320.0	329.9	500	50	400	100	0.0	INERTE	0.32
8466	QUE-223	329.9	340.0	500	50	300	100	0.0	INERTE	0.64
8467	QUE-223	340.0	350.0	500	50	900	200	0.0	INERTE	0.90
8468	QUE-223	350.0	360.0	500	50	1400	200	0.0	INERTE	0.60
8469	QUE-223	360.0	370.0	500	50	700	300	0.0	INERTE	0.82
8470	QUE-223	370.0	380.0	700	50	900	500	-0.1	INERTE	0.70
8471	QUE-223	380.0	390.0	500	50	1100	400	0.0	INERTE	0.48
8472	QUE-223	390.0	400.0	400	50	700	300	0.0	INERTE	0.38
8473	QUE-223	400.0	410.0	500	50	1600	700	-0.1	INERTE	0.50
8474	QUE-223	410.0	420.0	500	50	1500	800	-0.1	NEUTRAL	0.48
8475	QUE-223	420.0	430.0	500	50	800	400	0.0	INERTE	0.52
8476	QUE-223	430.0	439.8	500	50	1900	1100	-0.1	LIGERAMENTE ACIDO	0.33
8477	QUE-223	439.8	449.8	300	50	12500	12000	-1.6	ACIDO	0.38
8478	QUE-224	0.3	10.0	900	50	7400	4600	-0.6	LIGERAMENTE ACIDO	0.28
8479	QUE-224	10.0	20.0	1600	50	15400	13000	-1.8	ACIDO	0.20
8480	QUE-224	20.0	30.0	1900	50	4900	2100	-0.3	LIGERAMENTE ACIDO	0.10
8481	QUE-224	30.0	40.0	1200	50	21700	11900	-1.6	ACIDO	0.12
8482	QUE-224	40.0	50.0	1200	50	6600	2900	-0.4	LIGERAMENTE ACIDO	0.17
8483	QUE-224	50.0	60.0	1100	50	22900	13700	-1.9	ACIDO	0.36
8484	QUE-224	60.0	70.0	2300	50	28200	24300	-3.3	ACIDO	0.44
8485	QUE-224	70.0	80.0	1300	50	38400	35700	-4.9	ACIDO	0.41
8486	QUE-224	80.0	90.0	500	50	49900	48100	-6.6	ACIDO	0.50
8487	QUE-224	90.0	100.0	900	50	16100	13900	-1.9	ACIDO	0.34
8488	QUE-224	100.0	110.0	1000	50	6500	4000	-0.5	LIGERAMENTE ACIDO	0.14
8489	QUE-224	110.0	120.0	300	50	29100	24000	-3.3	ACIDO	0.43
8490	QUE-224	120.0	130.0	300	50	42500	40300	-5.5	ACIDO	0.66
8491	QUE-224	130.0	140.0	400	50	45600	43500	-5.9	ACIDO	0.81
8492	QUE-224	140.0	150.0	200	50	37500	35900	-4.9	ACIDO	0.68
8493	QUE-224	150.0	160.0	400	50	52500	51000	-7.0	ACIDO	0.59
8494	QUE-224	160.0	170.0	800	50	31500	29800	-4.1	ACIDO	0.92
8495	QUE-224	170.0	180.0	300	50	26400	24700	-3.4	ACIDO	0.68
8496	QUE-224	180.0	190.0	300	50	36900	35300	-4.8	ACIDO	0.73
8497	QUE-224	190.0	200.0	300	50	30800	28800	-3.9	ACIDO	0.65
8498	QUE-224	200.0	210.0	300	50	19500	17900	-2.4	ACIDO	1.04
8499	QUE-224	210.0	220.0	400	50	1800	700	-0.1	INERTE	0.88
8500	QUE-224	220.0	230.0	300	50	52200	25800	-3.5	ACIDO	0.83
8501	QUE-224	230.0	240.0	400	50	16100	9400	-1.3	ACIDO	0.97
8502	QUE-224	240.0	248.3	400	50	2600	900	-0.1	LIGERAMENTE ACIDO	1.09
8503	QUE-224	248.3	252.4	600	50	9300	7300	-1.0	LIGERAMENTE ACIDO	1.33
8504	QUE-225	20.0	30.1	500	50	200	100	0.0	INERTE	0.19
8505	QUE-225	30.1	40.0	500	100	200	100	0.0	INERTE	0.26
8506	QUE-225	40.0	51.0	800	100	5700	3200	-0.4	LIGERAMENTE ACIDO	0.15
8507	QUE-225	51.0	60.5	1800	50	6000	3700	-0.5	LIGERAMENTE ACIDO	0.17
8508	QUE-225	60.5	69.8	600	50	26900	16000	-2.2	ACIDO	0.14
8509	QUE-225	69.8	80.5	600	50	12300	7300	-1.0	LIGERAMENTE ACIDO	0.24
8510	QUE-225	80.5	90.0	1000	50	300	100	0.0	INERTE	0.37
8511	QUE-225	90.0	100.0	400	50	400	300	0.0	INERTE	0.15
8512	QUE-225	100.0	110.1	300	50	300	100	0.0	INERTE	0.11
8513	QUE-225	120.0	130.0	300	50	100	0	0.0	INERTE	0.11
8514	QUE-225	130.0	140.1	300	50	200	100	0.0	INERTE	0.37
8515	QUE-227	50.0	60.0	200	50	200	0	0.0	INERTE	0.11
8516	QUE-227	60.0	70.0	300	50	300	100	0.0	INERTE	0.14
8517	QUE-227	70.0	80.0	300	50	200	0	0.0	INERTE	0.21
8518	QUE-227	80.0	90.0	300	50	200	0	0.0	INERTE	0.19
8519	QUE-227	90.0	100.0	300	50	200	0	0.0	INERTE	0.18
8520	QUE-227	100.0	109.7	300	50	200	0	0.0	INERTE	0.27
8521	QUE-227	109.7	120.0	200	50	200	100	0.0	INERTE	0.12
8522	QUE-227	120.0	130.0	500	50	400	100	0.0	INERTE	0.53
8523	QUE-227	130.0	140.0	800	100	400	200	0.0	INERTE	0.41
8524	QUE-227	140.0	150.0	300	50	200	0	0.0	INERTE	0.21
8525	QUE-227	150.0	160.0	200	50	200	100	0.0	INERTE	0.20
8526	QUE-227	160.0	170.0	200	50	200	0	0.0	INERTE	0.18
8527	QUE-227	170.0	180.0	300	50	200	0	0.0	INERTE	0.19
8528	QUE-227	180.0	189.9	200	50	200	0	0.0	INERTE	0.52
8529	QUE-227	189.9	200.0	200	50	500	100	0.0	INERTE	0.28
8530	QUE-227	200.0	210.0	400	50	300	0	0.0	INERTE	0.22
8531	QUE-227	210.0	220.0	200	50	500	0	0.0	INERTE	0.28
8532	QUE-227	220.0	230.4	300	50	300	100	0.0	INERTE	0.48
8533	QUE-227	230.4	240.0	200	50	500	100	0.0	INERTE	0.48
8534	QUE-227	240.0	250.0	300	50	300	0	0.0	INERTE	0.46
8535	QUE-227	250.0	260.0	400	50	400	100	0.0	INERTE	0.49
8536	QUE-227	260.0	270.0	300	50	200	0	0.0	INERTE	0.39
8537	QUE-227	270.0	280.0	200	50	200	0	0.0	INERTE	0.37
8538	QUE-227	280.0	290.0	200	50	400	200	0.0	INERTE	0.46
8539	QUE-227	290.0	299.8	200	50	200	0	0.0	INERTE	0.33
8540	QUE-227	299.8	310.0	200	50	500	300	0.0	INERTE	0.41
8541	QUE-227	310.0	320.0	400	50	300	0	0.0	INERTE	1.56
8542	QUE-227	320.0	330.2	500	50	300	0	0.0	INERTE	0.44
8543	QUE-227	330.2	340.6	500	100	11900	6400	-0.8	LIGERAMENTE ACIDO	0.30
8544	QUE-227	340.6	350.0	3400	50	36700	34900	-4.8	ACIDO	0.39
8545	QUE-227	350.0	360.0	2100	50	64700	61000	-8.3	ACIDO	0.26
8546	QUE-227	360.0	369.8	1200	50	59900	55100	-7.5	ACIDO	0.27
8547	QUE-227	369.8	377.7	1400	50	44000	42100	-5.7	ACIDO	0.15
8548	QUE-228	250.0	259.7	200	100	400	300	0.0	INERTE	0.13
8549	QUE-228	259.7	270.0	400	100	900	600	0.0	INERTE	1.02
8550	QUE-228	270.0	280.0	600	100	1300	800	-0.1	NEUTRAL	0.45

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
8551	QUE-228	280.0	290.4	300	100	600	400	0.0	INERTE	0.21
8552	QUE-228	290.4	300.0	200	100	400	200	0.0	INERTE	0.18
8553	QUE-228	300.0	309.8	200	100	500	300	0.0	INERTE	0.27
8554	QUE-228	309.8	320.0	100	100	600	300	0.0	INERTE	0.29
8555	QUE-228	320.0	330.0	400	50	500	400	0.0	INERTE	0.33
8556	QUE-228	330.0	340.3	200	100	300	200	0.0	INERTE	0.26
8557	QUE-228	340.3	350.5	800	50	800	700	-0.1	INERTE	0.32
8558	QUE-228	350.5	360.0	300	50	200	150	0.0	INERTE	0.25
8559	QUE-228	360.0	370.0	200	50	900	400	0.0	INERTE	0.96
8560	QUE-228	370.0	380.0	400	50	29400	27800	-3.8	ACIDO	2.50
8561	QUE-228	380.0	390.0	300	50	18000	14400	-2.0	ACIDO	3.16
8562	QUE-228	390.0	402.0	300	200	48500	18300	-2.4	ACIDO	1.34
8563	QUE-228	405.7	406.8	400	50	11700	6000	-0.8	LIGERAMENTE ACIDO	1.08
8564	QUE-228	415.5	416.2	600	50	28800	14900	-2.0	ACIDO	0.68
8565	QUE-228	418.9	420.4	800	50	36100	33400	-4.6	ACIDO	0.62
8566	QUE-228	424.1	430.0	300	50	33300	17900	-2.4	ACIDO	1.30
8567	QUE-228	430.0	435.8	300	50	72600	42600	-5.8	ACIDO	0.93
8568	QUE-228	436.8	442.0	400	100	67200	52700	-7.2	ACIDO	0.92
8569	QUE-228	442.0	450.0	700	100	59600	50800	-6.9	ACIDO	0.67
8570	QUE-228	450.0	460.0	1000	50	48700	46200	-6.3	ACIDO	0.47
8571	QUE-228	460.0	470.0	1400	50	50300	48100	-6.6	ACIDO	0.35
8572	QUE-228	470.0	480.0	1700	50	52500	49100	-6.7	ACIDO	0.27
8573	QUE-228	480.0	492.2	2100	50	47400	44300	-6.1	ACIDO	0.27
8574	QUE-229	100.0	110.0	200	50	500	300	0.0	INERTE	0.12
8575	QUE-229	110.0	120.0	400	50	300	100	0.0	INERTE	0.14
8576	QUE-229	120.0	130.0	300	50	200	0	0.0	INERTE	0.17
8577	QUE-229	130.0	134.8	500	50	200	0	0.0	INERTE	0.20
8578	QUE-229	135.8	136.4	500	50	200	150	0.0	INERTE	0.42
8579	QUE-229	136.7	142.0	300	50	200	100	0.0	INERTE	0.18
8580	QUE-229	142.0	150.0	400	200	800	400	0.0	INERTE	0.17
8581	QUE-229	150.0	160.1	200	100	200	0	0.0	INERTE	0.16
8582	QUE-229	160.9	170.0	300	50	200	0	0.0	INERTE	0.26
8583	QUE-229	170.0	180.8	400	50	500	0	0.0	INERTE	0.45
8584	QUE-229	181.3	190.0	300	200	700	0	0.1	INERTE	0.26
8585	QUE-229	190.0	200.0	300	200	400	0	0.1	INERTE	0.21
8586	QUE-229	230.2	240.5	300	50	200	100	0.0	INERTE	0.12
8587	QUE-230	110.0	120.0	100	50	200	100	0.0	INERTE	0.10
8588	QUE-230	140.0	150.0	300	50	200	0	0.0	INERTE	0.15
8589	QUE-230	150.0	160.0	200	50	200	0	0.0	INERTE	0.18
8590	QUE-230	160.0	170.0	200	50	200	0	0.0	INERTE	0.26
8591	QUE-230	170.0	180.0	300	50	100	0	0.0	INERTE	0.21
8592	QUE-230	180.0	190.0	300	50	200	100	0.0	INERTE	0.39
8593	QUE-230	190.0	200.0	100	50	200	100	0.0	INERTE	0.86
8594	QUE-230	200.0	210.2	200	50	200	100	0.0	INERTE	2.28
8595	QUE-230	210.2	220.0	600	50	200	0	0.0	INERTE	1.31
8596	QUE-230	220.0	230.0	500	50	200	0	0.0	INERTE	1.02
8597	QUE-230	230.0	240.0	400	50	300	100	0.0	INERTE	0.70
8598	QUE-230	240.0	250.0	400	50	200	100	0.0	INERTE	0.53
8599	QUE-230	250.0	260.0	400	50	200	150	0.0	INERTE	0.49
8600	QUE-230	260.0	270.0	100	50	200	100	0.0	INERTE	0.32
8601	QUE-230	270.0	280.0	200	50	200	100	0.0	INERTE	0.25
8602	QUE-230	280.0	290.0	100	50	200	100	0.0	INERTE	0.47
8603	QUE-230	290.0	300.0	500	50	700	100	0.0	INERTE	0.57
8604	QUE-230	300.0	310.0	200	50	700	100	0.0	INERTE	0.40
8605	QUE-230	310.0	320.0	300	50	700	0	0.0	INERTE	0.83
8606	QUE-230	320.0	330.0	100	50	200	100	0.0	INERTE	0.54
8607	QUE-230	330.0	340.0	200	100	200	0	0.0	INERTE	0.56
8608	QUE-230	340.0	350.0	200	50	300	100	0.0	INERTE	0.51
8609	QUE-230	350.0	360.0	200	50	300	0	0.0	INERTE	0.53
8610	QUE-230	360.0	370.0	200	50	400	100	0.0	INERTE	0.40
8611	QUE-230	370.0	380.0	100	50	300	250	0.0	INERTE	0.23
8612	QUE-230	380.0	390.0	100	50	400	100	0.0	INERTE	0.38
8613	QUE-230	390.0	398.8	200	50	200	0	0.0	INERTE	0.23
8614	QUE-230	398.8	410.0	200	50	800	200	0.0	INERTE	0.59
8615	QUE-230	410.0	420.0	100	50	300	100	0.0	INERTE	0.52
8616	QUE-230	420.0	430.0	100	50	300	100	0.0	INERTE	0.67
8617	QUE-230	430.0	440.0	100	50	600	300	0.0	INERTE	0.49
8618	QUE-230	440.0	450.0	100	50	1700	1000	-0.1	LIGERAMENTE ACIDO	0.65
8619	QUE-230	450.0	460.0	200	50	46200	35900	-4.9	ACIDO	0.59
8620	QUE-230	460.0	470.0	200	50	64400	60400	-8.3	ACIDO	0.62
8621	QUE-230	470.0	480.0	300	50	3700	3100	-0.4	LIGERAMENTE ACIDO	0.32
8622	QUE-230	480.0	490.0	300	50	22300	18500	-2.5	ACIDO	0.35
8623	QUE-230	490.0	500.0	200	50	11800	9500	-1.3	ACIDO	0.25
8624	QUE-230	500.0	510.0	100	50	14100	13500	-1.8	ACIDO	0.34
8625	QUE-230	510.0	520.0	100	50	31600	30900	-4.2	ACIDO	0.44
8626	QUE-230	520.0	530.0	100	50	27300	26800	-3.7	ACIDO	0.21
8627	QUE-231	50.0	60.0	300	50	58900	36800	-5.0	ACIDO	0.10
8628	QUE-231	170.0	180.0	400	50	43600	23600	-3.2	ACIDO	0.13
8629	QUE-231	180.0	190.0	400	50	43200	23400	-3.2	ACIDO	0.21
8630	QUE-231	190.0	200.0	400	50	13600	7000	-0.9	LIGERAMENTE ACIDO	0.25
8631	QUE-231	200.0	210.0	100	50	29000	18300	-2.5	ACIDO	0.31
8632	QUE-231	210.0	215.0	400	50	64400	22000	-3.0	ACIDO	0.41
8633	QUE-232	249.0	260.0	100	50	400	200	0.0	INERTE	0.15
8634	QUE-232	260.0	270.0	300	50	400	200	0.0	INERTE	0.43
8635	QUE-232	270.0	280.0	300	50	300	100	0.0	INERTE	0.21
8636	QUE-232	280.0	290.0	100	50	300	200	0.0	INERTE	0.26
8637	QUE-232	290.0	300.0	100	50	200	100	0.0	INERTE	0.20
8638	QUE-232	300.0	310.0	200	50	1400	1100	-0.1	LIGERAMENTE ACIDO	0.18
8639	QUE-232	310.0	320.0	200	50	6900	6700	-0.9	LIGERAMENTE ACIDO	0.12
8640	QUE-232	400.0	410.0	100	50	3800	3600	-0.5	LIGERAMENTE ACIDO	0.66
8641	QUE-232	410.0	420.0	100	50	300	0	0.0	INERTE	0.44
8642	QUE-232	420.0	430.0	400	50	1300	500	-0.1	INERTE	5.50
8643	QUE-232	430.0	440.5	500	50	2200	600	-0.1	INERTE	6.58
8644	QUE-232	440.5	450.0	700	50	9000	5700	-0.8	LIGERAMENTE ACIDO	10.42
8645	QUE-232	450.0	460.0	500	50	1200	400	0.0	INERTE	2.12
8646	QUE-232	460.0	470.0	400	50	25600	23700	-3.2	ACIDO	0.64
8647	QUE-232	470.0	480.0	600	50	110400	87200	-11.9	ACIDO	0.28
8648	QUE-233	100.0	109.7	300	50	100	0	0.0	INERTE	0.10
8649	QUE-233	109.7	120.0	300	50	200	100	0.0	INERTE	0.10
8650	QUE-233	120.0	130.0	300	50	200	100	0.0	INERTE	0.11
8651	QUE-233	130.0	140.0	300	50	200	0	0.0	INERTE	0.11
8652	QUE-233	140.0	149.7	300	50	200	100	0.0	INERTE	0.19
8653	QUE-233	160.2	170.0	300	50	300	100	0.0	INERTE	0.18
8654	QUE-233	170.0	180.0	200	100	200	100	0.0	INERTE	0.16
8655	QUE-233	180.0	190.0	300	50	200	100	0.0	INERTE	0.24
8656	QUE-233	190.0	200.0	200	50	200	100	0.0	INERTE	0.49
8657	QUE-233	200.0	210.0	200	50	200	100	0.0	INERTE	0.49
8658	QUE-233	210.0	220.0	400	100	200	0	0.0	INERTE	0.54
8659	QUE-233	220.0	230.0	500	50	300	100	0.0	INERTE	0.86
8660	QUE-233	230.0	240.0	600	50	300	100	0.0	INERTE	0.95
8661	QUE-233	240.0	250.0	300	50	200	100	0.0	INERTE	0.62
8662	QUE-233	250.0	260.0	400	50	200	100	0.0	INERTE	0.61
8663	QUE-233	260.0	270.2	200	100	100	0	0.0	INERTE	0.51
8664	QUE-233	270.2	280.0	300	50	200	0	0.0	INERTE	0.45
8665	QUE-233	280.0	290.0	200	50	400	0	0.0	INERTE	0.87
8666	QUE-233	290.0	300.0	300	50	500	100	0.0	INERTE	1.21
8667	QUE-233	300.0	310.3	300	50	800	100	0.0	INERTE	1.42
8668	QUE-233	310.3	320.0	500	50	500	100	0.0	INERTE	1.55
8669	QUE-233	320.0	330.0	400	50	600	100	0.0	INERTE	1.36
8670	QUE-233	330.0	340.9	800	50	1000	500	-0.1	INERTE	1.59
8671	QUE-233	340.9	349.9	500	50	900	400	0.0	INERTE	2.00
8672	QUE-233	349.9	360.0	300	50	700	300	0.0	INERTE	1.37
8673	QUE-233	360.0	370.0	400	50	700	200	0.0	INERTE	0.84
8674	QUE-233	370.0	380.0	300	50	200	100	0.0	INERTE	0.24
8675	QUE-233	380.0	390.0	300	50	900	500	-0.1	INERTE	0.26
8676	QUE-233	390.0	400.0	300	50	500	100	0.0	INERTE	0.32
8677	QUE-233	400.0	410.0	200	50	300	100	0.0	INERTE	0.26
8678	QUE-233	410.0	420.0	200	50	300	100	0.0	INERTE	0.22
8679	QUE-233	420.0	428.0	300	50	300	100	0.0	INERTE	0.19
8680	QUE-233	428.0	433.2	300	50	200	100	0.0	INERTE	0.21
8681	QUE-234	12.0	20.0	2200	50	800	0	0.0	INERTE	0.19
8682	QUE-234	20.0	30.0	2100	50	700	0	0.0	INERTE	0.12
8683	QUE-234	30.0	40.0	700	50	400	100	0.0	INERTE	0.27
8684	QUE-234	40.0	50.0	500	50	300	100	0.0	INERTE	0.28
8685	QUE-234	50.0	60.0	600	50	300	100	0.0	INERTE	0.26
8686	QUE-234	60.0	69.9	400	50	2400	1400	-0.2	LIGERAMENTE ACIDO	0.17
8687	QUE-234	69.9	80.0	900	50	1100	500	-0.1	INERTE	0.15
8688	QUE-234	80.0	90.0	300	100	2400	1400	-0.2	LIGERAMENTE ACIDO	0.29
8689	QUE-234	90.0	100.0	700	50	400	100	0.0	INERTE	0.12
8690	QUE-234	100.0	105.9	400	50	8400	5100	-0.7	LIGERAMENTE ACIDO	0.17
8691	QUE-234	106.3	110.5	1100	50	12700	7400	-1.0	LIGERAMENTE ACIDO	0.17
8692	QUE-234	110.5	120.0	300	50	14000	8500	-1.1	ACIDO	0.15
8693	QUE-234	130.0	140.0	1000	100	500	0	0.0	INERTE	0.11
8694	QUE-235	150.4	160.0	400	50	1000	100	0.0	INERTE	0.25
8695	QUE-235	160.0	170.2	300	50	600	100	0.0	INERTE	0.52
8696	QUE-235	170.2	180.0	300	50	500	100	0.0	INERTE	0.51
8697	QUE-235	180.0	189.6	400	50	800	100	0.0	INERTE	0.31
8698	QUE-235	189.6	200.0	200	50	800	100	0.0	INERTE	0.38
8699	QUE-235	200.0	210.0	200	50	800	100	0.0	INERTE	0.27
8700	QUE-236	60.0	70.0	3900	50	37200	34200	-4.7	ACIDO	0.12
8701	QUE-236	70.0	80.0	3000	50	44200	40400	-5.5	ACIDO	0.10
8702	QUE-236	80.0	90.0	1000	50	24200	22000	-3.0	ACIDO	0.23
8703	QUE-236	99.6	106.1	800	200	19400	17100	-2.3	ACIDO	0.12
8704	QUE-237	20.6	30.0	300	50	800	500	-0.1	INERTE	0.12
8705	QUE-237	50.6	60.0	100	50	200	100	0.0	INERTE	0.11
8706	QUE-237	90.0	100.0	300	50	200	100	0.0	INERTE	0.12
8707	QUE-237	100.0	110.0	200	50	200	100	0.0	INERTE	0.11
8708	QUE-237	110.0	120.0	200	50	200	150	0.0	INERTE	0.14
8709	QUE-237	120.0	130.0	200	50	200	100	0.0	INERTE	0.12
8710	QUE-237	130.0	140.0	400	50	300	200	0.0	INERTE	0.22
8711	QUE-238	13.6	19.7	600	50	39300	24000	-3.3	ACIDO	0.14
8712	QUE-238	30.0	40.0	400	50	500	200	0.0	INERTE	0.16
8713	QUE-238	40.0	50.0	200	50	100	50	0.0	INERTE	0.19
8714	QUE-238	50.0	60.0	100	50	200	100	0.0	INERTE	0.16
8715	QUE-238	90.0	100.0	300	50	400	200	0.0	INERTE	0.10
8716	QUE-238	100.0	110.0	300	50	500	200	0.0	INERTE	0.17
8717	QUE-238	110.0	120.0	100	50	300	100	0.0	INERTE	0.11
8718	QUE-238	140.7	145.0	200	50	200	100	0.0	INERTE	0.12
8719	QUE-239	110.2	120.0	1500	300	3500	1600	-0.1	LIGERAMENTE ACIDO	0.12
8720	QUE-239	120.0	130.0	1600	50	1700	400	0.0	INERTE	0.11
8721	QUE-239	130.0	138.9	1800	50	4900	2100	-0.3	LIGERAMENTE ACIDO	0.38
8722	QUE-241	40.0	50.0	300	50	300	100	0.0	INERTE	0.20
8723	QUE-241	150.0	159.7	600	50	600	300	0.0	INERTE	0.16
8724	QUE-242	144.0	149.9	500	50	300	100	0.0	INERTE	0.12
8725	QUE-242	170.0	180.0	300	50	400	100	0.0	INERTE	0.12
8726	QUE-243	137.0	142.4	500	100	200	0	0.0	INERTE	0.17
8727	QUE-243	142.4	150.0	300	100	300	200	0.0	INERTE	0.18
8728	QUE-243	150.0	160.0	400	100	200	0	0.0	INERTE	0.18
8729	QUE-243	160.0	170.0	100	100	200	0	0.0	INERTE	0.14
8730	QUE-243	170.0	180.0	200	50	500	100	0.0	INERTE	0.10
8731	QUE-243	180.0	190.0	200	50	600	100	0.0	INERTE	0.27
8732	QUE-243	190.0	200.0	200	100	200	100	0.0	INERTE	0.19
8733	QUE-243	200.0	210.2	300	100	300	200	0.0	INERTE	0.29
8734	QUE-243	210.2	220.0	300	50	300	200	0.0	INERTE	0.28
8735	QUE-243	220.0	230.0	300	100	300	100	0.0	INERTE	0.21
8736	QUE-243	230.0	240.0	200	100	200	0	0.0	INERTE	0.16
8737	QUE-243	240.0	250.0	300	50	200	100	0.0	INERTE	0.21
8738	QUE-243	250.0	260.0	200	100	200	100	0.0	INERTE	0.26
8739	QUE-243	260.0	270.0	200	50	500	100	0.0	INERTE	0.36
8740	QUE-243	270.0	280.2	300	50	300	100	0.0	INERTE	0.49
8741	QUE-243	280.2	290.0	300	100	300	100	0.0	INERTE	0.69
8742	QUE-243	290.0	296.1	300	200	300	100	0.1	INERTE	0.52
8743	QUE-243	302.1	310.0	200	100	500	100	0.0	INERTE	0.33
8744	QUE-243	310.0	320.0	200	200	600	100	0.1	INERTE	0.71
8745	QUE-243	320.0	330.0	200	200	2600	1000	-0.1	NEUTRAL	0.93
8746	QUE-243	330.0	340.0	200	50	75300	49800	-6.8	ACIDO	0.55
8747	QUE-243	340.0	350.0	2200	100	28500	26900	-3.6	ACIDO	0.64
8748	QUE-243	350.0	360.0	1700	200	40300	37200	-5.0	ACIDO	0.41
8749	QUE-243	360.0	370.0	1100	100	49300	46800	-6.3	ACIDO	0.54
8750	QUE-243	370.0	375.1	600	50	52400	49800	-6.8	ACIDO	0.30
8751	QUE-244	360.0	370.0	100	50	5100	4500	-0.6	LIGERAMENTE ACIDO	0.30
8752	QUE-244	380.0	390.0	200	50	43800	43000	-5.9	ACIDO	0.32
8753	QUE-244	390.0	400.0	100	50	79600	71100	-9.7	ACIDO	0.34
8754	QUE-246	130.0	140.0	1600	50	38400	36500	-5.0	ACIDO	0.13
8755	QUE-246	150.0	160.0	1100	100	24000	14300	-1.9	ACIDO	0.13
8756	QUE-246	220.0	230.0	100	50	22300	9300	-1.3	ACIDO	0.25
8757	QUE-246	230.0	239.6	4400	200	34000	32300	-4.4	ACIDO	0.35
8758	QUE-246	239.6	250.0	300	100	8500	6300	-0.8	LIGERAMENTE ACIDO	0.24
8759	QUE-246	250.0	260.0	300	100	2700	1600	-0.2	LIGERAMENTE ACIDO	0.14
8760	QUE-246	260.0	270.4	200	100	2200	1300	-0.1	LIGERAMENTE ACIDO	0.15
8761	QUE-246	270.4	280.0	100	50	6500	3700	-0.5	LIGERAMENTE ACIDO	0.27
8762	QUE-246	280.0	290.0	300	50	3200	2000	-0.3	LIGERAMENTE ACIDO	0.38
8763	QUE-246	290.0	300.0	300	50	10400	5700	-0.8	LIGERAMENTE ACIDO	0.26
8764	QUE-246	300.0	310.0	200	100	4500	2500	-0.3	LIGERAMENTE ACIDO	0.20
8765	QUE-246	310.0	320.0	300	100	2200	1400	-0.2	LIGERAMENTE ACIDO	0.34
8766	QUE-246	320.0	330.0	300	100	2200	1400	-0.2	LIGERAMENTE ACIDO	0.30
8767	QUE-246	330.0	340.0	200	100	46400	31600	-4.3	ACIDO	0.47
8768	QUE-246	340.0	349.5	1500	100	59500	48700	-6.6	ACIDO	0.24
8769	QUE-246	349.5	360.0	500	50	25500	15300	-2.1	ACIDO	0.97
8770	QUE-246	360.0	370.0	300	100	40800	28900	-3.9	ACIDO	0.67
8771	QUE-246	370.0	380.0	400	100	7200	6200	-0.8	LIGERAMENTE ACIDO	0.40
8772	QUE-246	380.0	390.0	500	50	8800	6200	-0.8	LIGERAMENTE ACIDO	0.46
8773	QUE-246	390.0	400.0	900	50	84700	69700	-9.5	ACIDO	0.26
8774	QUE-246	400.0	404.1	1700	50	75300	65900	-9.0	ACIDO	0.16
8775	QUE-247	135.9	140.0	1200	100	10500	8000	-1.1	ACIDO	0.41
8776	QUE-247	140.0	150.0	1900	50	2700	1100	-0.1	LIGERAMENTE ACIDO	0.54
8777	QUE-247	150.0	160.0	2300	100	2200	600	0.0	INERTE	0.54
8778	QUE-247	160.0	170.0	1900	50	9300	4700	-0.6	LIGERAMENTE ACIDO	0.72
8779	QUE-247	170.0	180.0	1400	50	15800	9200	-1.2	ACIDO	0.40
8780	QUE-247	180.0	190.4	3500	50	3800	1400	-0.2	LIGERAMENTE ACIDO	0.27
8781	QUE-247	190.4	200.0	2100	50	14800	12400	-1.7	ACIDO	0.86
8782	QUE-247	200.0	210.0	900	50	5700	2400	-0.3	LIGERAMENTE ACIDO	0.60
8783	QUE-247	210.0	220.5	800	100	14000	7700	-1.0	ACIDO	0.65
8784	QUE-247	220.5	230.6	600	50	46700	27900	-3.8	ACIDO	0.80
8785	QUE-247	230.6	240.0	400	50	21800	13700	-1.9	ACIDO	0.65
8786	QUE-247	240.0	250.0	400	50	40700	22700	-3.1	ACIDO	0.61
8787	QUE-247	250.0	259.8	200	50	36300	23000	-3.1	ACIDO	0.73
8788	QUE-247	259.8	270.0	1000	100	14200	7100	-0.9	LIGERAMENTE ACIDO	0.70
8789	QUE-247	270.0	280.0	1100	100	16300	8900	-1.2	ACIDO	0.30
8790	QUE-247	280.0	290.0	1500	100	5900	2600	-0.3	LIGERAMENTE ACIDO	0.27
8791	QUE-247	290.0	294.3	1100	50	18400	9000	-1.2	ACIDO	0.33
8792	QUE-247	295.3	300.0	300	50	29100	17600	-2.4	ACIDO	0.38
8793	QUE-247	300.0	310.0	50	50	200	0	0.0	INERTE	0.18
8794	QUE-247	310.0	320.0	100	100	100	0	0.0	INERTE	0.33
8795	QUE-247	320.0	330.0	400	100	200	0	0.0	INERTE	0.47
8796	QUE-247	330.0	340.1	300	50	4200	2300	-0.3	LIGERAMENTE ACIDO	1.13
8797	QUE-248	90.0	100.0	300	300	300	100	0.1	NEUTRAL	0.12
8798	STZ-091	382.6	385.0	500	50	500	200	0.0	INERTE	0.10
8799	STZ-091	386.3	392.0	300	50	500	200	0.0	INERTE	0.11
8800	STZ-091	399.6	410.0	200	50	400	300	0.0	INERTE	0.32
8801	STZ-091	410.0	420.9	800	50	500	300	0.0	INERTE	0.28
8802	STZ-091	420.9	432.3	200	50	400	300	0.0	INERTE	0.15
8803	STZ-091	432.7	440.0	300	50	4200	2900	-0.4	LIGERAMENTE ACIDO	0.12

Apéndice 5
Resultados Análisis SPLP

Nro		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Código		DS-1378763	DS-1378764	DS-1378765	DS-1378766	DS-1378768	DS-1378770	DS-1378771	DS-1378773	DS-1378774	DS-1378775	DS-1378767	DS-1378769	DS-1378772	DS-1378776	DS-1378777	DS-1310209
NCV		Ligeramente Acido	Acido	Inerte/Neutral	Acido	Inerte/Neutral	Inerte/Neutral	Acido	Acido	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Acido	Inerte/Neutral	Inerte/Neutral	Ligeramente Acido
Alteración Tipo		SC Desmonte	SC Desmonte	SA Desmonte	SC Desmonte	SM Desmonte	SM Desmonte	SA Desmonte	SC Desmonte	SM Desmonte	SM Desmonte	SM Desmonte	SM Desmonte	SC Desmonte	SM Desmonte	SM Desmonte	SM Desmonte
Analito	Unit																
Al	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	0.013	0.009	7.644	0.036	0.016	0.005
Sb	mg/L	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.003	0.002	0.002	0.002	0.002	0.002	0.002
As	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.003	0.003	0.003	0.003	0.003	0.003
Ba	mg/L	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.010	0.015	0.030	0.034	0.047	0.014
Be	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Cd	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.002	0.004	0.002	0.002	0.002
Ca	mg/L											3.4	1.8	1.7	2.2	1.5	4.4
Cr	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.002	0.002	0.002	0.002	0.002	0.002
Co	mg/L	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.006	0.001	0.001	0.023	0.008	0.118	0.035	0.057	0.010
Cu	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.006	0.034	0.030	0.022	0.005
Fe	mg/L	1.810	3.370	2.520	1.250	1.250	1.250	2.340	1.360	1.250	1.250	0.720	0.923	11.756	1.062	1.096	0.300
Pb	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002
Mg	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	0.200	0.200	0.211	0.200	0.200	0.303
Mn	mg/L	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.071	0.172	0.032	0.131	0.137	0.123
Mo	mg/L	0.001	0.001	0.001	0.001	0.003	0.004	0.001	0.001	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Ni	mg/L	0.006	0.011	0.006	0.006	0.006	0.006	0.011	0.011	0.006	0.006	0.002	0.002	0.036	0.012	0.008	0.004
K	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.310	1.250	1.250	1.250	3.974	4.108	8.974	4.751	3.616	1.651
Se	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.005	0.005	0.005	0.005	0.005	0.005
Ag	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002
Na	mg/L	1.250	1.250	1.250	1.670	1.250	1.250	1.250	1.250	1.250	1.250	3.463	3.823	2.267	2.611	1.899	2.794
Tl	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.004	0.002	0.002	0.002
V	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.002	0.002	0.002	0.002	0.002	0.002
Zn	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.048	0.048	0.084	0.044	0.054	0.015
Alcalinidad	mg/L																2.0
Acidez	mg/L																3.0
Fluoruros	mg/L																0.250
Sulfatos	mg/L																16
Nitratos	mg/L																0.190
Nitritos	mg/L																0.100
Mercurio	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0025	0.0005	0.0005	0.0005	0.0005
pH	-																8.9
TDS	mg/L											13	11	79	12	10	27
Conductividad	µsm/cm											26	23	161	25	20	56

Nro		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Código		DS-1310210	DS-1310211	DS-1310212	DS-1310213	DS-1310214	DS-1310215	DS-1310216	DS-1310217	DS-1310218	DS-1310219	DS-1310220	DS-1310221	DS-1310222	DS-1310223	DS-1310224	DS-1310225
NCV		Ligeramente Acido	Acido	Acido	Acido	Acido	Acido	Acido	Acido	Ligeramente Acido	Ligeramente Acido	Inerte/Neutral	Inerte/Neutral	Ligeramente Acido	Inerte/Neutral	Ligeramente Acido	Ligeramente Acido
Alteración Tipo		SM Desmonte	SM Desmonte	SM Desmonte	SM Desmonte	SM Desmonte	SM Desmonte	SM Desmonte	SM Desmonte	SG Desmonte	SG Desmonte	SG Desmonte	SG Desmonte	PRO Desmonte	SC Desmonte	SA Desmonte	SC Desmonte
Analito	Unit																
Al	mg/L	0.005	0.013	0.019	0.018	0.040	0.099	0.051	0.060	0.016	0.145	0.022	0.063	0.006	0.005	0.005	0.057
Sb	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.002	0.002	0.002	0.002
As	mg/L	0.003	0.003	0.003	0.010	0.004	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Ba	mg/L	0.070	0.030	0.053	0.066	0.047	0.020	0.079	0.019	0.405	0.352	0.229	0.024	0.048	0.045	0.023	0.140
Be	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Cd	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Ca	mg/L	4.3	4.4	1.7	1.6	1.8	5.0	2.7	1.8	1.1	1.1	1.1	1.1	102.3	0.8	2.3	1.6
Cr	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Co	mg/L	0.010	0.002	0.002	0.002	0.002	0.002	0.002	0.010	0.005	0.003	0.020	0.002	0.025	0.002	0.023	0.003
Cu	mg/L	0.010	0.011	0.026	1.173	0.104	0.015	0.008	0.014	0.025	0.011	0.014	0.004	0.004	0.004	0.002	0.010
Fe	mg/L	0.300	0.300	0.300	1.220	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
Pb	mg/L	0.002	0.002	0.002	0.078	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Mg	mg/L	0.328	0.272	0.200	0.200	0.213	0.216	0.310	0.223	0.200	0.200	0.200	0.216	13.122	0.200	0.319	0.252
Mn	mg/L	0.042	0.026	0.130	0.075	0.011	0.003	0.072	0.006	0.037	0.037	0.377	0.050	3.507	0.006	0.012	0.046
Mo	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Ni	mg/L	0.002	0.002	0.027	0.058	0.005	0.002	0.002	0.002	0.006	0.007	0.008	0.002	0.024	0.002	0.002	0.004
K	mg/L	0.875	0.822	0.597	0.251	0.299	0.319	0.438	0.317	0.518	0.522	0.336	0.447	3.559	5.503	1.524	1.848
Se	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Ag	mg/L	0.002	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Na	mg/L	3.018	2.097	1.158	2.098	2.538	4.447	2.261	2.357	0.941	1.159	1.924	3.507	3.336	4.114	2.563	1.514
Tl	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
V	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Zn	mg/L	0.012	0.068	0.052	9.500	0.728	0.005	0.007	0.005	0.012	0.019	0.059	0.013	0.111	0.018	0.050	0.034
Alcalinidad	mg/L	2.0	3.0	2.0	2.0	2.0	10.9	2.0	3.0	2.0	2.0	2.0	2.0	9.9	2.0	2.0	2.0
Acidez	mg/L	3.0	4.0	8.0	55.7	7.0	8.0	5.0	4.0	6.0	7.0	7.0	4.0	4.0	7.0	4.0	6.0
Fluoruros	mg/L	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250
Sulfatos	mg/L	16	9	6	14	10	6	10	6	5	6	23	9	507	22	13	11
Nitratos	mg/L	0.180	0.270	0.100	1.630	0.220	0.200	0.100	0.200	0.200	0.200	0.100	0.100	0.200	0.420	0.230	0.180
Nitritos	mg/L	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Mercurio	mg/L	0.0005	0.0007	0.0005	0.0005	0.0005	0.0015	0.0005	0.0007	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
pH	-	8.8	8.8	8.7	6.7	7.8	8.7	8.6	8.7	8.7	8.2	8.3	8.6	7.7	8.3	8.5	8.4
TDS	mg/L	27	23	13	30	18	26	18	15	11	12	15	17	290	30	19	18
Conductividad	µsm/cm	54	47	26	62	37	53	36	30	23	23	30	35	592	60	39	36

Nro		33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Código		DS-1310226	DS-1310227	DS-1310228	DS-1310229	DS-1364822	DS-1362760	DS-1369841	DS-1369839	DS-1372767	DS-1372768	DS-1364470	DS-1364813	DS-1364818	DS-1362761	DS-1310084
NCV		Ligeramente Acido	Acido	Acido	Acido	Inerte/Neutral	Inerte/Neutral	Acido	Ligeramente Acido	Acido	Ligeramente Acido	Ligeramente Acido	Ligeramente Acido	Ligeramente Acido	Inerte/Neutral	Inerte/Neutral
Alteración Tipo		SA Desmonte	SC Desmonte	SC Desmonte	ARG Desmonte	SG Mineral	SM Mineral	SA Mineral	SC Mineral	CLY1 Mineral	CLY2 Mineral	SM & SV Mineral	SG 1 &2 Mineral	SM & SV Mineral	SM & SV Mineral	SM Mineral
Analito	Unit															
Al	mg/L	0.005	0.019	0.050	30.411	1.250	1.250	1.250	1.250	0.188	0.390	0.010	0.070	0.033	0.009	0.015
Sb	mg/L	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.008	0.005
As	mg/L	0.003	0.005	0.003	0.006	0.013	0.013	0.013	0.013	0.003	0.003	0.003	0.003	0.003	0.010	0.064
Ba	mg/L	0.040	0.045	0.060	0.028	0.063	0.063	0.063	0.063	0.002	0.009	0.054	0.109	0.012	0.476	0.046
Be	mg/L	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Cd	mg/L	0.002	0.002	0.002	0.005	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Ca	mg/L	3.7	19.3	2.7	1.7					18.0	23.0	8.3	9.4	19.3	6.2	7.4
Cr	mg/L	0.002	0.002	0.002	0.009	0.013	0.013	0.013	0.013	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Co	mg/L	0.002	0.002	0.031	0.096	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Cu	mg/L	0.002	0.002	0.010	0.580	0.006	0.006	0.006	0.006	0.002	0.007	0.002	0.002	0.002	0.012	0.013
Fe	mg/L	0.300	0.300	0.300	45.911	1.250	1.250	1.250	1.250	0.861	0.536	0.888	0.958	1.162	0.995	0.300
Pb	mg/L	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Mg	mg/L	0.261	0.591	0.556	1.002	1.250	1.250	1.250	1.250	0.200	0.200	0.344	0.413	0.251	0.299	0.209
Mn	mg/L	0.053	0.076	0.027	0.057	0.063	0.063	0.063	0.063	0.003	0.002	0.006	0.003	0.003	0.004	0.003
Mo	mg/L	0.003	0.003	0.003	0.003	0.001	0.004	0.001	0.001	0.007	0.003	0.003	0.003	0.003	0.125	0.005
Ni	mg/L	0.002	0.002	0.012	0.032	0.006	0.006	0.006	0.006	0.002	0.002	0.002	0.002	0.002	0.002	0.002
K	mg/L	0.843	4.368	8.383	0.738	1.250	1.250	1.250	1.250	4.932	5.137	6.270	5.893	7.077	5.282	0.200
Se	mg/L	0.005	0.005	0.005	0.005	0.013	0.013	0.013	0.013	0.005	0.005	0.005	0.005	0.005	0.006	0.009
Ag	mg/L	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Na	mg/L	1.818	3.870	6.001	0.630	1.250	1.250	1.250	1.250	2.493	3.288	1.470	1.520	1.781	1.302	1.599
Tl	mg/L	0.002	0.002	0.002	0.003	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002
V	mg/L	0.002	0.002	0.002	0.056	0.013	0.013	0.013	0.013	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Zn	mg/L	0.017	0.007	0.112	0.060	0.013	0.013	0.013	0.013	0.005	0.005	0.005	0.006	0.008	0.006	0.006
Alcalinidad	mg/L	2.0	23.2	2.0	2.0											13.1
Acidez	mg/L	8.0	8.0	9.0	1095.0											11.0
Fluoruros	mg/L	0.250	0.700	1.400	0.250											0.250
Sulfatos	mg/L	13	36	730	1390											6
Nitratos	mg/L	0.190	0.190	6.700	0.220											0.210
Nitritos	mg/L	0.100	0.100	0.100	0.100											0.100
Mercurio	mg/L	0.0005	0.0005	0.0005	0.0005	0.0001	0.0001	0.0001	0.0001	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
pH	-	8.6	8.6	7.7	2.9											8.9
TDS	mg/L	21	67	43	674					42	54	22	26	43	14	27
Conductividad	µsm/cm	42	136	88	1375					86	110	45	49	89	28	56

Apéndice 6
Resultados Ensayo de Celdas de Humedad (Ciclo completo)

Muestra	41577	Ox Leach	cola CLT	SM	Inerte/Neutral																		
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10	Semana 11	Semana 12	Semana 13	Semana 14	Semana 15	Semana 16	Semana 17	Semana 18	Semana 19	Semana 20	Semana 21
Volumen Solución	1	ml	926.58	942.58	980.21	965.57	951.36	941.23	954.45	923.80	925.84	945.54	935.89	942.65	943.09	967.45	968.59	963.66	962.82	961.42	960.55	955.13	954.58
mV (potencial)	0.1	mV	-24.00	-30.00	-19.90	-27.00	-23.90	-24.30	-26.00	-22.00	12.20	-21.40	15.20	11.00	7.00	14.30	10.00	12.00	28.00	21.80	36.20	34.00	8.00
pH @ 25° C	0.1	u pH	7.62	7.50	7.33	7.54	7.46	7.49	7.55	7.42	6.92	7.42	6.78	6.91	6.99	6.71	6.93	6.81	6.50	6.63	6.29	6.34	6.96
Conductividad @ 25°C	0.1	uS/cm	78	83	61	56	51	49	49	39	31	36	31	32	29	22	19	22	12	12	12	11	15
Sulfatos	0.01	mg/L	15.72	18.49	12.97	14.48	12.44	13.80	12.97	10.15	9.49	12.87	9.17	10.65	8.73	7.09	7.40	8.47	3.28	3.27	2.70	2.83	2.95
Nitrogeno amoniacal	0.004	mg/L	0.02	0.074	0.063	0.038	0.025	0.039	0.045	0.035	0.023	0.028	0.026	0.032	0.036	0.024	0.032	0.024	0.034	0.025	0.025	0.031	0.035
Fluoruro	0.002	mg/L	0.018	0.023	0.019	0.027	0.027	0.029	0.023	0.016	0.013	0.015	0.017	0.021	0.019	0.013	0.011	0.013	0.011	0.011	0.011	0.01	0.011
Nitrato	0.031	mg/L	<0.231	<0.088	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	8.20	9.80	10.40	12.50	8.80	8.00	8.40	6.30	4.80	6.80	5.30	5.60	4.90	3.50	3.30	4.00	2.70	3.00	2.90	3.30	2.90
Acidez (H2SO4)	0.5	mg/L	1.8	1.1	1.3	1.0	1.2	1.4	1.2	1.1	1.5	1.1	1.2	1.5	1.4	1.8	1.6	1.7	1.9	2.1	2.3	1.9	2.4
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0012	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.004	0.007	0.007	0.006	0.006	0.005	0.007	0.006	0.006	0.007	0.005	0.006	0.004	0.004	0.003	0.005	0.003	0.002	0.002	0.003	0.004
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.038	0.017	0.017	0.027	0.025	0.022	0.019	0.021	0.019	0.022	0.024	0.026	0.021	0.025	0.024	0.028	0.024	0.025	0.026	0.021	0.032
Bo	0.01	mg/L	0.01	0.03	0.05	0.06	0.04	0.05	0.05	0.06	0.06	0.07	0.08	0.10	0.09	0.11	0.09	0.10	0.09	0.09	0.12	0.08	0.09
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.002	0.003	0.003	0.004	0.003	0.002	0.003	0.003	0.002	0.003	0.002	0.003	0.001	0.004	0.003	0.005	0.002	0.001	0.002	0.005	0.007
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.020	0.039	0.043	0.038	0.028	0.028	0.021	0.018	0.012	0.011	0.010	0.040	0.010	0.023	0.023	0.020	0.004	0.006	0.004	0.017	0.033
Mn	0.0006	mg/L	0.0018	0.0016	0.0016	0.0012	0.0013	0.0013	0.0014	0.0008	0.0006	0.0007	0.0008	0.0009	0.0011	0.0008	0.0006	0.0007	0.0009	0.0006	0.0006	0.0008	0.0017
Hg	0.00003	mg/L	0.0013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0068	0.0149	0.0131	0.0108	0.0085	0.0076	0.0084	0.0071	0.0060	0.0064	0.0048	0.0064	0.0050	0.0019	0.0018	0.0022	0.0009	0.0008	0.0004	0.0007	0.0026
Ni	0.0004	mg/L	0.0004	0.0007	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0006	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005
Pb	0.0003	mg/L	0.0003	0.0016	0.0014	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0006	0.0003	0.0003	0.0003	0.0004	0.0003	0.0006	0.0004	0.0003	0.0003	0.0010	0.0028
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0054	0.0097	0.0186	0.0077	0.0074	0.0095	0.0093	0.0126	0.0117	0.0125	0.0165	0.0161	0.0126	0.0202	0.0192	0.0199	0.0211	0.0174	0.0189	0.0270	0.0250
Al	0.02	mg/L	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Li	0.0009	mg/L	0.005	0.002	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	10.80	10.85	9.59	12.38	10.70	10.58	9.55	8.57	6.73	6.82	5.83	5.94	4.74	3.89	2.99	3.63	2.02	1.57	1.96	1.85	2.08
Mg	0.001	mg/L	0.535	0.691	0.716	0.825	0.686	0.519	0.472	0.360	0.261	0.331	0.295	0.346	0.277	0.239	0.196	0.263	0.182	0.183	0.212	0.250	0.306
Co	0.00007	mg/L	0.0101	0.0103	0.0071	0.0074	0.0024	0.0019	0.0022	0.0015	0.0011	0.0014	0.0009	0.0010	0.0009	0.0007	0.0006	0.0008	0.0006	0.0006	0.0007	0.0007	0.0008
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	1.57	1.22	0.73	0.83	0.49	0.25	0.24	0.23	0.03	0.18	0.14	0.19	0.09	0.13	0.09	0.14	0.08	0.06	0.08	0.09	0.11
K	0.2	mg/L	1.20	0.80	0.60	0.50	0.45	0.30	0.35	0.60	0.50	0.60	0.70	0.90	0.80	0.80	0.80	1.00	0.80	0.40	0.40	0.50	0.50
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003
Sr	0.0003	mg/L	0.052	0.046	0.027	0.037	0.034	0.026	0.020	0.015	0.014	0.015	0.013	0.014	0.009	0.011	0.009	0.013	0.007	0.008	0.006	0.006	0.008
Si	0.04	mg/L	0.76	2.85	3.22	3.45	3.41	3.32	2.85	1.73	1.62	1.84	1.60	1.96	1.85	2.05	2.37	2.17	2.25	2.14	2.35	1.98	2.08
Sn	0.0014	mg/L	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014

Muestra	41578	Ox Mill	Cola BRT	SM	Inerte/Neutral																		
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10	Semana 11	Semana 12	Semana 13	Semana 14	Semana 15	Semana 16	Semana 17	Semana 18	Semana 19	Semana 20	Semana 21
Volumen Solución	1	ml	917.89	938.46	918.00	866.32	874.44	883.23	869.96	874.54	880.70	870.05	860.56	858.14	846.69	855.20	845.93	848.93	857.22	846.67	831.89	852.73	839.10
mV (potencial)	0.1	mV	-111.00	-49.00	-21.10	-35.70	-23.30	-29.50	-24.10	-41.00	-38.80	-36.10	-43.00	-29.00	-46.00	-51.00	-56.00	-34.10	-37.40	-23.80	-23.00	-37.00	-43.00
pH @ 25° C	0.1	u pH	9.16	7.85	7.30	7.64	7.40	7.53	7.43	7.70	7.65	7.64	7.84	7.50	7.86	7.91	8.02	7.62	7.67	7.37	7.34	7.75	7.81
Conductividad @ 25°C	0.1	uS/cm	32	30	23	33	26	36	34	32	27	28	31	35	32	36	38	35	34	24	30	32	29
Sulfatos	0.01	mg/L	2.39	2.93	2.67	3.87	3.43	5.06	4.32	3.04	2.86	3.24	2.80	2.38	2.16	2.76	3.17	3.43	2.62	1.14	1.67	1.29	1.36
Nitrogeno amoniacal	0.004	mg/L	0.01	0.079	0.06	0.033	0.085	0.097	0.108	0.129	0.146	0.16	0.191	0.189	0.169	0.14	0.112	0.0981	0.042	0.03	0.049	0.058	0.065
Fluoruro	0.002	mg/L	0.02	0.018	0.011	0.011	0.02	0.022	0.028	0.023	0.021	0.019	0.024	0.023	0.028	0.021	0.017	0.019	0.021	0.02	0.021	0.026	0.028
Nitrato	0.031	mg/L	<0.031	<0.061	<0.031	<0.031	<0.037	<0.031	<0.031	<0.039	<0.033	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	11.50	11.20	9.50	12.40	10.60	14.40	13.20	14.80	14.10	15.10	15.00	16.10	17.00	18.20	19.20	18.70	17.80	14.30	16.00	16.10	15.20
Acidez (H2SO4)	0.5	mg/L	1.6	1.1	1.2	0.9	1.6	1.2	1.4	0.8	0.9	0.8	1.0	1.2	1.3	1.1	1.2	1.4	1.6	2.1	2.3	1.5	1.4
Sb	0.0008	mg/L	<0.0008	<0.0008	0.0012	0.0020	0.0023	0.0025	0.0029	0.0032	0.0030	0.0033	0.0041	0.0038	0.0034	0.0039	0.0035	0.0029	0.0018	0.0017	0.0021	0.0025	0.0028
As	0.001	mg/L	0.027	0.018	0.022	0.025	0.028	0.034	0.042	0.043	0.039	0.044	0.052	0.051	0.055	0.060	0.056	0.049	0.045	0.046	0.056	0.050	0.065
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.158	0.062	0.062	0.105	0.106	0.121	0.144	0.159	0.153	0.163	0.179	0.163	0.186	0.208	0.206	0.202	0.202	0.231	0.273	0.162	0.190
Bo	0.01	mg/L	0.02	0.03	0.04	0.06	0.04	0.06	0.06	0.06	0.06	0.08	0.09	0.09	0.11	0.12	0.12	0.11	0.09	0.11	0.14	0.08	0.14
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.002	0.002	0.003	0.004	0.005	0.005	0.005	0.005	0.004	0.003	0.004	0.003	0.004	0.006	0.005	0.004	0.002	0.002	0.004	0.006	0.004
Cd	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.179	0.062	0.086	0.058	0.153	0.279	0.250	0.225	0.193	0.170	0.202	0.197	0.243	0.290	0.226	0.221	0.268	0.235	0.367	0.268	0.223
Mn	0.0006	mg/L	<0.0006	<0.0006	0.0011	0.0025	0.0001	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.0010	0.0013	0.0009	0.0007	0.0006	0.0010	0.0006	<0.0006	<0.0006	0.0007	0.0009
Hg	0.00003	mg/L	0.0003	<0.00003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002	0.0003	0.0002	0.0003
Mo	0.00014	mg/L	0.0031	0.0047	0.0041	0.0051	0.0054	0.0063	0.0086	0.0092	0.0073	0.0087	0.0099	0.0083	0.0067	0.0057	0.0058	0.0047	0.0040	0.0043	0.0058	0.0049	0.0050
Ni	0.0004	mg/L	<0.0004	0.0006	<0.0004	0.0004	0.0005	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0.0004
Pb	0.0003	mg/L	<0.0003	0.0010	0.0006	<0.0003	0.0006	0.0007	0.0006	0.0010	0.0008	0.0009	0.0008	0.0006	0.0010	0.0010	0.0008	0.0008	0.0012	0.0008	0.0013	0.0012	0.0014
Se	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Zn	0.0008	mg/L	0.0036	0.0029	0.0183	0.0091	0.0089	0.0085	0.0084	0.0087	0.0076	0.0088	0.0092	0.0088	0.0101	0.0127	0.0166	0.0187	0.0112	0.0105	0.0133	0.0166	0.0173
Al	0.02	mg/L	<0.02	0.02	0.03	<0.02	0.03	0.03	0.02	0.03	0.02	0.02	0.03	0.02	0.03	0.03	0.02	0.02	<0.02	<0.02	0.03	<0.02	<0.02
Li	0.0009	mg/L	0.002	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	0.001	<0.0009	<0.0009	0.001	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Ca	0.003	mg/L	3.06	2.27	2.05	3.23	3.69	4.83	4.51	4.69	4.66	4.69	5.58	6.45	7.09	6.84	7.02	6.54	6.18	4.86	5.73	5.07	5.88
Mg	0.001	mg/L	0.070	0.084	0.096	0.125	0.142	0.176	0.168	0.185	0.152	0.174	0.219	0.225	0.239	0.243	0.229	0.218	0.214	0.181	0.247	0.199	0.204
Co	0.00007	mg/L	0.0006	0.0005	0.0005	0.0009	0.0006	0.0006	0.0005	0.0003	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002
Ag	0.0002	mg/L	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Na	0.02	mg/L	3.60	4.16	3.60	5.69	5.62	5.67	5.34	3.06	2.53	2.80	2.33	2.09	1.95	1.31	0.93	0.45	0.36	0.40	0.57	0.33	0.55
K	0.2	mg/L	0.80	0.50	0.80	0.70	0.60	0.60	0.50	0.40	0.50	0.40	0.40	0.40	0.50	0.40	0.40	0.50	0.60	0.70	0.50	0.70	0.60
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Sr	0.0003	mg/L	0.008	0.006	0.004	0.006	0.006	0.009	0.010	0.010	0.009	0.011	0.013	0.015	0.014	0.013	0.014	0.012	0.010	0.010	0.011	0.011	0.010
Si	0.04	mg/L	0.50	1.15	0.93	1.40	1.25	1.72	1.58	1.54	1.25	1.37	1.54	1.66	1.85	1.72	1.94	1.80	2.40	2.11	2.39	2.18	2.55
Sn	0.0014	mg/L	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014

Sample	41579	Desmonte		SM	Ligeramente Acido																	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10	Semana 11	Semana 12	Semana 13	Semana 14	Semana 15	Semana 16	Semana 17	Semana 18	Semana 19	Semana 20	Semana 21
Volumen Solución	1	ml	918.75	940.59	900.06	919.67	900.88	904.95	907.94	892.23	874.8	887.35	904.76	892.93	886	917.47	905.56	906.63	905.45	921.63	911.48	911.81	909
mV (potencial)	0.1	mV	41.00	53.00	49.20	45.00	42.50	39.10	40.70	32.00	38.50	41.00	54.00	62.00	50.80	47.00	51.00	60.00	71.00	54.00	54.00	54.00	73.00
pH @ 25° C	0.1	u pH	6.48	6.09	6.03	6.22	6.25	6.39	6.33	6.55	6.41	6.30	6.12	5.96	6.08	6.19	6.14	6.07	5.87	6.12	6.10	6.10	5.78
Conductividad @ 25°C	0.1	uS/cm	158.70	81.30	49.20	38.60	32.70	30.05	32.60	24.84	24.12	31.90	26.23	22.69	22.40	18.17	16.52	14.67	11.80	11.61	11.91	13.30	13.47
Sulfatos	0.01	mg/L	43	24	14	11	10	11	10	7	8	10	8	7	7	5	5	6	4	3	3	3	3
Nitrogeno amoniacal	0.004	mg/L	0.01	0.03	0.09	0.08	0.10	0.11	0.13	0.15	0.14	0.14	0.12	0.11	0.09	0.08	0.07	0.05	0.02	0.02	0.03	0.04	0.07
Fluoruro	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Nitrato	0.031	mg/L	<0.031	0.304	0.272	0.208	0.203	0.191	0.173	0.153	0.093	0.081	0.065	0.045	0.031	<0.031	<0.031	0.037	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	<3.000	<2.300	<2.400	<2.500	<2.300	<2.500	<2.300	<2.400	<2.600	<2.600	<2.000	<2.100	<2.200	<2.100	<2.100	<2.200	<2.000	<2.200	<2.400	<3.100	<2.600
Acidez (H2SO4)	0.5	mg/L	2.20	1.50	1.60	1.20	1.60	1.50	1.30	1.70	1.60	1.80	1.70	1.90	2.10	1.90	1.80	1.90	2.00	2.30	2.40	1.70	1.90
Sb	0.0008	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
As	0.001	mg/L	<0.001	<0.001	0.0010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	<0.0060	<0.0070	<0.0050	<0.0050	<0.0060	<0.0050	<0.0060	<0.0060	<0.0080	<0.0060	<0.0070	<0.0080	<0.0070	<0.0070	<0.0080	<0.0100	<0.0090	<0.0100	<0.0150	<0.0160	<0.0200
Bo	0.01	mg/L	0.020	0.020	0.030	0.050	0.040	0.050	0.060	0.050	0.050	0.060	0.070	0.080	0.080	0.100	0.080	0.080	0.090	0.100	0.130	0.080	0.090
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	<0.00200	<0.00100	<0.00200	<0.00200	<0.00200	<0.00400	<0.00300	<0.00400	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00300	<0.00100	<0.00200	<0.00200	<0.00100	<0.00200	<0.00400	<0.00300
Cd	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	<0.004	<0.001	<0.005	<0.005	<0.031	<0.055	<0.023	<0.018	<0.015	<0.015	<0.014	<0.010	<0.008	<0.010	<0.009	<0.011	<0.006	<0.007	<0.005	<0.010	<0.013
Mn	0.0006	mg/L	0.320	0.224	0.150	0.123	0.081	0.081	0.091	0.083	0.065	0.082	0.081	0.075	0.067	0.049	0.041	0.029	0.033	0.033	0.035	0.036	0.040
Hg	0.00003	mg/L	<0.00003	<0.00003	0.0000	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Mo	0.00014	mg/L	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	0.0002	0.0001	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014
Ni	0.0004	mg/L	0.0155	0.0147	0.0115	0.0088	0.0064	0.0068	0.0065	0.0056	0.0050	0.0061	0.0054	0.0066	0.0073	0.0041	0.0040	0.0032	0.0040	0.0038	0.0042	0.0042	0.0048
Pb	0.0003	mg/L	0.0005	<0.0003	<0.0003	<0.0003	0.0005	0.0004	<0.0003	0.0005	<0.0003	0.0006	0.0003	0.0004	0.0003	0.0006	0.0003	0.0006	0.0006	<0.0003	<0.0003	0.0006	<0.0003
Se	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Zn	0.0008	mg/L	0.0650	0.0310	0.0420	0.0318	0.0307	0.0377	0.0325	0.0316	0.0208	0.0260	0.0253	0.0224	0.0204	0.0264	0.0259	0.0230	0.0207	0.0194	0.0205	0.0318	0.0376
Al	0.02	mg/L	<0.02	<0.02	0.0300	<0.02	<0.02	0.0200	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.0300	<0.02	<0.02	<0.02	<0.02	<0.02
Li	0.0009	mg/L	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009	<0.0009
Ca	0.003	mg/L	14.861	6.234	5.141	4.152	3.253	3.590	3.346	2.843	2.306	2.717	2.422	2.575	2.830	1.925	1.472	1.406	1.506	1.407	1.702	1.266	1.783
Mg	0.001	mg/L	0.91	0.50	0.32	0.29	0.24	0.19	0.18	0.20	0.15	0.19	0.11	0.12	0.11	0.08	0.07	0.07	0.08	0.06	0.06	0.05	0.06
Co	0.00007	mg/L	0.012	0.011	0.010	0.008	0.005	0.006	0.006	0.006	0.005	0.007	0.005	0.007	0.006	0.004	0.004	0.003	0.004	0.003	0.004	0.004	0.004
Ag	0.0002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Na	0.02	mg/L	14.5000	6.2600	3.1300	2.8900	1.9200	1.9100	2.1100	1.5900	1.2300	1.2400	0.8100	1.1100	0.8400	0.6700	0.4600	0.2700	0.2000	0.2000	0.2100	0.2500	0.2300
K	0.2	mg/L	2.00	0.90	1.00	0.90	1.00	0.90	1.00	0.90	0.80	0.90	1.00	1.00	0.80	0.70	0.60	0.60	0.60	0.70	0.50	0.60	1.10
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	<0.000	<0.00003	<0.000	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.000	<0.000	<0.000	<0.000	<0.000	<0.00003	<0.000	<0.00003	<0.00003	<0.00003	<0.000	<0.000	<0.000
Sr	0.0003	mg/L	0.0115	0.0089	0.0057	0.0056	0.0058	0.0065	0.0057	0.0065	0.0057	0.0067	0.0053	0.0059	0.0054	0.0051	0.0044	0.0040	0.0046	0.0048	0.0042	0.0045	0.0051
Si	0.04	mg/L	0.120	0.680	0.630	0.700	0.790	0.790	0.660	0.770	0.550	0.520	0.480	0.550	0.540	0.520	0.490	0.570	0.550	0.490	0.560	0.960	1.200
Sn	0.0014	mg/L	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014

Apéndice 7
Resultados Ensayo de Celdas de Humedad (Ciclo incompleto)

Muestra	DS-1378763	Desmonte		SC	Ligeramente Ácido							
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	849.23	901.7	788.31	787.63	783.19	811.65	786.12	797.91	787.23	788.69
mV (potencial)	0.1	mV										
pH @ 25° C	0.1	u pH	6.00	5.52	5.43	5.75	5.29	4.42	4.52	4.52	4.28	4.08
Conductividad @ 25°C	0.1	uS/cm	41	22	39	36	26	18	19	18	17	16
Sulfatos	0.01	mg/L	11.77	3.62	8.22	8.53	5.86	4.88	4.24	4.04	3.41	3.13
Nitrogeno amoniacal	0.004	mg/L	0.177	0.138	0.141	0.136	0.098	0.02	0.019	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.013	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nitrato	0.031	mg/L	<3.314	<0.282	<0.626	<0.463	<0.131	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	2.60	2.20	1.10	0.80	0.60	0.50	1.00	1.00	1.20	0.80
Acidez (H2SO4)	0.5	mg/L	2.3	2.9	4.8	4.2	3.1	3.9	3.7	2.5	2.3	2.3
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.007	0.010	0.015	0.023	0.023	0.032	0.040	0.039	0.076	0.079
Bo	0.01	mg/L	0.70	0.24	0.27	0.22	0.24	0.03	0.03	0.02	0.03	0.02
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.002	0.004	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.001
Cd	0.0002	mg/L	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.002	0.021	0.026	0.027	0.021	0.006	0.019	0.001	0.003	0.001
Mn	0.0006	mg/L	0.0046	0.0076	0.0118	0.0178	0.0201	0.0197	0.0233	0.0236	0.0263	0.0218
Hg	0.00003	mg/L	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Ni	0.0004	mg/L	0.0007	0.0009	0.0014	0.0015	0.0020	0.0022	0.0026	0.0021	0.0024	0.0020
Pb	0.0003	mg/L	0.0003	0.0003	0.0003	0.0006	0.0005	0.0003	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0256	0.0352	0.0189	0.0177	0.0218	0.0262	0.0237	0.0243	0.0180	0.0170
Al	0.02	mg/L	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Li	0.0009	mg/L	0.027	0.041	0.043	0.034	0.029	0.016	0.017	0.013	0.013	0.010
Ca	0.003	mg/L	1.16	1.30	2.05	2.00	1.46	1.33	1.39	1.38	1.35	1.03
Mg	0.001	mg/L	0.060	0.087	0.176	0.228	0.203	0.182	0.200	0.195	0.195	0.125
Co	0.00007	mg/L	0.0006	0.0013	0.0023	0.0035	0.0041	0.0047	0.0057	0.0046	0.0053	0.0057
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	5.17	3.35	4.71	4.30	1.52	0.68	0.58	0.35	0.27	0.23
K	0.2	mg/L	1.40	2.20	1.00	1.70	1.50	0.30	0.40	0.40	0.30	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Sr	0.0003	mg/L	0.014	0.015	0.026	0.037	0.036	0.036	0.044	0.039	0.053	0.050
Si	0.04	mg/L	18.73	24.54	17.40	12.59	8.91	3.28	2.53	2.28	2.42	2.07
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1378764	Desmonte		SC		Acido						
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	890.74	882.24	874.85	837.47	809.55	799.17	802.56	793.6	785.06	800.3
pH @ 25° C	0.1	u pH	5.70	5.20	5.15	5.02	4.84	4.41	4.34	4.40	4.53	4.14
Conductividad @ 25°C	0.1	uS/cm	107	79	57	51	51	53	35	32	29	25
Sulfatos	0.01	mg/L	45.15	15.53	11.89	9.36	11.75	14.23	8.03	7.23	6.58	4.88
Nitrogeno amoniacal	0.004	mg/L	0.337	0.125	0.025	0.026	0.024	0.004	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.018	0.002	0.002	0.002	0.018	0.014	0.022	0.027	0.031	0.024
Nitrato	0.031	mg/L	<0.963	<0.189	<0.138	<0.090	<0.081	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	2.30	1.10	1.40	0.80	0.60	0.80	0.80	0.70	1.20	0.80
Acidez (H2SO4)	0.5	mg/L	1.9	3.1	3.9	3.9	3.7	3.1	3.5	3.0	3.9	4.0
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.014	0.008	0.005	0.009	0.007	0.010	0.012	0.014	0.011	0.014
Bo	0.01	mg/L	0.63	0.25	0.28	0.24	0.26	0.02	0.02	0.02	0.02	0.02
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.003	0.004	0.003	0.003	0.006	0.005	0.006	0.007	0.010	0.009
Cd	0.0002	mg/L	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.009	0.006	0.015	0.021	0.019	0.017	0.023	0.018	0.016	0.022
Mn	0.0006	mg/L	0.0448	0.4744	0.1958	0.1970	0.2232	0.2513	0.1947	0.1877	0.1636	0.1081
Hg	0.00003	mg/L	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Ni	0.0004	mg/L	0.0033	0.0206	0.0107	0.0110	0.0223	0.0195	0.0172	0.0175	0.0154	0.0115
Pb	0.0003	mg/L	0.0003	0.0007	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0004	0.0005
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0425	0.0503	0.0235	0.0148	0.0248	0.0173	0.0272	0.0261	0.0259	0.0260
Al	0.02	mg/L	0.02	0.05	0.03	0.07	0.11	0.10	0.16	0.18	0.23	0.23
Li	0.0009	mg/L	0.006	0.004	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	8.93	7.98	3.95	3.90	4.08	3.82	2.38	2.45	2.15	1.34
Mg	0.001	mg/L	0.703	0.956	0.300	0.283	0.313	0.364	0.267	0.208	0.167	0.070
Co	0.00007	mg/L	0.0182	0.0586	0.0256	0.0264	0.0493	0.0485	0.0463	0.0480	0.0462	0.0368
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	5.70	5.21	1.65	1.70	2.08	1.87	1.61	1.50	1.36	0.94
K	0.2	mg/L	0.80	0.70	0.70	0.70	0.50	0.20	0.20	0.20	0.20	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0003	0.0002	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
Sr	0.0003	mg/L	0.045	0.015	0.008	0.007	0.008	0.010	0.010	0.008	0.010	0.009
Si	0.04	mg/L	15.21	19.10	13.23	6.48	2.00	1.04	1.07	1.21	0.93	1.03
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1378765	Desmonte		SA	Inerte							
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	902.21	895.95	867.23	876.17	889.99	870.59	903.6	900.54	908.22	893.53
pH @ 25° C	0.1	u pH	5.43	4.70	4.53	4.55	4.35	4.07	4.22	4.25	4.19	4.06
Conductividad @ 25°C	0.1	uS/cm	117	47	46	49	43	32	32	33	38	41
Sulfatos	0.01	mg/L	50.73	8.75	13.19	13.41	8.18	5.99	5.20	5.40	6.90	7.77
Nitrogeno amoniacal	0.004	mg/L	0.15	0.004	0.005	0.01	0.017	0.006	0.01	0.004	0.004	0.007
Fluoruro	0.002	mg/L	0.029	0.002	0.013	0.024	0.034	0.023	0.032	0.032	0.059	0.06
Nitrato	0.031	mg/L	<0.151	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	2.10	0.60	0.50	0.50	0.50	0.50	0.50	0.50	<0.5	<0.5
Acidez (H2SO4)	0.5	mg/L	2.5	4.0	4.5	5.7	7.1	6.4	6.7	6.6	8.5	8.8
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.005	0.004	0.005	0.005	0.005	0.006	0.007	0.013	0.010	0.013
Bo	0.01	mg/L	0.58	0.25	0.26	0.26	0.29	0.02	0.02	0.02	0.03	0.03
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.005	0.003	0.005	0.004	0.004	0.004	0.005	0.004	0.009	0.008
Cd	0.0002	mg/L	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.014	0.052	0.063	0.059	0.054	0.041	0.045	0.043	0.068	0.098
Mn	0.0006	mg/L	0.0418	0.1103	0.1091	0.1313	0.1038	0.0453	0.0405	0.0425	0.0444	0.0451
Hg	0.00003	mg/L	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Ni	0.0004	mg/L	0.0035	0.0121	0.0134	0.0193	0.0229	0.0060	0.0067	0.0057	0.0067	0.0064
Pb	0.0003	mg/L	0.0008	0.0005	0.0011	0.0007	0.0003	0.0003	0.0003	0.0003	0.0004	0.0008
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0652	0.0522	0.0446	0.0535	0.0499	0.0413	0.0704	0.0284	0.0696	0.0669
Al	0.02	mg/L	0.05	0.12	0.15	0.30	0.28	0.37	0.45	0.40	0.82	0.77
Li	0.0009	mg/L	0.014	0.005	0.004	0.006	0.005	0.002	0.002	0.002	0.002	0.003
Ca	0.003	mg/L	4.77	3.45	4.15	3.89	2.05	1.73	1.23	1.17	1.38	1.18
Mg	0.001	mg/L	0.441	0.380	0.418	0.495	0.191	0.083	0.070	0.066	0.071	0.041
Co	0.00007	mg/L	0.0063	0.0097	0.0106	0.0210	0.0167	0.0097	0.0096	0.0098	0.0118	0.0129
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	13.05	4.57	3.52	3.60	1.38	0.64	0.60	0.59	0.57	0.57
K	0.2	mg/L	2.50	1.00	1.10	0.90	1.70	0.20	0.20	0.20	0.20	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002
Sr	0.0003	mg/L	0.037	0.016	0.015	0.016	0.008	0.008	0.007	0.008	0.009	0.007
Si	0.04	mg/L	14.50	29.71	21.00	15.63	10.19	3.23	3.20	3.14	3.28	2.15
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1378766	Desmonte		SC	Acido							
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	808.31	838	857.14	856.09	869.33	890	880.58	892.38	880	888.68
pH @ 25° C	0.1	u pH	7.53	6.93	6.89	6.87	6.84	6.83	6.94	6.87	6.25	6.11
Conductividad @ 25°C	0.1	uS/cm	197	91	84	77	66	74	68	81	52	35
Sulfatos	0.01	mg/L	92.82	18.30	22.89	21.81	17.61	24.06	17.11	21.13	12.86	10.59
Nitrogeno amoniacal	0.004	mg/L	0.036	0.05	0.017	0.028	0.026	0.014	0.02	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.046	0.011	0.01	0.011	0.011	0.014	0.01	0.002	0.002	0.002
Nitrato	0.031	mg/L	<0.266	<0.031	<0.093	<0.088	<0.062	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	9.60	3.10	2.90	2.70	2.80	1.80	2.20	2.40	2.40	1.70
Acidez (H2SO4)	0.5	mg/L	2.1	2.5	3.2	2.3	2.1	1.6	1.1	1.1	1.1	1.2
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.002	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Bo	0.01	mg/L	0.67	0.25	0.29	0.27	0.26	0.01	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.002	0.003	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.037	0.698	0.055	0.089	0.046	0.008	0.013	0.019	0.016	0.001
Mn	0.0006	mg/L	0.0017	0.0009	0.0007	0.0016	0.0009	0.0011	0.0011	0.0017	0.0012	0.0011
Hg	0.00003	mg/L	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0003	0.0004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Ni	0.0004	mg/L	0.0010	0.0006	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Pb	0.0003	mg/L	0.0007	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0071	0.0185	0.0122	0.0103	0.0052	0.0072	0.0084	0.0078	0.0050	0.0057
Al	0.02	mg/L	0.04	0.32	0.03	0.05	0.03	0.03	0.03	0.04	0.03	0.02
Li	0.0009	mg/L	0.013	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001
Ca	0.003	mg/L	0.83	0.43	1.01	0.88	0.87	0.27	0.15	0.11	0.12	0.04
Mg	0.001	mg/L	0.047	0.028	0.026	0.040	0.025	0.023	0.019	0.018	0.018	0.014
Co	0.00007	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	35.64	23.08	19.36	17.79	18.69	22.86	16.59	17.66	12.17	8.57
K	0.2	mg/L	1.00	1.20	0.70	1.20	0.60	0.30	0.20	0.20	0.30	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Sr	0.0003	mg/L	0.008	0.005	0.003	0.002	0.001	0.002	0.001	0.002	0.002	0.001
Si	0.04	mg/L	16.64	16.45	8.56	3.89	1.37	0.66	0.98	1.27	1.03	0.66
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1378768	Desmonte		SM		Inerte / Neutral						
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	845.37	823.11	804.85	801.75	810.04	814.79	815.7	806.18	818.65	807.54
pH @ 25° C	0.1	u pH	7.70	6.81	6.71	6.73	6.65	6.61	6.65	6.24	5.94	5.43
Conductividad @ 25°C	0.1	uS/cm	236	36	24	20	19	14	16	14	12	10
Sulfatos	0.01	mg/L	93.32	5.09	4.63	3.53	3.04	3.13	2.85	2.86	2.56	2.37
Nitrogeno amoniacal	0.004	mg/L	0.004	0.004	0.004	0.012	0.018	0.004	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	1.178	0.149	0.23	0.163	0.135	0.094	0.074	0.046	0.045	0.024
Nitrato	0.031	mg/L	<0.279	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	14.40	5.20	2.80	3.20	2.80	1.40	2.40	1.90	1.90	1.50
Acidez (H2SO4)	0.5	mg/L	2.0	2.4	4.5	3.1	3.3	2.1	1.3	1.2	1.3	1.2
Sb	0.0008	mg/L	0.0033	0.0089	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.011	0.004	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.019	0.007	0.009	0.012	0.010	0.014	0.008	0.009	0.009	0.010
Bo	0.01	mg/L	0.86	0.57	0.43	0.40	0.41	0.12	0.03	0.02	0.01	0.01
Bi	0.00005	mg/L	<0.00047	<0.00005	<0.00028	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.011	0.005	0.006	0.003	0.003	0.001	0.002	0.003	0.003	0.003
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.094	0.026	0.095	0.081	0.078	0.042	0.050	0.001	0.001	0.001
Mn	0.0006	mg/L	0.0429	0.0304	0.0482	0.0700	0.0970	0.0797	0.0874	0.1066	0.1058	0.0978
Hg	0.00003	mg/L	0.0078	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0646	0.0398	0.0066	0.0042	0.0013	0.0004	0.0006	0.0002	0.0001	0.0001
Ni	0.0004	mg/L	0.0034	0.0024	0.0024	0.0021	0.0039	0.0038	0.0042	0.0054	0.0055	0.0051
Pb	0.0003	mg/L	0.0010	0.0006	0.0012	0.0009	0.0006	0.0003	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0030	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0177	0.0365	0.0385	0.0438	0.0667	0.0541	0.0661	0.0566	0.0806	0.0787
Al	0.02	mg/L	0.09	0.06	0.07	0.04	0.03	0.02	0.02	0.02	0.03	<0.02
Li	0.0009	mg/L	0.014	0.012	0.005	0.003	0.002	0.002	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	4.06	2.33	3.00	4.00	2.09	1.89	1.74	1.65	1.35	1.05
Mg	0.001	mg/L	0.611	0.311	0.437	0.401	0.314	0.257	0.263	0.227	0.196	0.123
Co	0.00007	mg/L	0.0080	0.0074	0.0126	0.0206	0.0360	0.0355	0.0459	0.0544	0.0592	0.0582
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	39.13	6.29	2.00	0.74	0.32	0.23	0.27	0.17	0.18	0.13
K	0.2	mg/L	2.10	1.20	1.70	1.60	0.60	0.20	0.20	0.20	0.20	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0005	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000
Sr	0.0003	mg/L	0.047	0.025	0.030	0.028	0.027	0.022	0.020	0.018	0.018	0.016
Si	0.04	mg/L	18.18	20.20	12.19	8.15	6.24	4.70	2.58	2.13	1.88	1.20
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1378770	Desmonte		SM	Inerte / Neutral							
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	933.34	937.07	834.6	803.79	809.73	808.51	800.54	781.75	788.3	797.56
pH @ 25° C	0.1	u pH	7.51	6.61	6.29	5.91	5.85	6.26	6.77	5.91	5.92	5.89
Conductividad @ 25°C	0.1	uS/cm	363	33	24	24	22	23	23	15	14	12
Sulfatos	0.01	mg/L	144.74	4.50	5.07	5.05	3.81	4.63	4.31	3.38	2.97	2.98
Nitrogeno amoniacal	0.004	mg/L	0.004	0.004	0.008	0.008	0.01	0.008	0.01	0.008	0.008	0.012
Fluoruro	0.002	mg/L	0.592	0.125	0.185	0.255	0.185	0.26	0.122	0.094	0.09	0.042
Nitrato	0.031	mg/L	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	8.60	4.00	2.30	1.50	1.80	2.10	1.50	1.40	1.60	1.70
Acidez (H2SO4)	0.5	mg/L	2.8	3.3	4.1	2.7	2.5	1.8	1.4	1.6	1.8	1.7
Sb	0.0008	mg/L	0.0077	0.0329	0.0044	0.0029	0.0018	0.0023	0.0020	0.0021	0.0019	0.0008
As	0.001	mg/L	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.344	0.254	0.213	0.225	0.213	0.198	0.196	0.261	0.299	0.277
Bo	0.01	mg/L	0.83	0.41	0.41	0.37	0.36	0.11	0.02	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00107	<0.00005	<0.00009	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.004	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.003	0.002
Cd	0.0002	mg/L	0.0004	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.038	0.027	0.035	0.043	0.016	0.013	0.026	0.031	0.033	0.012
Mn	0.0006	mg/L	0.6657	0.2354	0.2198	0.2483	0.2172	0.3123	0.2381	0.2047	0.2737	0.1621
Hg	0.00003	mg/L	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0314	0.0293	0.0074	0.0029	0.0007	0.0005	0.0007	0.0005	0.0004	0.0001
Ni	0.0004	mg/L	0.0064	0.0033	0.0027	0.0035	0.0032	0.0044	0.0044	0.0036	0.0028	0.0027
Pb	0.0003	mg/L	0.0018	0.0008	0.0003	0.0004	0.0004	0.0003	0.0005	0.0003	0.0004	0.0003
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0399	0.0405	0.0256	0.0291	0.0347	0.0480	0.0398	0.0445	0.0414	0.0394
Al	0.02	mg/L	0.02	0.03	0.02	0.05	0.03	0.04	0.02	0.06	0.04	0.03
Li	0.0009	mg/L	0.120	0.032	0.021	0.011	0.006	0.005	0.005	0.002	0.002	0.001
Ca	0.003	mg/L	16.27	3.30	2.76	2.89	2.79	2.92	2.98	2.85	2.30	1.44
Mg	0.001	mg/L	2.142	0.387	0.333	0.332	0.290	0.245	0.379	0.256	0.336	0.122
Co	0.00007	mg/L	0.0132	0.0072	0.0077	0.0104	0.0100	0.0159	0.0131	0.0118	0.0124	0.0104
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	42.99	3.00	1.56	1.06	0.78	0.62	0.80	0.29	0.37	0.20
K	0.2	mg/L	3.30	2.10	0.80	1.20	1.10	0.20	0.20	0.20	0.20	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0009	0.0002	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0000
Sr	0.0003	mg/L	0.207	0.055	0.043	0.050	0.030	0.050	0.042	0.039	0.044	0.027
Si	0.04	mg/L	17.13	39.34	18.25	18.74	8.22	4.68	2.58	1.91	2.59	2.50
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1378771	Desmonte		SA		Acido						
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	842.87	831.59	829.36	815.45	807.46	816.53	822.2	821.83	840.71	832.23
pH @ 25° C	0.1	u pH	6.42	6.01	5.88	5.79	5.39	4.90	5.05	4.96	4.73	4.77
Conductividad @ 25°C	0.1	uS/cm	113	114	43	37	32	21	23	17	14	13
Sulfatos	0.01	mg/L	44.78	20.54	10.47	9.35	7.69	4.56	4.67	3.58	2.89	2.73
Nitrogeno amoniacal	0.004	mg/L	0.113	0.014	0.015	0.01	0.015	0.004	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nitrato	0.031	mg/L	<0.425	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	3.10	1.80	1.40	1.20	1.10	1.20	1.60	1.30	1.50	1.60
Acidez (H2SO4)	0.5	mg/L	1.7	2.0	4.2	4.4	3.9	2.3	2.5	3.1	2.7	2.2
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.040	0.051	0.081	0.093	0.082	0.131	0.183	0.253	0.289	0.284
Bo	0.01	mg/L	0.50	0.27	0.28	0.29	0.27	0.01	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.003	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Cd	0.0002	mg/L	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.021	0.001	0.043	0.002	0.001	0.001	0.001	0.001	<0.001	<0.001
Mn	0.0006	mg/L	0.0221	0.3057	0.1881	0.1867	0.1734	0.1225	0.0878	0.0798	0.0724	0.0591
Hg	0.00003	mg/L	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0001	0.0009	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Ni	0.0004	mg/L	0.0016	0.0045	0.0038	0.0038	0.0033	0.0025	0.0025	0.0024	0.0023	0.0024
Pb	0.0003	mg/L	0.0007	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0020	0.0030	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0410	0.0549	0.0547	0.0446	0.0538	0.0368	0.0330	0.0348	0.0326	0.0442
Al	0.02	mg/L	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02
Li	0.0009	mg/L	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	2.14	4.44	3.05	2.55	1.78	1.64	1.88	0.98	0.83	0.73
Mg	0.001	mg/L	0.319	1.112	0.538	0.525	0.346	0.270	0.318	0.248	0.174	0.095
Co	0.00007	mg/L	0.0008	0.0050	0.0036	0.0046	0.0047	0.0040	0.0031	0.0030	0.0031	0.0036
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	14.26	17.18	3.25	1.97	1.07	0.60	0.59	0.41	0.28	0.21
K	0.2	mg/L	3.60	5.00	2.90	2.70	2.30	1.10	1.00	0.90	0.80	0.60
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0001	0.0002	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001
Sr	0.0003	mg/L	0.020	0.021	0.017	0.017	0.014	0.013	0.019	0.017	0.013	0.018
Si	0.04	mg/L	11.58	13.51	5.62	2.54	1.47	0.99	0.99	0.74	0.35	1.15
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1378773	Desmonte		SC	Acido							
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	867.42	817.28	885.26	871.47	887.23	872.74	884.4	880.89	891.15	891.07
pH @ 25° C	0.1	u pH	4.23	4.21	4.45	4.24	4.18	4.16	4.04	4.00	3.76	3.47
Conductividad @ 25°C	0.1	uS/cm	326	63	70	73	80	93	138	145	158	181
Sulfatos	0.01	mg/L	164.09	8.41	10.54	16.87	19.32	20.79	34.82	30.87	31.64	33.44
Nitrogeno amoniacal	0.004	mg/L	0.335	0.056	0.013	0.014	0.011	0.004	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.235	0.026	0.119	0.111	0.099	0.107	0.17	0.153	0.132	0.093
Nitrato	0.031	mg/L	<0.786	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Acidez (H2SO4)	0.5	mg/L	71.8	11.8	17.3	21.7	23.9	31.3	49.0	48.3	47.1	49.3
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.011	0.004	0.008	0.005	0.002	0.002	0.018	0.008	0.006	0.018
Bo	0.01	mg/L	0.56	0.48	0.45	0.43	0.31	0.06	0.06	0.03	0.06	0.04
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.034	0.007	0.010	0.009	0.005	0.010	0.020	0.014	0.033	0.036
Cd	0.0002	mg/L	0.0037	0.0003	0.0013	0.0010	0.0008	0.0006	0.0008	0.0003	0.0007	0.0006
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	26.720	1.880	1.887	1.822	1.766	1.609	2.481	2.279	2.393	2.405
Mn	0.0006	mg/L	0.1685	0.1486	0.1411	0.0996	0.0832	0.0799	0.0864	0.0526	0.0328	0.0228
Hg	0.00003	mg/L	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Ni	0.0004	mg/L	0.2783	0.0427	0.0391	0.0232	0.0180	0.0173	0.0208	0.0161	0.0099	0.0051
Pb	0.0003	mg/L	0.0013	0.0003	0.0005	0.0007	0.0003	0.0003	0.0003	0.0004	0.0017	0.0020
Se	0.002	mg/L	0.0050	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.4908	0.1721	0.2211	0.1642	0.1151	0.1486	0.2182	0.1056	0.1645	0.1572
Al	0.02	mg/L	2.22	0.80	1.80	2.65	3.31	4.48	4.30	3.02	4.05	4.49
Li	0.0009	mg/L	0.008	0.003	0.003	0.002	0.001	0.001	0.002	0.001	0.001	0.001
Ca	0.003	mg/L	10.16	3.03	3.70	2.74	2.11	2.06	2.44	1.78	1.54	1.35
Mg	0.001	mg/L	1.865	0.412	0.516	0.341	0.290	0.189	0.222	0.039	0.163	0.068
Co	0.00007	mg/L	0.9564	0.1457	0.1225	0.0788	0.0258	0.0587	0.0741	0.0497	0.0265	0.0169
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	17.98	2.03	1.59	0.89	0.52	0.51	0.66	0.52	0.46	0.30
K	0.2	mg/L	2.30	0.80	0.70	0.70	0.30	0.20	0.20	0.20	0.20	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0095	0.0028	0.0024	0.0028	0.0024	0.0032	0.0043	0.0058	0.0088	0.0075
Sr	0.0003	mg/L	0.056	0.014	0.013	0.010	0.004	0.007	0.009	0.008	0.009	0.009
Si	0.04	mg/L	12.20	12.72	8.75	4.33	2.79	1.95	2.39	3.20	4.17	4.59
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1378774	Desmonte		SM		Inerte /Neutral						
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	802.16	780.5	821.12	835.8	824.08	843.87	838.59	848.95	854.83	846.29
pH @ 25° C	0.1	u pH	7.56	7.18	6.88	6.72	6.68	6.70	6.51	6.56	6.30	6.22
Conductividad @ 25°C	0.1	uS/cm	210	45	23	12	10	6	6	6	5	6
Sulfatos	0.01	mg/L	72.85	4.28	1.47	0.79	0.64	0.39	0.36	0.52	0.46	0.41
Nitrogeno amoniacal	0.004	mg/L	0.523	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.369	0.066	0.118	0.077	0.063	0.034	0.043	0.044	0.038	0.027
Nitrato	0.031	mg/L	<1.669	<0.073	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	18.80	10.80	8.60	9.40	9.10	2.90	3.60	3.20	3.90	2.70
Acidez (H2SO4)	0.5	mg/L	3.2	3.8	4.7	4.1	4.5	1.9	1.5	1.4	2.0	1.3
Sb	0.0008	mg/L	0.0008	0.0010	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.014	0.009	0.005	0.004	0.002	0.001	0.002	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.023	0.013	0.006	0.015	0.013	0.005	0.004	0.005	0.006	0.003
Bo	0.01	mg/L	0.89	0.70	0.51	0.48	0.44	0.11	0.04	0.02	0.01	0.01
Bi	0.00005	mg/L	<0.00107	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.436	0.068	0.015	0.008	0.006	0.004	0.004	0.003	0.003	0.003
Cd	0.0002	mg/L	0.0012	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.648	0.094	0.069	0.051	0.046	0.041	0.049	0.045	0.042	0.034
Mn	0.0006	mg/L	0.1430	0.0816	0.0589	0.0935	0.0857	0.0466	0.0559	0.0649	0.0492	0.0399
Hg	0.00003	mg/L	0.0102	0.0018	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0436	0.0681	0.0263	0.0116	0.0065	0.0040	0.0041	0.0032	0.0032	0.0028
Ni	0.0004	mg/L	0.0320	0.0137	0.0032	0.0021	0.0076	0.0004	0.0007	0.0008	0.0007	0.0004
Pb	0.0003	mg/L	0.0015	0.0010	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0667	0.0240	0.0213	0.0116	0.0091	0.0077	0.0031	0.0051	0.0031	0.0087
Al	0.02	mg/L	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02
Li	0.0009	mg/L	0.005	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	2.96	2.02	2.56	3.00	2.36	0.80	0.69	0.68	0.55	0.60
Mg	0.001	mg/L	0.404	0.267	0.362	0.512	0.337	0.117	0.095	0.103	0.090	0.051
Co	0.00007	mg/L	0.2648	0.0915	0.0193	0.0245	0.0319	0.0103	0.0122	0.0119	0.0106	0.0085
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	38.70	10.45	3.36	2.00	0.78	0.34	0.30	0.30	0.29	0.21
K	0.2	mg/L	2.30	2.50	1.00	1.30	0.70	0.20	0.20	0.20	0.20	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Sr	0.0003	mg/L	0.019	0.011	0.012	0.017	0.013	0.004	0.003	0.004	0.003	0.003
Si	0.04	mg/L	16.08	19.63	16.64	10.03	8.03	4.27	4.57	3.06	1.64	1.27
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1378775	Desmonte		SM	Inerte /Neutral							
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9	Semana 10
Volumen Solución	1	ml	780	737.58	867.6	852.42	864.48	844.42	856.51	834.83	846.24	833.33
pH @ 25° C	0.1	u pH	7.54	7.08	6.89	6.91	6.80	7.02	7.09	7.05	6.18	6.51
Conductividad @ 25°C	0.1	uS/cm	207	18	13	11	10	8	7	10	7	5
Sulfatos	0.01	mg/L	87.14	1.10	0.49	0.37	0.33	0.21	0.20	0.27	0.32	0.24
Nitrogeno amoniacal	0.004	mg/L	0.004	0.004	0.009	0.017	0.01	0.004	0.02	0.018	0.016	0.016
Fluoruro	0.002	mg/L	0.488	0.068	0.061	0.048	0.055	0.026	0.036	0.037	0.02	0.012
Nitrato	0.031	mg/L	<0.653	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	14.80	7.10	6.00	4.80	4.40	3.00	4.30	3.30	3.90	3.40
Acidez (H2SO4)	0.5	mg/L	2.6	3.2	6.2	3.4	3.2	1.0	1.4	1.5	1.9	1.2
Sb	0.0008	mg/L	0.0186	0.0125	0.0196	0.0113	0.0083	0.0045	0.0085	0.0045	0.0071	0.0048
As	0.001	mg/L	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.009	0.002	0.002	0.002	0.002	0.002	0.002	0.017	0.006	0.006
Bo	0.01	mg/L	0.85	0.64	0.47	0.40	0.38	0.07	0.05	0.02	0.01	0.01
Bi	0.00005	mg/L	<0.00283	<0.00076	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.020	0.008	0.004	0.003	0.004	0.001	0.001	0.001	0.002	0.002
Cd	0.0002	mg/L	0.0006	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.217	0.153	0.134	0.055	0.042	0.008	0.036	0.028	0.023	0.008
Mn	0.0006	mg/L	0.1407	0.0276	0.0457	0.0535	0.0433	0.0233	0.0471	0.0531	0.0438	0.0240
Hg	0.00003	mg/L	0.0012	0.0009	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0082	0.0072	0.0025	0.0017	0.0009	0.0003	0.0007	0.0005	0.0003	0.0001
Ni	0.0004	mg/L	0.0042	0.0020	0.0011	0.0004	0.0005	0.0004	0.0007	0.0005	0.0007	0.0005
Pb	0.0003	mg/L	0.0015	0.0012	0.0003	0.0003	0.0005	0.0003	0.0005	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0449	0.0256	0.0197	0.0283	0.0250	0.0087	0.0155	0.0184	0.0224	0.0123
Al	0.02	mg/L	0.37	0.46	0.13	0.07	0.04	0.02	0.03	0.03	0.03	0.02
Li	0.0009	mg/L	0.008	0.003	0.002	0.002	0.003	0.001	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	3.73	1.11	1.87	1.35	1.08	0.67	0.85	0.93	0.91	0.58
Mg	0.001	mg/L	0.638	0.170	0.276	0.234	0.157	0.088	0.116	0.115	0.102	0.053
Co	0.00007	mg/L	0.0036	0.0011	0.0011	0.0013	0.0014	0.0014	0.0013	0.0001	0.0011	0.0007
Ag	0.0002	mg/L	0.0004	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	34.13	4.07	1.31	0.86	0.63	0.37	0.35	0.26	0.24	0.15
K	0.2	mg/L	2.00	2.70	0.80	0.50	0.50	0.20	0.20	0.20	0.20	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Sr	0.0003	mg/L	0.045	0.007	0.014	0.012	0.009	0.005	0.008	0.008	0.009	0.005
Si	0.04	mg/L	18.10	16.06	10.05	8.00	6.95	4.10	3.39	2.71	2.02	1.33
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1364822	Oxido Leach (Cola CLT)		SG		Inerte /Neutral					
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9
Volumen Solución	1	ml	823.5	788.43	776.19	787.88	740.68	768.87	741.22	750	763.14
pH @ 25° C	0.1	u pH	7.50	7.41	7.31	7.47	8.02	8.17	8.15	8.03	8.22
Conductividad @ 25°C	0.1	uS/cm	99	88	77	96	89	97	88	78	68
Sulfatos	0.01	mg/L	11.48	18.21	13.42	9.01	8.61	8.04	3.58	3.15	2.05
Nitrogeno amoniacal	0.004	mg/L	0.059	0.008	0.007	0.004	0.004	0.004	0.005	0.004	0.006
Fluoruro	0.002	mg/L	0.029	0.042	0.04	0.07	0.06	0.121	0.1	0.112	0.094
Nitrato	0.031	mg/L	<0.141	<0.226	<0.122	<0.100	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	17.50	12.20	13.10	18.20	15.50	21.70	22.60	22.80	21.20
Acidez (H2SO4)	0.5	mg/L	2.0	3.3	3.4	2.8	1.0	0.8	0.8	1.0	0.9
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.001	0.001	0.002	0.001	0.002	0.001	0.002	0.002	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.006	0.003	0.005	0.005	0.004	0.005	0.010	0.009	0.009
Bo	0.01	mg/L	0.39	0.40	0.36	0.30	0.03	0.04	0.04	0.05	0.03
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.006	0.003	0.003	0.004	0.002	0.002	0.002	0.004	0.002
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.019	0.005	0.013	0.028	0.045	0.033	0.031	0.027	0.031
Mn	0.0006	mg/L	0.0007	0.0015	0.0019	0.0014	0.0006	0.0006	0.0006	<0.0006	0.0006
Hg	0.00003	mg/L	0.0016	0.0018	0.0041	0.0091	0.0131	0.0252	0.0192	0.0213	0.0206
Mo	0.00014	mg/L	0.0026	0.0077	0.0118	0.0265	0.0208	0.0268	0.0205	0.0204	0.0125
Ni	0.0004	mg/L	0.0033	0.0013	0.0019	0.0022	0.0010	0.0015	0.0015	0.0016	0.0008
Pb	0.0003	mg/L	0.0006	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0084	0.0057	0.0069	0.0053	0.0008	0.0008	0.0008	0.0026	0.0017
Al	0.02	mg/L	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Li	0.0009	mg/L	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	16.07	13.67	12.19	15.09	10.68	17.00	14.99	14.15	11.91
Mg	0.001	mg/L	0.168	0.199	0.177	0.280	0.091	0.234	0.203	0.179	0.142
Co	0.00007	mg/L	0.0005	0.0003	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	2.60	1.70	1.22	1.45	1.01	1.78	0.91	0.91	0.53
K	0.2	mg/L	1.50	0.80	1.10	0.90	0.20	0.30	0.20	0.30	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Sr	0.0003	mg/L	0.031	0.028	0.029	0.036	0.021	0.037	0.031	0.033	0.026
Si	0.04	mg/L	15.12	10.42	8.67	6.45	4.40	6.89	6.61	8.07	6.39
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1362760	Oxido Leach (Cola CLT)		SM	Inerte /Neutral						
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9
Volumen Solución	1	ml	950.2	788.47	779.65	778.93	798.03	780.26	758.44	750.24	759.25
pH @ 25° C	0.1	u pH	7.39	7.64	7.31	7.45	8.39	7.96	8.10	7.98	7.82
Conductividad @ 25°C	0.1	uS/cm	138	117	69	66	51	49	59	39	33
Sulfatos	0.01	mg/L	19.32	23.68	11.46	6.70	4.50	3.69	3.79	2.06	1.88
Nitrogeno amoniacal	0.004	mg/L	0.139	0.004	0.008	0.008	0.004	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.029	0.046	0.043	0.055	0.043	0.064	0.079	0.052	0.036
Nitrato	0.031	mg/L	<0.073	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	17.90	13.70	14.50	18.70	16.20	17.60	19.30	17.80	15.10
Acidez (H2SO4)	0.5	mg/L	3.5	3.5	4.0	2.4	0.5	1.0	0.9	1.1	0.9
Sb	0.0008	mg/L	0.0009	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.058	0.076	0.072	0.075	0.150	0.154	0.170	0.166	0.178
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.144	0.077	0.091	0.104	0.164	0.127	0.153	0.207	0.195
Bo	0.01	mg/L	0.45	0.37	0.39	0.34	0.06	0.04	0.04	0.03	0.02
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001	0.002
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.016	0.142	0.066	0.052	0.044	0.088	0.850	0.063	0.078
Mn	0.0006	mg/L	0.0023	0.0030	0.0019	0.0018	0.0006	0.0006	0.0006	0.0006	0.0006
Hg	0.00003	mg/L	0.0027	0.0008	0.0005	0.0003	0.0005	0.0022	0.0028	0.0020	0.0020
Mo	0.00014	mg/L	0.0269	0.0558	0.0585	0.0498	0.0492	0.0517	0.0575	0.0282	0.0276
Ni	0.0004	mg/L	0.0010	0.0006	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Pb	0.0003	mg/L	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0050	0.0040	0.0030	0.0020	0.0030	0.0030	0.0050	0.0040	0.0030
Zn	0.0008	mg/L	0.0077	0.0064	0.0081	0.0057	0.0059	0.0024	0.0034	0.0040	0.0037
Al	0.02	mg/L	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02
Li	0.0009	mg/L	0.003	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	21.15	17.76	10.16	10.36	9.23	9.43	8.16	6.57	5.19
Mg	0.001	mg/L	0.859	0.961	0.732	0.538	0.377	0.433	0.362	0.288	0.256
Co	0.00007	mg/L	0.0068	0.0050	0.0026	0.0017	0.0013	0.0011	0.0009	0.0007	0.0006
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	3.09	1.91	0.98	0.56	0.45	0.45	0.39	0.16	0.15
K	0.2	mg/L	2.40	1.10	0.90	1.00	0.20	0.20	0.20	0.20	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	<0.00003	<0.00003	<0.00003
Sr	0.0003	mg/L	0.046	0.046	0.034	0.027	0.025	0.024	0.028	0.022	0.019
Si	0.04	mg/L	14.96	10.46	7.71	5.17	3.50	3.94	3.46	2.77	2.98
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1369841	Oxido Leach (Cola CLT)		SA		Acido					
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9
Volumen Solución	1	ml	908.81	829.64	825.87	830.65	822.76	810.16	800.04	800.13	801.6
pH @ 25° C	0.1	u pH	7.33	7.27	7.07	6.73	7.76	8.04	7.72	7.25	7.66
Conductividad @ 25°C	0.1	uS/cm	814	487	366	124	115	105	102	84	90
Sulfatos	0.01	mg/L	194.71	160.88	109.40	34.41	25.00	19.91	20.77	18.93	16.27
Nitrogeno amoniacal	0.004	mg/L	0.19	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.105	0.086	0.019	0.045	0.101	0.13	0.152	0.142	0.196
Nitrato	0.031	mg/L	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	18.40	14.10	17.20	13.60	12.10	13.60	14.40	14.10	15.00
Acidez (H2SO4)	0.5	mg/L	2.1	2.8	3.7	2.6	0.8	0.7	0.8	1.1	1.0
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.012	0.009	0.005	0.002	0.003	0.002	0.002	0.002	0.002
Bo	0.01	mg/L	0.26	0.36	0.28	0.25	0.01	0.02	0.01	<0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Cd	0.0002	mg/L	0.0002	0.0005	0.0003	0.0004	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.002	0.021	0.001	0.001	0.003	0.001	0.001	0.001	0.001
Mn	0.0006	mg/L	0.0039	0.0029	0.0023	0.0018	0.0006	0.0006	0.0006	0.0006	0.0006
Hg	0.00003	mg/L	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0037	0.0019	0.0023	0.0014	0.0007	0.0009	0.0013	0.0012	0.0015
Ni	0.0004	mg/L	0.0037	0.0004	0.0004	0.0014	0.0004	0.0004	0.0004	0.0004	0.0004
Pb	0.0003	mg/L	0.0010	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0040	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0142	0.0156	0.0073	0.0068	0.0008	0.0008	0.0008	0.0009	0.0009
Al	0.02	mg/L	0.19	0.06	0.02	0.02	0.18	0.15	0.11	0.15	0.17
Li	0.0009	mg/L	0.003	0.001	0.001	0.001	0.001	0.004	0.001	0.001	0.001
Ca	0.003	mg/L	141.82	75.89	56.50	25.02	19.36	13.13	15.85	11.26	13.90
Mg	0.001	mg/L	1.220	1.035	1.222	0.860	0.366	0.857	0.535	0.463	0.475
Co	0.00007	mg/L	0.0029	0.0013	0.0010	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	28.21	10.53	7.10	1.96	1.09	1.98	1.31	1.04	1.08
K	0.2	mg/L	12.60	4.90	4.10	1.40	0.80	0.80	1.00	0.80	1.10
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0009	0.0002	0.0003	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000
Sr	0.0003	mg/L	0.043	0.011	0.008	0.003	0.002	0.003	0.004	0.003	0.002
Si	0.04	mg/L	10.43	8.95	5.19	2.65	0.82	0.77	0.72	0.48	0.55
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1369839	Oxido Leach (Cola CLT)		SC	Ligeramente Acido						
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4	Semana 5	Semana 6	Semana 7	Semana 8	Semana 9
Volumen Solución	1	ml	841.98	809.48	770.26	776.91	765.93	769.7	780.15	785.42	792.72
pH @ 25° C	0.1	u pH	7.35	7.24	7.26	7.56	7.82	7.76	7.85	7.59	7.80
Conductividad @ 25°C	0.1	uS/cm	378	279	382	335	156	127	106	100	129
Sulfatos	0.01	mg/L	71.98	83.16	95.67	69.79	36.85	28.50	29.53	19.94	21.70
Nitrogeno amoniacal	0.004	mg/L	0.134	0.005	0.004	0.006	0.004	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.036	0.049	0.065	0.057	0.116	0.105	0.202	0.17	0.254
Nitrato	0.031	mg/L	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	19.10	10.80	18.60	15.20	13.10	14.50	18.80	17.10	19.30
Acidez (H2SO4)	0.5	mg/L	2.4	2.4	2.6	2.5	1.4	0.9	1.0	1.3	1.0
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.013	0.011	0.021	0.010	0.012	0.010	0.012	0.021	0.020
Bo	0.01	mg/L	0.37	0.40	0.31	0.28	0.02	0.01	0.03	0.02	0.03
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.005	0.004	0.007	0.004	0.002	0.007	0.003	0.002	0.002
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.005	0.033	0.022	0.024	0.034	0.053	0.003	0.002	0.024
Mn	0.0006	mg/L	0.0041	0.0019	0.0032	0.0018	0.0020	0.0024	0.0006	0.0006	0.0007
Hg	0.00003	mg/L	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0005	0.0006	0.0009	0.0005	0.0008	0.0003	0.0003	0.0004	0.0009
Ni	0.0004	mg/L	0.0021	0.0009	0.0008	0.0007	0.0004	0.0004	0.0004	0.0004	<0.0004
Pb	0.0003	mg/L	0.0008	0.0009	0.0008	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0030	0.0030	0.0040	0.0030	0.0020	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0124	0.0146	0.0157	0.0094	0.0062	0.0053	0.0031	0.0012	0.0029
Al	0.02	mg/L	0.02	0.02	0.02	0.02	0.06	0.05	0.03	0.04	0.02
Li	0.0009	mg/L	0.001	<0.0009	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	58.29	45.94	37.24	28.37	22.94	25.12	29.73	14.61	19.19
Mg	0.001	mg/L	1.016	0.861	1.068	0.718	0.370	0.390	0.341	0.266	0.370
Co	0.00007	mg/L	0.0049	0.0028	0.0039	0.0018	0.0010	0.0006	0.0009	0.0004	0.0004
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	14.97	6.53	10.47	5.53	3.60	1.89	2.31	1.47	1.53
K	0.2	mg/L	7.90	3.20	4.40	3.80	1.90	1.50	1.70	1.80	2.00
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0008	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	<0.00003
Sr	0.0003	mg/L	0.072	0.022	0.028	0.019	0.011	0.011	0.011	0.010	0.013
Si	0.04	mg/L	11.40	8.72	4.79	2.56	0.92	0.79	1.33	0.77	1.05
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Apéndice 8
Resultados Calidad de Agua de Proceso

Nro		1	2	3	4	5	6	7	8	9
Código DS		DS-1362760	DS-1364470	DS-1364813	DS-1364818	DS-1364822	DS-1369839	DS-1369841	DS-1372767	DS-1372768
NCV		Inerte/Neutral	Ligeramente Acido	Ligeramente Acido	Ligeramente Acido	Inerte/Neutral	Ligeramente Acido	Acido	Acido	Ligeramente Acido
Taladro		QUE-166	QUE-173	QUE-168	QUE-178	QUE-181	QUE-191	QUE-196	QUE-171	QUE-171
Desde		300	262	144	138.3	80.6	209.55	123.8	115.05	206.5
Hasta		344.5	289.5	175.8	165	115.5	240.8	152	125.5	216
Tipo		Oxido Leach CLT	Oxido Leach CLT	Oxido Leach CLT	Oxido Leach CLT	Oxido Leach CLT	Oxido Leach CLT	Oxido Leach CLT	Oxido Leach BRT	Oxido Leach BRT
Tiempo Lix (h)		240	456	384	336	336	168	168	72	72
CN Libre / p80		50 ppm, 1"	50 ppm, 1"	50 ppm, 1"	50 ppm, 1"	50 ppm, 1"	50 ppm, 1"	50 ppm, 1"	50ppm, 10M	50ppm, 10M
Analito	**Unidad**									
Cloruro	ppm	7.05	9.06	8.36	6.65	7.44	8.62	11.20		
Fluoruro	ppm	9.06	9.07	9.07	10.11	9.68	10.46	9.14		
N-NH3	ppm	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
N-Nitrato	ppm	N/A	3.000<	3.000<	N/A	N/A	3.000<	N/A		
N-Nitrito	ppm	N/A	3.000<	3.000<	N/A	N/A	3.000<	3.000<		
Sulfato	ppm	397	498	610	571	491	593	540		
CN Total	ppm	32.74	24.74	6.23	23.00	31.71	27.51	35.41		
CN WAD	ppm	28.60	20.23	3.06	18.50	17.53	22.87	32.03	57.54	58.08
Cianato	ppm	0.360	1.350	0.900	0.180	0.480	0.600	0.630		
Hg	ppb								36.454	30.935
Ag	ppm	0.008	0.003	0.004	0.001	0.003	0.003	0.004	0.005	0.015
Au	ppm								0.066	0.615
Cu	ppm	1.021	0.218	0.567	0.250	1.887	0.840	0.144	3.187	1.428
Al	ppm	0.182	1.210	0.682	0.843	0.186	2.119	4.547	6.051	2.522
As	ppm	1.340	0.034	0.047	0.000	0.000	0.015	0.000	0.000	0.000
B	ppm	0.430	0.410	0.409	0.432	0.450	0.438	0.708	1.675	1.762
Ba	ppm	0.023	0.020	0.014	0.019	0.010	0.016	0.041	0.004	0.010
Be	ppm	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
Bi	ppm	0.000	0.006	0.002	0.003	0.000	0.005	0.003	0.000	0.000
Ca	ppm	110.449	142.941	171.726	182.729	164.357	227.818	194.442	282.005	302.602
Cd	ppm	0.002	0.002	0.000	0.002	0.002	0.002	0.002	0.004	0.005
Co	ppm	0.051	0.040	0.052	0.029	0.009	0.019	0.013	0.018	0.000
Cr	ppm	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.003	0.000
Fe	ppm	0.036	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ga	ppm	0.000	0.001	0.000	0.000	0.000	0.000	0.001	0.016	0.000
K	ppm	2.049	3.330	12.409	4.057	2.928	6.480	5.816	18.621	24.820
Li	ppm	0.001	0.004	0.002	0.000	0.001	0.001	0.001	0.001	0.001
Mg	ppm	0.140	1.855	1.275	0.254	0.282	0.279	0.213	0.363	0.366
Mn	ppm	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.016	0.019
Mo	ppm	0.119	0.026	0.010	0.025	0.111	0.009	0.022	0.210	0.045
Na	ppm	49.319	51.013	62.378	46.211	47.627	23.165	38.819	92.521	104.551
Nb	ppm	0.010	0.000	0.000	0.007	0.000	0.006	0.007	0.003	0.005
Ni	ppm	0.052	0.021	0.039	0.016	0.392	0.023	0.013	0.000	0.000
Pb	ppm	0.000	0.000	0.004	0.014	0.000	0.008	0.011	0.000	0.008
Sb	ppm	0.000	0.001	0.000	0.000	0.010	0.000	0.000	0.000	0.000
Sc	ppm	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
Se	ppm	0.054	0.031	0.044	0.032	0.025	0.000	0.000	0.051	0.020
Sn	ppm	0.000	0.000	0.022	0.016	0.023	0.019	0.011	0.005	0.000
Sr	ppm	0.218	0.310	0.081	0.044	0.115	0.156	0.265	0.151	0.342
Te	ppm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.099	0.098
Ti	ppm	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.000
Tl	ppm	0.000	0.000	0.000	0.000	0.008	0.000	0.028	0.014	0.023
V	ppm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	ppm	0.694	0.000	0.000	0.000	2.460	0.012	0.002	0.172	0.150
Zn	ppm	1.069	0.002	0.000	0.000	1.374	0.143	0.194	0.073	0.089
Tiocianato	ppm	0.910	1.040	0.130	0.700	0.050	0.910	1.550		
TDS	ppm	620.000	690.000	840.000	865.000	790.000	955.000	850.000		
TSS	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000		

Yanacocha

Metallurgical Services

Para : Jorge Zuñiga, Lelis Abanto
Copia : Gilmar Guzmán, Leoncio Sevilla
De : Carolina Alva
Fecha : 22 de Julio, 2015
Tema : Caracterización Geoquímica del Depósito Chaquicocha Etapa 4

CARACTERIZACIÓN GEOQUÍMICA DEL DEPÓSITO CHAQUICOCHA ETAPA 4

1. Introducción

La etapa 4 del depósito Chaquicocha, también llamada Quecher Norte, está ubicada al norte de la etapa 3. Esta etapa está conformada principalmente por mineral óxido cuyo proceso será el de lixiviación en pilas (leach pads).

2. Métodos de Análisis

Los análisis geoquímicos realizados incluyen pruebas estáticas tales como Valor de Carbonato Neto (NCV, Net Carbonate Value), Procedimiento de Lixiviación por Precipitación Sintética (Synthetic Precipitation Leaching Procedure, SPLP), Generación de Ácido Neto Estático (NAG, Net Acid Generation) y el método cinético de Celdas de Humedad (HCT, Humidity Cell Test).

2.1 Valor de Carbonato Neto (NCV, ASTM E1915-11)

El NCV se determina a través de ensayos químicos de muestras minerales y desmonte para la determinación del Carbón Total y Carbón Residual después de pirólisis, del mismo modo se ensaya el Azufre Total y el Azufre residual después de pirolisis. Con estos resultado se determinará el Potencial de Neutralización Acida (ANP) y el Potencial de Generación de Acido (AGP) y el valor de NCV se calculará mediante las siguientes fórmulas:

$$ANP = 3.67*(Ctotal - Cresidual)$$
$$AGP = -1.37*(Stotal - Sresidual)$$
$$NCV = ANP + AGP$$

El resultado de NCV se clasifica de acuerdo a la Tabla 1 y según esta clasificación se determina si el material tiene potencial de generación de soluciones acidas, neutras o básicas.

Tabla 1 Rangos de clasificación del método NCV

Clasificación NCV	
Altamente ácido	NCV ≤ -5
Ácido	-5 < NCV ≤ -1
Ligeramente ácido	-1 < NCV ≤ -0.1
Inerte/Neutral	-0.1 < NCV < 0.1
Ligeramente básico	0.1 ≤ NCV < 1
Básico	1 ≤ NCV < 5
Altamente básico	NCV ≥ 5

2.2 *Procedimiento de Lixiviación por Precipitación Sintética (SPLP, US EPA 1312)*

El Procedimiento de Lixiviación por Precipitación Sintética (SPLP) es usado para evaluar el potencial de lixiviación de constituyentes inorgánicos (metales) desde materiales mineralizados o no mineralizados y que podrían tener impacto en las aguas superficiales y subterráneas. Este método provee un aseguramiento más realista de la movilidad bajo las actuales condiciones de campo, por ejemplo lo que ocurre cuando llueve o cuando nieva. El pH del fluido de extracción que se usa para esta prueba debe reflejar el pH en condiciones ácidas (el pH empleado fue 4.2), modificado según una mezcla 60/40 de ácidos sulfúrico y nítrico, en el cual el mineral y/o desmonte está siendo ensayado y almacenado.

2.3 *Generación de Ácido Neto Estático (NAG, Net Acid Generation)*

Esta prueba se emplea para determinar el equilibrio entre los componentes productores de ácido y los componentes consumidores de ácido en la roca. El sulfuro total contenido en la muestra se oxida con peróxido de hidrógeno, resultando en iones H^+:

$$S^{2-} \xrightarrow{H_2O_2} SO_4^{2-} + H^+$$

El ácido que produce la oxidación de sulfuros con peróxido de hidrógeno será neutralizado por los componentes neutralizantes, como los carbonatos. El pH de la solución será medido y en caso sea menos a 4.5, el ácido restante será titulado con NaOH y se determinará el contenido de total de H_2SO_4 ácido producido por tonelada de material. En algunos casos, se reportará la cantidad de ácido neutralizada desde el pH NAG hasta pH 4.5 y luego hasta pH 7.0.

2.4 *Ensayo de Celda de Humedad (HCT, ASTM D5744-07$^{\varepsilon 1}$)*

El ensayo de Celda de Humedad simula las condiciones climáticas a escala de laboratorio de forma controlada para promover la mineralización de una muestra mediante ciclos de aire húmedo y seco para simular la precipitación. La solución resultante se filtra y analiza. La prueba determinará el tiempo o la velocidad de generación de soluciones ácidas y la calidad del agua resultante (pH, metales, sulfatos, acidez, alcalinidad, conductividad, entre otros) a lo largo de 20 semanas de prueba.La muestra empleada consiste en un compósito de 2 kg y el tamaño de partícula ha sido modificado de acuerdo al tipo de mineral y proceso.

3. Selección de Muestras

Se seleccionaron compósitos de 66 taladros (ver Apéndice 2) distribuidos en el depósito según se muestra en la Figura 1 en el shape indicado como *Tajo Chaquicocha Etapa 4 (Tajo Quecher Norte)*. Las coordenadas de los taladros se encuentran en Datum WGS84.

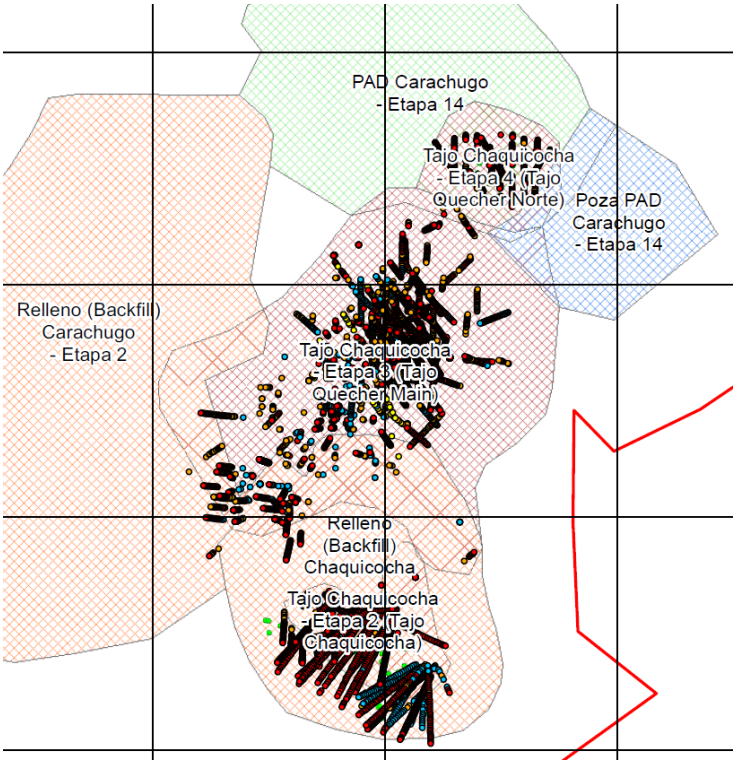


Figura 1 Distribución de muestras para caracterización geoquímica

El tipo de muestra está condicionado al método a realizar. Para el caso del ensayo de Valor de Carbonato Neto se emplearon compósitos de 10 metros obtenidos de muestras de cabeza de taladros tanto para desmonte y mineral. Una ley de oro mayor a 0.1 gpt clasificará una muestra como mineral, caso contrario, será clasificada como desmonte.

Para determinar la calidad de agua mediante los métodos SPLP y el ensayo de Celda de Humedad, se seleccionarán muestras representativas del tratamiento que se le dará al material. Los rechazos de taladros de baja concentración de oro (menor a 0.1 gpt) son las muestras más representativas para el caso de desmonte.

La selección de la muestra de mineral dependerá del proceso (lixiviación en pads o proceso Gold Mill). Para el caso del mineral a lixiviarse en el pad, se tomaron muestras de colas de columna o botella realizadas a condiciones representativas del proceso (un p80 de 10M o 1" y una concentración de cianuro libre de 50 ppm). Para el mineral a procesarse en la planta Gold Mill se tomaron muestras de colas de pruebas de botella a un p80 de 150 µm y a concentración de cianuro de acuerdo al tipo de mineral como se muestra en la Tabla 2.

Tabla 2 Selección de muestra para caracterización mediante SPLP/Celda de Humedad

Proceso	Tipo de Mineral	Muestra	p80	CN- Libre
Leach	Oxido	Cola BRT / CLT	10M o 1"	50 ppm
Gold Mill	Oxido	Cola BRT / CLT	150 µm	150 ppm
	Transitional			500 ppm
	Sulfuro			1000 ppm
Gold Mill - Flotación	Sulfuro	Cola de BRT con material flotado	150 µm	150 ppm
Desmonte	Desmonte	Muestra de taladro	10M	No aplica

4. Resultados

4.1 Resultados Valor de Carbonato Neto (NCV)

Se analizaron un total de 825 muestras de tramos de 10 metros pertenecientes a 66 taladros. El criterio empleado para separar el mineral del desmonte fue una ley mínima de 0.1 gpt. Un total de 200 fueron clasificadas como desmonte y un total de 625 fueron clasificadas como mineral. El resultado NCV de las muestras se encuentra en la Tabla 3. La distribución porcentual se muestra en la Figura 2.

Tabla 3 Clasificación de 3103 muestras de acuerdo al método NCV

CHQ 4	DESMONTE	MINERAL	TOTAL
ácido	104	340	444
ligeramente ácido	43	126	169
inerte/neutral	53	156	209
ligeramente básico		3	3
básico			
total	200	625	825

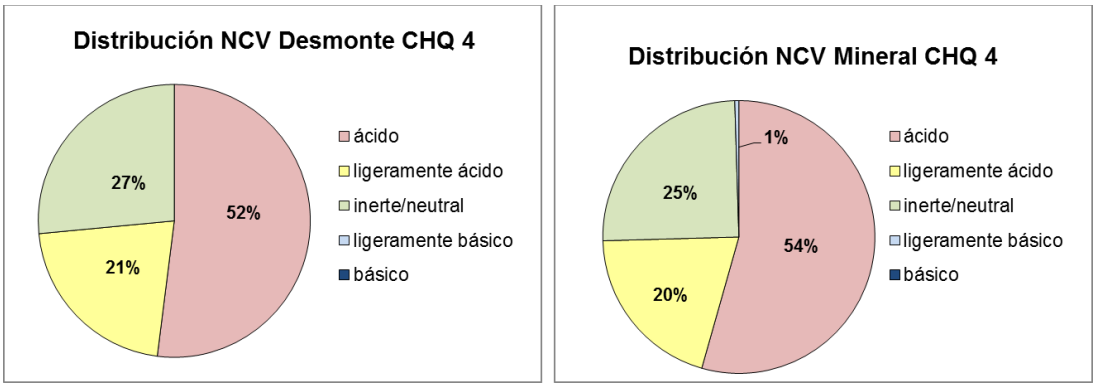


Figura 2 (A) Distribución Desmonte (B) Distribución NCV Mineral

Como se puede observar en la Tabla 3 y Figura 2, la distribución NCV entre mineral y desmonte es relativamente similar. En ambos casos, un porcentaje entre 52-54% de muestras fueron clasificadas como ácidas, es decir, con un potencial moderado para producir aguas ácidas. La fracción restante de muestras está distribuido mayormente entre material inerte y ligeramente básico. El material clasificado como inerte/neutro y varía entre 25-27%, mientras que para el material ligeramente ácido varía entre 20-21%.

4.2 Resultados Procedimiento de Lixiviación por Precipitación Sintética (SPLP)

Se analizaron un total de 15 muestras, de las cuales 06 fueron de desmonte y 09 de mineral según se muestra en la Tabla 4. Las 09 muestras de mineral pertenecen a colas de pruebas de botella de mineral óxido procesado a las condiciones de lixiviación en pads.

Tabla 4 Muestras de Mineral y Desmonte analizadas por el método SPLP

Nro	Código DS	Taladro	Desde	Hasta	NCV	NAG (kg H_2SO_4/t)	Alteración	Tipo
1	DS-1383318	QUE-028	10	20	Inerte/Neutral	6.41	SG	Desmonte
2	DS-1383319	QUE-028	22	32	Inerte/Neutral	6.71	SG	Desmonte
3	DS-1383320	QUE-033	14	24	Inerte/Neutral	7.29	SVG	Desmonte
4	DS-1383325	QUE-113	0	10	Inerte/Neutral	4.80	ARG	Desmonte
5	DS-1383326	QUE-113	10	20	Inerte/Neutral	4.76	ARG	Desmonte
6	DS-1383328	QUE-119	0	6	Acido	40.51	ARG	Desmonte
7	DS-1383317	QUE-022	14	24	Ligeramente Acido	5.46	SC	Ox leach (colas BRT)
8	DS-1383321	QUE-038	12	22	Acido	56.62	SC	Ox leach (colas BRT)
9	DS-1383322	QUE-039	2	8	Ligeramente Acido	24.27	SC	Ox leach (colas BRT)
10	DS-1383323	QUE-108	0	8	Inerte/Neutral	5.13	SG	Ox leach (colas BRT)
11	DS-1383324	QUE-110	4	14	Ligeramente Acido	5.60	SG	Ox leach (colas BRT)
12	DS-1383327	QUE-118	6	16	Ligeramente Acido	6.32	AA	Ox leach (colas BRT)
13	DS-1383329	QUE-122	10	20	Inerte/Neutral	4.82	AA	Ox leach (colas BRT)
14	DS-1383330	QUE-128	4	14	Acido	71.74	ARG	Ox leach (colas BRT)
15	DS-1383331	QUE-134	0	8	Acido	6.89	ARG	Ox leach (colas BRT)

La mayoría de los parámetros analizados en la solución SPLP, incluyendo el mercurio, se mantuvieron por debajo de los límites de detección. Los valores mínimos, máximos y promedio se muestran en la Tabla 5. Los resultados indican que a las condiciones de la prueba, el material analizado no tiene la capacidad de producir altas concentraciones de los componentes analizados. Las muestras de desmonte presentaron la mayor concentración de metales y aniones. Los resultados completos se encuentran en el Apéndice 5.

Tabla 5 Resumen resultados SPLP en mineral y desmonte

Analito	Unidad	DESMONTE (06 SPLP)			MINERAL (09 SPLP)		
		Max	Min	Promedio	Max	Min	Promedio
As	ppm	0.013	0.013	0.013	0.013	0.013	0.013
Hg		0.000	0.000	0.000	0.000	0.000	0.000
Pb		0.003	0.003	0.003	0.013	0.003	0.005
Cd		0.000	0.000	0.000	0.001	0.000	0.000
Cr		0.013	0.013	0.013	0.013	0.013	0.013
Mn		0.957	0.063	0.496	0.063	0.063	0.063
Mo		0.003	0.001	0.002	0.025	0.002	0.008
Co		0.050	0.001	0.009	0.004	0.001	0.002
V		0.013	0.013	0.013	0.013	0.013	0.013
pH final	-	6.6	4.7	6.1	8.6	7.6	8.0
Conductividad	µs/cm	251	32	75	245	64	127
ORP	mV	280	166	243	196	69	115

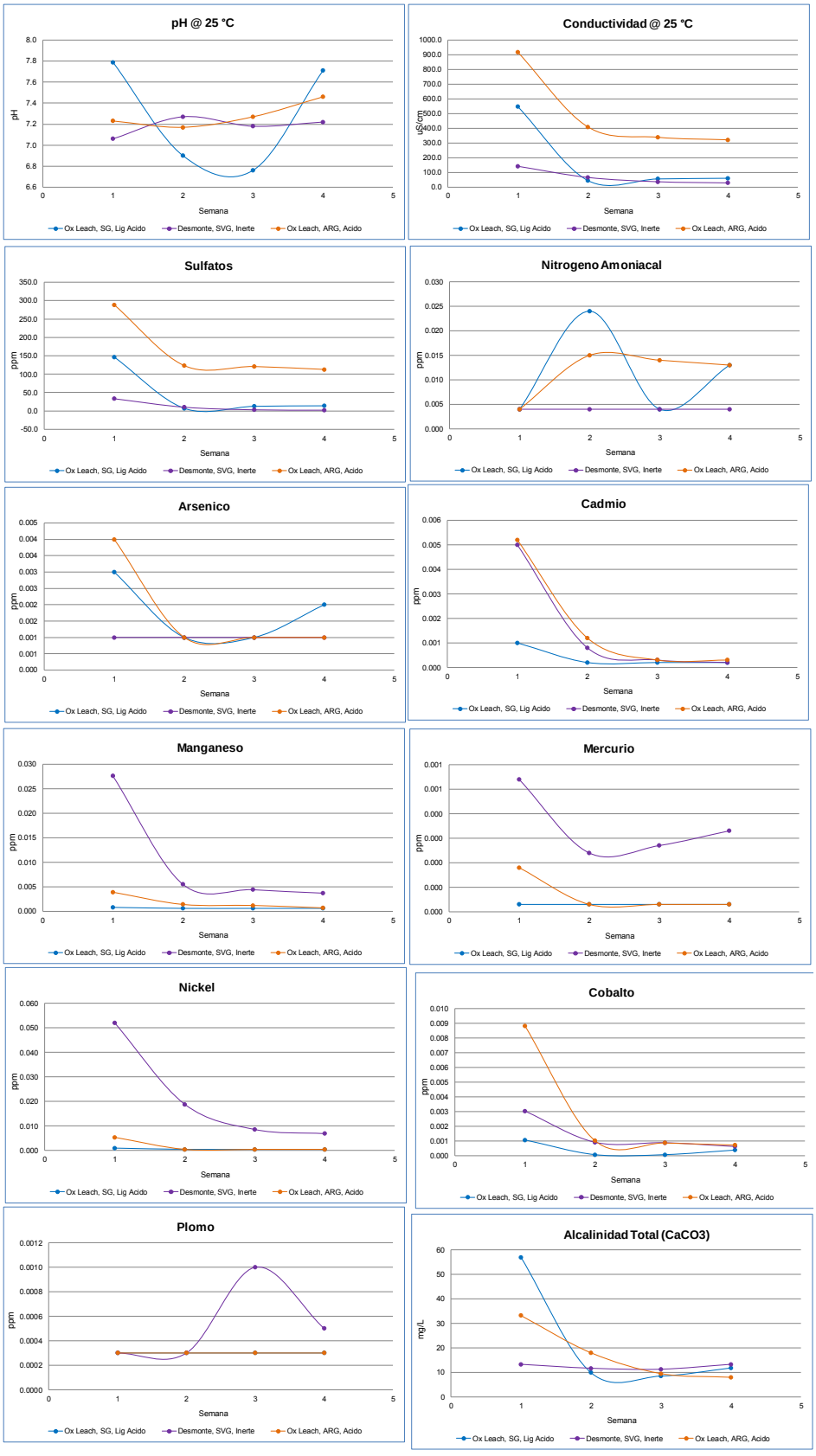
4.3 Resultados Ensayo de Celda de Humedad

Un total de 03 muestras, una de desmonte y dos de mineral, fueron enviadas a SGS Peru (Lima) para realizar el ensayo de Celda de Humedad. Los ensayos de cabeza de cada muestra se encuentran en la Tabla 6. A la fecha solo se tienen resultados de 04 semanas, los resultados se muestran en el Apéndice 5. La variación de concentración de los analitos se muestra en la Figura 3.

Tabla 6 Ensayos de cabeza a 03 muestras para el ensayo de Celda de Humedad

Código	DS-1383320	DS-1383324	DS-1383330
Taladro	QUE-033	QUE-110	QUE-128
Desde	14	4	4
Hasta	24	14	14
NCV	Inerte/Neutral	Ligeramente Acido	Acido
Alteración	SVG	SG	ARG
Material	Desmonte	Ox leach (cola BRT)	Ox leach (cola BRT)
pH pasta	6.50	8.40	8.30
Total S%	0.07	0.09	0.10
Sulfuro %	<0.01	<0.01	<0.01
S elemental %	0.0	0.1	0.0
kg H_2SO_4/ t (pH 4.5)	0.3	<0.1	<0.1
kg H_2SO_4/ t (pH 7.0)	3.9	1.5	1.3
NAG pH	4.10	6.40	6.70
NP/AP	0.76	2.13	2.76
Tipo material	Productor acido	Incierto	Incierto

Figura 3 Variación en la concentración de analitos a lo largo del ensayo HCT



4.4 *Resultados Análisis de Solución de Proceso*

El análisis de solución de proceso consistió en analizar los componentes de la solución final de una prueba de botella o columna a condiciones normales del proceso. Los metales totales se analizaron por ICP-34 y los aniones por Cromatografía Iónica.

En este caso el proceso de lixiviación en pilas será representado por la solución final de una BRT con un p80 de 10M realizada a 50 ppm de CN libre. Es importante resaltar que una prueba de botella es un sistema cerrado en el que los componentes disueltos se acumularán hasta que la concentración de oro se mantenga constante y eso significará que se ha llegado a la máxima extracción.

Para el depósito se presentan los resultados 09 muestras, todas de mineral óxido leach a las cual se realizó la prueba de botella como se muestra en la Tabla 7.

Tabla 7 Muestras de BRT para la determinación de calidad de agua de proceso

Código DS	NCV	Taladro	Desde	Hasta	Tipo	Tiempo lix (hrs)	CN Libre / p80
DS-1383317	Ligeramente Acido	QUE-022	14	24	Oxido Leach BRT	96	50ppm, 10M
DS-1383321	Acido	QUE-038	12	22	Oxido Leach BRT	96	50ppm, 10M
DS-1383322	Ligeramente Acido	QUE-039	2	8	Oxido Leach BRT	96	50ppm, 10M
DS-1383323	Inerte/Neutral	QUE-108	0	8.25	Oxido Leach BRT	96	50ppm, 10M
DS-1383324	Ligeramente Acido	QUE-110	4	14.25	Oxido Leach BRT	96	50ppm, 10M
DS-1383327	Ligeramente Acido	QUE-118	6	16	Oxido Leach BRT	96	50ppm, 10M
DS-1383329	Inerte/Neutral	QUE-122	10	20	Oxido Leach BRT	96	50ppm, 10M
DS-1383330	Acido	QUE-128	4	14	Oxido Leach BRT	96	50ppm, 10M
DS-1383331	Acido	QUE-134	0	8	Oxido Leach BRT	96	50ppm, 10M

El resumen de los resultados se muestra en la Tabla 8. Los valores de mercurio y cobre se muestran altos debido a la alta disolución de este metal en presencia de cianuro. En ausencia de fierro, se observa que los valores de CN WAD y total son similares. El análisis completo se encuentra en el Apéndice 7.

Tabla 8 Resumen resultados solución de proceso

Analito	Unidad	Oxido Leach BRT (9 muestras)		
		Max	Min	Promedio
CN WAD	ppm	134.9	54.9	78.9
CN Total		134.9	54.9	78.9
Sulfatos		1539	318	537
As		0.403	0.000	0.072
Cd		0.008	0.000	0.003
Ni		0.121	0.008	0.042
Hg		14.460	1.201	9.715
Cu		128.572	0.609	22.406
Pb		0.028	0.000	0.007
TDS		2245	375	917

5. Conclusiones

- Se analizaron un total de 200 muestras de desmonte y 625 muestras de mineral por el método NCV. La distribución NCV fue similar para ambos tipos de material, con un 52-54% aproximadamente de material ácido y con un 25-27% de material inerte o neutral.
- Se analizaron 15 muestras por el método SPLP, de las cuales 06 fueron de desmonte y 09 de mineral. Las concentraciones de la mayoría de parámetros analizados fueron menores al límite de detección.
- Se analizaron 03 muestras por el ensayo de Celda de Humedad, las cuales han completado solo 04 ciclos a la fecha.
- Se analizó la solución final de 09 pruebas BRT a condiciones óxido leach. Es importante resaltar que la BRT es un sistema cerrado y por tanto los resultados representan la disolución total de la muestra.

Apéndice 1
Tabla de Acrónimos

SPLP	Synthetic Precipitation Leaching Procedure, en español: Procedimiento de Lixiviación por Precipitación Sintética
HCT	Humidity Cell Test, en español: ensayo de Celda de Humedad
NCV	Net Carbonate Value, en español: Valor de Carbonato Neto
PPM	Partes por millón
CLT	Column Leach Test, en español: prueba de lixiviación en columna
BRT	Bottle Roll Test, en español: prueba de lixiviación en botella

Apéndice 2 Identificación de taladros perforados en Chaquicocha 4

Nro	Taladro	Este	Norte	Elevación
1	CAMYBH1502	18992.5	27855.7	3972.7
2	CHQ3PZ01	18684.9	27759.5	4021.5
3	CHQ4PZ02	18916.9	27786.8	3987.5
4	DST-133	18675.6	27772.3	4023.8
5	DST-142	18819.9	27745.7	4001.1
6	DST-146	18964.1	27930.4	3986.0
7	DST-147	18766.5	27837.7	3995.8
8	QUE-012	18699.8	28036.8	3992.5
9	QUE-019	18504.8	27917.4	4040.8
10	QUE-022	18749.9	27798.7	4000.9
11	QUE-023	18767.9	28011.8	3993.2
12	QUE-025	18955.7	27904.0	3980.9
13	QUE-026	18523.0	27979.7	4019.6
14	QUE-028	18659.6	27911.3	4012.5
15	QUE-033	18655.9	27913.5	4012.7
16	QUE-036	18752.2	27895.9	3999.0
17	QUE-037	18554.9	27802.2	4043.1
18	QUE-038	18797.8	27833.8	3989.6
19	QUE-039	18604.1	27851.2	4032.5
20	QUE-040	18692.2	27861.4	4015.5
21	QUE-045	18650.1	27800.0	4030.0
22	QUE-051	18597.6	27979.0	4014.7
23	QUE-055	18651.0	27695.6	4027.7
24	QUE-056	18542.0	28092.3	4011.3
25	QUE-061	18844.9	27749.1	3996.0
26	QUE-108	18711.8	27896.1	4007.5
27	QUE-109	18703.9	27970.2	3993.4
28	QUE-110	18749.6	27843.6	3999.5
29	QUE-111	18599.9	27929.6	4021.8
30	QUE-112	18600.0	27888.4	4023.7
31	QUE-113	18650.2	27856.1	4025.8
32	QUE-114	18650.2	28010.9	3999.2
33	QUE-115	18549.8	27904.0	4035.8
34	QUE-116	18551.8	27854.7	4033.9
35	QUE-117	18800.8	27931.9	3989.3
36	QUE-118	18701.4	27811.8	4012.9
37	QUE-119	18800.4	27886.8	3989.1
38	QUE-120	18649.8	27960.3	4006.8
39	QUE-121	18799.9	27734.7	4004.1
40	QUE-122	18749.9	27949.6	3995.1
41	QUE-123	18849.7	27794.5	3989.9
42	QUE-124	18849.9	27901.1	3980.1
43	QUE-125	18898.0	27791.7	3990.7
44	QUE-126	18549.9	27955.4	4028.8
45	QUE-127	18899.9	27843.5	3975.5
46	QUE-128	18851.4	27851.1	3980.7
47	QUE-129	18900.7	27949.8	3979.3
48	QUE-130	18600.1	28028.0	4002.1
49	QUE-131	18550.2	28003.6	4013.3
50	QUE-132	18650.2	27749.8	4027.2
51	QUE-133	18799.5	27811.0	3989.6
52	QUE-134	18750.0	27755.1	4006.8
53	QUE-135	18850.0	27951.0	3978.7
54	QUE-136	18650.0	28055.0	3994.9
55	QUE-137	18499.7	27750.2	4053.3
56	QUE-138	18799.1	27986.6	3990.9
57	QUE-139	18908.5	27997.3	3993.1
58	QUE-140	18921.5	27900.3	3976.5
59	QUE-142	18537.6	27820.4	4041.2
60	QUE-143	18591.9	27733.6	4034.4
61	QUE-147	18800.0	28027.9	3993.8
62	QUE-148	18849.8	28003.2	3990.0
63	QUE-149	18961.5	27954.5	3992.1
64	QUE-150	18750.1	28063.2	3996.0
65	QUE-151	18713.5	28092.9	3997.8
66	STZ-092	18464.4	27988.3	4022.2
67	STZ-093	18766.9	27837.0	3995.9
68	STZ-094	18913.3	27795.6	3987.6

Apéndice 3
Resultados Análisis NCV de Muestras de Desmonte

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1	DST-133	3.6	6.0	600	50	49900	26200	-3.6	ACIDO	0.06
2	DST-133	6.0	8.0	500	50	56600	23400	-3.2	ACIDO	0.09
3	DST-133	18.0	20.0	500	200	52000	35100	-4.7	ACIDO	0.10
4	DST-133	20.0	22.0	500	50	59200	30300	-4.1	ACIDO	0.08
5	DST-133	27.8	30.0	300	50	2000	1100	-0.1	LIGERAMENTE ACIDO	0.09
6	DST-133	38.0	40.0	400	50	18800	10500	-1.4	ACIDO	0.07
7	DST-133	44.0	44.6	800	50	22200	12000	-1.6	ACIDO	0.10
8	DST-133	46.0	48.0	1100	50	2300	700	-0.1	INERTE	0.09
9	DST-133	64.0	65.5	1200	50	2700	700	-0.1	INERTE	0.09
10	DST-133	65.5	66.0	1100	50	15200	8200	-1.1	ACIDO	0.09
11	DST-133	86.0	87.1	300	50	1200	800	-0.1	NEUTRAL	0.10
12	DST-133	142.3	144.0	50	50	14300	8200	-1.1	ACIDO	0.10
13	DST-133	144.0	146.0	50	50	2500	1500	-0.2	LIGERAMENTE ACIDO	0.07
14	DST-133	158.0	160.0	200	50	400	100	0.0	INERTE	0.09
15	DST-133	160.0	162.0	50	50	500	200	0.0	INERTE	0.06
16	DST-133	162.0	163.7	300	100	500	200	0.0	INERTE	0.06
17	DST-133	163.7	166.0	200	50	600	300	0.0	INERTE	0.06
18	DST-133	181.9	184.0	900	50	87800	47600	-6.5	ACIDO	0.09
19	DST-133	202.0	204.0	400	50	500	200	0.0	INERTE	0.10
20	DST-133	204.0	206.0	400	50	400	0	0.0	INERTE	0.07
21	DST-133	286.0	288.0	400	50	700	500	-0.1	INERTE	0.10
22	DST-133	290.0	292.0	200	50	1200	1100	-0.1	LIGERAMENTE ACIDO	0.10
23	DST-133	351.3	352.0	300	50	300	100	0.0	INERTE	0.10
24	DST-133	354.0	356.0	200	50	300	200	0.0	INERTE	0.09
25	QUE-055	20.0	30.0	300	200	200	100	0.1	INERTE	0.02
26	QUE-111	0.0	8.0	460	200	560	100	0.1	INERTE	0.09
27	QUE-111	15.8	24.0	240	200	1190	100	0.1	INERTE	0.09
28	QUE-111	24.0	32.0	410	200	1300	100	0.1	INERTE	0.03
29	QUE-111	32.0	40.0	390	200	1000	100	0.1	INERTE	0.02
30	QUE-111	40.0	48.0	460	200	680	100	0.1	INERTE	0.02
31	QUE-111	80.0	88.0	860	200	340	100	0.1	INERTE	0.10
32	QUE-111	104.0	112.2	560	200	2050	100	0.1	INERTE	0.07
33	QUE-111	112.2	120.0	520	200	12000	2100	-0.2	LIGERAMENTE ACIDO	0.06
34	QUE-111	120.0	127.9	720	200	17700	3300	-0.4	LIGERAMENTE ACIDO	0.07
35	QUE-111	127.9	136.0	720	200	6980	580	0.0	INERTE	0.04
36	QUE-111	136.0	140.0	390	300	1150	250	0.1	INERTE	0.04
37	QUE-112	8.0	16.0	580	200	760	100	0.1	INERTE	0.07
38	QUE-112	16.0	24.0	490	200	820	100	0.1	INERTE	0.03
39	QUE-112	24.0	32.1	370	200	690	100	0.1	INERTE	0.02
40	QUE-112	32.1	40.2	640	200	570	100	0.1	INERTE	0.04
41	QUE-112	56.2	64.0	840	200	1390	100	0.1	INERTE	0.06
42	QUE-112	64.0	72.0	620	200	24800	5400	-0.7	LIGERAMENTE ACIDO	0.05
43	QUE-112	72.0	80.0	830	200	18500	11900	-1.6	ACIDO	0.10
44	QUE-112	80.0	88.0	550	200	18100	8200	-1.1	ACIDO	0.02
45	QUE-112	88.0	96.0	430	200	19600	12400	-1.6	ACIDO	0.04
46	QUE-113	0.0	7.7	1400	200	4500	100	0.1	INERTE	0.05
47	QUE-113	48.0	56.0	300	200	800	100	0.1	INERTE	0.06
48	QUE-114	66.2	74.0	1200	200	36300	32100	-4.3	ACIDO	0.10
49	QUE-115	56.0	64.0	500	200	11500	3400	-0.4	LIGERAMENTE ACIDO	0.05
50	QUE-115	64.0	72.0	500	200	13200	6800	-0.9	LIGERAMENTE ACIDO	0.05
51	QUE-115	72.0	80.0	500	200	7900	4700	-0.6	LIGERAMENTE ACIDO	0.04
52	QUE-116	8.4	16.0	1300	200	2400	100	0.1	INERTE	0.03
53	QUE-116	16.0	23.7	1100	200	13600	8200	-1.1	ACIDO	0.03
54	QUE-116	23.7	31.6	900	200	10000	6400	-0.8	LIGERAMENTE ACIDO	0.02
55	QUE-116	31.6	40.0	1700	200	25800	23000	-3.1	ACIDO	0.03
56	QUE-116	40.0	48.0	1900	200	35000	31700	-4.3	ACIDO	0.04
57	QUE-116	48.0	56.0	2000	200	36700	32700	-4.4	ACIDO	0.05
58	QUE-116	56.0	64.0	1200	200	40900	36100	-4.9	ACIDO	0.05
59	QUE-116	64.0	74.8	700	200	39400	35800	-4.8	ACIDO	0.04
60	QUE-117	0.0	8.3	1090	200	12800	2100	-0.2	LIGERAMENTE ACIDO	0.09
61	QUE-117	8.3	16.0	1030	200	30600	23700	-3.2	ACIDO	0.03
62	QUE-117	16.0	24.0	840	200	26600	23000	-3.1	ACIDO	0.02
63	QUE-117	24.0	31.6	810	200	37100	34800	-4.7	ACIDO	0.03
64	QUE-117	31.6	40.0	680	200	36000	33200	-4.5	ACIDO	0.04
65	QUE-117	40.0	48.0	600	200	37400	31600	-4.3	ACIDO	0.08
66	QUE-117	48.0	56.0	820	200	40100	37300	-5.0	ACIDO	0.03
67	QUE-117	56.0	64.0	530	200	41100	37400	-5.1	ACIDO	0.10
68	QUE-117	80.0	88.0	790	200	36600	32800	-4.4	ACIDO	0.08
69	QUE-117	88.0	96.0	1350	200	35600	31000	-4.2	ACIDO	0.08
70	QUE-117	96.0	104.0	640	200	16500	14600	-1.9	ACIDO	0.08
71	QUE-120	48.1	56.0	830	200	44800	41100	-5.6	ACIDO	0.06
72	QUE-120	56.0	64.2	1230	200	23100	19300	-2.6	ACIDO	0.09
73	QUE-121	8.0	16.0	830	200	25500	6800	-0.9	LIGERAMENTE ACIDO	0.03
74	QUE-121	16.0	24.0	770	200	19800	9000	-1.2	ACIDO	0.05
75	QUE-121	24.0	31.6	920	200	22200	16800	-2.2	ACIDO	0.04
76	QUE-121	31.6	40.4	1010	200	17500	13500	-1.8	ACIDO	0.02
77	QUE-121	40.4	48.0	920	200	38800	33700	-4.5	ACIDO	0.02
78	QUE-121	48.0	56.0	710	200	20900	10900	-1.4	ACIDO	0.01
79	QUE-121	56.0	64.0	510	200	54500	10200	-1.3	ACIDO	0.02
80	QUE-121	64.0	70.0	490	200	41700	9300	-1.2	ACIDO	0.04
81	QUE-122	32.2	40.0	1140	200	14700	5500	-0.7	LIGERAMENTE ACIDO	0.09
82	QUE-122	40.0	48.0	640	200	23300	19100	-2.5	ACIDO	0.04
83	QUE-122	48.0	56.7	720	200	9600	5000	-0.6	LIGERAMENTE ACIDO	0.04
84	QUE-122	56.7	64.0	780	200	19000	13700	-1.8	ACIDO	0.07
85	QUE-122	64.0	72.1	590	200	33000	29300	-3.9	ACIDO	0.04
86	QUE-122	72.1	80.0	510	200	25800	20200	-2.7	ACIDO	0.06
87	QUE-122	80.0	87.9	720	200	4900	100	0.1	INERTE	0.06
88	QUE-122	95.8	104.0	2350	300	24600	20100	-2.6	ACIDO	0.07
89	QUE-122	104.0	112.0	520	200	29800	25800	-3.5	ACIDO	0.08
90	QUE-122	128.0	136.0	900	200	32800	28600	-3.8	ACIDO	0.06
91	QUE-123	32.0	40.0	420	200	20400	3700	-0.4	LIGERAMENTE ACIDO	0.06
92	QUE-123	40.0	48.3	570	200	3090	100	0.1	INERTE	0.09
93	QUE-123	64.0	72.0	770	200	45700	8900	-1.1	ACIDO	0.04
94	QUE-123	72.0	80.0	940	200	13000	7400	-0.9	LIGERAMENTE ACIDO	0.02
95	QUE-123	80.0	88.0	790	200	16600	8400	-1.1	ACIDO	0.03
96	QUE-123	88.0	95.0	700	200	17600	3100	-0.4	LIGERAMENTE ACIDO	0.03
97	QUE-124	88.0	96.0	620	200	20700	17900	-2.4	ACIDO	0.08
98	QUE-124	96.0	104.0	580	200	21300	18700	-2.5	ACIDO	0.09
99	QUE-124	104.0	112.0	600	200	11600	9100	-1.2	ACIDO	0.08
100	QUE-125	8.5	16.3	640	200	49200	10500	-1.4	ACIDO	0.08
101	QUE-125	16.3	24.0	1030	200	4790	100	0.1	INERTE	0.07
102	QUE-125	24.0	32.0	600	200	21300	5300	-0.7	LIGERAMENTE ACIDO	0.08
103	QUE-125	32.0	39.9	740	200	23300	5300	-0.7	LIGERAMENTE ACIDO	0.05
104	QUE-125	39.9	48.0	670	200	3610	100	0.1	INERTE	0.06
105	QUE-125	48.0	56.0	720	200	21000	3200	-0.4	LIGERAMENTE ACIDO	0.05
106	QUE-125	56.0	64.0	850	300	18500	2200	-0.2	LIGERAMENTE ACIDO	0.07
107	QUE-125	64.0	72.0	770	300	25700	6200	-0.7	LIGERAMENTE ACIDO	0.04
108	QUE-125	72.0	80.0	760	200	25700	6500	-0.8	LIGERAMENTE ACIDO	0.02
109	QUE-125	80.0	88.0	750	200	12500	4000	-0.5	LIGERAMENTE ACIDO	0.02
110	QUE-125	88.0	96.0	710	200	44900	17000	-2.3	ACIDO	0.02
111	QUE-125	96.0	100.0	650	200	50800	12900	-1.7	ACIDO	0.04
112	QUE-126	8.2	16.0	1200	200	25200	20100	-2.7	ACIDO	0.09
113	QUE-126	24.0	32.0	900	200	7800	500	0.0	INERTE	0.07
114	QUE-126	32.0	40.0	500	200	400	100	0.1	INERTE	0.04
115	QUE-126	40.0	48.0	600	200	500	100	0.0	INERTE	0.10
116	QUE-127	10.0	17.9	800	200	22600	9500	-1.2	ACIDO	0.08
117	QUE-127	17.9	25.9	700	200	37600	15200	-2.0	ACIDO	0.08
118	QUE-127	50.0	58.2	800	200	9400	3500	-0.4	LIGERAMENTE ACIDO	0.04
119	QUE-127	58.2	66.0	700	200	19100	10000	-1.3	ACIDO	0.09
120	QUE-127	66.0	74.0	600	200	41300	36700	-5.0	ACIDO	0.05
121	QUE-127	74.0	80.0	500	200	41800	37300	-5.0	ACIDO	0.07
122	QUE-128	106.0	110.0	700	200	57400	51700	-7.0	ACIDO	0.05
123	QUE-129	8.0	16.0	1100	200	38000	9200	-1.2	ACIDO	0.07
124	QUE-131	0.3	8.0	800	200	17500	14100	-1.9	ACIDO	0.07
125	QUE-131	32.0	40.0	800	200	26200	23300	-3.1	ACIDO	0.09
126	QUE-131	40.0	48.0	600	200	10400	8400	-1.1	ACIDO	0.05
127	QUE-132	0.0	8.0	2200	200	16700	4200	-0.5	LIGERAMENTE ACIDO	0.08
128	QUE-132	8.0	16.0	1000	200	6900	1200	-0.1	INERTE	0.07
129	QUE-132	16.0	24.0	700	200	2700	100	0.1	INERTE	0.05
130	QUE-132	24.0	32.0	700	200	500	100	0.1	INERTE	0.04
131	QUE-132	63.8	70.0	1000	200	9000	200	0.0	INERTE	0.04
132	QUE-133	64.0	72.0	700	300	28100	6800	-0.8	LIGERAMENTE ACIDO	0.06
133	QUE-133	72.0	80.0	600	200	21700	16400	-2.2	ACIDO	0.07
134	QUE-134	24.2	32.0	1060	200	3790	100	0.1	INERTE	0.05
135	QUE-134	32.0	40.0	1220	200	22600	4100	-0.5	LIGERAMENTE ACIDO	0.05
136	QUE-134	40.0	48.0	650	200	26000	15900	-2.1	ACIDO	0.04
137	QUE-134	48.0	56.0	710	200	20500	5600	-0.7	LIGERAMENTE ACIDO	0.04
138	QUE-134	56.0	60.0	670	200	6050	100	0.1	INERTE	0.03
139	QUE-137	1.8	8.0	830	300	11600	100	0.1	INERTE	0.10
140	QUE-137	8.0	16.4	430	200	25900	3200	-0.4	LIGERAMENTE ACIDO	0.06
141	QUE-137	24.0	32.0	520	200	13100	1600	-0.1	LIGERAMENTE ACIDO	0.06
142	QUE-137	32.0	40.0	510	200	42700	14800	-2.0	ACIDO	0.06
143	QUE-137	40.0	47.6	280	200	58300	7800	-1.0	LIGERAMENTE ACIDO	0.03
144	QUE-137	47.6	56.0	490	200	16400	1800	-0.2	LIGERAMENTE ACIDO	0.05
145	QUE-137	56.0	64.0	850	200	35700	7900	-1.0	ACIDO	0.05
146	QUE-137	64.0	72.1	300	200	21000	2500	-0.3	LIGERAMENTE ACIDO	0.06
147	QUE-137	72.1	80.3	400	200	41100	10500	-1.4	ACIDO	0.04
148	QUE-137	80.3	88.0	350	200	28000	3700	-0.4	LIGERAMENTE ACIDO	0.03
149	QUE-137	88.0	96.3	660	200	18500	2300	-0.2	LIGERAMENTE ACIDO	0.06
150	QUE-137	104.2	112.1	640	200	11800	100	0.1	INERTE	0.04
151	QUE-137	112.1	120.0	200	200	53400	11100	-1.4	ACIDO	0.10
152	QUE-137	120.0	128.0	460	200	15800	500	0.0	INERTE	0.04
153	QUE-137	128.0	136.0	440	200	37700	8100	-1.0	ACIDO	0.08
154	QUE-137	136.0	144.0	670	200	25900	5100	-0.6	LIGERAMENTE ACIDO	0.06
155	QUE-137	168.3	176.0	450	200	220	100	0.1	INERTE	0.06
156	QUE-137	216.0	223.7	440	200	1410	210	0.0	INERTE	0.06
157	QUE-138	88.0	96.0	600	200	19300	17200	-2.3	ACIDO	0.08
158	QUE-138	96.0	100.1	700	200	14400	12300	-1.6	ACIDO	0.08
159	QUE-139	24.0	32.4	1100	200	10600	6500	-0.8	LIGERAMENTE ACIDO	0.03
160	QUE-139	32.4	39.8	900	300	42500	29800	-4.0	ACIDO	0.08
161	QUE-139	39.8	48.0	1100	200	40300	35800	-4.8	ACIDO	0.06
162	QUE-139	48.0	56.0	1000	300	45500	33600	-4.5	ACIDO	0.04
163	QUE-139	112.0	119.9	1800	200	29000	25900	-3.5	ACIDO	0.08
164	QUE-140	80.0	88.0	470	300	20700	17400	-2.3	ACIDO	0.03
165	QUE-140	88.0	96.0	550	300	21600	17900	-2.3	ACIDO	0.02
166	QUE-140	96.0	101.2	500	300	17000	15400	-2.0	ACIDO	0.03
167	QUE-142	206.0	214.0	360	200	44190	34930	-4.7	ACIDO	0.06
168	QUE-142	214.0	222.0	650	200	33220	30540	-4.1	ACIDO	0.06
169	QUE-142	222.0	230.0	370	200	39930	29950	-4.0	ACIDO	0.07
170	QUE-142	230.0	238.0	610	200	33690	30160	-4.1	ACIDO	0.03
171	QUE-142	261.9	262.0	530	200	14860	1880	-0.2	LIGERAMENTE ACIDO	0.10
172	QUE-142	294.0	302.0	200	200	6100	600	0.0	INERTE	0.10
173	QUE-143	232.0	240.0	500	30	38770	24980	-3.4	ACIDO	0.05
174	QUE-143	248.0	256.0	470	5	20630	4850	-0.7	LIGERAMENTE ACIDO	0.03
175	QUE-143	264.0	272.0	980	20	34410	16330	-2.2	ACIDO	0.04
176	QUE-143	272.0	280.0	360	140	50210	35080	-4.8	ACIDO	0.03
177	QUE-143	280.0	288.0	520	90	46090	40690	-5.5	ACIDO	0.09
178	QUE-143	288.0	296.0	530	170	45930	40230	-5.4	ACIDO	0.03
179	QUE-143	296.0	304.0	500	20	40470	37230	-5.1	ACIDO	0.03
180	QUE-143	304.0	312.0	610	200	69620	51470	-7.0	ACIDO	0.08
181	QUE-143	408.0	416.0	540	90	4840	410	0.0	INERTE	0.08
182	QUE-143	416.0	416.1	540	90	4840	410	0.0	INERTE	0.09
183	QUE-143	424.0	432.0	540	130	9250	40	0.0	INERTE	0.06
184	QUE-143	432.0	440.0	290	100	15620	2470	-0.3	LIGERAMENTE ACIDO	0.08
185	QUE-148	0.0	8.0	3430	250	3060	0	0.1	INERTE	0.06
186	QUE-148	8.0	15.7	1170	210	25900	22970	-3.1	ACIDO	0.04
187	QUE-148	15.7	24.0	1070	220	30640	24420	-3.3	ACIDO	0.07
188	QUE-148	47.9	56.0	3100	240	15970	3990	-0.5	LIGERAMENTE ACIDO	0.07
189	QUE-148	72.0	82.0	440	440	7760	5720	-0.6	LIGERAMENTE ACIDO	0.10
190	QUE-149	0.0	8.0	3510	280	26370	18500	-2.4	ACIDO	0.07
191	QUE-149	16.0	24.2	1840	250	32560	29850	-4.0	ACIDO	0.08
192	QUE-149	24.2	32.1	1520	200	36450	34580	-4.7	ACIDO	0.06
193	QUE-149	32.1	40.0	1160	200	40710	37470	-5.1	ACIDO	0.03
194	QUE-149	40.0	48.0	1170	250	22600	18090	-2.4	ACIDO	0.08
195	STZ-092	8.0	20.0	700	50	35000	19200	-2.6	ACIDO	0.02
196	STZ-092	20.0	30.0	700	50	22400	11400	-1.5	ACIDO	0.03
197	STZ-092	30.0	39.9	1400	50	23400	11300	-1.5	ACIDO	0.08
198	STZ-092	39.9	50.0	2400	50	31100	19500	-2.7	ACIDO	0.04
199	STZ-092	50.0	60.0	1900	50	27000	17500	-2.4	ACIDO	0.08
200	STZ-092	90.0	100.0	900	50	22100	11100	-1.5	ACIDO	0.07

Apéndice 4
Resultados Análisis NCV de Muestras de Mineral

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
201	DST-133	8.0	10.0	500	50	54400	26800	-3.7	ACIDO	0.11
202	DST-133	10.0	12.0	500	50	50700	28500	-3.9	ACIDO	0.14
203	DST-133	12.0	14.0	500	50	55200	34800	-4.7	ACIDO	0.20
204	DST-133	14.0	16.0	1000	50	51600	33500	-4.6	ACIDO	0.24
205	DST-133	16.0	18.0	700	50	54300	35000	-4.8	ACIDO	0.36
206	DST-133	22.0	24.0	300	50	57600	27200	-3.7	ACIDO	0.14
207	DST-133	24.0	26.0	300	50	60500	30000	-4.1	ACIDO	0.21
208	DST-133	26.0	27.8	400	50	57800	32300	-4.4	ACIDO	0.12
209	DST-133	30.0	32.0	600	50	45900	24600	-3.4	ACIDO	0.13
210	DST-133	32.0	34.0	700	50	48600	25200	-3.4	ACIDO	0.11
211	DST-133	34.0	36.0	500	50	38500	20500	-2.8	ACIDO	0.15
212	DST-133	36.0	38.0	400	50	61400	33600	-4.6	ACIDO	0.14
213	DST-133	40.0	42.0	300	50	22500	14400	-2.0	ACIDO	0.14
214	DST-133	42.0	44.0	600	50	47100	28500	-3.9	ACIDO	0.17
215	DST-133	44.6	46.0	1000	50	4500	1800	-0.2	LIGERAMENTE ACIDO	0.15
216	DST-133	48.0	50.0	1200	50	3800	1700	-0.2	LIGERAMENTE ACIDO	0.20
217	DST-133	50.0	52.0	2000	50	8900	5000	-0.7	LIGERAMENTE ACIDO	0.23
218	DST-133	52.0	54.0	800	50	3600	1400	-0.2	LIGERAMENTE ACIDO	0.19
219	DST-133	54.0	54.6	1300	50	5900	3000	-0.4	LIGERAMENTE ACIDO	0.25
220	DST-133	54.6	56.1	1200	50	8200	4700	-0.6	LIGERAMENTE ACIDO	0.37
221	DST-133	56.1	58.0	900	50	4900	2200	-0.3	LIGERAMENTE ACIDO	0.44
222	DST-133	58.0	60.0	1000	50	6800	3200	-0.4	LIGERAMENTE ACIDO	1.28
223	DST-133	60.0	62.0	1000	50	6200	3000	-0.4	LIGERAMENTE ACIDO	0.64
224	DST-133	62.0	64.0	1000	50	4600	1900	-0.2	LIGERAMENTE ACIDO	0.17
225	DST-133	66.0	68.0	900	50	9400	5100	-0.7	LIGERAMENTE ACIDO	0.12
226	DST-133	68.0	70.0	1000	50	17100	8200	-1.1	ACIDO	0.15
227	DST-133	70.0	70.7	900	50	29100	14000	-1.9	ACIDO	0.10
228	DST-133	70.7	71.9	600	50	44300	19800	-2.7	ACIDO	0.12
229	DST-133	71.9	74.0	1000	50	53800	18500	-2.5	ACIDO	0.14
230	DST-133	74.0	76.0	700	50	41100	17700	-2.4	ACIDO	0.17
231	DST-133	76.0	78.3	400	50	44200	18600	-2.5	ACIDO	0.28
232	DST-133	78.3	80.0	400	50	59100	23400	-3.2	ACIDO	0.28
233	DST-133	80.0	82.0	200	100	59900	20300	-2.7	ACIDO	0.13
234	DST-133	82.0	83.1	300	50	59600	16900	-2.3	ACIDO	0.16
235	DST-133	83.1	84.0	200	50	5500	3100	-0.4	LIGERAMENTE ACIDO	0.29
236	DST-133	84.0	86.0	300	50	1100	600	-0.1	INERTE	0.14
237	DST-133	87.1	88.0	300	50	42900	16400	-2.2	ACIDO	0.15
238	DST-133	88.0	90.0	400	50	45100	19500	-2.7	ACIDO	0.21
239	DST-133	90.0	91.4	300	50	40300	21700	-3.0	ACIDO	0.22
240	DST-133	91.4	92.0	100	50	4800	2700	-0.4	LIGERAMENTE ACIDO	0.16
241	DST-133	92.0	94.0	200	50	23100	14400	-2.0	ACIDO	0.17
242	DST-133	94.0	96.0	200	50	800	400	0.0	INERTE	0.17
243	DST-133	96.0	98.0	200	200	700	300	0.0	INERTE	0.20
244	DST-133	98.0	100.0	200	50	800	500	-0.1	INERTE	0.25
245	DST-133	100.0	102.0	200	50	600	400	0.0	INERTE	0.16
246	DST-133	102.0	103.8	300	50	21200	12400	-1.7	ACIDO	0.27
247	DST-133	103.8	106.1	500	50	44000	21100	-2.9	ACIDO	0.23
248	DST-133	106.1	107.5	900	50	22500	14300	-1.9	ACIDO	0.22
249	DST-133	107.5	108.0	1100	50	11000	5800	-0.8	LIGERAMENTE ACIDO	0.16
250	DST-133	108.0	110.0	500	50	40900	26300	-3.6	ACIDO	0.17
251	DST-133	110.0	112.0	800	50	30500	17800	-2.4	ACIDO	0.11
252	DST-133	112.0	114.0	1100	50	5900	2700	-0.4	LIGERAMENTE ACIDO	0.13
253	DST-133	114.0	116.0	1100	50	7100	3700	-0.5	LIGERAMENTE ACIDO	0.21
254	DST-133	116.0	118.0	1100	50	18800	10900	-1.5	ACIDO	0.19
255	DST-133	118.0	119.4	1100	50	17900	12300	-1.7	ACIDO	0.22
256	DST-133	119.4	120.0	1300	50	38000	35800	-4.9	ACIDO	0.25
257	DST-133	120.0	122.0	1200	50	79700	75700	-10.4	ACIDO	0.27
258	DST-133	122.0	124.0	1000	50	50000	43900	-6.0	ACIDO	0.28
259	DST-133	124.0	124.8	700	200	65200	50900	-6.9	ACIDO	0.27
260	DST-133	124.8	126.0	1100	50	50300	28600	-3.9	ACIDO	0.33
261	DST-133	126.0	128.0	1100	50	47100	22000	-3.0	ACIDO	0.24
262	DST-133	128.0	130.0	400	50	66300	26100	-3.6	ACIDO	0.21
263	DST-133	130.0	131.0	500	50	72100	32800	-4.5	ACIDO	0.20
264	DST-133	131.0	132.0	500	50	63700	22400	-3.1	ACIDO	0.25
265	DST-133	132.0	134.0	500	300	24100	12300	-1.6	ACIDO	0.27
266	DST-133	134.0	136.0	300	50	2300	1300	-0.2	LIGERAMENTE ACIDO	0.16
267	DST-133	136.0	138.0	600	50	8500	4700	-0.6	LIGERAMENTE ACIDO	0.15
268	DST-133	138.0	140.0	500	50	5400	3200	-0.4	LIGERAMENTE ACIDO	0.25
269	DST-133	140.0	142.3	200	50	6600	3700	-0.5	LIGERAMENTE ACIDO	0.12
270	DST-133	146.0	148.0	50	50	1100	600	-0.1	INERTE	0.14
271	DST-133	148.0	150.0	200	100	1200	700	-0.1	INERTE	0.13
272	DST-133	150.0	152.0	300	50	1600	700	-0.1	INERTE	0.15
273	DST-133	152.0	154.0	300	50	3300	1900	-0.2	LIGERAMENTE ACIDO	0.16
274	DST-133	154.0	156.0	100	50	400	200	0.0	INERTE	0.15
275	DST-133	156.0	158.0	100	50	400	100	0.0	INERTE	0.17
276	DST-133	166.0	168.0	200	50	600	100	0.0	INERTE	0.13
277	DST-133	168.0	170.0	600	50	800	200	0.0	INERTE	0.10
278	DST-133	170.0	172.0	500	50	1300	700	-0.1	INERTE	0.14
279	DST-133	172.0	174.0	700	50	1000	400	0.0	INERTE	0.23
280	DST-133	174.0	176.0	500	50	600	100	0.0	INERTE	0.30
281	DST-133	176.0	178.0	100	50	500	200	0.0	INERTE	0.20
282	DST-133	178.0	180.0	50	50	7800	4500	-0.6	LIGERAMENTE ACIDO	0.25
283	DST-133	180.0	181.9	100	50	54300	28500	-3.9	ACIDO	0.12
284	DST-133	184.0	186.0	200	100	91500	68100	-9.3	ACIDO	0.15
285	DST-133	186.0	188.0	300	50	98400	69400	-9.5	ACIDO	0.22
286	DST-133	188.0	189.4	300	50	126500	83000	-11.4	ACIDO	0.10
287	DST-133	189.4	190.5	500	50	44600	24900	-3.4	ACIDO	0.16
288	DST-133	190.5	192.0	400	50	4700	3000	-0.4	LIGERAMENTE ACIDO	0.45
289	DST-133	192.0	194.0	700	50	18900	10800	-1.5	ACIDO	1.00
290	DST-133	194.0	196.0	700	50	1200	700	-0.1	INERTE	0.33
291	DST-133	196.0	198.0	300	100	1000	700	-0.1	INERTE	0.14
292	DST-133	198.0	200.0	500	50	1200	900	-0.1	LIGERAMENTE ACIDO	0.12
293	DST-133	200.0	202.0	300	50	900	500	-0.1	INERTE	0.24
294	DST-133	206.0	208.0	600	50	7300	3900	-0.5	LIGERAMENTE ACIDO	0.25
295	DST-133	208.0	210.0	500	50	63100	17900	-2.4	ACIDO	0.39
296	DST-133	210.0	212.0	500	50	45300	19300	-2.6	ACIDO	0.36
297	DST-133	212.0	214.0	500	50	56100	29200	-4.0	ACIDO	0.40
298	DST-133	214.0	216.0	1100	50	43800	20000	-2.7	ACIDO	0.42
299	DST-133	216.0	218.0	1400	50	73200	30300	-4.1	ACIDO	0.39
300	DST-133	218.0	220.0	1200	50	70500	30900	-4.2	ACIDO	0.88
301	DST-133	220.0	221.9	800	50	70800	31200	-4.3	ACIDO	0.82
302	DST-133	221.9	224.0	1000	50	80400	34200	-4.7	ACIDO	0.13
303	DST-133	224.0	226.0	1200	50	73700	24100	-3.3	ACIDO	0.29
304	DST-133	226.0	228.0	700	50	173400	141400	-19.4	ACIDO	0.66
305	DST-133	228.0	230.0	1500	50	67000	59400	-8.1	ACIDO	0.37
306	DST-133	230.0	232.0	1300	50	35700	30400	-4.1	ACIDO	1.04
307	DST-133	232.0	234.0	1700	50	49700	44200	-6.0	ACIDO	0.76
308	DST-133	234.0	236.0	400	50	36100	32900	-4.5	ACIDO	0.35
309	DST-133	236.0	238.0	700	50	76700	64800	-8.9	ACIDO	0.39
310	DST-133	238.0	239.4	100	50	111800	98900	-13.5	ACIDO	0.19
311	DST-133	239.4	240.0	800	50	50800	26300	-3.6	ACIDO	0.74
312	DST-133	240.0	242.0	700	50	25500	16100	-2.2	ACIDO	0.37
313	DST-133	242.0	244.0	600	50	2500	2100	-0.3	LIGERAMENTE ACIDO	0.20
314	DST-133	244.0	246.0	300	50	2300	2100	-0.3	LIGERAMENTE ACIDO	0.23
315	DST-133	246.0	248.0	400	100	1400	1100	-0.1	LIGERAMENTE ACIDO	0.21
316	DST-133	248.0	250.0	400	50	1900	1500	-0.2	LIGERAMENTE ACIDO	0.29
317	DST-133	250.0	252.0	800	50	1500	1000	-0.1	LIGERAMENTE ACIDO	0.29
318	DST-133	252.0	253.5	300	50	2400	2100	-0.3	LIGERAMENTE ACIDO	0.28
319	DST-133	253.5	254.0	200	50	500	200	0.0	INERTE	0.40
320	DST-133	254.0	256.0	50	50	700	400	0.0	INERTE	0.36
321	DST-133	256.0	258.0	50	50	700	500	-0.1	INERTE	0.47
322	DST-133	258.0	260.0	200	50	400	200	0.0	INERTE	0.30
323	DST-133	260.0	261.2	50	50	2200	2000	-0.3	LIGERAMENTE ACIDO	0.24
324	DST-133	261.2	262.0	200	100	3700	3300	-0.4	LIGERAMENTE ACIDO	0.48
325	DST-133	262.0	264.0	300	50	2900	2600	-0.3	LIGERAMENTE ACIDO	0.47
326	DST-133	264.0	265.6	300	100	3100	2700	-0.3	LIGERAMENTE ACIDO	0.78
327	DST-133	265.6	268.0	50	50	2200	2000	-0.3	LIGERAMENTE ACIDO	0.40
328	DST-133	268.0	270.0	50	50	2500	2300	-0.3	LIGERAMENTE ACIDO	0.35
329	DST-133	270.0	272.0	200	50	2900	2700	-0.4	LIGERAMENTE ACIDO	0.36
330	DST-133	272.0	274.0	200	50	2500	2300	-0.3	LIGERAMENTE ACIDO	0.26
331	DST-133	274.0	276.0	300	50	1500	1400	-0.2	LIGERAMENTE ACIDO	0.24
332	DST-133	276.0	278.0	400	50	1500	1300	-0.2	LIGERAMENTE ACIDO	0.23
333	DST-133	278.0	280.0	200	200	800	700	0.0	INERTE	0.12
334	DST-133	280.0	282.0	200	50	600	500	-0.1	INERTE	0.13
335	DST-133	282.0	284.0	400	50	8300	5000	-0.7	LIGERAMENTE ACIDO	0.11
336	DST-133	284.0	286.0	200	50	1500	1300	-0.2	LIGERAMENTE ACIDO	0.20
337	DST-133	288.0	290.0	300	50	900	700	-0.1	INERTE	0.15
338	DST-133	292.0	294.0	300	100	1400	1200	-0.1	LIGERAMENTE ACIDO	0.13
339	DST-133	294.0	296.0	300	50	1200	1100	-0.1	LIGERAMENTE ACIDO	0.13
340	DST-133	296.0	298.1	200	50	2200	1900	-0.2	LIGERAMENTE ACIDO	0.15
341	DST-133	298.1	300.0	300	50	1000	800	-0.1	NEUTRAL	0.16
342	DST-133	300.0	302.0	300	50	800	500	-0.1	INERTE	0.17
343	DST-133	302.0	304.0	400	50	1000	600	-0.1	INERTE	0.29
344	DST-133	304.0	306.0	300	50	1000	800	-0.1	NEUTRAL	0.14
345	DST-133	306.0	308.0	200	50	600	500	-0.1	INERTE	0.11
346	DST-133	308.0	310.0	200	50	600	400	0.0	INERTE	0.19
347	DST-133	310.0	312.0	400	50	700	400	0.0	INERTE	0.27
348	DST-133	312.0	314.0	300	50	900	700	-0.1	INERTE	0.29
349	DST-133	314.0	316.0	400	50	1100	700	-0.1	INERTE	0.33
350	DST-133	316.0	318.0	400	50	1400	1200	-0.1	LIGERAMENTE ACIDO	0.31
351	DST-133	318.0	320.0	500	50	1000	700	-0.1	INERTE	0.20
352	DST-133	320.0	322.0	600	50	700	500	-0.1	INERTE	0.20
353	DST-133	322.0	324.0	300	50	700	500	-0.1	INERTE	0.17
354	DST-133	324.0	326.0	300	50	400	300	0.0	INERTE	0.11
355	DST-133	326.0	328.0	400	50	600	500	-0.1	INERTE	0.20
356	DST-133	328.0	330.0	200	50	1100	900	-0.1	LIGERAMENTE ACIDO	0.18
357	DST-133	330.0	332.0	200	50	2700	2500	-0.3	LIGERAMENTE ACIDO	0.12
358	DST-133	332.0	334.0	200	100	1100	900	-0.1	NEUTRAL	0.15
359	DST-133	334.0	336.0	300	100	700	500	0.0	INERTE	0.13
360	DST-133	336.0	338.0	300	50	300	200	0.0	INERTE	0.14
361	DST-133	338.0	340.0	200	100	500	400	0.0	INERTE	0.18
362	DST-133	340.0	342.0	500	50	800	600	-0.1	INERTE	0.18
363	DST-133	342.0	344.0	300	50	800	500	-0.1	INERTE	0.20
364	DST-133	344.0	346.0	200	50	700	600	-0.1	INERTE	0.27
365	DST-133	346.0	348.0	300	100	400	300	0.0	INERTE	0.20
366	DST-133	348.0	350.0	400	100	500	300	0.0	INERTE	0.12
367	DST-133	350.0	351.3	200	100	400	100	0.0	INERTE	0.13
368	DST-133	352.0	354.0	300	100	500	300	0.0	INERTE	0.12
369	DST-133	356.0	358.0	400	50	300	200	0.0	INERTE	0.14
370	DST-133	358.0	359.8	200	100	400	300	0.0	INERTE	0.33
371	DST-133	359.8	362.0	200	50	1200	1000	-0.1	LIGERAMENTE ACIDO	0.32
372	DST-133	362.0	364.0	300	50	800	700	-0.1	INERTE	0.37
373	DST-133	364.0	366.0	300	100	400	300	0.0	INERTE	0.77
374	DST-133	366.0	368.0	100	100	300	200	0.0	INERTE	1.20
375	DST-133	368.0	368.8	50	50	300	100	0.0	INERTE	0.76
376	DST-133	368.8	370.0	100	100	200	0	0.0	INERTE	0.49
377	DST-133	370.0	372.0	100	50	300	100	0.0	INERTE	0.72
378	DST-133	372.0	374.0	50	50	100	0	0.0	INERTE	0.90
379	DST-133	374.0	374.8	300	200	100	0	0.1	INERTE	2.10
380	DST-133	374.8	376.0	600	200	600	400	0.0	INERTE	0.65
381	DST-133	376.0	378.0	50	50	300	100	0.0	INERTE	2.41
382	DST-133	378.0	380.0	50	50	600	500	-0.1	INERTE	0.35
383	DST-133	380.0	382.0	200	50	3300	1900	-0.2	LIGERAMENTE ACIDO	0.47
384	DST-133	382.0	384.0	700	50	46700	27800	-3.8	ACIDO	1.04
385	DST-133	384.0	386.0	400	50	7600	4000	-0.5	LIGERAMENTE ACIDO	2.69
386	DST-133	386.0	388.0	100	50	200	0	0.0	INERTE	0.43
387	DST-133	388.0	390.0	50	50	200	0	0.0	INERTE	0.40
388	DST-133	390.0	392.0	200	50	200	0	0.0	INERTE	0.21
389	DST-133	392.0	394.0	200	50	100	0	0.0	INERTE	0.76
390	DST-133	394.0	396.0	100	50	100	0	0.0	INERTE	0.53
391	DST-133	396.0	398.0	100	50	300	100	0.0	INERTE	0.44
392	DST-133	398.0	400.0	100	50	100	0	0.0	INERTE	0.36
393	DST-133	400.0	402.0	200	100	200	0	0.0	INERTE	0.79
394	DST-133	402.0	404.0	100	50	200	0	0.0	INERTE	1.21
395	DST-133	404.0	406.0	200	50	300	100	0.0	INERTE	2.29
396	DST-133	406.0	408.0	600	100	600	300	0.0	INERTE	10.75
397	DST-133	408.0	410.0	500	50	9000	4700	-0.6	LIGERAMENTE ACIDO	8.39
398	DST-133	410.0	412.0	300	50	49700	19300	-2.6	ACIDO	0.97
399	DST-133	412.0	412.9	500	50	53400	19500	-2.7	ACIDO	0.54
400	DST-133	412.9	414.0	500	50	123900	100600	-13.8	ACIDO	0.99
401	DST-133	414.0	416.0	200	50	50300	33100	-4.5	ACIDO	1.03
402	DST-133	416.0	417.2	200	50	52900	33300	-4.5	ACIDO	1.11
403	DST-133	417.2	418.0	1400	50	64400	53200	-7.3	ACIDO	1.17
404	DST-133	418.0	420.0	1300	50	34600	33300	-4.5	ACIDO	1.57
405	DST-133	420.0	422.0	2400	50	45000	43400	-5.9	ACIDO	0.83
406	DST-133	422.0	424.0	2700	50	41400	39700	-5.4	ACIDO	1.12
407	DST-133	424.0	424.6	600	50	32500	31200	-4.3	ACIDO	1.03
408	DST-133	424.6	426.0	500	50	34200	32600	-4.4	ACIDO	2.30
409	DST-133	426.0	428.0	600	50	45500	43600	-6.0	ACIDO	2.58
410	DST-133	428.0	430.0	100	50	42600	41000	-5.6	ACIDO	1.54
411	DST-133	430.0	432.0	1600	50	34400	32900	-4.5	ACIDO	2.02
412	DST-133	432.0	434.0	2100	50	48300	45200	-6.2	ACIDO	1.80
413	DST-133	434.0	436.0	1700	50	46100	43300	-5.9	ACIDO	0.91
414	DST-133	436.0	438.0	1600	50	50200	43400	-5.9	ACIDO	0.56
415	DST-133	438.0	440.0	1300	100	25800	23700	-3.2	ACIDO	0.61
416	DST-133	440.0	442.2	1600	50	21000	19300	-2.6	ACIDO	0.59
417	DST-133	442.2	444.0	2300	100	27800	25800	-3.5	ACIDO	0.64
418	DST-133	444.0	446.0	100	50	39400	36200	-4.9	ACIDO	0.79
419	DST-133	446.0	448.0	50	50	44200	40500	-5.5	ACIDO	1.50
420	DST-133	448.0	449.9	100	50	76600	69200	-9.5	ACIDO	0.90
421	DST-133	449.9	452.0	300	50	103600	94900	-13.0	ACIDO	2.88
422	DST-133	452.0	454.0	300	50	125300	112000	-15.3	ACIDO	2.38
423	QUE-108	0.0	8.3	5400	200	3980	100	0.1	INERTE	1.89
424	QUE-108	8.3	16.0	2320	200	18800	2600	-0.3	LIGERAMENTE ACIDO	2.06
425	QUE-108	16.0	24.0	2660	200	7920	3320	-0.4	LIGERAMENTE ACIDO	1.09
426	QUE-108	24.0	32.0	2090	200	37700	33600	-4.5	ACIDO	0.77
427	QUE-108	32.0	40.0	1750	300	37800	32900	-4.4	ACIDO	0.95
428	QUE-108	40.0	48.0	500	300	46100	41600	-5.6	ACIDO	0.75
429	QUE-108	48.0	56.0	1520	200	40200	32500	-4.4	ACIDO	0.52
430	QUE-108	56.0	64.0	1880	200	37500	18200	-2.4	ACIDO	0.52
431	QUE-108	64.0	72.0	380	300	43900	39800	-5.3	ACIDO	0.47
432	QUE-108	72.0	80.0	1520	200	35100	30000	-4.0	ACIDO	0.57
433	QUE-108	80.0	88.0	2550	200	33200	26500	-3.6	ACIDO	0.56
434	QUE-108	88.0	96.0	1360	200	40300	17600	-2.3	ACIDO	0.33
435	QUE-108	96.0	104.0	2180	200	23400	11600	-1.5	ACIDO	0.37
436	QUE-108	104.0	112.0	710	200	43300	32100	-4.3	ACIDO	0.37
437	QUE-108	112.0	120.0	2730	200	39800	34600	-4.7	ACIDO	0.66
438	QUE-108	120.0	128.0	3280	200	37300	33800	-4.6	ACIDO	0.48
439	QUE-108	128.0	136.0	2560	200	24400	20100	-2.7	ACIDO	0.62
440	QUE-108	136.0	140.0	1750	200	29100	6700	-0.8	LIGERAMENTE ACIDO	0.42

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
441	QUE-109	7.6	16.0	1960	200	44100	40500	-5.5	ACIDO	0.65
442	QUE-109	16.0	23.8	1380	200	16400	7200	-0.9	LIGERAMENTE ACIDO	0.54
443	QUE-109	23.8	32.1	950	200	35600	32100	-4.3	ACIDO	0.32
444	QUE-109	32.1	40.0	930	200	23300	20000	-2.7	ACIDO	0.29
445	QUE-109	40.0	47.9	990	200	34100	30200	-4.1	ACIDO	0.54
446	QUE-109	47.9	56.2	1030	200	18500	12100	-1.6	ACIDO	1.83
447	QUE-109	56.2	64.0	1070	200	16100	3800	-0.4	LIGERAMENTE ACIDO	5.11
448	QUE-109	64.0	72.0	1300	200	10400	1200	-0.1	INERTE	0.64
449	QUE-109	72.0	80.0	810	200	36600	31600	-4.3	ACIDO	0.71
450	QUE-109	80.0	88.0	790	200	37600	34000	-4.6	ACIDO	1.19
451	QUE-109	88.0	96.0	1010	200	38200	35100	-4.7	ACIDO	0.55
452	QUE-109	96.0	104.0	1320	200	39500	35800	-4.8	ACIDO	0.44
453	QUE-109	104.0	112.0	1050	200	31300	18500	-2.5	ACIDO	0.63
454	QUE-109	112.0	120.0	1610	200	41800	38300	-5.2	ACIDO	0.35
455	QUE-109	120.0	128.0	540	200	36500	26600	-3.6	ACIDO	0.41
456	QUE-109	128.0	136.0	640	200	23900	14300	-1.9	ACIDO	0.47
457	QUE-109	136.0	144.0	830	300	31500	22900	-3.0	ACIDO	0.50
458	QUE-109	144.0	155.0	1030	200	42300	37400	-5.1	ACIDO	0.50
459	QUE-110	0.0	8.2	980	300	20600	4700	-0.5	LIGERAMENTE ACIDO	0.82
460	QUE-110	8.2	16.0	690	200	37300	9200	-1.2	ACIDO	0.95
461	QUE-110	16.0	23.9	490	200	38200	34100	-4.6	ACIDO	0.20
462	QUE-110	23.9	32.0	480	200	8440	740	0.0	INERTE	0.21
463	QUE-110	32.0	40.0	470	200	19600	15000	-2.0	ACIDO	0.10
464	QUE-110	40.0	48.0	500	200	18300	9500	-1.2	ACIDO	0.15
465	QUE-110	48.0	55.7	500	200	12500	7200	-0.9	LIGERAMENTE ACIDO	0.12
466	QUE-110	55.7	64.0	490	300	26500	22900	-3.0	ACIDO	0.14
467	QUE-110	64.0	72.0	490	200	18300	14700	-1.9	ACIDO	0.19
468	QUE-110	72.0	80.0	680	200	22700	19300	-2.6	ACIDO	0.33
469	QUE-110	80.0	88.0	490	200	12000	2700	-0.3	LIGERAMENTE ACIDO	0.78
470	QUE-110	88.0	96.0	730	200	3090	100	0.1	INERTE	0.80
471	QUE-110	96.0	104.0	530	200	23300	10400	-1.4	ACIDO	0.60
472	QUE-110	104.0	112.0	740	200	22000	17500	-2.3	ACIDO	0.36
473	QUE-110	112.0	120.0	550	200	22900	11100	-1.4	ACIDO	0.32
474	QUE-110	120.0	128.0	580	300	32800	26800	-3.6	ACIDO	0.14
475	QUE-110	128.0	136.0	560	300	23500	12300	-1.6	ACIDO	0.19
476	QUE-110	136.0	140.0	480	200	31600	22300	-3.0	ACIDO	0.17
477	QUE-111	8.0	15.8	400	200	360	100	0.1	INERTE	0.10
478	QUE-111	48.0	56.0	670	200	3800	200	0.0	INERTE	0.16
479	QUE-111	56.0	64.0	620	300	3520	100	0.1	LIGERAMENTE BASICO	0.13
480	QUE-111	64.0	72.0	2050	200	2130	100	0.1	INERTE	0.24
481	QUE-111	72.0	80.0	540	200	4430	630	0.0	INERTE	0.38
482	QUE-111	88.0	96.0	560	200	500	100	0.1	INERTE	0.11
483	QUE-111	96.0	104.0	510	200	460	100	0.1	INERTE	0.13
484	QUE-112	40.2	48.8	900	200	27100	7300	-0.9	LIGERAMENTE ACIDO	0.10
485	QUE-112	48.8	56.2	550	200	33200	6600	-0.8	LIGERAMENTE ACIDO	0.13
486	QUE-112	96.0	100.2	420	200	38200	31400	-4.2	ACIDO	0.12
487	QUE-113	7.7	16.0	500	200	1400	100	0.1	INERTE	0.11
488	QUE-113	16.0	24.0	600	200	32700	5300	-0.7	LIGERAMENTE ACIDO	0.18
489	QUE-113	24.0	32.0	400	200	56100	9300	-1.2	ACIDO	0.20
490	QUE-113	32.0	40.0	500	200	13900	1000	-0.1	INERTE	0.16
491	QUE-113	40.0	48.0	500	200	800	700	0.0	INERTE	0.13
492	QUE-113	56.0	64.0	500	200	32100	6600	-0.8	LIGERAMENTE ACIDO	0.24
493	QUE-113	64.0	72.0	500	200	5500	400	0.0	INERTE	0.45
494	QUE-113	72.0	80.0	500	200	9300	300	0.0	INERTE	0.25
495	QUE-113	80.0	88.2	500	200	32700	7100	-0.9	LIGERAMENTE ACIDO	0.20
496	QUE-113	88.2	96.0	500	200	35600	7800	-1.0	LIGERAMENTE ACIDO	0.36
497	QUE-113	96.0	103.8	510	200	39000	8700	-1.1	ACIDO	0.36
498	QUE-113	103.8	111.6	770	200	10300	400	0.0	INERTE	0.30
499	QUE-113	111.6	120.0	990	200	17300	2400	-0.3	LIGERAMENTE ACIDO	0.25
500	QUE-113	120.0	128.0	710	200	13200	2400	-0.3	LIGERAMENTE ACIDO	0.28
501	QUE-113	128.0	136.0	550	200	21200	4200	-0.5	LIGERAMENTE ACIDO	0.19
502	QUE-113	136.0	144.0	520	200	20100	4400	-0.5	LIGERAMENTE ACIDO	0.34
503	QUE-113	144.0	150.0	300	200	19000	4000	-0.5	LIGERAMENTE ACIDO	0.15
504	QUE-114	2.6	10.0	900	200	5000	1000	-0.1	INERTE	1.97
505	QUE-114	10.0	17.8	1300	200	7500	1200	-0.1	INERTE	1.16
506	QUE-114	17.8	26.3	1100	200	27200	23900	-3.2	ACIDO	0.89
507	QUE-114	26.3	34.0	600	200	2500	500	0.0	INERTE	0.70
508	QUE-114	34.0	41.6	700	200	8700	100	0.1	INERTE	1.37
509	QUE-114	41.6	50.0	600	200	2700	500	0.0	INERTE	1.08
510	QUE-114	50.0	58.0	500	200	6400	400	0.0	INERTE	1.00
511	QUE-114	58.0	66.2	600	200	28200	7800	-1.0	LIGERAMENTE ACIDO	0.14
512	QUE-114	74.0	81.6	600	200	30700	21400	-2.9	ACIDO	0.95
513	QUE-115	0.0	8.0	1600	200	44700	8800	-1.1	ACIDO	0.11
514	QUE-115	8.0	16.0	500	200	52600	9200	-1.2	ACIDO	0.11
515	QUE-115	16.0	24.0	700	200	14200	100	0.1	INERTE	0.11
516	QUE-115	24.0	32.0	600	200	33900	5500	-0.7	LIGERAMENTE ACIDO	0.18
517	QUE-115	32.0	39.6	600	200	9200	100	0.1	INERTE	0.22
518	QUE-115	39.6	48.0	600	200	20900	2100	-0.2	LIGERAMENTE ACIDO	0.39
519	QUE-115	48.0	56.0	500	200	27300	3400	-0.4	LIGERAMENTE ACIDO	0.43
520	QUE-117	64.0	72.0	960	200	33900	29600	-4.0	ACIDO	0.15
521	QUE-117	72.0	80.0	680	200	43900	40400	-5.5	ACIDO	0.11
522	QUE-117	104.0	110.0	740	200	33400	29800	-4.0	ACIDO	0.25
523	QUE-119	104.0	112.2	710	200	36500	26900	-3.6	ACIDO	0.99
524	QUE-119	112.2	120.0	1180	200	10600	7000	-0.9	LIGERAMENTE ACIDO	1.63
525	QUE-119	120.0	128.0	920	200	30300	21600	-2.9	ACIDO	0.83
526	QUE-119	128.0	140.3	570	200	32500	24900	-3.3	ACIDO	0.35
527	QUE-120	0.0	8.0	960	200	6190	100	0.0	INERTE	0.21
528	QUE-120	8.0	16.0	970	200	420	100	0.1	INERTE	0.10
529	QUE-120	16.0	24.0	820	200	3760	100	0.1	INERTE	0.36
530	QUE-120	24.0	32.1	780	200	21500	17300	-2.3	ACIDO	0.18
531	QUE-120	32.1	39.7	910	200	32400	27200	-3.7	ACIDO	0.17
532	QUE-120	39.7	48.1	740	200	41700	14800	-2.0	ACIDO	0.23
533	QUE-120	64.2	71.6	1290	200	37200	11800	-1.5	ACIDO	0.21
534	QUE-120	71.6	80.1	640	200	7270	100	0.1	INERTE	0.21
535	QUE-120	80.1	88.0	680	200	340	100	0.1	INERTE	0.26
536	QUE-120	88.0	96.0	570	200	210	100	0.1	INERTE	0.27
537	QUE-120	96.0	104.3	800	200	320	100	0.1	INERTE	0.19
538	QUE-120	104.3	112.0	1190	200	590	100	0.1	INERTE	0.21
539	QUE-120	112.0	120.0	700	200	340	100	0.1	INERTE	0.22
540	QUE-120	120.0	130.0	1130	200	930	100	0.1	INERTE	0.23
541	QUE-122	8.0	16.0	1860	200	950	100	0.1	INERTE	0.69
542	QUE-122	16.0	24.0	1130	200	5720	100	0.1	INERTE	0.34
543	QUE-122	24.0	32.2	1010	200	12100	1200	-0.1	INERTE	0.12
544	QUE-122	87.9	95.8	560	200	28300	10200	-1.3	ACIDO	0.11
545	QUE-122	112.0	120.0	580	200	32700	21800	-2.9	ACIDO	0.11
546	QUE-122	120.0	128.0	1060	200	27900	23500	-3.1	ACIDO	0.12
547	QUE-122	136.0	144.0	2690	200	30200	26700	-3.6	ACIDO	0.14
548	QUE-122	144.0	152.0	1140	200	36300	31600	-4.3	ACIDO	0.75
549	QUE-122	152.0	160.0	820	200	33900	29600	-4.0	ACIDO	0.55
550	QUE-123	0.0	8.0	700	200	9300	100	0.1	INERTE	0.20
551	QUE-123	8.0	16.0	680	200	40500	10500	-1.4	ACIDO	0.27
552	QUE-123	16.0	24.0	600	200	37900	9200	-1.2	ACIDO	0.33
553	QUE-123	24.0	32.0	680	200	19000	3700	-0.4	LIGERAMENTE ACIDO	0.24
554	QUE-123	48.3	56.0	790	200	10700	400	0.0	INERTE	0.12
555	QUE-123	56.0	64.0	760	200	20700	3800	-0.4	LIGERAMENTE ACIDO	0.12
556	QUE-124	0.0	8.0	1500	200	2950	100	0.1	INERTE	0.76
557	QUE-124	8.0	16.0	1200	200	740	100	0.1	INERTE	0.37
558	QUE-124	16.0	24.0	670	200	16700	12700	-1.7	ACIDO	0.33
559	QUE-124	24.0	32.0	620	200	38500	35100	-4.7	ACIDO	0.28
560	QUE-124	32.0	40.0	710	200	30600	26600	-3.6	ACIDO	0.25

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
561	QUE-124	40.0	48.0	770	200	38700	34700	-4.7	ACIDO	0.37
562	QUE-124	48.0	56.0	840	200	41800	36400	-4.9	ACIDO	1.31
563	QUE-124	56.0	64.0	700	200	42300	38000	-5.1	ACIDO	0.74
564	QUE-124	64.0	72.0	790	200	40900	37300	-5.0	ACIDO	1.29
565	QUE-124	72.0	80.0	740	200	38200	34900	-4.7	ACIDO	2.33
566	QUE-124	80.0	88.0	730	200	40800	37200	-5.0	ACIDO	0.92
567	QUE-124	112.0	120.0	710	200	23900	20800	-2.8	ACIDO	0.15
568	QUE-125	0.0	8.5	710	200	26200	4800	-0.6	LIGERAMENTE ACIDO	0.13
569	QUE-126	0.0	8.2	1300	200	13800	7400	-0.9	LIGERAMENTE ACIDO	0.15
570	QUE-126	16.0	24.0	1300	200	19200	9200	-1.2	ACIDO	0.10
571	QUE-126	48.0	56.0	700	200	500	100	0.1	INERTE	0.14
572	QUE-126	56.0	63.8	500	200	29600	7000	-0.9	LIGERAMENTE ACIDO	0.12
573	QUE-126	63.8	71.7	600	200	65200	10600	-1.4	ACIDO	0.42
574	QUE-126	71.7	80.0	500	200	34300	3100	-0.4	LIGERAMENTE ACIDO	0.45
575	QUE-126	80.0	88.0	700	200	27900	1800	-0.2	LIGERAMENTE ACIDO	0.35
576	QUE-126	88.0	96.0	600	200	5600	500	0.0	INERTE	0.19
577	QUE-126	96.0	100.1	600	200	50400	16300	-2.2	ACIDO	0.20
578	QUE-127	1.8	10.0	600	200	21800	5400	-0.7	LIGERAMENTE ACIDO	0.11
579	QUE-127	25.9	34.0	800	200	36000	23400	-3.1	ACIDO	0.18
580	QUE-127	34.0	42.0	1200	200	6900	300	0.0	INERTE	0.19
581	QUE-127	42.0	50.0	1100	200	11800	700	0.0	INERTE	0.18
582	QUE-128	2.0	10.0	900	300	25100	17900	-2.3	ACIDO	1.70
583	QUE-128	10.0	18.0	1000	200	19100	13600	-1.8	ACIDO	1.62
584	QUE-128	18.0	26.0	1300	200	22300	13400	-1.8	ACIDO	0.83
585	QUE-128	26.0	33.8	1300	200	40100	35600	-4.8	ACIDO	1.16
586	QUE-128	33.8	42.0	1000	200	8500	500	0.0	INERTE	0.68
587	QUE-128	42.0	50.0	900	200	8700	4100	-0.5	LIGERAMENTE ACIDO	0.77
588	QUE-128	50.0	58.0	800	200	23100	14400	-1.9	ACIDO	0.77
589	QUE-128	58.0	65.9	500	200	20400	13400	-1.8	ACIDO	0.39
590	QUE-128	65.9	74.0	900	200	4200	400	0.0	INERTE	0.39
591	QUE-128	74.0	81.6	900	200	29500	7900	-1.0	ACIDO	0.59
592	QUE-128	81.6	90.3	900	200	20900	6400	-0.8	LIGERAMENTE ACIDO	0.20
593	QUE-128	90.3	98.2	800	200	27000	9900	-1.3	ACIDO	0.24
594	QUE-128	98.2	106.0	800	200	33700	8000	-1.0	ACIDO	0.17
595	QUE-129	0.0	8.0	1000	200	2800	300	0.0	INERTE	0.15
596	QUE-129	16.0	24.1	800	200	24100	4600	-0.6	LIGERAMENTE ACIDO	0.24
597	QUE-129	24.1	32.0	600	300	25600	20600	-2.7	ACIDO	0.44
598	QUE-129	32.0	40.0	800	200	23600	16700	-2.2	ACIDO	0.68
599	QUE-129	40.0	50.0	500	200	18500	15700	-2.1	ACIDO	0.78
600	QUE-130	24.3	32.0	870	300	45200	42500	-5.7	ACIDO	0.11
601	QUE-130	32.0	40.0	1200	200	49900	46900	-6.4	ACIDO	0.32
602	QUE-130	40.0	48.0	850	200	42300	39600	-5.4	ACIDO	0.23
603	QUE-130	48.0	56.0	590	200	42900	39900	-5.4	ACIDO	0.13
604	QUE-130	56.0	64.5	1240	200	30400	27900	-3.7	ACIDO	0.22
605	QUE-130	64.5	72.0	1110	200	33900	28600	-3.8	ACIDO	0.31
606	QUE-130	72.0	81.0	1340	200	33100	29600	-4.0	ACIDO	0.26
607	QUE-131	8.0	16.0	700	200	29400	25300	-3.4	ACIDO	0.15
608	QUE-131	16.0	24.0	700	200	39600	35600	-4.8	ACIDO	0.25
609	QUE-131	24.0	32.0	800	200	37100	33400	-4.5	ACIDO	0.16
610	QUE-131	48.0	56.0	700	200	28600	25900	-3.5	ACIDO	0.22
611	QUE-131	56.0	64.0	800	200	39900	36300	-4.9	ACIDO	0.18
612	QUE-131	64.0	72.0	600	200	46500	41600	-5.6	ACIDO	0.20
613	QUE-131	72.0	80.0	600	200	46700	41800	-5.7	ACIDO	0.11
614	QUE-131	80.0	90.0	500	200	25000	19800	-2.6	ACIDO	0.23
615	QUE-132	32.0	40.0	1100	200	4300	300	0.0	INERTE	0.26
616	QUE-132	40.0	48.0	1700	200	26500	5100	-0.6	LIGERAMENTE ACIDO	0.21
617	QUE-132	48.0	55.8	1400	200	54200	13600	-1.8	ACIDO	0.20
618	QUE-132	55.8	63.8	1100	200	13700	2600	-0.3	LIGERAMENTE ACIDO	0.13
619	QUE-133	0.0	7.9	1500	300	19000	4100	-0.5	LIGERAMENTE ACIDO	0.74
620	QUE-133	7.9	16.0	600	200	5900	1000	-0.1	INERTE	1.61
621	QUE-133	16.0	24.0	600	200	12400	8200	-1.1	ACIDO	1.23
622	QUE-133	24.0	32.0	700	300	29200	21600	-2.8	ACIDO	1.22
623	QUE-133	32.0	39.9	800	200	24600	6800	-0.9	LIGERAMENTE ACIDO	0.80
624	QUE-133	39.9	48.0	600	200	56800	20000	-2.7	ACIDO	0.58
625	QUE-133	48.0	56.0	700	200	41200	13500	-1.8	ACIDO	0.32
626	QUE-133	56.0	64.0	800	200	21800	5600	-0.7	LIGERAMENTE ACIDO	0.17
627	QUE-134	0.0	8.0	770	200	44700	11200	-1.5	ACIDO	0.47
628	QUE-134	8.0	16.0	740	200	23100	4200	-0.5	LIGERAMENTE ACIDO	0.24
629	QUE-134	16.0	24.2	590	200	27900	7600	-1.0	LIGERAMENTE ACIDO	0.16
630	QUE-135	0.0	8.0	2770	200	7780	100	0.1	INERTE	0.26
631	QUE-135	8.0	16.1	770	200	9870	5970	-0.7	LIGERAMENTE ACIDO	0.32
632	QUE-135	16.1	24.0	390	200	24300	20800	-2.8	ACIDO	0.30
633	QUE-135	24.0	31.8	490	200	18100	12600	-1.7	ACIDO	0.32
634	QUE-135	31.8	40.0	470	200	22600	19600	-2.6	ACIDO	1.60
635	QUE-135	40.0	48.0	1020	300	27300	23200	-3.1	ACIDO	1.75
636	QUE-135	48.0	56.0	990	200	13900	10800	-1.4	ACIDO	1.46
637	QUE-135	56.0	60.0	840	200	29200	25700	-3.4	ACIDO	1.04
638	QUE-136	63.8	72.0	760	200	29600	26100	-3.5	ACIDO	0.36
639	QUE-136	72.0	80.2	750	300	11900	3300	-0.3	LIGERAMENTE ACIDO	0.38
640	QUE-136	80.2	87.7	680	200	20000	14500	-1.9	ACIDO	0.37
641	QUE-136	87.7	96.0	950	300	36300	31800	-4.2	ACIDO	0.14
642	QUE-136	96.0	104.0	730	200	36000	31600	-4.3	ACIDO	0.53
643	QUE-136	104.0	112.0	700	200	42000	37600	-5.1	ACIDO	0.76
644	QUE-136	112.0	120.1	430	200	37500	33700	-4.5	ACIDO	1.03
645	QUE-137	16.4	24.0	420	200	18100	2000	-0.2	LIGERAMENTE ACIDO	0.11
646	QUE-137	96.3	104.2	470	200	27000	5000	-0.6	LIGERAMENTE ACIDO	0.11
647	QUE-137	144.0	152.0	500	200	13400	700	0.0	INERTE	0.13
648	QUE-137	152.0	160.0	550	200	360	100	0.1	INERTE	0.14
649	QUE-137	160.0	168.3	540	200	250	100	0.1	INERTE	0.11
650	QUE-137	176.0	184.0	460	200	210	100	0.1	INERTE	0.12
651	QUE-137	184.0	192.0	520	200	250	100	0.1	INERTE	0.21
652	QUE-137	192.0	199.9	430	200	310	100	0.1	INERTE	0.31
653	QUE-137	199.9	208.0	610	200	560	100	0.1	INERTE	0.36
654	QUE-137	208.0	216.0	580	200	28100	12300	-1.6	ACIDO	0.22
655	QUE-138	0.0	8.0	1160	200	15500	1100	-0.1	INERTE	0.36
656	QUE-138	8.0	16.3	2200	200	3360	100	0.1	INERTE	0.17
657	QUE-138	16.3	24.0	560	200	36500	6100	-0.8	LIGERAMENTE ACIDO	0.22
658	QUE-138	24.0	32.0	1970	200	48400	39100	-5.3	ACIDO	0.56
659	QUE-138	32.0	40.0	1160	200	29900	26700	-3.6	ACIDO	0.46
660	QUE-138	40.0	48.0	770	200	32800	28800	-3.9	ACIDO	0.90
661	QUE-138	48.0	56.0	1100	200	31800	28100	-3.8	ACIDO	0.52
662	QUE-138	56.0	64.0	1200	300	20200	14200	-1.8	ACIDO	1.00
663	QUE-138	64.0	72.0	1400	200	17900	15900	-2.1	ACIDO	0.57
664	QUE-138	72.0	80.0	1200	500	22700	20600	-2.6	ACIDO	0.30
665	QUE-138	80.0	88.0	800	200	22700	20400	-2.7	ACIDO	0.17
666	QUE-139	0.0	8.0	2200	200	21200	6500	-0.8	LIGERAMENTE ACIDO	0.10
667	QUE-139	8.0	16.0	1000	200	38700	12400	-1.6	ACIDO	0.28
668	QUE-139	16.0	24.0	1300	300	8300	700	0.0	INERTE	0.12
669	QUE-139	56.0	64.0	900	200	22400	13000	-1.7	ACIDO	0.10
670	QUE-139	64.0	72.0	900	200	48900	42300	-5.7	ACIDO	0.10
671	QUE-139	72.0	80.0	1000	200	51200	47100	-6.4	ACIDO	0.16
672	QUE-139	80.0	88.2	1000	300	45100	39600	-5.3	ACIDO	0.12
673	QUE-139	88.2	96.0	1000	200	35200	32000	-4.3	ACIDO	0.19
674	QUE-139	96.0	104.0	1400	200	25300	22700	-3.0	ACIDO	0.23
675	QUE-139	104.0	112.0	800	300	25000	22400	-3.0	ACIDO	0.24
676	QUE-140	0.8	8.0	2100	200	6600	400	0.0	INERTE	0.13
677	QUE-140	8.0	16.0	2500	300	200	100	0.1	LIGERAMENTE BASICO	0.19
678	QUE-140	16.0	24.0	1000	400	500	100	0.1	LIGERAMENTE BASICO	0.18
679	QUE-140	24.0	32.0	2600	200	23300	20000	-2.7	ACIDO	0.28
680	QUE-140	32.0	40.0	780	200	17700	14300	-1.9	ACIDO	0.81

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
681	QUE-140	40.0	48.0	790	500	22600	18000	-2.3	ACIDO	1.54
682	QUE-140	48.0	56.0	640	200	35500	18500	-2.5	ACIDO	0.72
683	QUE-140	56.0	64.0	660	200	21600	4600	-0.6	LIGERAMENTE ACIDO	0.56
684	QUE-140	64.0	72.5	680	300	38700	33600	-4.5	ACIDO	0.46
685	QUE-140	72.5	80.0	700	300	29900	24600	-3.3	ACIDO	0.53
686	QUE-142	198.0	206.0	210	200	16660	6240	-0.8	LIGERAMENTE ACIDO	0.15
687	QUE-142	238.0	246.0	220	200	42430	20270	-2.7	ACIDO	0.18
688	QUE-142	246.0	254.0	530	200	49050	31660	-4.3	ACIDO	0.19
689	QUE-142	254.0	261.9	420	200	25090	2930	-0.3	LIGERAMENTE ACIDO	0.27
690	QUE-142	262.0	270.0	530	200	14860	1880	-0.2	LIGERAMENTE ACIDO	0.41
691	QUE-142	270.0	278.0	400	200	19650	590	0.0	INERTE	0.76
692	QUE-142	278.0	286.0	290	200	25060	12130	-1.6	ACIDO	0.56
693	QUE-142	286.0	294.0	260	200	37120	24280	-3.3	ACIDO	0.38
694	QUE-142	302.0	310.0	220	200	33650	600	0.0	INERTE	0.60
695	QUE-142	310.0	318.0	250	240	27410	0	0.1	INERTE	0.86
696	QUE-143	200.0	208.0	220	40	46380	2420	-0.3	LIGERAMENTE ACIDO	0.52
697	QUE-143	208.0	208.6	220	40	46380	2420	-0.3	LIGERAMENTE ACIDO	0.27
698	QUE-143	208.6	215.9	390	5	45710	7420	-1.0	ACIDO	0.31
699	QUE-143	215.9	216.0	390	5	10330	1910	-0.3	LIGERAMENTE ACIDO	0.12
700	QUE-143	216.0	224.0	390	5	10330	1910	-0.3	LIGERAMENTE ACIDO	0.20
701	QUE-143	224.0	232.0	460	5	33630	3920	-0.5	LIGERAMENTE ACIDO	0.23
702	QUE-143	240.0	248.0	380	5	2740	230	0.0	INERTE	0.11
703	QUE-143	256.0	264.0	410	50	2020	20	0.0	INERTE	0.33
704	QUE-143	312.0	320.0	520	30	53130	40710	-5.6	ACIDO	0.12
705	QUE-143	320.0	327.7	490	5	42890	10500	-1.4	ACIDO	0.17
706	QUE-143	327.7	328.0	210	10	49010	16220	-2.2	ACIDO	0.29
707	QUE-143	328.0	336.0	210	10	49010	16220	-2.2	ACIDO	0.21
708	QUE-143	336.0	344.0	570	30	23940	8420	-1.1	ACIDO	0.15
709	QUE-143	344.0	352.0	440	30	30390	5070	-0.7	LIGERAMENTE ACIDO	0.20
710	QUE-143	352.0	360.0	370	30	36770	5600	-0.8	LIGERAMENTE ACIDO	0.34
711	QUE-143	360.0	368.0	280	20	1280	180	0.0	INERTE	0.25
712	QUE-143	368.0	376.0	370	160	1400	5	0.1	INERTE	0.16
713	QUE-143	376.0	384.0	320	5	1850	280	0.0	INERTE	0.22
714	QUE-143	384.0	392.0	330	5	490	150	0.0	INERTE	0.17
715	QUE-143	392.0	400.0	470	100	6410	110	0.0	INERTE	0.16
716	QUE-143	400.0	408.0	470	190	23840	7690	-1.0	LIGERAMENTE ACIDO	0.23
717	QUE-143	416.1	424.0	350	110	15910	2650	-0.3	LIGERAMENTE ACIDO	0.15
718	QUE-143	440.0	448.0	380	170	16010	2930	-0.3	LIGERAMENTE ACIDO	0.10
719	QUE-143	448.0	456.0	410	60	24450	17280	-2.3	ACIDO	0.39
720	QUE-143	456.0	464.0	400	110	27650	20980	-2.8	ACIDO	0.40
721	QUE-143	464.0	472.0	460	70	36360	33350	-4.5	ACIDO	0.39
722	QUE-143	472.0	480.0	400	160	38250	32060	-4.3	ACIDO	0.47
723	QUE-143	480.0	488.0	510	170	39270	33530	-4.5	ACIDO	0.24
724	QUE-143	488.0	495.8	300	110	45180	32210	-4.4	ACIDO	0.26
725	QUE-147	39.9	48.0	1450	700	20450	17840	-2.2	ACIDO	0.22
726	QUE-147	48.0	56.0	780	200	16910	16310	-2.2	ACIDO	0.72
727	QUE-147	56.0	64.0	540	450	36900	30890	-4.1	ACIDO	0.42
728	QUE-147	64.0	72.0	520	480	57550	50830	-6.8	ACIDO	0.27
729	QUE-147	72.0	80.0	370	370	51580	43860	-5.9	ACIDO	0.43
730	QUE-147	80.0	85.0	580	580	46160	42130	-5.6	ACIDO	0.50
731	QUE-148	24.0	31.7	610	200	33320	6040	-0.8	LIGERAMENTE ACIDO	0.14
732	QUE-148	31.7	40.0	1150	380	16010	13870	-1.8	ACIDO	0.13
733	QUE-148	40.0	47.9	1130	380	20600	18890	-2.4	ACIDO	0.13
734	QUE-148	56.0	64.5	920	200	18900	15390	-2.0	ACIDO	0.11
735	QUE-148	64.5	72.0	830	240	25450	21280	-2.8	ACIDO	0.14
736	QUE-149	8.0	16.0	1110	380	30850	26980	-3.6	ACIDO	0.10
737	QUE-149	48.0	56.0	1140	220	19550	16850	-2.2	ACIDO	0.16
738	QUE-149	56.0	63.8	1440	220	3090	0	0.1	INERTE	0.15
739	QUE-149	63.8	72.4	1020	200	37010	33230	-4.5	ACIDO	0.20
740	QUE-149	72.4	79.5	910	290	44400	38210	-5.1	ACIDO	0.26
741	QUE-149	79.5	90.0	1240	310	30670	28110	-3.7	ACIDO	0.14
742	QUE-150	96.0	100.1	1400	200	30740	27860	-3.7	ACIDO	1.06
743	STZ-092	60.0	70.0	1800	50	26900	18000	-2.4	ACIDO	0.12
744	STZ-092	70.0	80.0	700	50	45500	27200	-3.7	ACIDO	0.10
745	STZ-092	80.0	90.0	1400	50	21600	11700	-1.6	ACIDO	0.12
746	STZ-092	100.0	109.2	1900	50	22700	17700	-2.4	ACIDO	0.11
747	STZ-092	109.2	120.0	1800	50	13100	7500	-1.0	ACIDO	0.11
748	STZ-092	120.0	129.8	600	50	15600	8500	-1.1	ACIDO	0.17
749	STZ-092	129.8	140.0	900	50	24600	13400	-1.8	ACIDO	0.20
750	STZ-092	140.0	150.0	500	50	3900	2400	-0.3	LIGERAMENTE ACIDO	0.14
751	STZ-092	150.0	160.0	1400	100	32700	28500	-3.9	ACIDO	0.33
752	STZ-092	160.0	170.0	1000	50	37300	30200	-4.1	ACIDO	0.30
753	STZ-092	170.0	180.3	900	50	33900	25500	-3.5	ACIDO	0.23
754	STZ-092	180.3	190.0	700	50	13700	7900	-1.1	ACIDO	0.33
755	STZ-092	190.0	200.0	400	50	500	200	0.0	INERTE	0.18
756	STZ-092	200.0	210.0	400	50	600	100	0.0	INERTE	0.18
757	STZ-092	210.0	220.0	300	50	400	200	0.0	INERTE	0.14
758	STZ-092	220.0	230.0	500	50	7900	4100	-0.5	LIGERAMENTE ACIDO	0.23
759	STZ-092	230.0	240.0	500	100	3000	1400	-0.2	LIGERAMENTE ACIDO	0.90
760	STZ-092	240.0	249.4	600	50	47000	22300	-3.0	ACIDO	0.48
761	STZ-092	249.4	260.0	1100	50	50100	44600	-6.1	ACIDO	0.70
762	STZ-092	260.0	270.0	1200	50	52700	49400	-6.7	ACIDO	0.27
763	STZ-092	270.0	279.6	500	50	20000	13600	-1.8	ACIDO	0.26
764	STZ-092	279.6	289.3	600	50	12400	6500	-0.9	LIGERAMENTE ACIDO	0.48
765	STZ-092	289.3	300.0	700	50	47400	37100	-5.1	ACIDO	0.44
766	STZ-092	300.0	309.9	1000	50	68900	58400	-8.0	ACIDO	0.48
767	STZ-092	309.9	320.0	500	50	14700	7700	-1.0	ACIDO	0.79
768	STZ-092	320.0	330.0	300	50	500	200	0.0	INERTE	0.74
769	STZ-092	330.0	340.0	300	100	600	200	0.0	INERTE	0.74
770	STZ-092	340.0	350.0	400	50	1200	700	-0.1	INERTE	0.59
771	STZ-092	350.0	360.0	300	50	26900	15100	-2.1	ACIDO	0.71
772	STZ-092	360.0	370.0	300	50	42600	26600	-3.6	ACIDO	0.68
773	STZ-092	370.0	380.2	1400	50	32200	24000	-3.3	ACIDO	1.08
774	STZ-092	380.2	390.0	800	50	24900	14600	-2.0	ACIDO	0.58
775	STZ-092	390.0	400.0	400	50	600	300	0.0	INERTE	0.40
776	STZ-092	400.0	410.0	500	100	20400	16800	-2.3	ACIDO	1.32
777	STZ-092	410.0	420.0	1000	200	28800	23200	-3.1	ACIDO	0.50
778	STZ-092	420.0	430.0	1400	50	41100	36300	-5.0	ACIDO	0.36
779	STZ-092	430.0	440.6	1100	50	54200	44500	-6.1	ACIDO	0.69
780	STZ-092	440.6	449.0	1000	50	44600	35600	-4.9	ACIDO	0.49
781	STZ-093	1.5	10.5	2700	100	10200	6000	-0.8	LIGERAMENTE ACIDO	0.74
782	STZ-093	10.5	20.0	700	100	27500	14500	-1.9	ACIDO	1.54
783	STZ-093	20.0	30.0	3500	50	38000	35500	-4.8	ACIDO	1.32
784	STZ-093	30.0	40.0	3000	50	18300	16300	-2.2	ACIDO	0.78
785	STZ-093	40.0	49.9	2500	50	7100	4900	-0.7	LIGERAMENTE ACIDO	0.62
786	STZ-093	49.9	60.0	1400	200	16000	12900	-1.7	ACIDO	1.04
787	STZ-093	60.0	70.0	2400	50	28900	26300	-3.6	ACIDO	0.69
788	STZ-093	70.0	80.0	2800	50	49100	47000	-6.4	ACIDO	0.60
789	STZ-093	80.0	90.0	3200	100	34100	32200	-4.4	ACIDO	0.34
790	STZ-093	90.0	100.0	2300	50	25200	20100	-2.7	ACIDO	0.60
791	STZ-093	100.0	110.0	3000	50	36200	30300	-4.1	ACIDO	0.57
792	STZ-093	110.0	120.0	2300	200	28800	27700	-3.7	ACIDO	0.49
793	STZ-093	120.0	130.0	2300	50	15100	13800	-1.9	ACIDO	0.28
794	STZ-093	130.0	140.3	2300	50	6700	5100	-0.7	LIGERAMENTE ACIDO	0.42
795	STZ-093	140.3	150.0	2300	50	12000	11200	-1.5	ACIDO	0.31
796	STZ-093	150.0	160.0	2400	50	15600	14400	-2.0	ACIDO	0.71
797	STZ-093	160.0	170.0	1500	200	17500	16400	-2.2	ACIDO	0.48
798	STZ-093	170.0	180.0	2200	50	19700	16200	-2.2	ACIDO	0.68
799	STZ-093	180.0	190.0	2300	50	17400	14800	-2.0	ACIDO	0.18
800	STZ-093	190.0	200.0	1900	50	12600	11800	-1.6	ACIDO	0.28
801	STZ-093	200.0	210.0	1300	300	18900	18000	-2.4	ACIDO	0.24
802	STZ-093	210.0	220.0	1300	50	17800	16300	-2.2	ACIDO	0.20
803	STZ-093	220.0	230.0	1500	100	22300	21300	-2.9	ACIDO	0.13
804	STZ-093	230.0	240.0	1500	50	15700	11900	-1.6	ACIDO	0.45
805	STZ-093	240.0	250.0	2000	50	24800	20300	-2.8	ACIDO	0.15
806	STZ-093	250.0	260.0	3100	50	23600	22100	-3.0	ACIDO	0.42
807	STZ-093	260.0	270.0	3200	100	16100	15400	-2.1	ACIDO	0.44
808	STZ-093	270.0	280.0	2600	50	31400	26500	-3.6	ACIDO	0.48
809	STZ-093	280.0	290.5	2800	100	22900	17500	-2.4	ACIDO	0.41
810	STZ-093	290.5	300.0	200	100	26300	10900	-1.5	ACIDO	0.28
811	STZ-093	300.0	310.0	300	50	1200	800	-0.1	NEUTRAL	0.20
812	STZ-093	310.0	319.8	50	50	2500	2000	-0.3	LIGERAMENTE ACIDO	0.17
813	STZ-093	319.8	330.0	1900	1000	28200	25300	-3.1	ACIDO	0.29
814	STZ-093	330.0	339.8	2800	50	20400	19100	-2.6	ACIDO	0.51
815	STZ-093	339.8	350.0	600	100	52000	27500	-3.7	ACIDO	0.57
816	STZ-093	350.0	360.0	3800	100	7000	5500	-0.7	LIGERAMENTE ACIDO	0.26
817	STZ-093	360.0	370.0	900	50	50000	29500	-4.0	ACIDO	0.43
818	STZ-093	370.0	380.0	700	200	61400	35400	-4.8	ACIDO	0.40
819	STZ-093	380.0	390.0	1500	50	30000	24700	-3.4	ACIDO	0.48
820	STZ-093	390.0	400.0	1600	50	47300	40900	-5.6	ACIDO	0.46
821	STZ-093	400.0	410.0	200	50	2100	1100	-0.1	LIGERAMENTE ACIDO	0.12
822	STZ-093	410.0	420.0	400	100	36200	23900	-3.2	ACIDO	0.82
823	STZ-093	420.0	429.6	700	50	83200	38800	-5.3	ACIDO	1.20
824	STZ-093	429.6	440.0	300	100	32100	20900	-2.8	ACIDO	1.18
825	STZ-093	440.0	446.0	500	50	76600	41100	-5.6	ACIDO	1.04

Apéndice 5
Resultados Análisis SPLP

Nro		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Código		DS-1383318	DS-1383319	DS-1383320	DS-1383325	DS-1383326	DS-1383328	DS-1383317	DS-1383321	DS-1383322	DS-1383323	DS-1383324	DS-1383327	DS-1383329	DS-1383330	DS-1383331
NCV		Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Acido	Ligeramente Acido	Acido	Ligeramente Acido	Inerte/Neutral	Ligeramente Acido	Ligeramente Acido	Inerte/Neutral	Acido	Acido
Taladro		QUE-028	QUE-028	QUE-033	QUE-113	QUE-113	QUE-119	QUE-022	QUE-038	QUE-039	QUE-108	QUE-110	QUE-118	QUE-122	QUE-128	QUE-134
Desde		10	22	14	0	10.25	0	14	12	2	0	4	6	10	4	0
Hasta		20.3	32	24	10.25	19.6	6	24	22	8	8.25	14.25	16	20	14	8
Alteración		SG	SG	SVG	ARG	ARG	ARG	SC	SC	SC	SG	SG	AA	AA	ARG	ARG
Tipo		Desmonte	Desmonte	Desmonte	Desmonte	Desmonte	Desmonte	Ox leach	Ox leach	Ox leach	Ox leach	Ox leach	Ox leach	Ox leach	Ox leach	Ox leach
Analito	Unit															
As	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Ba	mg/L	0.310	0.233	0.131	0.063	0.063	0.074	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063
Cd	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cr	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Hg	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pb	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.005	0.003	0.013	0.003	0.003	0.003	0.006
Se	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Ag	mg/L	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Al	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
B	mg/L	0.340	0.340	0.320	0.290	0.300	0.340	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
Be	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Bi	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ce	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Co	mg/L	0.001	0.001	0.001	0.001	0.001	0.050	0.001	0.001	0.004	0.001	0.001	0.001	0.001	0.001	0.001
Cs	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Cu	mg/L	0.006	0.006	0.006	0.006	0.006	0.105	0.008	0.006	0.006	0.007	0.006	0.006	0.006	0.006	0.006
Fe	mg/L	11.170	10.520	8.220	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Ga	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ge	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Hf	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
In	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
K	mg/L	1.250	1.250	1.250	12.230	11.020	31.530	5.260	10.550	6.810	1.250	5.900	1.940	1.250	12.330	2.710
La	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Li	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.014	0.017	0.015	0.016
Lu	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mg	mg/L	1.250	1.250	1.250	1.250	1.250	5.030	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Mn	mg/L	0.957	0.897	0.906	0.063	0.063	0.088	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063
Mo	mg/L	0.002	0.003	0.002	0.001	0.001	0.001	0.003	0.005	0.005	0.007	0.003	0.002	0.019	0.003	0.025
Na	mg/L	2.290	2.410	1.890	7.580	3.420	4.210	6.950	5.570	5.120	2.440	3.030	1.250	1.250	2.440	6.230
Nb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ni	mg/L	0.006	0.006	0.006	0.006	0.006	0.012	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
P	mg/L	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630
Rb	mg/L	0.003	0.003	0.003	0.004	0.004	0.026	0.004	0.006	0.003	0.003	0.004	0.003	0.003	0.008	0.003
Re	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	mg/L	46.660	39.410	43.850	40.110	42.510	55.720	32.660	61.970	72.480	27.680	37.470	22.710	41.550	43.800	48.580
Sb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.002	0.001	0.001	0.001	0.001	0.001
Sc	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Sn	mg/L	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Sr	mg/L	0.070	0.077	0.057	0.006	0.014	0.094	0.049	0.052	0.120	0.071	0.037	0.013	0.037	0.055	0.006
Ta	mg/L	0.021	0.020	0.016	0.016	0.012	0.006	0.001	0.001	0.001	0.001	0.017	0.056	0.010	0.017	0.009
Tb	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Te	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Th	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Tl	mg/L	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
U	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
V	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
W	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Y	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Yb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Zn	mg/L	0.013	0.021	0.013	0.013	0.020	0.088	0.021	0.013	0.013	0.019	0.017	0.013	0.013	0.013	0.013
Zr	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
pH final		6.43	6.42	6.50	6.60	5.75	4.65	7.76	8.10	8.07	7.92	7.62	7.80	8.59	8.07	7.65
Conductividad	uS	33.2	31.5	34.2	60.5	37.9	251.4	71.5	219.6	245.2	67.3	118.9	69.7	64.2	161.8	127.5
ORP	mV	260	280	166	202	277	271	95	125	108	107	127	109	69	103	196

Apéndice 6
Resultados Ensayo de Celdas de Humedad (Ciclo Incompleto)

Muestra	DS-1383320	Desmonte		SVG	Inerte/Neutral	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	821.18	809.03	801.9	801.44
pH @ 25° C	0.1	u pH	7.06	7.27	7.18	7.22
Conductividad @ 25°C	0.1	uS/cm	142	66	37	29
Sulfatos	0.01	mg/L	33.07	10.04	2.94	1.99
Nitrogeno amoniacal	0.004	mg/L	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.056	0.146	0.175	0.198
Nitrato	0.031	mg/L	<0.031	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	13.30	11.70	11.30	13.30
Acidez (H2SO4)	0.5	mg/L	3.0	1.0	1.3	1.2
Sb	0.0008	mg/L	0.0008	0.0008	0.0009	0.0011
As	0.001	mg/L	0.001	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.018	0.006	0.005	0.004
Bo	0.01	mg/L	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.011	0.006	0.004	0.004
Cd	0.0002	mg/L	0.0050	0.0008	0.0003	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.072	0.041	0.051	0.059
Mn	0.0006	mg/L	0.0276	0.0055	0.0044	0.0037
Hg	0.00003	mg/L	0.0005	0.0002	0.0003	0.0003
Mo	0.00014	mg/L	0.0039	0.0178	0.0151	0.0130
Ni	0.0004	mg/L	0.0520	0.0188	0.0085	0.0068
Pb	0.0003	mg/L	0.0003	0.0003	0.0010	0.0005
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0105	0.0036	0.0035	0.0023
Al	0.02	mg/L	0.03	0.02	0.02	0.02
Li	0.0009	mg/L	0.002	0.001	0.001	0.001
Ca	0.003	mg/L	5.39	4.56	3.30	3.13
Mg	0.001	mg/L	0.587	0.540	0.404	0.349
Co	0.00007	mg/L	0.0030	0.0009	0.0009	0.0006
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	18.44	11.19	3.89	3.88
K	0.2	mg/L	0.90	0.40	0.30	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0000	0.0000	0.0000	0.0000
Sr	0.0003	mg/L	0.043	0.028	0.024	0.022
Si	0.04	mg/L	1.37	2.63	2.85	3.74
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1383324	Ox leach (Cola BRT)		SG	Ligeramente Acido	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	792.42	947.62	940.7	932.46
pH @ 25º C	0.1	u pH	7.79	6.90	6.76	7.71
Conductividad @ 25°C	0.1	uS/cm	548	45	56	61
Sulfatos	0.01	mg/L	146.52	7.05	12.51	13.86
Nitrogeno amoniacal	0.004	mg/L	0.004	0.024	0.004	0.013
Fluoruro	0.002	mg/L	0.133	0.017	0.026	0.046
Nitrato	0.031	mg/L	<1.456	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	57.00	9.90	8.50	11.80
Acidez (H2SO4)	0.5	mg/L	3.0	1.1	1.0	0.8
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.003	0.001	0.001	0.002
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.010	0.002	0.002	0.002
Bo	0.01	mg/L	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.002	0.001	0.001	0.001
Cd	0.0002	mg/L	0.0010	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.057	0.035	0.015	0.007
Mn	0.0006	mg/L	0.0008	0.0006	0.0006	0.0006
Hg	0.00003	mg/L	0.0000	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0027	0.0012	0.0008	0.0006
Ni	0.0004	mg/L	0.0009	0.0004	0.0004	0.0004
Pb	0.0003	mg/L	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0070	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0090	0.0018	0.0023	0.0012
Al	0.02	mg/L	0.04	0.02	0.02	0.08
Li	0.0009	mg/L	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	84.84	7.16	8.26	9.22
Mg	0.001	mg/L	0.538	0.098	0.123	0.109
Co	0.00007	mg/L	0.0011	0.0001	0.0001	0.0004
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	13.06	0.45	0.83	0.73
K	0.2	mg/L	10.10	0.70	1.10	1.00
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0004	0.0000	0.0003	0.0001
Sr	0.0003	mg/L	0.062	0.006	0.006	0.008
Si	0.04	mg/L	0.55	0.43	0.26	0.21
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1383330	Ox leach (Cola BRT)		ARG	Acido	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	747.23	773.91	761	767.2
pH @ 25º C	0.1	u pH	7.23	7.17	7.27	7.46
Conductividad @ 25°C	0.1	uS/cm	918	410	339	322
Sulfatos	0.01	mg/L	288.50	123.26	120.72	112.83
Nitrogeno amoniacal	0.004	mg/L	0.004	0.015	0.014	0.013
Fluoruro	0.002	mg/L	0.059	0.019	0.012	0.035
Nitrato	0.031	mg/L	<3.555	<0.102	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	33.20	18.00	9.50	8.00
Acidez (H2SO4)	0.5	mg/L	5.7	1.6	1.3	1.1
Sb	0.0008	mg/L	0.0008	0.0008	0.0008	0.0008
As	0.001	mg/L	0.004	0.001	0.001	0.001
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.035	0.011	0.005	0.002
Bo	0.01	mg/L	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.027	0.001	0.001	0.001
Cd	0.0002	mg/L	0.0052	0.0012	0.0003	0.0003
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.178	0.008	0.001	0.002
Mn	0.0006	mg/L	0.0039	0.0014	0.0012	0.0007
Hg	0.00003	mg/L	0.0002	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0028	0.0010	0.0001	0.0001
Ni	0.0004	mg/L	0.0053	0.0004	0.0004	0.0004
Pb	0.0003	mg/L	0.0003	0.0003	0.0003	0.0003
Se	0.002	mg/L	0.0070	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0106	0.0133	0.0051	0.0019
Al	0.02	mg/L	0.02	0.02	0.02	0.02
Li	0.0009	mg/L	0.001	<0.0009	<0.0009	0.001
Ca	0.003	mg/L	152.62	72.98	61.61	52.82
Mg	0.001	mg/L	1.296	1.346	1.559	1.469
Co	0.00007	mg/L	0.0088	0.0010	0.0009	0.0007
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	22.52	5.91	4.92	5.07
K	0.2	mg/L	11.90	4.10	4.00	4.10
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0015	0.0001	0.0000	0.0001
Sr	0.0003	mg/L	0.179	0.064	0.062	0.061
Si	0.04	mg/L	0.54	0.62	0.12	0.12
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Apéndice 7
Resultados Calidad de Agua de Proceso

Código DS		DS-1383317	DS-1383321	DS-1383322	DS-1383323	DS-1383324	DS-1383327	DS-1383329	DS-1383330	DS-1383331
NCV		Ligeramente Acido	Acido	Ligeramente Acido	Inerte/Neutral	Ligeramente Acido	Ligeramente Acido	Inerte/Neutral	Acido	Acido
Taladro		QUE-022	QUE-038	QUE-039	QUE-108	QUE-110	QUE-118	QUE-122	QUE-128	QUE-134
Desde		14	12	2	0	4	6	10	4	0
Hasta		24	22	8	8.25	14.25	16	20	14	8
Tipo		Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT	Oxido Leach BRT
Tiempo Lix (h)		96	96	96	96	96	96	96	96	96
CN Libre / p80		50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M	50ppm, 10M
Analito	**Unidad**									
Cloruro	ppm	11.07	11.38	10.01	10.05	8.06	9.34	8.23	12.59	12.82
Fluoruro	ppm	2.63	0.00	0.00	3.45	7.99	2.68	2.16	7.44	2.73
N-NH3	ppm	32.5	0.0	0.0	0.0	4.5	31.4	31.2	72.5	0.0
N-Nitrato	ppm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N-Nitrito	ppm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sulfato	ppm	379	427	429	318	398	383	353	1539	610
CN Total	ppm	59.62	134.91	54.94	72.69	68.38	65.29	65.47	126.43	62.30
CN WAD	ppm	59.62	134.91	54.94	72.69	68.38	65.29	65.47	126.42	62.30
Cianato	ppm	4.620	19.500	1.830	1.110	0.120	0.120	0.960	6.270	0.390
Hg	ppb	8.896	2.136	1.201	9.886	14.248	12.615	14.376	9.620	14.460
Ag	ppm	0.017	0.060	0.030	0.039	0.021	0.009	0.011	0.087	0.009
Au	ppm	0.221	0.504	0.038	1.375	0.380	0.419	0.291	0.528	0.223
Cu	ppm	1.407	128.572	4.194	1.995	1.207	0.609	2.770	59.815	1.083
Al	ppm	3.637	15.648	3.758	2.438	0.374	3.920	2.430	0.271	8.422
As	ppm	0.000	0.000	0.000	0.000	0.403	0.000	0.000	0.242	0.000
B	ppm	4.708	4.322	4.196	4.258	0.181	4.223	4.199	0.190	4.386
Ba	ppm	0.049	0.089	0.082	0.045	1.012	0.054	0.024	0.977	0.098
Be	ppm	0.002	0.002	0.001	0.001	0.000	0.002	0.001	0.000	0.002
Bi	ppm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ca	ppm	55.162	144.597	164.882	64.161	75.949	102.698	98.282	443.212	167.908
Cd	ppm	0.002	0.000	0.002	0.006	0.000	0.005	0.008	0.000	0.000
Co	ppm	0.019	0.094	0.161	0.000	0.000	0.000	0.001	0.047	0.005
Cr	ppm	0.016	0.006	0.033	0.018	0.004	0.020	0.039	0.004	0.023
Fe	ppm	0.000	0.000	0.257	3.197	0.284	0.572	2.726	0.397	1.011
Ga	ppm	0.000	0.000	0.006	0.000	0.000	0.017	0.014	0.005	0.015
K	ppm	30.695	9.373	4.005	3.297	6.886	7.542	2.540	12.499	16.115
Li	ppm	0.004	0.003	0.003	0.003	0.000	0.003	0.003	0.000	0.003
Mg	ppm	1.427	1.079	1.423	1.012	1.431	1.140	0.473	3.030	1.344
Mn	ppm	0.026	0.024	0.023	0.024	0.000	0.022	0.026	0.000	0.021
Mo	ppm	0.014	0.049	0.049	0.115	0.027	0.029	0.141	0.037	0.410
Na	ppm	135.498	111.253	57.103	79.200	N/A	54.253	61.529	N/A	96.982
Nb	ppm	0.020	0.000	0.009	0.011	0.000	0.010	0.016	0.000	0.007
Ni	ppm	0.027	0.034	0.121	0.062	0.014	0.008	0.018	0.085	0.013
Pb	ppm	0.000	0.013	0.000	0.000	0.000	0.000	0.000	0.018	0.028
Sb	ppm	0.000	0.000	0.000	0.002	0.025	0.001	0.042	0.000	0.000
Sc	ppm	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.002	0.000
Se	ppm	0.048	0.233	0.226	0.071	0.000	0.136	0.000	0.085	0.148
Sn	ppm	0.041	0.048	0.070	0.051	0.000	0.043	0.062	0.015	0.038
Sr	ppm	0.120	0.194	0.340	0.159	0.241	0.171	0.181	0.894	0.104
Te	ppm	0.061	0.131	0.085	0.060	0.000	0.135	0.117	0.000	0.077
Ti	ppm	0.007	0.010	0.012	0.107	0.010	0.019	0.163	0.002	0.022
Tl	ppm	0.009	0.017	0.007	0.119	0.032	0.042	0.000	0.005	0.000
V	ppm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	ppm	0.234	0.174	0.193	0.223	0.000	0.255	0.167	0.000	0.119
Zn	ppm	0.305	0.000	0.234	8.832	0.191	1.013	0.000	0.256	0.000
Tiocianato	ppm	3.670	23.600	36.700	6.970	14.350	5.230	4.210	51.750	7.130
TDS	ppm	865.000	1145.000	830.000	625.000	375.000	575.000	600.000	2245.000	995.000
TSS	mg/L	27.000	8.000	52.000	23.000	0.000	51.000	49.000	0.000	51.000

Yanacocha

Metallurgical Services

Para	:	Jorge Zuñiga, Lelis Abanto
Copia	:	Gilmar Guzmán, Leoncio Sevilla
De	:	Carolina Alva
Fecha	:	22 de Julio, 2015
Tema	:	Caracterización Geoquímica del Depósito Chaquicocha Underground

CARACTERIZACIÓN GEOQUÍMICA DEL DEPÓSITO CHAQUICOCHA SUBTERRÁNEO OXIDOS

1. Introducción

El Proyecto Chaquicocha Oxidos Subterráneo se encuentra en la zona suroeste de la fase 2 del tajo Chaquicocha y se compone de minerales clase óxidos que será minado mediante un túnel subterráneo y procesado en la planta Gold Mill.

2. Métodos de Análisis

Los análisis geoquímicos realizados incluyen pruebas estáticas tales como Valor de Carbonato Neto (NCV, Net Carbonate Value), Procedimiento de Lixiviación por Precipitación Sintética (Synthetic Precipitation Leaching Procedure, SPLP), Generación de Ácido Neto Estático (NAG, Net Acid Generation) y el método cinético de Celdas de Humedad (HCT, Humidity Cell Test).

2.1 Valor de Carbonato Neto (NCV, ASTM E1915-11)

El NCV se determina a través de ensayos químicos de muestras minerales y desmonte para la determinación del Carbón Total y Carbón Residual después de pirólisis, del mismo modo se ensaya el Azufre Total y el Azufre residual después de pirolisis. Con estos resultados se determinará el Potencial de Neutralización Acida (ANP) y el Potencial de Generación de Acido (AGP) y el valor de NCV se calculará mediante las siguientes fórmulas:

$$ANP = 3.67*(Ctotal - Cresidual)$$
$$AGP = -1.37*(Stotal - Sresidual)$$
$$NCV = ANP + AGP$$

El resultado de NCV se clasifica de acuerdo a la Tabla 1 y según esta clasificación se determina si el material tiene potencial de generación de soluciones acidas, neutras o básicas.

Tabla 1 Rangos de clasificación del método NCV

Clasificación NCV	
Altamente ácido	NCV ≤ -5
Ácido	-5 < NCV ≤ -1
Ligeramente ácido	-1 < NCV ≤ -0.1
Inerte/Neutral	-0.1 < NCV < 0.1
Ligeramente básico	0.1 ≤ NCV < 1
Básico	1 ≤ NCV < 5
Altamente básico	NCV ≥ 5

2.2 *Procedimiento de Lixiviación por Precipitación Sintética (SPLP, US EPA 1312)*

El Procedimiento de Lixiviación por Precipitación Sintética (SPLP) es usado para evaluar el potencial de lixiviación de constituyentes inorgánicos (metales) desde materiales mineralizados o no mineralizados y que podrían tener impacto en las aguas superficiales y subterráneas. Este método provee un aseguramiento más realista de la movilidad bajo las actuales condiciones de campo, por ejemplo lo que ocurre cuando llueve o cuando nieva. El pH del fluido de extracción que se usa para esta prueba debe reflejar el pH en condiciones ácidas (el pH empleado fue 4.2), modificado según una mezcla 60/40 de ácidos sulfúrico y nítrico, en el cual el mineral y/o desmonte está siendo ensayado y almacenado.

2.3 *Generación de Ácido Neto Estático (NAG, Net Acid Generation)*

Esta prueba se emplea para determinar el equilibrio entre los componentes productores de ácido y los componentes consumidores de ácido en la roca. El sulfuro total contenido en la muestra se oxida con peróxido de hidrógeno, resultando en iones H^+:

$$S^{2-} \xrightarrow{H_2O_2} SO_4^{2-} + H^+$$

El ácido que produce la oxidación de sulfuros con peróxido de hidrógeno será neutralizado por los componentes neutralizantes, como los carbonatos. El pH de la solución será medido y en caso sea menos a 4.5, el ácido restante será titulado con NaOH y se determinará el contenido de total de H_2SO_4 ácido producido por tonelada de material. En algunos casos, se reportará la cantidad de ácido neutralizada desde el pH NAG hasta pH 4.5 y luego hasta pH 7.0.

2.4 *Ensayo de Celda de Humedad (HCT, ASTM D5744-07$^{\varepsilon 1}$)*

El ensayo de Celda de Humedad simula las condiciones climáticas a escala de laboratorio de forma controlada para promover la mineralización de una muestra mediante ciclos de aire húmedo y seco para simular la precipitación. La solución resultante se filtra y analiza. La prueba determinará el tiempo o la velocidad de generación de soluciones ácidas y la calidad del agua resultante (pH, metales, sulfatos, acidez, alcalinidad, conductividad, entre otros) a lo largo de 20 semanas de prueba.La muestra empleada consiste en un compósito de 2 kg y el tamaño de partícula ha sido modificado de acuerdo al tipo de mineral y proceso.

3. Selección de Muestras

Se seleccionaron compósitos de 82 taladros (ver Apéndice 2) distribuidos en el depósito según se muestra en la Figura 1 en el shape indicado como *Tajo Chaquicocha Subterráneo Óxidos*. Las coordenadas de los taladros se encuentran en Datum WGS84.

Figura 1 Distribución de muestras para caracterización geoquímica

El tipo de muestra está condicionado al método a realizar. Para el caso del ensayo de Valor de Carbonato Neto se emplearon compósitos de 10 metros obtenidos de muestras de cabeza de taladros tanto para desmonte y mineral. Una ley de oro mayor a 0.1 gpt clasificará una muestra como mineral, caso contrario, será clasificada como desmonte.

Para determinar la calidad de agua mediante los métodos SPLP y el ensayo de Celda de Humedad, se seleccionarán muestras representativas del tratamiento que se le dará al material. Los rechazos de taladros de baja concentración de oro (menor a 0.1 gpt) son las muestras más representativas para el caso de desmonte.

La selección de la muestra de mineral dependerá del proceso (lixiviación en pads o proceso Gold Mill). Para el caso del mineral a lixiviarse en el pad, se tomaron muestras de colas de columna o botella realizadas a condiciones representativas del proceso (un p80 de 10M o 1” y una concentración de cianuro libre de 50 ppm). Para el mineral a procesarse en la planta Gold Mill se tomaron muestras de colas de pruebas de botella a un p80 de 150 µm y a concentración de cianuro de acuerdo al tipo de mineral como se muestra en la Tabla 2.

Tabla 2 Selección de muestra para caracterización mediante SPLP/Celda de Humedad

Proceso	Tipo de Mineral	Muestra	p80	CN- Libre
Leach	Oxido	Cola BRT / CLT	10M o 1"	50 ppm
Gold Mill	Oxido	Cola BRT / CLT	150 µm	150 ppm
	Transitional			500 ppm
	Sulfuro			1000 ppm
Gold Mill - Flotación	Sulfuro	Cola de BRT con material flotado	150 µm	150 ppm
Desmonte	Desmonte	Muestra de taladro	10M	No aplica

4. Resultados

4.1 Resultados Valor de Carbonato Neto (NCV)

Se analizaron un total de 86 muestras de tramos de 10 metros pertenecientes a 82 taladros. El criterio empleado para separar el mineral del desmonte fue una ley mínima de 0.1 gpt. Un total de 05 fueron clasificadas como desmonte y un total de 81 fueron clasificadas como mineral. El resultado NCV de las muestras se encuentra en la Tabla 3. La distribución porcentual se muestra en la Figura 2.

Tabla 3 Clasificación de 82 muestras de acuerdo al método NCV

CHQ Subterráneo Ox	DESMONTE	MINERAL	TOTAL
ácido	2	80	82
ligeramente ácido	0	1	1
inerte/neutral	0	0	0
ligeramente básico	3	0	3
básico	0	0	0
total	5	81	86

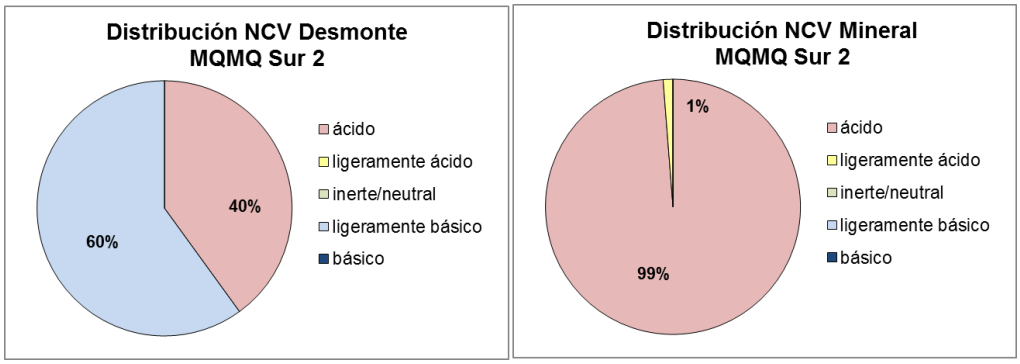


Figura 2 (A) Distribución Desmonte (B) Distribución NCV Mineral

Como se puede observar en la Tabla 3 y Figura 2, el mineral es predominante ácido. Las muestras de desmonte fueron escasas ya que el material muestreado tuvo leyes mayores a 0.1 gpt, sin embargo, las 05 muestras indican una distribución 60%-40% entre material ligeramente básico y acido respectivamente.

4.2 *Resultados Procedimiento de Lixiviación por Precipitación Sintética (SPLP)*

Se analizaron un total de 14 muestras, de las cuales 08 fueron de desmonte y 06 de mineral según se muestra en la Tabla 4. Las 09 muestras de mineral pertenecen a colas de pruebas de botella de mineral óxido procesado a las condiciones de la planta Gold Mill.

Como se puede observar en la Tabla 4, algunas de las muestras con las más altas producción de H_2SO_4 en el resultado NAG contienen niveles altos de azufre elemental.

Tabla 4 Muestras de Mineral y Desmonte analizadas por el método SPLP

Nro	Código DS	Taladro	Desde	Hasta	NCV	NAG (kg H_2SO_4/t)	S elemental %	Alteración	Tipo
1	DS-1383278	CHQ-1017	128	138	Inerte/Neutral	7.2		SM	Desmonte
2	DS-1383284	CHQ-408	186	196	Inerte/Neutral	9.5		SG	Desmonte
3	DS-1383291	CHQ-727	250	260	Altamente Acido	42.6	4.0	SM	Desmonte
4	DS-1383292	CHQ-735	208	215	Altamente Acido	160.4	9.1	SM	Desmonte
5	DS-1383299	CHQ-974	225	235	Inerte/Neutral	6.8		SM	Desmonte
6	DS-1383301	CHQ-991	198	207	Inerte/Neutral	6.3		SM	Desmonte
7	DS-1383302	DST-052	184	194	Inerte/Neutral	6.8		SG	Desmonte
8	DS-1383303	DST-052	201	210	Inerte/Neutral	7.7		SMV	Desmonte
9	DS-1383285	CHQ-408	212	222	Ligeramente Acido	11.3		SM	Ox mill (cola BRT)
10	DS-1383286	CHQ-485	256	266	Altamente Acido	160.2	9.8	SM	Ox mill (cola BRT)
11	DS-1383293	CHQ-740	222	233	Altamente Acido	112.8	11.7	SM	Ox mill (cola BRT)
12	DS-1383296	CHQ-759	244	254	Altamente Acido	64.1	8.9	SM	Ox mill (cola BRT)
13	DS-1383300	CHQ-974	250	264	Acido	44.4		SM	Ox mill (cola BRT)
14	DS-1383298	CHQ-912	217	230	Ligeramente Acido	9.5		SM	Ox mill (cola BRT)

A pesar de la acidez de la muestra, muchos parámetros analizados en la solución SPLP se mantuvieron por debajo de los límites de detección (tales como el vanadio, que para todas las muestras el resultado fue 0.013 ppm). Los valores mínimos, máximos y promedio se muestran en la Tabla 5. Sin embargo, se presentaron concentraciones mayores de fierro, arsénico, manganeso y molibdeno, que se relacionaron proporcionalmente con la acidez de la muestra. El desmonte presentó mayores niveles de estos metales. Los resultados se pueden observar en el Apéndice 5.

Tabla 5 Resumen resultados SPLP en mineral y desmonte

Analito	Unidad	DESMONTE (8 SPLP)			MINERAL (6 SPLP)		
		Max	Min	Promedio	Max	Min	Promedio
As	ppm	0.283	0.013	0.054	2.235	0.013	0.442
Hg		0.0001	0.0001	0.0001	0.0003	0.0001	0.0002
Pb		0.005	0.003	0.003	0.006	0.003	0.004
Cd		0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Cr		0.013	0.013	0.013	0.062	0.013	0.021
Mn		4.728	0.457	1.578	1.823	0.063	0.797
Mo		0.093	0.002	0.034	0.102	0.028	0.050
Co		0.001	0.001	0.001	0.009	0.001	0.003
V		0.013	0.013	0.013	0.013	0.013	0.013
pH final	-	6.9	5.2	6.3	10.1	6.5	7.9
Conductividad	µs/cm	1064	28	184	1448	54	399
ORP	mV	362	130	206	188	-34	42

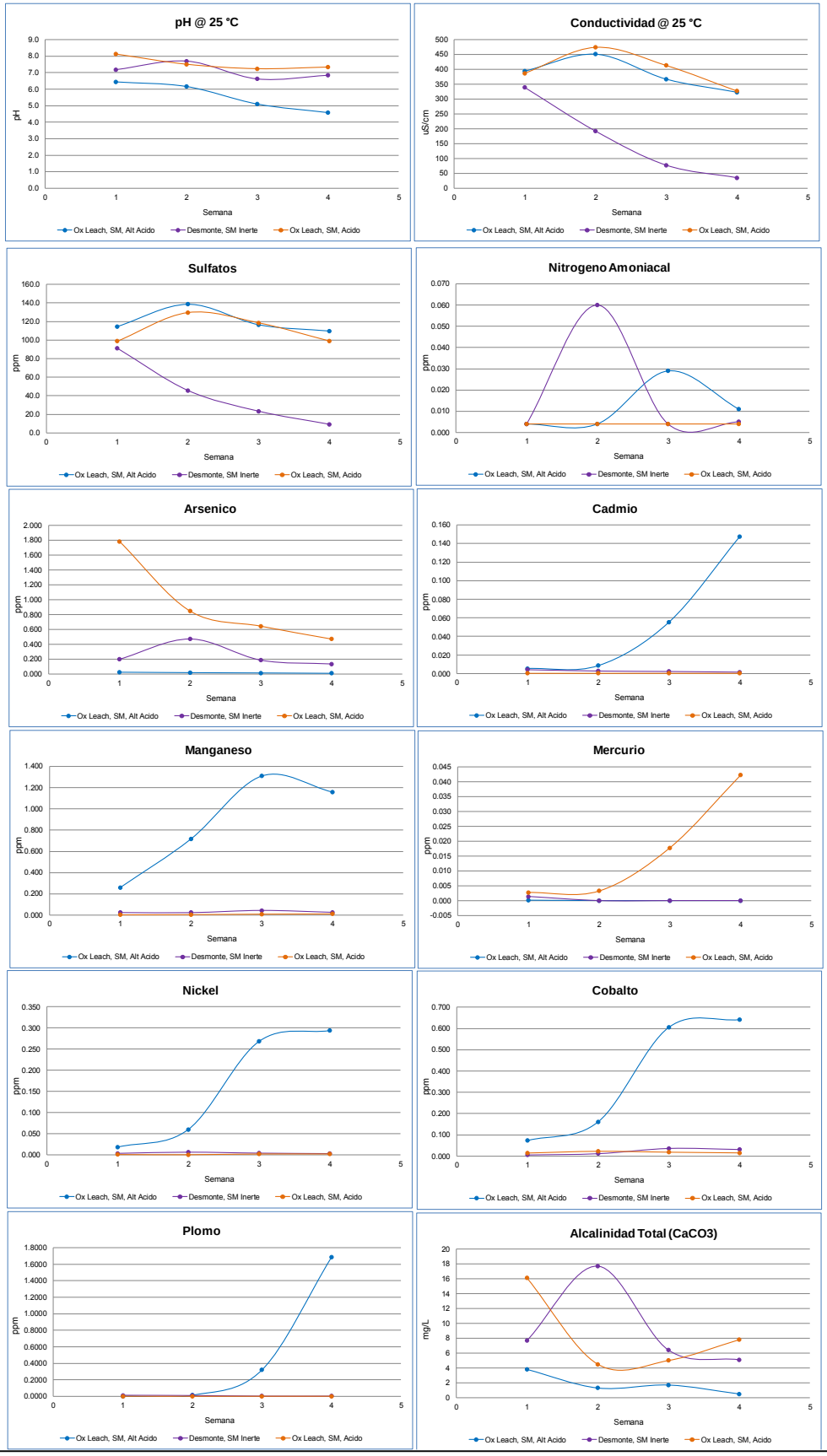
4.3 Resultados Ensayo de Celda de Humedad

Un total de 03 muestras, una de desmonte y dos de mineral, fueron enviadas a SGS Peru (Lima) para realizar el ensayo de Celda de Humedad. Los ensayos de cabeza de cada muestra se encuentran en la Tabla 6. A la fecha solo se tienen resultados de 04 semanas, los resultados se muestran en el Apéndice 5. La variación de concentración de los analitos se muestra en la Figura 3.

Tabla 6 Ensayos de cabeza a 03 muestras para el ensayo de Celda de Humedad

Código	DS-1383299	DS-1383293	DS-1383300
Taladro	CHQ-974	CHQ-740	CHQ-974
Desde	225	222	250
Hasta	235	233	264
NCV	Inerte/Neutral	Altamente Acido	Acido
Alteración	SM	SM	SM
Material	Desmonte	Ox mill (cola BRT)	Ox mill (cola BRT)
pH pasta	7.40	7.50	8.10
Total S%	0.16	11.07	1.95
Sulfuro %	<0.01	9.36	1.02
S elemental %	0.07	0.22	0.48
kg H_2SO_4/ t (pH 4.5)	0.4	15.7	34.8
kg H_2SO_4/ t (pH 7.0)	1.3	17.0	40.8
NAG pH	4.0	2.0	2.3
NP/AP	0.55	0.35	0.16
Tipo material	Productor acido	Productor acido	Productor acido

Figura 3 Variación en la concentración de analitos a lo largo del ensayo HCT



4.4 *Resultados Análisis de Solución de Proceso*

El análisis de solución de proceso consistió en analizar los componentes de la solución final de una prueba de botella o columna a condiciones normales del proceso. Los metales totales se analizaron por ICP-34 y los aniones por Cromatografía Iónica.

En este caso, el proceso de lixiviación será en la planta Gold Mill con un p80 de 150 µm y a 150 ppm de CN libre. Es importante resaltar que una prueba de botella es un sistema cerrado en el que los componentes disueltos se acumularán hasta que la concentración de oro se mantenga constante y eso significará que se ha llegado a la máxima extracción.

Para el depósito se presentan los resultados 06 muestras de pruebas BRT a condiciones óxido mill como se muestra en la Tabla 7.

Tabla 7 Muestras de BRT para la determinación de calidad de agua de proceso

Código DS	NCV	Taladro	Desde	Hasta	Tipo	Tiempo lix (hrs)	CN Libre / p80
DS-1383293	Altamente Acido	CHQ-740	222.1	233.3	Oxido Mill	24	150ppm, 150 µm
DS-1383285	Ligeramente Acido	CHQ-408	212	222	Oxido Mill	24	150ppm, 150 µm
DS-1383286	Altamente Acido	CHQ-485	256	266	Oxido Mill	24	150ppm, 150 µm
DS-1383296	Altamente Acido	CHQ-759	244	254	Oxido Mill	24	150ppm, 150 µm
DS-1383298	Ligeramente Acido	CHQ-912	217.3	230	Oxido Mill	144	150ppm, 150 µm
DS-1383300	Acido	CHQ-974	249.5	263.5	Oxido Mill	24	150ppm, 150 µm

El resumen de los resultados se muestra en la Tabla 8. Los valores de mercurio y cobre se muestran altos debido a la alta disolución de estos metales en presencia de cianuro, mientras que los sulfatos son una consecuencia directa de la producción de ácido. En este caso, se observa que los valores de CN WAD y total se diferencian debido a la presencia de fierro en solución. El análisis completo se encuentra en el Apéndice 7.

Tabla 8 Resumen resultados solución de proceso

Analito	Unidad	Oxido Mill BRT (6 muestras)		
		Max	Min	Promedio
CN WAD	ppm	203.7	1.4	105.5
CN Total		221.4	5.2	110.3
Sulfatos		1534	305	859
As		2.697	0.543	1.325
Cd		0.023	0.000	0.007
Ni		0.633	0.202	0.438
Hg		408.757	0.066	70.849
Cu		165.784	0.202	50.227
Pb		0.142	0.000	0.028
TDS		9550	1005	4582

5. Conclusiones

- Se analizaron un total de 05 muestras de desmonte y 81 muestras de mineral por el método NCV. La distribución NCV indica que el mineral será predominantemente ácido y que las muestras de desmonte son escasas e indican una distribución de 60-40% entre ligeramente básico y ácido.
- Se analizaron 14 muestras por el método SPLP, de las cuales 08 fueron de desmonte y 06 de mineral. Las concentraciones de la mayoría de parámetros analizados fueron menores al límite de detección.
- Se analizaron 03 muestras por el ensayo de Celda de Humedad, las cuales han completado solo 04 ciclos a la fecha.
- Se analizó la solución final de 06 pruebas BRT a condiciones óxido mill. Es importante resaltar que la BRT es un sistema cerrado y por tanto los resultados representan la disolución total de la muestra.

Apéndice 1
Tabla de Acrónimos

SPLP	Synthetic Precipitation Leaching Procedure, en español: Procedimiento de Lixiviación por Precipitación Sintética
HCT	Humidity Cell Test, en español: ensayo de Celda de Humedad
NCV	Net Carbonate Value, en español: Valor de Carbonato Neto
PPM	Partes por millón
CLT	Column Leach Test, en español: prueba de lixiviación en columna
BRT	Bottle Roll Test, en español: prueba de lixiviación en botella

Apéndice 2 Identificación de taladros perforados en Chaquicocha Subterráneo Óxidos

Nro	Taladro	Este	Norte	Elevación
1	CHQ-1002	18140.6	25993.1	3750.4
2	CHQ-1012	18269.7	25970.5	3749.7
3	CHQ-1013	18194.2	25926.2	3750.3
4	CHQ-437	18030.3	26059.7	3956.1
5	CHQ-557	17882.4	25814.6	3985.5
6	CHQ-599	18060.0	25859.8	3955.3
7	CHQ-602	18060.1	26003.7	3955.2
8	CHQ-605	17900.7	25833.3	3980.8
9	CHQ-606	18091.5	25925.4	3951.9
10	CHQ-679	17914.4	25756.8	3985.5
11	CHQ-682	17804.6	25876.6	3983.3
12	CHQ-693	17801.4	26086.9	3960.0
13	CHQ-694	18046.0	26147.9	3953.7
14	CHQ-697	17831.4	25850.8	3983.4
15	CHQ-701	18160.8	26031.2	3956.1
16	CHQ-727	17749.9	26062.0	3969.5
17	CHQ-729	17850.1	25961.2	3960.7
18	CHQ-730	17950.1	26113.0	3899.9
19	CHQ-731	17999.9	26155.3	3900.1
20	CHQ-732	18148.1	26005.0	3899.0
21	CHQ-733	17900.0	25912.1	3960.8
22	CHQ-734	17950.1	25860.5	3960.7
23	CHQ-735	17800.0	26008.4	3960.8
24	CHQ-737	17924.6	26242.8	3920.6
25	CHQ-740	17820.0	25998.6	3959.6
26	CHQ-744	18000.1	26099.9	3891.3
27	CHQ-745	18132.9	26004.4	3880.5
28	CHQ-748	17900.5	25913.7	3960.4
29	CHQ-750	17918.6	25898.6	3960.5
30	CHQ-751	18005.9	25817.2	3961.3
31	CHQ-752	17899.9	25915.8	3960.6
32	CHQ-753	18049.7	25773.0	3963.9
33	CHQ-754	17950.1	25649.7	3994.3
34	CHQ-766	17950.0	25859.2	3960.5
35	CHQ-767	17945.9	25648.3	3994.8
36	CHQ-773	17848.7	25773.6	3991.6
37	CHQ-774	17799.7	25780.6	3994.8
38	CHQ-785	17962.3	26054.4	3891.6
39	CHQ-787	17922.3	26123.4	3901.1
40	CHQ-796	17986.3	26018.7	3892.0
41	CHQ-798	17747.7	25817.7	3997.6

Nro	Taladro	Este	Norte	Elevación
42	CHQ-799	17850.8	25750.4	3993.6
43	CHQ-819	18100.0	25926.3	3875.2
44	CHQ-822	18048.5	25958.8	3881.9
45	CHQ-826	18149.3	25917.3	3870.5
46	CHQ-838	18079.8	25934.4	3877.0
47	CHQ-840	18044.8	25958.7	3881.8
48	CHQ-853	18103.3	26113.4	3770.2
49	CHQ-859	18035.6	26031.3	3759.8
50	CHQ-860	18043.2	26041.1	3759.6
51	CHQ-861	18037.6	26034.0	3759.7
52	CHQ-862	18097.7	26106.2	3759.1
53	CHQ-898	18035.3	26032.2	3760.1
54	CHQ-911	18120.6	25975.8	3760.1
55	CHQ-912	18447.3	25713.4	3794.8
56	CHQ-916	18058.8	26048.9	3759.9
57	CHQ-918	18041.4	26039.6	3759.6
58	CHQ-935	18212.3	25938.5	3750.5
59	CHQ-936	18147.6	25991.6	3749.3
60	CHQ-940	17944.2	26117.5	3719.3
61	CHQ-941	17968.4	26093.7	3720.7
62	CHQ-943	17951.9	26104.1	3719.3
63	CHQ-944	17952.2	26106.4	3719.5
64	CHQ-945	18159.8	25983.8	3749.7
65	CHQ-946	17932.5	26134.1	3720.1
66	CHQ-948	17952.2	26106.2	3719.8
67	CHQ-950	17971.0	26097.1	3720.8
68	CHQ-954	17941.4	26117.5	3719.7
69	CHQ-960	18159.1	25983.4	3750.0
70	CHQ-961	17952.1	26106.2	3720.0
71	CHQ-962	17941.3	26117.3	3719.5
72	CHQ-963	18175.2	25972.2	3751.2
73	CHQ-965	17931.6	26133.1	3720.1
74	CHQ-974	18159.9	25492.9	3999.2
75	CHQ-992	18174.8	25971.4	3751.2
76	CHQ-995	18119.4	25964.9	3761.0
77	DST-056	18209.6	25929.5	3750.5
78	DST-058	18209.0	25926.8	3750.5
79	DST-052	18412.9	25472.8	3982.9
80	CHQ-408	18277.2	25549.2	3985.7
81	CHQ-1017	18340.6	25651.8	3886.0
82	CHQ-991	18290.7	25474.8	3997.4

Apéndice 3
Resultados Análisis NCV de Muestras de Desmonte

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1	CHQ-727	250.0	260.0	220	200	45050	41170	-5.6	ACIDO	0.83
2	CHQ-735	207.0	217.0	1280	200	76467	75499	-10.3	ACIDO	0.03
4	CHQ-974	225.0	235.0	500	500	734	0	0.2	LIGERAMENTE BASICO	0.62
6	CHQ-1017	128.0	138.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.68
7	CHQ-991	197.8	207.1	500	500	500	0	0.2	LIGERAMENTE BASICO	0.88

Apéndice 4
Resultados Análisis NCV de Muestras de Mineral

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
8	CHQ-1002	237.2	265.6	500	500	51383	50324	-6.7	ACIDO	1.91
9	CHQ-1012	120.6	224.4	500	500	61506	59512	-8.0	ACIDO	3.18
10	CHQ-1013	83.7	246.7	500	500	61385	58227	-7.8	ACIDO	4.86
11	CHQ-437	253.1	345.0	1103	169	34717	32265	-4.4	ACIDO	8.27
12	CHQ-557	225.6	299.9	995	230	133662	128763	-17.6	ACIDO	11.05
13	CHQ-599	263.7	346.2	421	200	24658	21383	-2.9	ACIDO	5.64
14	CHQ-602	269.0	352.8	990	200	53985	50206	-6.8	ACIDO	7.07
15	CHQ-605	240.8	300.8	394	223	124511	118280	-16.1	ACIDO	16.20
16	CHQ-606	251.9	331.9	3345	200	57448	53550	-7.3	ACIDO	18.39
17	CHQ-679	225.6	325.6	216	200	88926	84143	-11.5	ACIDO	5.03
18	CHQ-682	243.5	283.5	200	200	87363	84007	-11.4	ACIDO	3.52
19	CHQ-693	347.1	405.8	287	200	109965	107440	-14.6	ACIDO	8.69
20	CHQ-694	301.6	426.5	715	200	36999	33819	-4.6	ACIDO	5.76
21	CHQ-697	272.7	293.4	200	200	80820	73250	-10.0	ACIDO	2.08
22	CHQ-701	260.7	281.0	200	200	55265	51831	-7.0	ACIDO	4.26
23	CHQ-727	266.6	341.4	201	200	76835	70649	-9.6	ACIDO	0.73
24	CHQ-729	253.8	299.4	457	200	114556	112721	-15.4	ACIDO	7.64
25	CHQ-730	208.0	276.9	321	200	75663	74016	-10.1	ACIDO	2.35
26	CHQ-731	244.7	259.9	369	200	51784	50353	-6.8	ACIDO	6.45
27	CHQ-732	227.2	342.0	670	200	45463	42262	-5.8	ACIDO	4.43
28	CHQ-733	225.3	289.7	200	200	122099	118160	-16.1	ACIDO	3.37
29	CHQ-734	218.5	304.8	1032	200	59375	56441	-7.7	ACIDO	4.16
30	CHQ-735	230.1	324.1	966	200	117077	115099	-15.7	ACIDO	3.81
31	CHQ-737	294.7	348.1	273	200	81969	78839	-10.7	ACIDO	45.03
32	CHQ-740	219.3	308.0	261	200	95599	93244	-12.7	ACIDO	2.57
33	CHQ-744	201.7	296.3	460	200	74979	72672	-9.9	ACIDO	2.34
34	CHQ-745	197.3	230.0	569	200	45456	44258	-6.0	ACIDO	3.48
35	CHQ-748	261.9	300.0	585	214	48059	45256	-6.1	ACIDO	25.92
36	CHQ-750	301.7	315.8	673	200	26674	23527	-3.1	ACIDO	17.42
37	CHQ-751	300.9	368.0	722	200	82788	78608	-10.7	ACIDO	3.22
38	CHQ-752	223.4	314.8	708	200	118167	115593	-15.8	ACIDO	5.57
39	CHQ-753	293.7	388.3	852	200	29635	26750	-3.6	ACIDO	15.29
40	CHQ-754	259.6	335.5	920	200	49594	47629	-6.5	ACIDO	4.42
41	CHQ-754	416.5	432.6	570	200	180381	168991	-23.1	ACIDO	1.60
42	CHQ-766	222.1	274.9	507	200	38680	35545	-4.8	ACIDO	3.42
43	CHQ-767	254.5	338.6	1131	200	64525	61262	-8.3	ACIDO	2.66
44	CHQ-773	260.8	344.9	214	205	106927	103651	-14.1	ACIDO	3.90
45	CHQ-774	283.3	324.4	205	200	134586	131516	-17.9	ACIDO	5.74
46	CHQ-785	176.7	238.4	301	206	50089	48155	-6.5	ACIDO	3.16
47	CHQ-787	242.4	302.8	200	200	101884	100326	-13.7	ACIDO	26.35
48	CHQ-796	217.9	308.6	417	200	19949	18133	-2.4	ACIDO	6.05

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
49	CHQ-798	260.6	321.1	396	200	115451	110667	-15.1	ACIDO	15.19
50	CHQ-799	270.3	348.7	301	200	128336	124742	-17.0	ACIDO	8.41
51	CHQ-819	175.4	255.4	391	200	37080	31371	-4.2	ACIDO	8.66
52	CHQ-822	179.7	289.0	275	200	64491	59912	-8.1	ACIDO	6.64
53	CHQ-826	192.1	212.1	372	200	78470	72197	-9.8	ACIDO	3.71
54	CHQ-838	199.1	259.9	220	200	23388	20443	-2.7	ACIDO	6.24
55	CHQ-840	171.1	276.7	281	200	84181	80853	-11.0	ACIDO	6.35
56	CHQ-853	161.1	235.6	500	500	38086	36044	-4.8	ACIDO	3.89
57	CHQ-859	112.3	228.8	500	500	73217	70365	-9.5	ACIDO	4.22
58	CHQ-860	110.1	246.5	500	500	72677	69853	-9.4	ACIDO	4.36
59	CHQ-861	107.2	165.7	978	500	52575	49900	-6.7	ACIDO	3.11
60	CHQ-862	136.1	190.1	500	500	44369	43109	-5.7	ACIDO	2.98
61	CHQ-898	230.8	321.7	500	500	135827	133131	-18.1	ACIDO	4.62
62	CHQ-911	72.3	161.2	500	500	54907	52169	-7.0	ACIDO	7.69
63	CHQ-912	217.0	230.0	500	500	2829	1717	-0.1	LIGERAMENTE ACIDO	14.23
64	CHQ-916	265.2	336.3	500	500	101326	96805	-13.1	ACIDO	21.40
65	CHQ-918	159.3	305.1	500	500	109781	105187	-14.2	ACIDO	12.80
66	CHQ-935	86.1	100.3	500	500	73244	71551	-9.6	ACIDO	4.70
67	CHQ-936	93.7	211.7	500	500	47194	43476	-5.8	ACIDO	9.96
68	CHQ-940	55.2	166.9	500	500	88487	85372	-11.5	ACIDO	26.42
69	CHQ-941	73.4	103.5	500	500	51197	50092	-6.7	ACIDO	3.23
70	CHQ-941	253.8	343.9	500	500	109671	105404	-14.3	ACIDO	4.59
71	CHQ-943	68.4	108.1	500	500	82206	80194	-10.8	ACIDO	2.01
72	CHQ-944	71.1	113.4	500	500	122423	118699	-16.1	ACIDO	24.29
73	CHQ-945	74.2	182.7	500	500	98753	93052	-12.6	ACIDO	5.12
74	CHQ-946	281.3	326.4	500	500	69707	63525	-8.5	ACIDO	38.91
75	CHQ-948	64.0	136.2	500	500	61515	59240	-7.9	ACIDO	11.32
76	CHQ-950	78.3	93.4	500	500	39803	38460	-5.1	ACIDO	1.54
77	CHQ-950	286.0	316.2	500	500	205943	202272	-27.5	ACIDO	1.39
78	CHQ-954	75.6	124.9	500	500	52101	51164	-6.8	ACIDO	0.97
79	CHQ-960	112.1	175.2	500	500	16881	15577	-2.0	ACIDO	3.83
80	CHQ-961	75.4	127.6	500	500	54769	52624	-7.0	ACIDO	6.90
81	CHQ-962	68.7	145.7	500	500	84252	82963	-11.2	ACIDO	4.93
82	CHQ-963	274.0	334.2	500	500	178922	176888	-24.1	ACIDO	4.55
83	CHQ-965	281.3	326.6	500	500	133461	127664	-17.3	ACIDO	2.28
84	CHQ-974	249.5	263.0	500	500	17728	17228	-2.2	ACIDO	6.61
85	CHQ-992	261.3	344.0	500	500	45396	43790	-5.8	ACIDO	3.60
86	CHQ-995	232.1	292.1	500	500	149274	145104	-19.7	ACIDO	3.71
87	DST-056	135.1	143.3	500	500	58138	53576	-7.2	ACIDO	6.27
88	DST-058	168.0	178.4	500	500	59965	59465	-8.0	ACIDO	14.95

Apéndice 5
Resultados Análisis SPLP

Nro		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Código		DS-1383278	DS-1383284	DS-1383291	DS-1383292	DS-1383299	DS-1383301	DS-1383302	DS-1383303	DS-1383285	DS-1383286	DS-1383293	DS-1383296	DS-1383300	DS-1383298
NCV		Inerte/Neutral	Inerte/Neutral	Fuertemente Acido	Fuertemente Acido	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Inerte/Neutral	Ligeramente Acido	Fuertemente Acido	Fuertemente Acido	Fuertemente Acido	Acido	Ligeramente Acido
Taladro		CHQ-1017	CHQ-408	CHQ-727	CHQ-735	CHQ-974	CHQ-991	DST-052	DST-052	CHQ-408	CHQ-485	CHQ-740	CHQ-759	CHQ-974	CHQ-912
Desde		128	186	250	207.5	224.5	197.75	184	200.5	212	256	222.1	244	249.5	217.3
Hasta		138	196	260	215	235	207.1	194	210	222	266	233.3	254	263.5	230
Alteración		SM	SG	SM	SM	SM	SM	SG	SMV	SM	SM	SM	SM	SM	SM
Tipo		Desmonte	Desmonte	Desmonte	Desmonte	Desmonte	Desmonte	Desmonte	Desmonte	Ox Mill	Ox Mill	Ox Mill	Ox Mill	Ox Mill	Ox Mill
Analito	Unit														
As	mg/L	0.013	0.013	0.030	0.283	0.051	0.013	0.013	0.013	2.235	0.084	0.017	0.284	0.018	0.013
Ba	mg/L	0.447	0.090	0.107	0.063	0.319	0.448	0.296	0.470	0.117	0.063	0.184	0.104	0.283	0.440
Cd	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cr	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.062	0.013	0.013	0.013	0.013
Hg	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pb	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.004	0.003	0.003	0.003	0.004	0.006
Se	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.021	0.013	0.013	0.013	0.013	0.013
Ag	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.002	0.000
Al	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
B	mg/L	0.530	0.570	0.590	0.590	0.610	0.560	0.310	0.360	0.180	0.170	0.170	0.170	0.130	0.130
Be	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Bi	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ce	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Co	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.009	0.001	0.005	0.001	0.001
Cs	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.001	0.001	0.001	0.001
Cu	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Fe	mg/L	17.450	16.560	37.510	378.420	18.580	14.450	10.940	11.250	1.250	1.250	14.120	1.250	12.220	6.310
Ga	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001
Ge	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Hf	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
In	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
K	mg/L	1.250	1.410	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
La	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Li	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Lu	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mg	mg/L	1.250	2.820	1.250	1.250	1.250	1.250	1.250	1.250	1.700	2.440	1.250	3.960	1.250	1.250
Mn	mg/L	0.961	1.050	2.904	4.728	0.959	0.731	0.457	0.830	0.063	0.063	1.823	0.063	1.745	1.027
Mo	mg/L	0.002	0.011	0.093	0.041	0.035	0.028	0.021	0.042	0.028	0.041	0.102	0.044	0.048	0.035
Na	mg/L	2.010	15.440	1.250	1.250	5.030	1.810	4.500	2.460	1.250	1.250	1.250	1.250	1.250	1.250
Nb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ni	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.020	0.006	0.006	0.006	0.006
P	mg/L	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630
Rb	mg/L	0.003	0.008	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.003	0.003	0.003	0.003	0.003
Re	mg/L	0.000	0.000	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000
S	mg/L	39.590	68.330	62.750	279.820	38.650	41.690	46.890	40.810	42.470	634.540	30.920	163.470	33.650	25.050
Sb	mg/L	0.020	0.004	0.004	0.002	0.007	0.048	0.150	0.050	0.029	0.010	0.012	0.045	0.103	0.054
Sc	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Sn	mg/L	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Sr	mg/L	0.068	0.170	0.065	0.113	0.087	0.043	0.064	0.064	0.132	0.193	0.056	0.123	0.037	0.098
Ta	mg/L	0.003	0.003	0.005	0.002	0.007	0.003	0.017	0.015	0.008	0.006	0.022	0.005	0.001	0.001
Tb	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Te	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Th	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Tl	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.298	0.003	0.002	0.000	0.000
U	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
V	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
W	mg/L	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.008	0.002	0.001	0.002	0.001	0.001
Y	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Yb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Zn	mg/L	0.013	0.013	0.013	0.015	0.013	0.013	0.013	0.019	0.013	0.081	0.015	0.013	0.049	0.015
Zr	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
pH final		6.25	6.38	6.22	5.21	6.30	6.30	6.55	6.93	8.80	10.12	6.47	8.51	6.81	6.87
Conductividad	uS	31.6	125.7	107.5	1064.0	40.7	32.3	28.3	41.3	153.0	1448.0	110.1	493.0	134.0	53.5
ORP	mV	171	275	286	362	132	133	130	155	188	101	-6	-34	-10	10

Apéndice 6
Resultados Ensayo de Celdas de Humedad (Ciclo Incompleto)

Muestra	DS-1383299	Desmonte		SM	Inerte/Neutral	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	796.95	966.49	970.7	968.16
pH @ 25° C	0.1	u pH	7.18	7.70	6.62	6.84
Conductividad @ 25°C	0.1	uS/cm	339	192	78	35
Sulfatos	0.01	mg/L	91.28	45.73	23.41	9.30
Nitrogeno amoniacal	0.004	mg/L	0.004	0.06	0.004	0.005
Fluoruro	0.002	mg/L	0.197	0.168	0.077	0.076
Nitrato	0.031	mg/L	<0.984	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	7.70	17.70	6.40	5.10
Acidez (H2SO4)	0.5	mg/L	4.1	2.3	2.2	2.0
Sb	0.0008	mg/L	0.0015	0.0076	0.0065	0.0045
As	0.001	mg/L	0.198	0.471	0.186	0.135
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.173	0.101	0.069	0.084
Bo	0.01	mg/L	0.03	0.05	0.02	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.006	0.028	0.004	0.002
Cd	0.0002	mg/L	0.0041	0.0027	0.0022	0.0015
Cr	0.002	mg/L	<0.004	<0.002	<0.002	<0.002
Fe	0.001	mg/L	2.568	0.033	0.101	0.004
Mn	0.0006	mg/L	0.0236	0.0229	0.0438	0.0257
Hg	0.00003	mg/L	0.0014	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0048	0.0160	0.0011	0.0022
Ni	0.0004	mg/L	0.0036	0.0064	0.0041	0.0030
Pb	0.0003	mg/L	0.0127	0.0097	0.0020	0.0020
Se	0.002	mg/L	0.0030	0.0030	0.0020	0.0020
Zn	0.0008	mg/L	0.0076	0.0728	0.0203	0.0145
Al	0.02	mg/L	0.05	0.02	0.02	0.02
Li	0.0009	mg/L	0.005	0.007	0.004	0.002
Ca	0.003	mg/L	10.17	13.95	8.49	3.63
Mg	0.001	mg/L	1.466	2.167	1.121	0.557
Co	0.00007	mg/L	0.0057	0.0117	0.0363	0.0313
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	44.53	24.75	6.26	2.48
K	0.2	mg/L	3.00	1.30	0.40	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0013	0.0012	0.0007	0.0004
Sr	0.0003	mg/L	0.051	0.100	0.062	0.039
Si	0.04	mg/L	5.39	12.59	9.69	8.95
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1383293	Ox mill (Cola BRT)		SM	Altamente Acido	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	874.28	843.13	847.13	842.78
pH @ 25° C	0.1	u pH	6.44	6.16	5.10	4.58
Conductividad @ 25°C	0.1	uS/cm	394	451	367	323
Sulfatos	0.01	mg/L	114.49	138.48	116.47	109.67
Nitrogeno amoniacal	0.004	mg/L	0.004	0.004	0.029	0.011
Fluoruro	0.002	mg/L	0.026	0.015	0.002	0.002
Nitrato	0.031	mg/L	<0.182	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	3.80	1.30	1.70	0.50
Acidez (H2SO4)	0.5	mg/L	4.3	2.4	3.3	5.1
Sb	0.0008	mg/L	0.0108	0.0062	0.0056	0.0026
As	0.001	mg/L	0.024	0.018	0.014	0.009
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.063	0.049	0.054	0.034
Bo	0.01	mg/L	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.001	0.001	0.024	0.091
Cd	0.0002	mg/L	0.0054	0.0085	0.0553	0.1474
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.003
Fe	0.001	mg/L	0.029	0.001	0.105	0.665
Mn	0.0006	mg/L	0.2600	0.7177	1.3099	1.1586
Hg	0.00003	mg/L	0.0002	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0058	0.0070	0.0008	0.0003
Ni	0.0004	mg/L	0.0182	0.0601	0.2679	0.2934
Pb	0.0003	mg/L	0.0019	0.0133	0.3197	1.6839
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0150	0.0321	0.3187	0.5822
Al	0.02	mg/L	0.03	0.02	0.02	0.07
Li	0.0009	mg/L	0.002	0.003	0.003	0.002
Ca	0.003	mg/L	59.30	88.95	58.56	49.21
Mg	0.001	mg/L	2.232	4.387	2.770	1.205
Co	0.00007	mg/L	0.0733	0.1616	0.6057	0.6415
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	1.31	1.97	1.36	0.72
K	0.2	mg/L	0.40	0.40	0.40	0.40
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.1496	0.1831	0.4545	0.7069
Sr	0.0003	mg/L	0.079	0.045	0.078	0.129
Si	0.04	mg/L	1.95	2.75	5.58	5.88
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1383300	Ox mill (Cola BRT)		SM	Acido	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	908.49	770.12	757.6	767.04
pH @ 25° C	0.1	u pH	8.13	7.51	7.24	7.34
Conductividad @ 25°C	0.1	uS/cm	387	474	413	327
Sulfatos	0.01	mg/L	98.68	129.57	118.53	98.96
Nitrogeno amoniacal	0.004	mg/L	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.098	0.081	0.1	0.111
Nitrato	0.031	mg/L	<0.239	<0.175	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	16.10	4.50	5.00	7.80
Acidez (H2SO4)	0.5	mg/L	7.6	5.7	2.7	2.0
Sb	0.0008	mg/L	0.0948	0.0792	0.0875	0.0607
As	0.001	mg/L	1.785	0.846	0.643	0.470
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.159	0.178	0.126	0.150
Bo	0.01	mg/L	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.001	0.001	0.002	0.002
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.014	0.001	0.001	0.001
Mn	0.0006	mg/L	0.0019	0.0038	0.0088	0.0103
Hg	0.00003	mg/L	0.0028	0.0033	0.0178	0.0422
Mo	0.00014	mg/L	0.0045	0.0124	0.0084	0.0090
Ni	0.0004	mg/L	0.0008	0.0004	0.0021	0.0022
Pb	0.0003	mg/L	0.0003	0.0003	0.0005	0.0007
Se	0.002	mg/L	0.0050	0.0050	0.0040	0.0030
Zn	0.0008	mg/L	0.0029	0.0021	0.0067	0.0033
Al	0.02	mg/L	0.02	0.02	0.02	0.02
Li	0.0009	mg/L	0.001	0.001	0.001	0.001
Ca	0.003	mg/L	57.92	80.52	71.41	55.03
Mg	0.001	mg/L	2.010	4.838	4.211	4.116
Co	0.00007	mg/L	0.0148	0.0230	0.0188	0.0154
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	2.50	3.83	2.53	2.27
K	0.2	mg/L	0.60	0.40	0.30	0.30
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0289	0.0202	0.0176	0.0192
Sr	0.0003	mg/L	0.084	0.085	0.079	0.070
Si	0.04	mg/L	3.03	2.70	2.85	2.50
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Apéndice 7
Resultados Calidad de Agua de Proceso

Nro		1	2	3	4	5	6
Código DS		DS-1383293	DS-1383285	DS-1383286	DS-1383296	DS-1383298	DS-1383300
NCV		Altamente Acido	Ligeramente Acido	Altamente Acido	Altamente Acido	Ligeramente Acido	Acido
Taladro		CHQ-740	CHQ-408	CHQ-485	CHQ-759	CHQ-912	CHQ-974
Desde		222.1	212	256	244	217.3	249.5
Hasta		233.3	222	266	254	230	263.5
Tipo		Oxido Mill	Oxido Mill	Oxido Mill	Oxido Mill	Oxido Mill	Oxido Mill
Tiempo Lix (h)		24	24	24	24	144	24
CN Libre / p80		150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm
Analito	**Unidad**						
Cloruro	ppm	9.19	13.54	9.02	8.16	12.46	7.66
Fluoruro	ppm	7.93	0.00	7.55	7.37	2.54	7.52
N-NH3	ppm	175.8	0.0	195.8	0.0	0.0	324.5
N-Nitrato	ppm	0.00	0.00	0.00	0.00	0.00	0.00
N-Nitrito	ppm	0.00	0.00	0.00	0.00	0.00	0.00
Sulfato	ppm	1199	530	1534	1093	305	495
CN Total	ppm	140.62	119.24	5.18	7.50	167.67	221.42
CN WAD	ppm	129.66	123.03	1.39	7.66	167.66	203.72
Cianato	ppm	2.340	1.860	2.220	2.460	1.800	1.680
Hg	ppb	1.354	12.977	0.066	1.366	408.757	0.575
Ag	ppm	0.009	0.232	0.000	0.002	0.525	0.079
Au	ppm	1.344	2.104	1.731	2.984	15.957	1.986
Cu	ppm	108.711	4.028	0.202	3.749	18.887	165.784
Al	ppm	1.531	0.694	0.550	0.758	1.962	1.299
As	ppm	0.959	1.304	0.543	0.668	1.776	2.697
B	ppm	3.219	1.409	1.198	1.538	5.126	2.749
Ba	ppm	0.034	0.045	0.104	0.082	0.317	0.036
Be	ppm	0.008	0.000	0.000	0.000	0.001	0.009
Bi	ppm	0.000	0.000	0.000	0.000	0.000	0.641
Ca	ppm	338.850	161.725	1168.820	608.842	61.601	129.279
Cd	ppm	0.023	0.000	0.000	0.000	0.008	0.008
Co	ppm	0.604	0.033	0.615	0.178	0.438	0.331
Cr	ppm	0.000	0.085	0.015	0.014	0.046	0.000
Fe	ppm	5.423	0.409	0.470	0.509	1.087	0.000
Ga	ppm	0.007	0.002	0.000	0.000	0.000	0.011
K	ppm	2.132	5.083	7.182	3.227	2.610	1.847
Li	ppm	0.019	0.003	0.018	0.011	0.005	0.007
Mg	ppm	7.102	0.245	0.290	0.393	1.651	0.495
Mn	ppm	0.068	0.004	0.005	0.004	0.054	0.064
Mo	ppm	0.432	0.198	0.434	0.108	0.211	0.150
Na	ppm	257.760	N/A	N/A	N/A	175.574	211.999
Nb	ppm	0.036	0.003	0.002	0.003	0.008	0.007
Ni	ppm	0.536	0.218	0.633	0.582	0.457	0.202
Pb	ppm	0.020	0.004	0.000	0.000	0.142	0.004
Sb	ppm	0.107	0.000	0.000	0.000	0.064	0.651
Sc	ppm	0.000	0.001	0.000	0.000	0.000	0.001
Se	ppm	0.290	0.000	0.065	0.047	0.076	0.209
Sn	ppm	0.227	0.006	0.008	0.000	0.000	0.093
Sr	ppm	0.153	0.647	1.255	0.706	0.192	0.190
Te	ppm	0.002	0.019	0.000	0.018	0.091	0.000
Ti	ppm	0.004	0.003	0.002	0.002	0.160	0.002
Tl	ppm	0.000	0.000	0.557	0.000	0.000	0.000
V	ppm	0.000	0.000	0.000	0.000	0.000	0.000
W	ppm	0.078	0.052	0.013	0.032	0.634	0.195
Zn	ppm	0.000	3.058	0.000	0.000	0.309	0.000
Tiocianato	ppm	740.950	175.120	3677.120	2457.120	59.400	139.950
TDS	ppm	6075.000	1210.000	5940.000	3710.000	1005.000	9550.000
TSS	mg/L	0.000	0.000	0.000	0.000	132.000	0.000

Yanacocha

Metallurgical Services

Para : Jorge Zuñiga, Lelis Abanto
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De : Carolina Alva
Fecha : 23 de Julio, 2015
Tema : Caracterización Geoquímica del Depósito Maqui Maqui Sur Etapa 2

CARACTERIZACIÓN GEOQUÍMICA DEL DEPÓSITO MAQUI MAQUI SUR ETAPA 2

1. Introducción

La etapa 2 del depósito Maqui Maqui Sur es el depósito que se encuentra más al norte del límite comprendido para el proyecto. Esta etapa está conformada principalmente por mineral oxidado y sulfurado que será tratado en la planta Gold Mill y dependiendo de la concentración de cobre, recibirá un pre-tratamiento de flotación previo a la lixiviación con cianuro.

2. Métodos de Análisis

Los análisis geoquímicos realizados incluyen pruebas estáticas tales como Valor de Carbonato Neto (NCV, Net Carbonate Value), Procedimiento de Lixiviación por Precipitación Sintética (Synthetic Precipitation Leaching Procedure, SPLP), Generación de Ácido Neto Estático (NAG, Net Acid Generation) y el método cinético de Celdas de Humedad (HCT, Humidity Cell Test).

2.1 Valor de Carbonato Neto (NCV, ASTM E1915-11)

El NCV se determina a través de ensayos químicos de muestras minerales y desmonte para la determinación del Carbón Total y Carbón Residual después de pirólisis, del mismo modo se ensaya el Azufre Total y el Azufre residual después de pirolisis. Con estos resultado se determinará el Potencial de Neutralización Acida (ANP) y el Potencial de Generación de Acido (AGP) y el valor de NCV se calculará mediante las siguientes fórmulas:

$$ANP = 3.67*(Ctotal - Cresidual)$$
$$AGP = -1.37*(Stotal - Sresidual)$$
$$NCV = ANP + AGP$$

El resultado de NCV se clasifica de acuerdo a la Tabla 1 y según esta clasificación se determina si el material tiene potencial de generación de soluciones acidas, neutras o básicas.

Tabla 1 Rangos de clasificación del método NCV

Clasificación NCV	
Altamente ácido	NCV ≤ -5
Ácido	-5 < NCV ≤ -1
Ligeramente ácido	-1 < NCV ≤ -0.1
Inerte/Neutral	-0.1 < NCV < 0.1
Ligeramente básico	0.1 ≤ NCV < 1
Básico	1 ≤ NCV < 5
Altamente básico	NCV ≥ 5

2.2 *Procedimiento de Lixiviación por Precipitación Sintética (SPLP, US EPA 1312)*

El Procedimiento de Lixiviación por Precipitación Sintética (SPLP) es usado para evaluar el potencial de lixiviación de constituyentes inorgánicos (metales) desde materiales mineralizados o no mineralizados y que podrían tener impacto en las aguas superficiales y subterráneas. Este método provee un aseguramiento más realista de la movilidad bajo las actuales condiciones de campo, por ejemplo lo que ocurre cuando llueve o cuando nieva. El pH del fluido de extracción que se usa para esta prueba debe reflejar el pH en condiciones ácidas (el pH empleado fue 4.2), modificado según una mezcla 60/40 de ácidos sulfúrico y nítrico, en el cual el mineral y/o desmonte está siendo ensayado y almacenado.

2.3 *Generación de Ácido Neto Estático (NAG, Net Acid Generation)*

Esta prueba se emplea para determinar el equilibrio entre los componentes productores de ácido y los componentes consumidores de ácido en la roca. El sulfuro total contenido en la muestra se oxida con peróxido de hidrógeno, resultando en iones H^+:

$$S^{2-} \xrightarrow{H_2O_2} SO_4^{2-} + H^+$$

El ácido que produce la oxidación de sulfuros con peróxido de hidrógeno será neutralizado por los componentes neutralizantes, como los carbonatos. El pH de la solución será medido y en caso sea menos a 4.5, el ácido restante será titulado con NaOH y se determinará el contenido de total de H_2SO_4 ácido producido por tonelada de material. En algunos casos, se reportará la cantidad de ácido neutralizada desde el pH NAG hasta pH 4.5 y luego hasta pH 7.0.

2.4 *Ensayo de Celda de Humedad (HCT, ASTM D5744-07$^{\varepsilon 1}$)*

El ensayo de Celda de Humedad simula las condiciones climáticas a escala de laboratorio de forma controlada para promover la mineralización de una muestra mediante ciclos de aire húmedo y seco para simular la precipitación. La solución resultante se filtra y analiza. La prueba determinará el tiempo o la velocidad de generación de soluciones ácidas y la calidad del agua resultante (pH, metales, sulfatos, acidez, alcalinidad, conductividad, entre otros) a lo largo de 20 semanas de prueba. La muestra empleada consiste en un compósito de 2 kg y el tamaño de partícula ha sido modificado de acuerdo al tipo de mineral y proceso.

3. Selección de Muestras

Se seleccionaron compósitos de 566 taladros (ver Apéndice 2) distribuidos en el depósito según se muestra en la Figura 1 en el shape indicado como *Tajo Chaquicocha Etapa 4 (Tajo Quecher Norte)*. Las coordenadas de los taladros se encuentran en Datum WGS84.

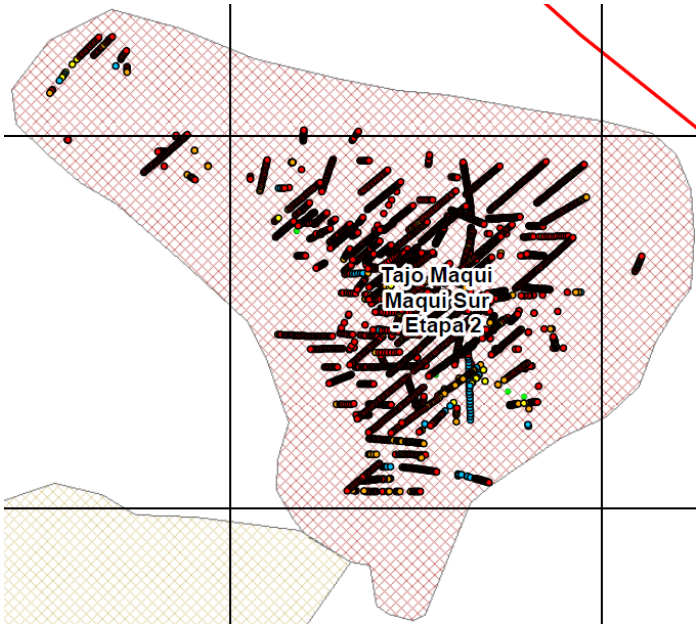


Figura 1 Distribución de muestras para caracterización geoquímica

El tipo de muestra está condicionado al método a realizar. Para el caso del ensayo de Valor de Carbonato Neto se emplearon compósitos de 10 metros obtenidos de muestras de cabeza de taladros tanto para desmonte y mineral. Una ley de oro mayor a 0.1 gpt clasificará una muestra como mineral, caso contrario, será clasificada como desmonte.

Para determinar la calidad de agua mediante los métodos SPLP y el ensayo de Celda de Humedad, se seleccionarán muestras representativas del tratamiento que se le dará al material. Los rechazos de taladros de baja concentración de oro (menor a 0.1 gpt) son las muestras más representativas para el caso de desmonte.

La selección de la muestra de mineral dependerá del proceso (lixiviación en pads o proceso Gold Mill). Para el caso del mineral a lixiviarse en el pad, se tomaron muestras de colas de columna o botella realizadas a condiciones representativas del proceso (un p80 de 10M o 1" y una concentración de cianuro libre de 50 ppm). Para el mineral a procesarse en la planta Gold Mill se tomaron muestras de colas de pruebas de botella a un p80 de 150 µm y a concentración de cianuro de acuerdo al tipo de mineral como se muestra en la Tabla 2.

Tabla 2 Selección de muestra para caracterización mediante SPLP/Celda de Humedad

Proceso	Tipo de Mineral	Muestra	p80	CN- Libre
Leach	Oxido	Cola BRT / CLT	10M o 1"	50 ppm
Gold Mill	Oxido	Cola BRT / CLT	150 µm	150 ppm
	Transitional			500 ppm
	Sulfuro			1000 ppm
Gold Mill - Flotación	Sulfuro	Cola de BRT con material flotado	150 µm	150 ppm
Desmonte	Desmonte	Muestra de taladro	10M	No aplica

4. Resultados

4.1 Resultados Valor de Carbonato Neto (NCV)

Se analizaron un total de 4190 muestras de tramos de 10 metros pertenecientes a 566 taladros. El criterio empleado para separar el mineral del desmonte fue una ley mínima de 0.1 gpt. Un total de 722 muestras fueron clasificadas como desmonte y un total de 3468 fueron clasificadas como mineral. El resultado NCV de las muestras se encuentra en la Tabla 3. La distribución porcentual se muestra en la Figura 2.

Tabla 3 Clasificación de 3103 muestras de acuerdo al método NCV

MQMQ SUR 2	DESMONTE	MINERAL	TOTAL
ácido	500	2735	3235
ligeramente ácido	51	207	258
inerte/neutral	722	3468	0
ligeramente básico	17	43	60
básico		2	2
total	722	3468	4190

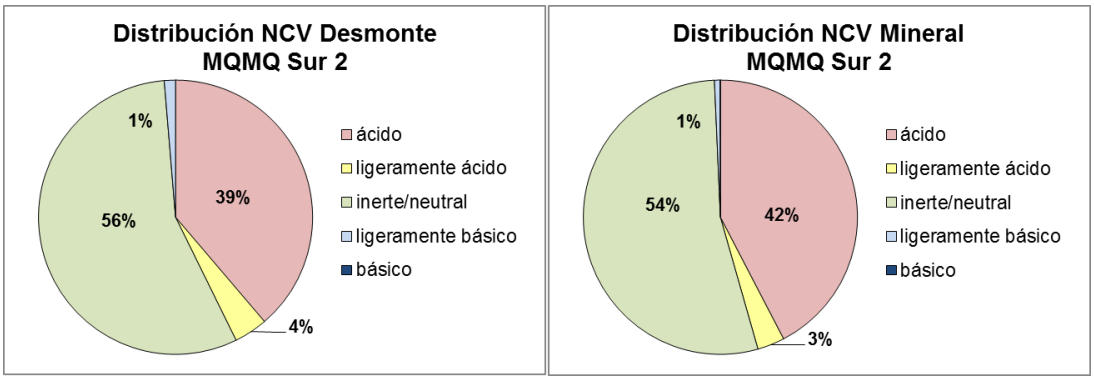


Figura 2 (A) Distribución Desmonte (B) Distribución NCV Mineral

Como se puede observar en la Tabla 3 y Figura 2, la distribución NCV entre mineral y desmonte es relativamente similar. En ambos casos, un porcentaje entre 39-42% de muestras fueron clasificadas como ácidas, es decir, con un potencial moderado para producir aguas ácidas. La fracción restante de muestras está distribuido mayormente entre material inerte o neutral, variando entre 54-56%.

4.2 *Resultados Procedimiento de Lixiviación por Precipitación Sintética (SPLP)*

Se analizaron un total de 26 muestras, de las cuales 04 fueron de desmonte, 09 de mineral oxido mill y 13 de sulfuro mill al que se sometió un pre-tratamiento de flotación antes de la lixiviación cianurada en BRT.

Tabla 4 Muestras de Mineral y Desmonte analizadas por el método SPLP

Nro	Código DS	Taladro	Desde	Hasta	NCV	NAG (kg H_2SO_4/t)	S elemental %	Alteración	Tipo
1	DS-1383308	MM-398	10	20	Inerte/Neutral	6.2		SG	Desmonte
2	DS-1383312	MM-481	22	32	Acido	67.7		ARG	Desmonte
3	DS-1383313	MM-490	45	55	Acido	70.6		ARG	Desmonte
4	DS-1383314	MM-499	42	52	Acido	79.6		ARG	Desmonte
5	DS-1383304	MM-255	34	44	Acido	68.0		AA	Ox mill (cola BRT)
6	DS-1383305	MM-275	80	90	Acido	59.5		SG	Ox mill (cola BRT)
7	DS-1383306	MM-289	38	48	Altamente Acido	142.5	0.32	SIL	Ox mill (cola BRT)
8	DS-1383307	MM-292	40	50	Inerte/Neutral	12.0		SM	Ox mill (cola BRT)
9	DS-1383309	MM-423	76	87	Inerte/Neutral	5.7		SV	Ox mill (cola BRT)
10	DS-1383310	MM-424	16	26	Acido	23.5		SM	Ox mill (cola BRT)
11	DS-1383311	MM-467	24	34	Ligeramente Acido	9.2		SG	Ox mill (cola BRT)
12	DS-1383315	MM-516	10	20	Acido	63.5		SP	Ox mill (cola BRT)
13	DS-1383316	MM-520	0	11	Acido	46.6		-	Ox mill (cola BRT)
14	43337	MM-419	8	12	Acido			SV	Sulfuro (cola BRT Flot)
15	43338	MM-460	26	32	Acido			SM	Sulfuro (cola BRT Flot)
16	43339	MM-460	32	35	Acido			SM	Sulfuro (cola BRT Flot)
17	43340	MM-465	14	18	Acido			SM	Sulfuro (cola BRT Flot)
18	43341	MM-465	18	22	Acido			SM	Sulfuro (cola BRT Flot)
19	43342	MM-465	22	26	Acido			SM	Sulfuro (cola BRT Flot)
20	43343	MM-503	40	43	Altamente Acido			SM	Sulfuro (cola BRT Flot)
21	43345	MM-505	28	32	Altamente Acido			SM	Sulfuro (cola BRT Flot)
22	43346	MM-537	21	25	Acido			SM	Sulfuro (cola BRT Flot)
23	43347	DST-094	78	84	Altamente Acido			SA	Sulfuro (cola BRT Flot)
24	43348	MM-540	66	72	Altamente Acido			SC	Sulfuro (cola BRT Flot)
25	43349	MM-540	74	80	Altamente Acido			SC	Sulfuro (cola BRT Flot)
26	43350	MM-544	115	120	Altamente Acido			SC	Sulfuro (cola BRT Flot)

La mayoría de los parámetros analizados en la solución SPLP, incluyendo el mercurio, se mantuvieron por debajo de los límites de detección. Los valores mínimos, máximos y promedio se muestran en la Tabla 5. Valores mayores a 0.0001 ppm de Hg se observaron solamente en las muestras de cola de BRT, más no en las muestras desmonte. Los valores de plomo y cromo se mantuvieron cercanos al límite de detección, y los valores de fierro y molibdeno fueron altos solamente en las muestras de desmonte. Los resultados indican que a las condiciones de la prueba, el material analizado no tiene la capacidad de producir altas concentraciones de los componentes analizados. Los resultados completos se encuentran en el Apéndice 5.

Tabla 5 Resumen resultados SPLP en mineral y desmonte

Analito	Unidad	DESMONTE (4 SPLP)			MINERAL (22 SPLP)		
		Max	Min	Promedio	Max	Min	Promedio
As	ppm	0.013	0.013	0.013	2.575	0.013	0.190
Hg		0.0001	0.0001	0.0001	0.0020	0.0001	0.0005
Pb		0.003	0.003	0.003	0.017	0.003	0.004
Cd		0.013	0.000	0.006	0.002	0.000	0.000
Cr		0.013	0.013	0.013	0.013	0.013	0.013
Mn		0.851	0.135	0.332	0.718	0.063	0.138
Mo		0.039	0.001	0.010	0.097	0.001	0.012
Co		0.691	0.001	0.272	0.113	0.001	0.011
V		0.013	0.013	0.013	0.027	0.013	0.014
pH final	-	6.7	4.0	5.0	10.0	4.3	7.4
Conductividad	µs/cm	291	42	187	1570	25	216
ORP	mV	330	187	276	317	33	123

4.3 *Resultados Ensayo de Celda de Humedad*

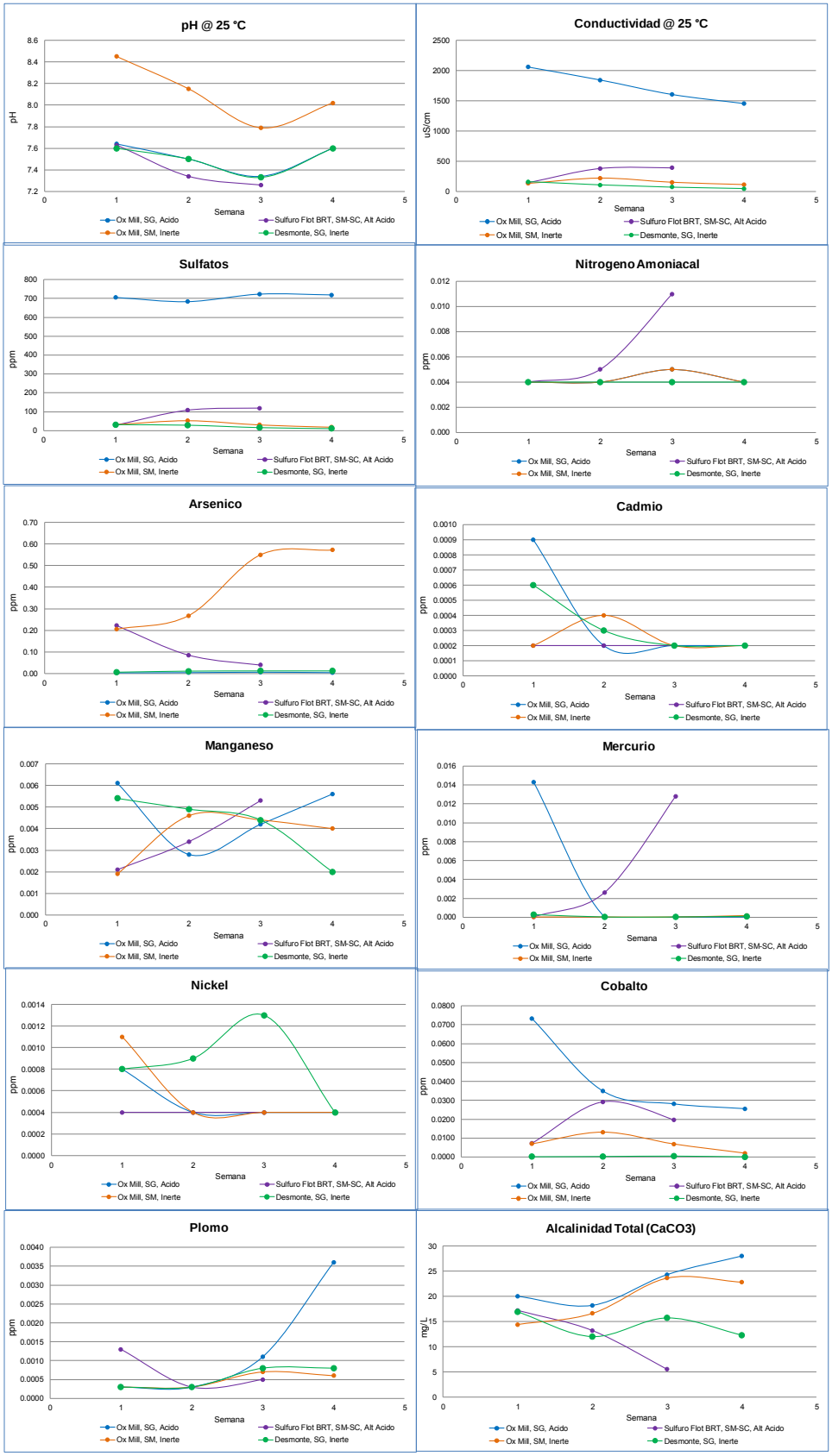
Un total de 04 muestras, una de desmonte y tres de mineral (una de las cuales se realizó con las colas BRT con un pre-tratamiento de Flotación), fueron enviadas a SGS Peru (Lima) para realizar el ensayo de Celda de Humedad. Los ensayos a cada muestra se encuentran en la Tabla 6 y es importante notar la presencia de azufre elemental como principal influencia en la acidez. A la fecha solo se tienen resultados de 04 semanas, mostrados en el Apéndice 5. La variación de concentración de los analitos se muestra en la Figura 3.

Tabla 6 Ensayos de cabeza a 03 muestras para el ensayo de Celda de Humedad

Código	MQMQ FLOT *	DS-1383305	DS-1383307	DS-1383308
Taladro	N/A	MM-275	MM-292	MM-398
Desde	N/A	80	40	10
Hasta	N/A	90	50	20
NCV cabeza	Acido-Altamente Acido	Acido	Inerte/Neutral	Inerte/Neutral
Alteración	SM-SC	SG	SM	SG
Material	Sulfuro (colas Flotación + BRT)	Ox mill (cola BRT)	Ox mill (cola BRT)	Desmonte
pH pasta	7.40	8.30	8.00	7.20
Total S%	1.06	2.13	0.10	0.04
Sulfuro %	0.85	<0.01	<0.01	<0.01
S elemental %	<0.01	1.24	0.09	0.03
kg H_2SO_4/ t (pH 4.5)	5.7	31.3	<0.1	<0.1
kg H_2SO_4/ t (pH 7.0)	11.5	35.4	1.4	1.6
NAG pH	3.1	2.3	5.0	4.7
NP/AP	0.11	0.17	0.85	1.54
Tipo material	Productor acido	Productor acido	Productor acido	Incierto

**El composito MQMQ se formó con las muestras SPLP: 43337, 43338, 43339, 43340, 43341,43342, 43343, 43345, 43346,43347, 43348, 43349 y 43350.*

Figura 3 Variación en la concentración de analitos a lo largo del ensayo HCT



4.4 Resultados Análisis de Solución de Proceso

El análisis de solución de proceso consistió en analizar los componentes de la solución final de una prueba de botella o columna a condiciones normales del proceso. Los metales totales se analizaron por ICP-34 y los aniones por Cromatografía Iónica.

En este caso el proceso de lixiviación en pilas será representado por la solución final de una BRT con un p80 de 150 µm realizada a 150 ppm de CN libre. Es importante resaltar que una prueba de botella es un sistema cerrado en el que los componentes disueltos se acumularán hasta que la concentración de oro se mantenga constante y eso significará que se ha llegado a la máxima extracción.

Para el depósito se presentan los resultados 09 muestras, todas de mineral óxido leach a las cual se realizó la prueba de botella como se muestra en la Tabla 7.

Tabla 7 Muestras de BRT para la determinación de calidad de agua de proceso

Código DS	NCV	Taladro	Desde	Hasta	Tipo	Tiempo lix (hrs)	CN Libre / p80
DS-1383304	Acido	MM-255	34	44	Oxido Mill	24	150ppm, 150 µm
DS-1383305	Acido	MM-275	80	90	Oxido Mill	24	150ppm, 150 µm
DS-1383306	Altamente Acido	MM-289	38	48	Oxido Mill	24	150ppm, 150 µm
DS-1383307	Inerte/Neutral	MM-292	40	50	Oxido Mill	24	150ppm, 150 µm
DS-1383309	Inerte/Neutral	MM-423	76	86.8	Oxido Mill	24	150ppm, 150 µm
DS-1383310	Acido	MM-424	16	26	Oxido Mill	24	150ppm, 150 µm
DS-1383311	Ligeramente Acido	MM-467	24	34	Oxido Mill	24	150ppm, 150 µm
DS-1383315	Acido	MM-516	10	19.5	Oxido Mill	24	150ppm, 150 µm
DS-1383316	Acido	MM-520	0	10.7	Oxido Mill	24	150ppm, 150 µm

El resumen de los resultados se muestra en la Tabla 8. Los valores de mercurio y cobre (y en algunos casos nickel) se muestran altos debido a la alta disolución de este metal en presencia de cianuro. En ausencia de fierro, se observa que los valores de CN WAD y total son similares. El análisis completo se encuentra en el Apéndice 7.

Tabla 8 Resumen resultados solución de proceso

Analito	Unidad	Oxido Mill BRT (09 muestras)		
		Max	Min	Promedio
CN WAD	ppm	304.7	132.5	213.9
CN Total		331.1	132.5	230.0
Sulfatos		2189	379	1177
As		4.526	0.000	0.733
Cd		0.001	0.000	0.000
Ni		18.025	0.119	3.463
Hg		30.870	0.234	5.355
Cu		272.466	10.326	125.732
Pb		0.085	0.001	0.044
TDS		4230	690	2273

5. Conclusiones

- Se analizaron un total de 700 muestras de desmonte y 3468 muestras de mineral por el método NCV. La distribución NCV fue similar para ambos tipos de material, con un 39-42% aproximadamente de material ácido y con un 54-56% de material inerte o neutral.
- Se analizaron 26 muestras por el método SPLP, de las cuales 06 fueron de desmonte, 09 de mineral oxido mill y 13 de mineral oxido mill que recibió un pre-tratamiento de flotación. Las concentraciones de la mayoría de parámetros analizados fueron menores al límite de detección.
- Se analizaron 03 muestras por el ensayo de Celda de Humedad, las cuales han completado solo 04 ciclos a la fecha.
- Se analizó la solución final de 09 pruebas BRT a condiciones óxido mill. Es importante resaltar que la BRT es un sistema cerrado y por tanto los resultados representan la disolución total de la muestra.

Apéndice 1
Tabla de Acrónimos

SPLP	Synthetic Precipitation Leaching Procedure, en español: Procedimiento de Lixiviación por Precipitación Sintética
HCT	Humidity Cell Test, en español: ensayo de Celda de Humedad
NCV	Net Carbonate Value, en español: Valor de Carbonato Neto
PPM	Partes por millón
CLT	Column Leach Test, en español: prueba de lixiviación en columna
BRT	Bottle Roll Test, en español: prueba de lixiviación en botella

Apéndice 2 Identificación de taladros perforados en Maqui Maqui Sur Etapa 2

Nro	Taladro	Este	Norte	Elevación
1	CSU-001	19765.0	31343.9	4070.4
2	CSU-001A	19764.2	31343.9	4070.7
3	CSU-003	19815.4	31250.4	4074.2
4	CSU-005	19901.9	31107.9	4077.0
5	CSU-006	20170.1	30749.8	4068.0
6	CSU-007	20039.1	30957.4	4067.1
7	CSU-010	20040.2	31050.1	4065.9
8	CSU-011	20086.6	30950.2	4080.4
9	CSU-012	20131.9	30899.7	4087.5
10	CSU-013	20076.7	30848.8	4063.6
11	CSU-014	20133.1	30900.2	4087.6
12	CSU-015	20117.7	30743.0	4056.4
13	CSU-016	20128.9	31001.6	4088.6
14	CSU-017	20079.7	30998.2	4077.2
15	CSU-018	20179.6	30852.9	4090.3
16	CSU-019	20213.2	30951.7	4120.9
17	CSU-020	20180.0	30801.3	4078.2
18	CSU-021	20031.3	31003.4	4065.7
19	DST-060	19868.8	30954.9	3983.3
20	DST-061	19028.3	31303.9	4003.6
21	DST-062	19005.3	31317.2	3999.2
22	DST-063	19767.3	30992.0	3986.4
23	DST-065	19953.7	30982.8	4007.2
24	DST-066	19739.8	30899.3	3958.8
25	DST-067	19028.6	31303.9	4003.6
26	DST-069	19347.8	31194.6	3995.9
27	DST-070	19465.1	31132.3	3995.8
28	DST-071	19743.8	30906.5	3959.1
29	DST-072	19364.9	31196.0	3995.9
30	DST-073	19687.4	30958.7	3960.2
31	DST-074	19786.4	30945.1	3978.5
32	DST-075	19723.3	30944.1	3966.5
33	DST-076	19860.9	30851.9	3969.0
34	DST-077	19991.9	30961.1	4005.9
35	DST-078	19339.5	31116.9	3994.8
36	DST-081	19957.7	30471.0	4029.6
37	DST-082	20020.1	30493.8	4030.2
38	DST-083	19769.5	30829.1	3966.2
39	DST-084	19922.1	30867.4	3972.5
40	DST-085	19340.9	31102.4	3995.1
41	DST-086	20005.1	31006.7	4006.9
42	DST-087	19904.8	30932.7	3986.2
43	DST-088	19935.0	30805.7	3956.4
44	DST-089	19827.3	30911.8	3977.3
45	DST-090	19876.2	30811.9	3955.9
46	DST-091	19579.9	30703.9	4002.1
47	DST-092	19655.7	30604.6	4006.9
48	DST-093	19751.3	30894.0	3958.9
49	DST-094	19772.1	31056.9	4013.3
50	DST-095	19772.8	31058.5	4013.4
51	DST-096	19730.2	30929.7	3966.8
52	DST-097	19933.7	30804.1	3956.4
53	DST-098	19542.2	30615.0	4042.1
54	DST-099	20066.0	30861.9	4011.4
55	DST-100	20017.7	31018.5	4007.1
56	DST-101	20019.7	31020.6	4007.0
57	DST-113	18834.5	31569.5	4067.0
58	DST-114	18835.8	31570.8	4067.0
59	DST-115	18885.6	31585.8	4067.8
60	DST-116	18944.9	31556.8	4044.1
61	DST-117	18977.6	31564.1	4040.4
62	MM-001	19681.5	30527.2	4070.2
63	MM-002	19840.0	30523.6	4071.8
64	MM-003	19568.1	30590.6	4041.3
65	MM-004	19656.2	30573.5	4076.0
66	MM-005	19784.9	30577.5	4097.0
67	MM-006	19868.9	30569.1	4074.5
68	MM-007	19921.3	30564.2	4055.5
69	MM-008	19969.7	30560.6	4030.6
70	MM-009	19669.5	30625.6	4100.3
71	MM-010	19755.0	30625.2	4107.6
72	MM-011	19829.7	30622.8	4105.2
73	MM-012	19555.8	30672.3	4047.4
74	MM-013	19705.9	30675.7	4110.5
75	MM-014	19711.2	30675.2	4110.0
76	MM-015	19767.6	30674.2	4122.0
77	MM-016	19850.5	30668.8	4109.7
78	MM-017	19915.6	30666.7	4082.4
79	MM-018	19979.7	30665.3	4048.2
80	MM-019	19612.1	30726.9	4074.3
81	MM-020	19667.8	30727.6	4104.1
82	MM-021	19739.9	30726.6	4129.7
83	MM-022	19854.5	30718.9	4112.8
84	MM-023	19906.5	30717.1	4095.8
85	MM-024	19957.5	30715.7	4062.6
86	MM-025	19853.7	30738.6	4114.9
87	MM-026	19682.5	30777.0	4121.2
88	MM-027	19572.0	30782.0	4069.6
89	MM-028	19630.5	30778.9	4095.6
90	MM-029	19756.5	30775.6	4144.9
91	MM-030	19901.2	30767.9	4101.6
92	MM-031	19957.6	30768.2	4067.1
93	MM-032	20023.1	30765.2	4051.5
94	MM-033	20065.2	30757.6	4052.1
95	MM-034	19752.5	30793.1	4152.2
96	MM-035	19965.1	30803.6	4067.4
97	MM-036	19542.0	30820.0	4054.9
98	MM-037	19596.0	30820.0	4083.4
99	MM-038	19646.3	30819.5	4116.6
100	MM-039	19725.2	30817.3	4151.8
101	MM-040	19775.8	30812.4	4162.5
102	MM-041	19887.9	30807.1	4104.5
103	MM-042	19993.8	30802.8	4060.7
104	MM-043	20034.8	30798.7	4054.4
105	MM-044	20129.6	30802.1	4068.3
106	MM-045	19683.9	30843.2	4137.4
107	MM-046	19761.5	30840.0	4172.1
108	MM-047	19871.0	30832.4	4114.0
109	MM-048	19963.2	30829.6	4068.7
110	MM-049	19858.9	30855.0	4128.7
111	MM-050	19560.0	30866.0	4066.7
112	MM-051	19609.8	30871.1	4100.4
113	MM-052	19646.6	30866.0	4131.6
114	MM-053	19780.7	30862.4	4168.9
115	MM-054	19962.4	30853.1	4069.9
116	MM-055	20038.0	30852.0	4059.4
117	MM-056	19904.8	30881.0	4096.7
118	MM-057	19683.2	30891.6	4154.2
119	MM-058	19627.7	30906.0	4120.5
120	MM-059	19570.0	30920.0	4079.4
121	MM-060	19606.1	30928.7	4124.2
122	MM-061	19646.1	30919.6	4140.6
123	MM-062	19793.8	30910.7	4161.2
124	MM-063	19904.4	30904.4	4095.9
125	MM-064	19935.3	30910.6	4077.7
126	MM-065	19962.7	30899.6	4069.8
127	MM-066	20046.0	30906.0	4067.6
128	MM-067	19635.9	30948.1	4143.4
129	MM-068	19711.6	30945.4	4169.2
130	MM-069	19888.2	30932.8	4095.8
131	MM-070	19663.8	30975.6	4158.3
132	MM-071	19578.9	30979.6	4105.2
133	MM-072	19624.7	30976.1	4147.6
134	MM-073	19797.7	30964.5	4138.6
135	MM-074	19892.4	30958.4	4085.1
136	MM-075	19937.0	30958.5	4068.8
137	MM-076	19973.6	30953.0	4066.9
138	MM-077	19817.1	30984.8	4115.3
139	MM-078	19487.1	30984.4	4045.3
140	MM-079	19732.8	31014.0	4166.1
141	MM-080	19472.5	31020.3	4046.0
142	MM-081	19612.5	31028.2	4146.2
143	MM-082	19831.7	31011.4	4100.5
144	MM-083	19884.0	31005.8	4082.3
145	MM-084	19565.3	31031.6	4120.6
146	MM-085	19399.1	31041.1	4026.8
147	MM-086	19526.3	31036.9	4097.6
148	MM-087	19526.0	31037.0	4097.6
149	MM-088	19511.4	31076.6	4101.2
150	MM-089	19297.0	31075.4	4011.2
151	MM-090	19594.9	31080.1	4148.7
152	MM-091	19808.4	31061.7	4090.5
153	MM-092	19342.0	31082.5	4023.4
154	MM-093	19436.9	31092.2	4047.8
155	MM-094	19276.3	31107.0	4010.7
156	MM-095	19558.9	31107.4	4145.7
157	MM-096	19376.7	31128.2	4031.7
158	MM-097	19321.4	31146.4	4025.6
159	MM-098	19668.6	31118.0	4125.5
160	MM-099	19479.0	31152.8	4114.9
161	MM-100	19623.9	31139.8	4147.0
162	MM-101	19317.5	31164.3	4026.1
163	MM-102	19358.3	31163.1	4035.9
164	MM-103	19411.7	31177.5	4093.0
165	MM-104	19698.1	31159.6	4107.6
166	MM-105	19665.7	31174.9	4116.6
167	MM-106	19492.7	31201.5	4144.4
168	MM-107	19589.5	31188.2	4154.2
169	MM-108	19430.4	31233.2	4140.0
170	MM-109	19647.6	31211.3	4113.1
171	MM-110	19525.0	31237.8	4139.8
172	MM-111	19695.2	31219.9	4105.8
173	MM-112	19624.7	31240.5	4108.6
174	MM-113	19452.9	31269.8	4139.6
175	MM-114	19563.6	31273.2	4115.9
176	MM-115	19307.4	31294.6	4088.5
177	MM-116	19409.0	31295.0	4126.3
178	MM-117	19497.7	31301.1	4117.3
179	MM-118	19614.5	31038.6	4146.2
180	MM-119	19526.1	30978.7	4078.3
181	MM-120	19599.5	31075.5	4146.1
182	MM-121	19559.5	31151.5	4146.5
183	MM-122	19496.0	31117.2	4099.5
184	MM-123	19462.0	31061.1	4048.0
185	MM-124	19469.4	31138.4	4099.8
186	MM-125	19397.8	31171.2	4088.0
187	MM-126	19381.4	31187.6	4095.5
188	MM-127	19699.7	31163.1	4107.7
189	MM-128	19691.0	30818.5	4134.7
190	MM-129	19701.0	30813.5	4139.7
191	MM-130	19756.0	30812.5	4163.7
192	MM-131	19874.0	30811.5	4114.7
193	MM-132	19922.4	30807.6	4096.7
194	MM-133	19962.0	30802.5	4067.7
195	MM-134	19877.1	30905.1	4108.8
196	MM-135	19935.0	30910.5	4077.7
197	MM-165	19686.0	30625.2	4102.0
198	MM-166	19756.5	30728.3	4134.5
199	MM-167	19756.0	30775.5	4144.7
200	MM-168	19771.7	30801.6	4159.2
201	MM-169	19771.7	30801.6	4159.2
202	MM-170	19821.7	30857.4	4151.5
203	MM-171	19898.0	30855.5	4105.7
204	MM-172	19693.0	30914.0	4162.1
205	MM-173	19652.0	30985.5	4154.7
206	MM-174	19858.0	30959.5	4104.7
207	MM-176	19877.7	30354.5	4010.3
208	MM-177	20004.2	30530.5	4016.9
209	MM-179	18798.3	31399.2	4002.8
210	MM-180	18945.3	31406.9	4041.3
211	MM-181	18945.3	31406.9	4041.3
212	MM-182	18992.0	31403.2	4040.0
213	MM-183	19045.5	31403.5	4043.5
214	MM-184	19014.2	31441.0	4043.3
215	MM-185	18706.6	31437.8	3994.0
216	MM-186	19139.4	31438.0	4052.5
217	MM-187	18791.7	31459.7	4018.2
218	MM-188	18971.4	31453.4	4042.7
219	MM-189	18800.0	31450.2	4016.3
220	MM-190	18905.3	31449.4	4045.1
221	MM-191	18866.5	31466.0	4043.1
222	MM-192	18915.9	31458.6	4046.3
223	MM-193	18877.1	31477.9	4046.9
224	MM-194	18711.4	31489.8	4035.8
225	MM-195	18974.3	31502.3	4067.2
226	MM-196	19175.6	31495.4	4066.0
227	MM-197	18858.6	31512.6	4075.1
228	MM-198	18918.9	31506.4	4065.3
229	MM-199	19036.3	31501.1	4058.6
230	MM-200	19116.9	31497.6	4058.8
231	MM-201	19042.6	31519.2	4065.4
232	MM-202	18940.2	31527.6	4075.6
233	MM-203	18951.9	31553.4	4078.0
234	MM-204	19003.6	31551.7	4071.8
235	MM-205	19094.3	31548.7	4065.1
236	MM-206	19023.0	31369.0	4042.0
237	MM-207	18863.0	31466.0	4043.0
238	MM-208	19043.0	31422.0	4045.0
239	MM-209	18862.0	31389.0	4006.0
240	MM-210	18877.0	31306.0	3999.0

Nro	Taladro	Este	Norte	Elevación
241	MM-211	18947.0	31335.0	4009.0
242	MM-212	19041.0	31358.0	4043.0
243	MM-213	18992.0	31546.0	4073.0
244	MM-214	18835.0	31532.0	4072.0
245	MM-215	18835.0	31532.0	4072.0
246	MM-216	18906.5	31440.4	4044.7
247	MM-217	18988.3	31485.1	4058.2
248	MM-218	19100.8	31477.8	4054.1
249	MM-219	19824.0	31445.9	4048.3
250	MM-220	19967.6	31105.7	4067.7
251	MM-221	19972.4	31299.9	4052.3
252	MM-222	19819.7	31299.9	4066.8
253	MM-223	19968.0	31458.8	4041.2
254	MM-225	19388.2	30435.6	4031.9
255	MM-226	19541.5	30820.4	4054.0
256	MM-227	19745.2	31049.0	4127.4
257	MM-228	19541.5	30820.4	4054.0
258	MM-229	19520.7	30870.9	4052.0
259	MM-231	18875.6	31542.8	4081.5
260	MM-232	18798.7	31528.2	4064.2
261	MM-233	18775.2	31583.0	4063.7
262	MM-234	19026.5	31443.0	4044.5
263	MM-235	19075.0	31435.5	4046.8
264	MM-236	18975.2	31431.9	4041.2
265	MM-237	18924.9	31475.6	4052.0
266	MM-238	18829.9	31485.0	4047.0
267	MM-239	19049.8	31357.0	4041.0
268	MM-240	18848.5	31417.5	4009.7
269	MM-241	18900.2	31399.8	4019.0
270	MM-242	19008.6	31354.2	4038.8
271	MM-243	18934.6	31389.4	4031.5
272	MM-244	19630.6	30616.4	4071.7
273	MM-245	19641.0	30650.0	4062.7
274	MM-246	19604.5	30731.3	4062.9
275	MM-247	19688.5	30715.3	4062.4
276	MM-248	19649.1	30975.3	4062.0
277	MM-249	19646.3	30256.4	4046.6
278	MM-250	19695.2	31070.2	4061.9
279	MM-251	19830.0	31000.8	4061.8
280	MM-252	19598.9	30850.7	4056.2
281	MM-253	19585.5	30802.7	4056.0
282	MM-254	19985.2	30600.1	4034.1
283	MM-255	19998.7	30685.6	4049.3
284	MM-256	19829.3	30690.9	4050.2
285	MM-257	19805.1	30650.1	4050.1
286	MM-258	19750.4	30649.6	4050.2
287	MM-259	19860.5	30649.7	4050.0
288	MM-260	19725.1	30688.8	4050.1
289	MM-261	19699.7	30640.4	4050.0
290	MM-262	19599.9	30899.9	4050.2
291	MM-263	19920.0	30600.0	4057.6
292	MM-264	19635.0	30287.3	4047.0
293	MM-269	19951.0	30774.0	4020.0
294	MM-270	19869.0	30720.0	4020.0
295	MM-271	19951.0	30828.0	4025.0
296	MM-272	20015.0	30799.0	4032.0
297	MM-273	19893.0	30774.0	4013.0
298	MM-274	19930.0	30726.0	4032.0
299	MM-275	19954.0	30799.0	4026.0
300	MM-276	19603.0	30975.0	3996.0
301	MM-277	19648.0	30898.0	3996.0
302	MM-278	19139.5	31278.0	4044.0
303	MM-279	19120.7	31332.0	4043.6
304	MM-280	19242.9	31336.5	4069.3
305	MM-281	19245.7	31280.1	4067.2
306	MM-282	19099.9	31400.2	4044.7
307	MM-283	19245.0	31280.0	4067.3
308	MM-284	19245.0	31280.0	4067.3
309	MM-285	19088.0	31320.6	4042.1
310	MM-286	19245.0	31280.0	4067.3
311	MM-287	19582.7	31010.3	3983.8
312	MM-288	19667.8	30828.0	3983.8
313	MM-289	19655.5	30954.7	3983.8
314	MM-290	19755.5	30716.6	3989.7
315	MM-291	19857.8	30754.5	4002.6
316	MM-292	19805.1	30730.0	3990.0
317	MM-293	19773.0	30979.0	4017.0
318	MM-294	19358.7	31261.0	4105.8
319	MM-295	19371.6	31299.4	4109.9
320	MM-296	19194.5	31295.7	4058.3
321	MM-297	19158.6	31331.6	4051.1
322	MM-298	19272.5	31299.0	4073.7
323	MM-299	19308.3	31279.7	4085.8
324	MM-300	19321.1	31312.3	4085.8
325	MM-301	19148.5	31375.0	4047.2
326	MM-302	19108.1	31350.7	4038.0
327	MM-303	19099.9	31283.4	4031.3
328	MM-304	19129.6	31271.7	4037.3
329	MM-305	19211.8	31169.9	4007.8
330	MM-306	19929.4	30976.4	4007.3
331	MM-307	19744.8	31054.9	4008.2
332	MM-308	19675.6	31081.0	4008.3
333	MM-309	19190.2	31550.0	4072.0
334	MM-309T	19190.2	31550.0	4072.0
335	MM-310	18817.8	31360.3	3999.5
336	MM-311	18715.8	31485.6	4035.4
337	MM-311T	18715.8	31485.6	4035.4
338	MM-312	19849.0	30850.0	3963.0
339	MM-313	19590.0	30750.0	3994.0
340	MM-314	19755.0	30776.0	3965.0
341	MM-315	19326.2	31109.2	4019.3
342	MM-316	19328.2	31111.8	4019.8
343	MM-317	19326.2	31109.2	4019.3
344	MM-341	19597.8	30489.8	4050.9
345	MM-344	19748.8	30360.4	4046.2
346	MM-345	19480.5	30536.1	4054.3
347	MM-346	19650.7	31439.9	4079.5
348	MM-347A	19958.4	31146.3	4074.8
349	MM-348	20107.5	31010.6	4074.9
350	MM-349	19072.7	31168.6	3991.7
351	MM-352	19126.5	31600.4	4064.5
352	MM-356	19785.5	31288.4	4077.7
353	MM-357	19836.1	31262.6	4072.2
354	MM-358	19574.0	31348.6	4104.4
355	MM-359	20051.9	31278.0	4057.3
356	MM-364	19756.0	30584.5	4019.7
357	MM-365	19549.7	30950.0	3968.2
358	MM-367	19545.0	30841.8	3983.6
359	MM-368	20340.0	31005.0	4156.4
360	MM-369	19510.5	30997.3	3971.6
361	MM-370	19164.9	31204.5	4006.5
362	MM-371	19605.3	30558.7	4046.9
363	MM-373	19496.5	30999.7	3971.8
364	MM-376	19948.7	30600.0	4035.8
365	MM-377	19374.0	31101.2	4031.2
366	MM-378	19613.9	30387.1	4051.3
367	MM-379	19502.1	30989.8	3971.2
368	MM-380	19296.7	30902.3	3994.6
369	MM-381	19865.3	30447.0	4041.3
370	MM-382	19776.0	30285.5	4035.7
371	MM-384	19379.9	30838.5	4002.7
372	MM-385	19455.1	30653.5	4018.5
373	MM-386	19429.4	30730.8	4010.1
374	MM-389	18844.3	31648.3	4059.0
375	MM-391	18954.7	31647.2	4055.7
376	MM-393	19550.1	30852.4	3982.6
377	MM-394	19569.5	30790.7	3989.2
378	MM-395	19569.9	30791.5	3989.3
379	MM-396	19371.6	31070.1	4030.6
380	MM-397	19723.9	31262.8	4092.1
381	MM-398	20042.2	30665.5	4046.0
382	MM-399	20064.9	30887.7	4031.4
383	MM-400	19725.8	30995.4	3978.3
384	MM-401	19786.7	30961.5	3977.3
385	MM-402	19726.2	30996.9	3978.4
386	MM-403	19877.7	30871.2	3972.2
387	MM-404	20128.8	30799.8	4062.4
388	MM-405	20018.1	30945.6	4030.8
389	MM-406	19980.1	31067.9	4056.8
390	MM-407	20068.4	30556.9	4039.6
391	MM-408	19911.1	31128.9	4073.1
392	MM-409	19956.3	30990.4	4020.5
393	MM-410	20068.7	30555.9	4039.4
394	MM-411	19843.1	31170.8	4080.2
395	MM-412	19810.8	30960.1	3977.7
396	MM-413	20053.2	31129.5	4072.3
397	MM-414	19843.0	31173.7	4080.2
398	MM-415	19578.2	30563.9	4047.1
399	MM-416	19883.6	30902.2	3972.8
400	MM-417	20038.6	30906.5	4031.0
401	MM-418	19684.1	30481.1	4040.4
402	MM-419	19901.4	30953.7	3985.3
403	MM-420	20113.8	30752.7	4057.1
404	MM-421	20135.0	30947.7	4074.7
405	MM-422	20075.4	30697.7	4050.3
406	MM-423	19374.8	31122.4	4032.1
407	MM-424	20062.3	30844.7	4022.8
408	MM-428	19560.9	30933.8	3965.8
409	MM-431	20087.3	30638.3	4051.2
410	MM-441	20094.9	31049.9	4074.3
411	MM-442	19940.1	30900.0	3986.2
412	MM-443	20001.3	30957.1	4028.9
413	MM-444	20019.0	31100.0	4074.1
414	MM-445	19693.6	30450.4	4038.6
415	MM-446	19800.0	30548.4	4030.8
416	MM-447	19543.5	31348.7	4106.9
417	MM-448	19946.7	31149.9	4074.3
418	MM-449	19420.0	31299.6	4109.9
419	MM-450	20102.5	31049.6	4075.4
420	MM-451	19449.9	31349.1	4110.0
421	MM-452	19083.1	31329.0	4031.7
422	MM-453	19900.0	31139.3	4076.2
423	MM-454	19620.5	30650.0	4004.2
424	MM-455	19587.5	30750.1	3994.1
425	MM-456	20132.1	30959.1	4074.9
426	MM-457	19900.1	31138.6	4076.1
427	MM-458	19910.3	31126.7	4075.2
428	MM-459	19485.9	30750.0	4031.0
429	MM-460	19840.4	30949.8	3979.0
430	MM-461	19601.4	30704.9	3998.9
431	MM-462	19835.5	30851.1	3968.1
432	MM-463	19511.0	30650.0	4030.2
433	MM-464	19600.0	31304.9	4063.0
434	MM-465	19764.7	30835.5	3966.2
435	MM-466	19344.7	31231.0	4061.4
436	MM-467	19623.0	30850.1	3955.2
437	MM-468	19752.9	31200.1	4060.7
438	MM-469	19557.7	31000.0	3969.5
439	MM-470	19822.6	30913.1	3977.1
440	MM-471	19766.6	30985.0	3985.4
441	MM-472	19745.4	30895.0	3958.8
442	MM-473	19650.2	31014.0	3972.8
443	MM-474	19638.9	30789.0	3954.9
444	MM-475	19377.8	31139.5	4032.8
445	MM-476	19652.5	31016.0	3972.9
446	MM-477	19613.7	30933.0	3956.6
447	MM-478	20073.3	31100.0	4074.9
448	MM-479	19899.0	30596.0	4031.5
449	MM-480	19620.0	30486.9	4050.2
450	MM-481	19430.7	31049.9	3995.3
451	MM-482	19435.2	31160.1	3995.8
452	MM-483	19579.9	31101.9	4001.7
453	MM-484	19668.2	30415.8	4045.6
454	MM-485	19326.0	31186.6	3994.7
455	MM-486	19658.5	30482.9	4047.5
456	MM-487	19704.0	31054.2	3995.9
457	MM-488	19466.1	31093.6	3990.2
458	MM-489	19997.0	30883.1	4001.2
459	MM-490	19372.0	31097.0	3996.3
460	MM-491	19517.4	31134.5	3997.3
461	MM-492	19595.4	31133.5	4001.7
462	MM-493	19635.6	31102.4	4001.4
463	MM-494	19662.5	31113.7	4001.4
464	MM-495	19885.9	30869.9	3971.6
465	MM-496	19471.4	31128.2	3994.9
466	MM-497	19513.9	31079.6	3996.6
467	MM-498	19558.2	31007.3	3970.4
468	MM-499	19680.3	30976.5	3962.7
469	MM-500	19705.1	30931.9	3959.3
470	MM-501	19618.9	30988.9	3964.0
471	MM-502	20003.5	30648.1	4035.0
472	MM-503	19778.5	30893.4	3967.3
473	MM-504	19918.0	30824.5	3956.3
474	MM-505	19828.1	30972.0	3979.6
475	MM-506	19733.9	31031.9	3994.1
476	MM-507	19917.5	30932.3	3986.4
477	MM-508	20057.7	30765.1	4020.0
478	MM-509	19517.6	31035.7	3976.2
479	MM-510	19737.7	30952.4	3973.4
480	MM-511	19550.6	31027.4	3976.4
481	MM-512	19763.0	31083.5	4014.8
482	MM-513	20047.5	30861.8	4010.6
483	MM-514	19897.0	30740.2	3951.9
484	MM-515	19616.9	31028.7	3974.9
485	MM-516	19680.7	31007.5	3971.0
486	MM-517	19593.5	31131.9	4001.9
487	MM-518	20005.4	30872.7	4001.0
488	MM-519	19681.0	30976.9	3962.8
489	MM-520	19962.2	30888.1	3991.5
489	MM-520	19962.2	30888.1	3991.5
490	MM-521	19482.2	31168.9	3996.2
491	MM-522	19676.1	30727.8	3952.8
492	MM-523	19868.0	31009.5	4008.5
493	MM-524	19018.3	31270.4	3998.0
494	MM-525	19576.2	31052.1	3983.9
495	MM-526	19620.6	31172.6	4013.8
496	MM-527	19615.1	30516.0	4049.0
497	MM-528	19804.0	31080.0	4028.0
498	MM-529	19672.6	30415.8	4045.9
499	MM-530	19672.4	31049.5	3986.0
500	MM-531	19610.8	31080.2	3991.2
501	MM-532	19360.6	31132.2	3995.4
502	MM-533	19631.2	31068.0	3990.8
503	MM-534	20018.2	30960.4	4005.8
504	MM-535	19689.6	31139.7	4013.9
505	MM-536	19913.5	31008.9	4019.1
506	MM-537	19738.7	30733.5	3951.8
507	MM-538	19651.7	31049.5	3986.4
508	MM-539	19685.9	30829.8	3953.5
509	MM-540	19670.0	30956.2	3956.2
510	MM-541	19762.9	30506.0	4038.7
511	MM-542	19942.3	30753.0	3953.6
512	MM-544	19763.0	31078.1	4013.4
513	MM-545	19867.6	31010.2	4008.3
514	MM-546	19852.1	30465.7	4034.5
515	MM-547	19560.4	30800.4	3987.7
516	MM-548	19891.5	30729.2	3951.8
517	MM-549	19875.7	30944.4	3981.3
518	MM-550	19671.7	30892.5	3954.7
519	MM-551	19780.2	30702.9	3951.6
520	MM-552	19631.4	30621.6	4004.4
521	MM-553	19824.3	31129.9	4049.0
522	MM-554	20075.3	31189.5	4068.6
523	MM-555	19673.6	30841.8	3953.6
524	MM-556	19920.4	31047.3	4038.0
525	MM-557	19739.4	30732.2	3951.7
526	MM-558	19882.2	31211.1	4076.5
527	MM-559	19588.0	30733.6	3995.5
528	MM-560	19661.4	30498.3	4046.7
529	MM-561	19943.0	31164.9	4075.5
530	MM-562	19602.7	31217.9	4028.7
531	MM-563	19879.0	30594.1	4029.8
532	MM-564	19730.6	31116.3	4016.6
533	MM-565	20090.1	31136.6	4069.8
534	MM-566	19695.0	30807.1	3953.4
535	MMCP-001	19241.4	31296.8	4070.2
536	MMCP-002	19383.2	31153.6	4032.6
537	MMDW-008	19752.8	30839.6	3977.9
538	MMDW-009	19789.4	30724.7	3989.9
539	MMDW-01	19827.3	30808.7	3990.3
540	MMDW-010	19815.7	30745.7	3990.0
541	MMDW-011	19494.3	31004.9	3972.6
542	MMDW-02	19703.9	30702.0	3990.3
543	MMDW-03	19592.4	30900.0	3984.3
544	MMDW-07	19744.7	30805.6	3978.2
545	MMGT-002	19618.7	31317.3	4098.7
546	MMGT-002A	19632.7	31325.7	4098.3
547	MMGT-003	19825.5	31217.7	4081.4
548	MMGT-004	19828.7	31214.3	4081.3
549	MMGT-005	19624.6	31327.6	4098.2
550	MMGT-006	19876.6	31139.3	4076.3
551	MMTW-001	19810.1	30737.0	3990.3
552	MMTW-002	19749.4	30789.6	3979.2
553	MMTW-005	19959.5	30790.9	3984.0
554	MMTW-006	19800.0	30650.0	3984.0
555	MMTW-03A	19686.8	30886.6	3978.0
556	MMTW-04A	19582.2	31038.9	3984.0
557	MMW-016	19837.4	30299.8	4017.9
558	MQMQBH1401	19709.2	31074.5	4000.8
559	MQMQBH1402	19558.0	31111.7	4002.6
560	MQS2PZ01	19430.2	31388.5	4103.5
561	MQS2PZ02	19908.3	31177.5	4075.1
562	MQS2PZ03	19134.2	31163.3	3996.3
563	PEW-01	19457.5	30720.5	4018.7
564	PEW-02	19929.5	30433.4	4021.0
565	PEW-03	19812.0	31300.5	4067.0
566	QCO-016	18944.0	31358.0	3991.5

Apéndice 3
Resultados Análisis NCV de Muestras de Desmonte

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1	DST-113	1.5	6.1	700	200	800	300	0.0	INERTE	0.07
2	DST-113	6.1	12.0	500	300	500	100	0.1	NEUTRAL	0.03
3	DST-113	12.0	19.6	100	100	200	0	0.0	INERTE	0.03
4	DST-113	20.0	26.5	500	100	600	200	0.0	INERTE	0.04
5	DST-113	26.5	32.0	400	200	400	0	0.1	INERTE	0.09
6	DST-113	38.0	44.2	800	300	400	100	0.1	NEUTRAL	0.06
7	DST-113	44.2	50.6	700	300	600	0	0.1	LIGERAMENTE BASICO	0.01
8	DST-113	50.6	56.6	900	300	3900	2900	-0.3	LIGERAMENTE ACIDO	0.01
9	DST-113	56.6	63.1	1300	700	4000	1600	0.0	NEUTRAL	0.01
10	DST-113	82.5	87.9	1100	200	1300	100	0.1	INERTE	0.02
11	DST-113	100.0	106.0	300	200	1600	100	0.1	INERTE	0.01
12	DST-113	106.0	112.0	600	200	17000	11300	-1.5	ACIDO	0.03
13	DST-113	112.0	117.2	1400	300	69600	59200	-8.0	ACIDO	0.01
14	DST-113	119.1	125.9	500	300	6700	5000	-0.6	LIGERAMENTE ACIDO	0.01
15	DST-113	125.9	133.2	400	100	1100	200	0.0	INERTE	0.01
16	DST-113	134.7	141.7	700	100	2200	700	-0.1	INERTE	0.01
17	DST-114	2.0	6.0	900	100	900	400	0.0	INERTE	0.08
18	DST-114	6.0	11.9	900	300	600	200	0.1	NEUTRAL	0.10
19	DST-114	18.0	24.0	2200	100	16000	13200	-1.8	ACIDO	0.06
20	DST-114	24.0	30.0	2700	100	32700	31100	-4.2	ACIDO	0.00
21	DST-114	30.0	36.0	900	50	39400	37200	-5.1	ACIDO	0.00
22	DST-114	36.0	41.9	1200	50	38400	36300	-5.0	ACIDO	0.00
23	DST-114	41.9	48.0	2000	50	35100	32900	-4.5	ACIDO	0.00
24	DST-114	48.0	54.0	2400	100	41300	37900	-5.2	ACIDO	0.00
25	DST-114	54.0	60.0	1200	50	40000	36600	-5.0	ACIDO	0.00
26	DST-114	60.0	66.0	1400	50	38600	35700	-4.9	ACIDO	0.00
27	DST-114	66.0	72.0	1800	50	40700	38200	-5.2	ACIDO	0.00
28	DST-114	72.0	78.0	2000	50	39800	36800	-5.0	ACIDO	0.00
29	DST-114	78.0	84.0	1900	50	45200	42300	-5.8	ACIDO	0.00
30	DST-114	84.0	90.0	2200	50	46200	43600	-6.0	ACIDO	0.00
31	DST-114	90.0	96.0	2400	50	46800	43500	-5.9	ACIDO	0.01
32	DST-114	96.0	100.3	2100	100	40100	37600	-5.1	ACIDO	0.00
33	DST-115	0.8	6.0	2200	50	28300	18400	-2.5	ACIDO	0.05
34	DST-115	6.0	12.0	3000	50	16500	9300	-1.3	ACIDO	0.05
35	DST-115	12.0	18.0	2200	50	29900	28000	-3.8	ACIDO	0.03
36	DST-115	18.0	24.0	3600	50	38700	37300	-5.1	ACIDO	0.00
37	DST-115	24.0	30.0	2400	50	28600	20800	-2.8	ACIDO	0.00
38	DST-115	30.0	36.0	1300	50	25200	17500	-2.4	ACIDO	0.00
39	DST-115	36.0	43.0	900	50	23800	12200	-1.7	ACIDO	0.01
40	DST-115	43.0	49.7	3400	50	17700	15000	-2.0	ACIDO	0.01
41	DST-115	49.7	56.5	1100	50	5400	2700	-0.4	LIGERAMENTE ACIDO	0.04
42	DST-115	62.0	67.8	900	50	3800	900	-0.1	LIGERAMENTE ACIDO	0.07
43	DST-115	67.8	74.0	3100	50	37800	35100	-4.8	ACIDO	0.00
44	DST-115	74.0	80.2	3000	100	44500	42100	-5.7	ACIDO	0.00
45	DST-115	80.2	86.0	1300	50	38200	25000	-3.4	ACIDO	0.01
46	DST-115	86.0	92.0	3100	100	36700	34000	-4.6	ACIDO	0.00
47	DST-115	92.0	99.0	2800	100	40400	38400	-5.2	ACIDO	0.00
48	DST-116	36.0	40.0	2300	100	39200	34800	-4.7	ACIDO	0.02
49	DST-116	40.0	46.0	1900	100	42100	40100	-5.5	ACIDO	0.00
50	DST-116	46.0	52.0	2400	50	42400	39700	-5.4	ACIDO	0.00
51	DST-116	52.0	58.0	1500	50	40400	37600	-5.1	ACIDO	0.00
52	DST-116	58.0	64.0	1800	50	41700	39600	-5.4	ACIDO	0.00
53	DST-116	64.0	71.6	1200	50	40100	37600	-5.1	ACIDO	0.00
54	DST-117	6.0	12.0	2300	50	48300	46500	-6.4	ACIDO	0.00
55	DST-117	12.0	18.4	2100	50	33800	29700	-4.1	ACIDO	0.00
56	DST-117	18.4	24.7	1000	50	5200	1300	-0.2	LIGERAMENTE ACIDO	0.02
57	DST-117	24.7	30.1	600	50	3800	1100	-0.1	LIGERAMENTE ACIDO	0.03
58	DST-117	30.1	36.0	400	50	1700	0	0.0	INERTE	0.01
59	DST-117	36.0	42.0	500	50	1100	100	0.0	INERTE	0.06
60	MM-006	78.0	84.0	300	100	300	0	0.0	INERTE	0.10
61	MM-285	72.0	80.0	1000	100	142800	139900	-19.1	ACIDO	0.03
62	MM-299	96.0	104.0	1000	100	63700	61100	-8.3	ACIDO	0.03
63	MM-302	80.0	90.0	1200	200	50700	44900	-6.1	ACIDO	0.03
64	MM-304	40.0	48.0	1200	100	4700	1600	-0.2	LIGERAMENTE ACIDO	0.03
65	MM-304	48.0	56.0	1500	100	3300	1100	-0.1	LIGERAMENTE ACIDO	0.05
66	MM-304	64.0	72.0	800	200	25100	22800	-3.1	ACIDO	0.04
67	MM-304	72.0	80.0	1100	200	71300	65700	-8.9	ACIDO	0.01
68	MM-310	0.0	10.0	1890	500	8080	4270	-0.4	LIGERAMENTE ACIDO	0.01
69	MM-310	10.0	20.0	1550	500	21940	16000	-2.0	ACIDO	0.00
70	MM-310	30.0	40.0	1310	500	31760	29170	-3.8	ACIDO	0.01
71	MM-310	40.0	50.0	500	500	58630	39370	-5.2	ACIDO	0.01
72	MM-310	50.0	60.0	2340	500	51020	43410	-5.8	ACIDO	0.00
73	MM-368	0.0	10.0	500	500	31070	7260	-0.8	LIGERAMENTE ACIDO	0.02
74	MM-368	10.0	20.0	500	500	28300	13520	-1.7	ACIDO	0.02
75	MM-368	20.0	30.0	500	500	33760	31110	-4.1	ACIDO	0.01
76	MM-368	30.0	40.0	500	500	39130	34020	-4.5	ACIDO	0.03
77	MM-368	40.0	50.0	500	500	35710	31950	-4.2	ACIDO	0.04
78	MM-368	50.0	60.0	500	500	38770	29140	-3.8	ACIDO	0.04
79	MM-368	60.0	68.0	500	500	14350	370	0.1	LIGERAMENTE BASICO	0.08
80	MM-368	68.0	80.0	500	500	23420	16060	-2.0	ACIDO	0.06
81	MM-368	80.0	90.0	500	500	35800	30240	-4.0	ACIDO	0.03
82	MM-368	90.0	100.0	500	500	35730	28100	-3.7	ACIDO	0.04
83	MM-368	100.0	110.0	500	500	31130	9660	-1.1	ACIDO	0.05
84	MM-368	110.0	120.0	500	500	23030	18860	-2.4	ACIDO	0.04
85	MM-381	32.0	40.0	500	100	100	0	0.0	INERTE	0.09
86	MM-381	216.0	224.0	800	200	200	100	0.1	INERTE	0.09
87	MM-384	8.0	16.0	700	200	32200	15600	-2.1	ACIDO	0.07
88	MM-384	16.0	24.0	500	200	33100	17800	-2.4	ACIDO	0.06
89	MM-384	24.0	32.0	500	200	10500	100	0.0	INERTE	0.05
90	MM-384	32.0	40.0	1000	200	29900	19900	-2.7	ACIDO	0.06
91	MM-384	40.0	48.0	400	200	43800	23100	-3.1	ACIDO	0.06
92	MM-384	48.0	56.0	400	200	41600	30100	-4.1	ACIDO	0.05
93	MM-384	56.0	64.0	300	200	33300	13600	-1.8	ACIDO	0.06
94	MM-384	64.0	72.0	900	200	32700	20200	-2.7	ACIDO	0.07
95	MM-384	72.0	80.0	1000	200	39100	27800	-3.7	ACIDO	0.07
96	MM-384	80.0	88.0	600	200	48500	32000	-4.3	ACIDO	0.05
97	MM-384	88.0	96.0	500	200	49400	38700	-5.2	ACIDO	0.05
98	MM-384	96.0	100.0	500	200	54400	26900	-3.6	ACIDO	0.03
99	MM-384	100.0	108.0	1100	200	48100	35900	-4.8	ACIDO	0.03
100	MM-384	108.0	116.0	400	200	44600	31300	-4.2	ACIDO	0.04
101	MM-384	116.0	124.0	300	200	42000	34000	-4.6	ACIDO	0.04
102	MM-384	124.0	132.0	400	200	45800	35400	-4.8	ACIDO	0.04
103	MM-384	132.0	140.0	2800	200	40400	33300	-4.5	ACIDO	0.04
104	MM-384	140.0	148.0	600	200	44700	32200	-4.3	ACIDO	0.05
105	MM-384	148.0	156.0	600	200	50700	38400	-5.2	ACIDO	0.05
106	MM-384	156.0	164.0	400	200	43200	34100	-4.6	ACIDO	0.05
107	MM-384	164.0	172.0	300	200	45600	35700	-4.8	ACIDO	0.04
108	MM-384	172.0	180.0	400	200	66400	39700	-5.4	ACIDO	0.06
109	MM-384	180.0	188.0	200	200	44300	34600	-4.7	ACIDO	0.04
110	MM-384	188.0	196.0	600	200	45500	35100	-4.7	ACIDO	0.03
111	MM-384	196.0	204.0	400	200	45300	32800	-4.4	ACIDO	0.03
112	MM-384	204.0	212.0	200	200	39200	26900	-3.6	ACIDO	0.04
113	MM-384	220.0	228.0	500	200	56900	36600	-4.9	ACIDO	0.08
114	MM-384	236.0	244.0	200	200	47100	36600	-4.9	ACIDO	0.04
115	MM-384	244.0	252.0	200	200	44400	34300	-4.6	ACIDO	0.04
116	MM-384	252.0	260.0	400	200	50500	39400	-5.3	ACIDO	0.04
117	MM-384	260.0	268.0	500	200	53800	41600	-5.6	ACIDO	0.05
118	MM-384	268.0	276.0	300	200	52400	39700	-5.4	ACIDO	0.04
119	MM-384	276.0	284.0	300	200	54100	40300	-5.4	ACIDO	0.04
120	MM-384	284.0	292.0	300	200	47800	36800	-5.0	ACIDO	0.05
121	MM-384	292.0	300.0	300	200	55500	45100	-6.1	ACIDO	0.05
122	MM-398	216.0	224.0	1200	100	45900	30800	-4.2	ACIDO	0.09
123	MM-401	210.0	218.0	470	200	41900	34030	-4.6	ACIDO	0.06
124	MM-401	218.0	225.5	620	200	47200	34300	-4.6	ACIDO	0.07
125	MM-403	70.0	72.5	730	200	55300	49680	-6.7	ACIDO	0.03
126	MM-404	136.0	144.0	670	200	16600	600	0.0	INERTE	0.07
127	MM-404	232.0	240.0	460	200	54300	12000	-1.6	ACIDO	0.08
128	MM-410	116.4	124.0	3650	200	320	200	0.1	INERTE	0.07
129	MM-410	172.0	180.0	200	200	230	200	0.1	INERTE	0.08
130	MM-410	180.0	188.0	300	290	220	200	0.1	LIGERAMENTE BASICO	0.07
131	MM-410	188.0	196.8	370	200	310	200	0.1	INERTE	0.05
132	MM-410	196.8	204.0	200	200	14100	200	0.1	INERTE	0.07
133	MM-410	212.0	220.5	200	200	1360	200	0.1	INERTE	0.08
134	MM-410	220.5	228.0	510	200	490	290	0.0	INERTE	0.05
135	MM-410	228.0	236.0	230	200	320	200	0.1	INERTE	0.07
136	MM-415	8.6	14.0	1570	200	750	200	0.1	INERTE	0.01
137	MM-415	14.0	20.0	570	200	1320	200	0.1	INERTE	0.03
138	MM-415	20.0	22.0	500	200	2950	200	0.1	INERTE	0.07
139	MM-415	22.0	26.0	500	200	2950	200	0.1	INERTE	0.05
140	MM-415	30.0	32.0	390	200	2280	200	0.1	INERTE	0.06
141	MM-415	32.0	38.0	410	200	2370	880	0.0	INERTE	0.09
142	MM-415	122.0	124.5	470	200	95800	68500	-9.3	ACIDO	0.06
143	MM-415	127.5	133.8	600	200	89300	46430	-6.3	ACIDO	0.10
144	MM-415	205.4	210.0	200	200	15800	2700	-0.3	LIGERAMENTE ACIDO	0.09
145	MM-415	210.0	212.0	200	200	15800	2700	-0.3	LIGERAMENTE ACIDO	0.08
146	MM-415	218.0	224.0	200	200	1810	760	0.0	INERTE	0.09
147	MM-415	230.0	234.0	200	200	33000	1800	-0.2	LIGERAMENTE ACIDO	0.07
148	MM-415	254.0	258.0	200	200	35900	7200	-0.9	LIGERAMENTE ACIDO	0.09
149	MM-415	258.0	261.0	200	200	35900	7200	-0.9	LIGERAMENTE ACIDO	0.07
150	MM-415	266.0	267.7	450	200	42300	4420	-0.5	LIGERAMENTE ACIDO	0.07
151	MM-415	269.4	274.0	270	200	22400	2000	-0.2	LIGERAMENTE ACIDO	0.07
152	MM-415	274.0	274.7	270	200	22400	2000	-0.2	LIGERAMENTE ACIDO	0.06
153	MM-415	274.7	280.0	200	200	35300	1100	-0.1	INERTE	0.05
154	MM-415	280.0	282.0	560	200	52400	12220	-1.6	ACIDO	0.09
155	MM-415	282.0	286.1	560	200	52400	12220	-1.6	ACIDO	0.06
156	MM-415	286.1	290.0	560	200	53700	8410	-1.1	ACIDO	0.10
157	MM-415	290.0	292.5	560	200	53700	8410	-1.1	ACIDO	0.05
158	MM-415	300.0	306.0	600	200	58000	10970	-1.4	ACIDO	0.07
159	MM-415	306.0	312.2	590	200	21600	2500	-0.3	LIGERAMENTE ACIDO	0.06
160	MM-445	0.0	6.0	340	200	23800	1100	-0.1	INERTE	0.08
161	MM-445	18.0	20.0	300	200	20100	0	0.1	INERTE	0.04
162	MM-445	20.0	24.0	2530	460	25900	0	0.2	LIGERAMENTE BASICO	0.03
163	MM-445	24.0	30.0	2530	460	25900	0	0.2	LIGERAMENTE BASICO	0.09
164	MM-445	40.0	42.0	200	200	13700	900	0.0	INERTE	0.04
165	MM-445	42.0	48.0	200	200	13700	900	0.0	INERTE	0.05
166	MM-445	50.0	54.0	400	200	4850	0	0.1	INERTE	0.04
167	MM-445	54.0	60.0	400	200	4850	0	0.1	INERTE	0.04
168	MM-445	60.0	66.0	1330	520	5060	0	0.2	LIGERAMENTE BASICO	0.07
169	MM-445	66.0	70.0	1330	520	5060	0	0.2	LIGERAMENTE BASICO	0.05
170	MM-445	108.0	110.0	530	200	97700	74900	-10.2	ACIDO	0.07
171	MM-445	110.0	114.0	200	200	71200	34500	-4.7	ACIDO	0.07
172	MM-445	114.0	120.0	200	200	71200	34500	-4.7	ACIDO	0.08
173	MM-445	120.0	126.0	200	200	93400	56900	-7.7	ACIDO	0.05
174	MM-445	126.0	130.0	200	200	93400	56900	-7.7	ACIDO	0.09
175	MM-445	130.0	132.0	200	200	66100	43000	-5.8	ACIDO	0.03
176	MM-445	132.0	138.0	200	200	66100	43000	-5.8	ACIDO	0.04
177	MM-445	138.0	140.0	200	200	66100	43000	-5.8	ACIDO	0.03
178	MM-445	140.0	144.0	200	200	38100	33880	-4.6	ACIDO	0.02
179	MM-445	144.0	150.0	200	200	38100	33880	-4.6	ACIDO	0.03
180	MM-445	150.0	156.0	200	200	42100	35350	-4.8	ACIDO	0.03
181	MM-445	156.0	160.0	200	200	42100	35350	-4.8	ACIDO	0.01
182	MM-445	160.0	162.0	200	200	37900	29860	-4.0	ACIDO	0.02
183	MM-445	162.0	168.0	200	200	37900	29860	-4.0	ACIDO	0.03
184	MM-445	168.0	170.0	200	200	37900	29860	-4.0	ACIDO	0.01
185	MM-445	170.0	174.0	200	200	31700	27380	-3.7	ACIDO	0.01
186	MM-445	174.0	180.0	200	200	31700	27380	-3.7	ACIDO	0.03
187	MM-445	180.0	186.0	200	200	56600	31300	-4.2	ACIDO	0.03
188	MM-445	186.0	190.3	200	200	56600	31300	-4.2	ACIDO	0.04
189	MM-445	190.3	192.0	200	200	53000	29000	-3.9	ACIDO	0.03
190	MM-445	192.0	198.0	200	200	53000	29000	-3.9	ACIDO	0.03
191	MM-445	198.0	200.0	200	200	53000	29000	-3.9	ACIDO	0.04
192	MM-445	200.0	204.0	200	200	37800	28440	-3.8	ACIDO	0.03
193	MM-445	204.0	210.0	200	200	37800	28440	-3.8	ACIDO	0.01
194	MM-445	210.0	216.0	200	200	42300	35490	-4.8	ACIDO	0.02
195	MM-445	216.0	220.0	200	200	42300	35490	-4.8	ACIDO	0.02
196	MM-445	220.0	222.0	200	200	35400	31130	-4.2	ACIDO	0.02
197	MM-445	222.0	228.0	200	200	35400	31130	-4.2	ACIDO	0.02
198	MM-445	228.0	230.0	200	200	35400	31130	-4.2	ACIDO	0.04
199	MM-445	230.0	234.0	200	200	48500	38860	-5.3	ACIDO	0.02
200	MM-445	234.0	239.7	200	200	48500	38860	-5.3	ACIDO	0.04
201	MM-445	239.7	240.0	200	200	49100	30500	-4.1	ACIDO	0.05
202	MM-445	240.0	248.7	200	200	49100	30500	-4.1	ACIDO	0.04
203	MM-446	20.0	24.0	390	200	420	50	0.1	INERTE	0.09
204	MM-446	30.0	36.0	430	200	370	0	0.1	INERTE	0.06
205	MM-446	36.0	42.0	430	200	370	0	0.1	INERTE	0.06
206	MM-446	42.0	44.3	430	200	370	0	0.1	INERTE	0.06
207	MM-446	44.3	48.0	200	200	340	0	0.1	INERTE	0.09
208	MM-446	48.0	54.0	200	200	340	0	0.1	INERTE	0.07
209	MM-446	54.0	60.0	200	200	380	10	0.1	INERTE	0.07
210	MM-446	60.0	64.3	200	200	380	10	0.1	INERTE	0.10
211	MM-446	64.3	66.0	200	200	370	0	0.1	INERTE	0.08
212	MM-446	66.0	72.0	200	200	370	0	0.1	INERTE	0.08
213	MM-446	72.0	73.5	200	200	370	0	0.1	INERTE	0.09
214	MM-446	94.0	96.0	270	200	280	0	0.1	INERTE	0.06
215	MM-446	96.0	102.0	270	200	280	0	0.1	INERTE	0.06
216	MM-446	102.0	104.0	270	200	280	0	0.1	INERTE	0.04
217	MM-446	104.0	108.0	200	200	380	20	0.1	INERTE	0.09
218	MM-446	108.0	114.0	200	200	380	20	0.1	INERTE	0.07
219	MM-446	114.0	120.0	300	200	200	0	0.1	INERTE	0.06
220	MM-446	120.0	124.0	300	200	200	0	0.1	INERTE	0.08
221	MM-446	124.0	126.0	200	200	230	0	0.1	INERTE	0.07
222	MM-446	132.0	134.0	200	200	230	0	0.1	INERTE	0.06
223	MM-446	134.0	138.0	200	200	200	0	0.1	INERTE	0.08
224	MM-446	138.0	144.0	200	200	200	0	0.1	INERTE	0.07
225	MM-446	144.0	150.0	200	200	200	0	0.1	INERTE	0.06
226	MM-446	151.1	156.0	200	200	35200	34610	-4.7	ACIDO	0.09
227	MM-449	54.0	60.0	200	200	29400	25550	-3.4	ACIDO	0.02
228	MM-449	60.0	60.2	200	200	29400	25550	-3.4	ACIDO	0.03
229	MM-449	65.7	66.0	200	200	47600	44730	-6.1	ACIDO	0.08
230	MM-449	66.0	72.0	200	200	47600	44730	-6.1	ACIDO	0.09
231	MM-449	72.0	78.0	200	200	46600	42280	-5.7	ACIDO	0.06
232	MM-449	78.0	84.0	200	200	27200	25060	-3.4	ACIDO	0.04
233	MM-449	84.0	90.0	200	200	24800	22030	-2.9	ACIDO	0.10
234	MM-449	102.0	105.7	7150	200	6860	3620	-0.4	LIGERAMENTE ACIDO	0.08
235	MM-450	246.0	250.0	2750	200	68300	50400	-6.8	ACIDO	0.07
236	MM-451	18.0	24.0	790	200	49000	24900	-3.3	ACIDO	0.10
237	MM-451	24.0	30.0	1180	200	25700	22400	-3.0	ACIDO	0.04
238	MM-451	30.0	36.0	1370	200	28100	24440	-3.3	ACIDO	0.03
239	MM-451	36.0	41.8	1050	200	10700	9050	-1.2	ACIDO	0.05
240	MM-451	41.8	42.0	540	200	29400	26900	-3.6	ACIDO	0.06
241	MM-451	42.0	48.0	540	200	29400	26900	-3.612	ACIDO	0.04
242	MM-451	48.0	54.0	1240	200	30200	27610	-3.7	ACIDO	0.03
243	MM-451	54.0	54.3	1240	200	30200	27610	-3.7	ACIDO	0.03
244	MM-451	60.0	66.0	620	200	22200	19670	-2.6	ACIDO	0.02
245	MM-451	66.0	72.0	1450	200	15700	14060	-1.9	ACIDO	0.01
246	MM-451	72.0	78.0	370	200	23800	18400	-2.4	ACIDO	0.04
247	MM-451	78.0	84.0	290	200	28900	25090	-3.4	ACIDO	0.06
248	MM-451	84.0	90.5	500	200	25300	22620	-3.0	ACIDO	0.04
249	MM-452	78.0	84.0	450	200	41100	38780	-5.2	ACIDO	0.00
250	MM-452	84.0	90.0	770	200	38200	35640	-4.8	ACIDO	0.00
251	MM-452	90.0	96.0	600	200	40800	37350	-5.0	ACIDO	0.01
252	MM-452	96.0	101.5	660	200	47000	38210	-5.2	ACIDO	0.01
253	MM-453	160.0	162.0	200	200	35100	29040	-3.9	ACIDO	0.08
254	MM-453	162.0	168.0	200	200	35100	29040	-3.9	ACIDO	0.07
255	MM-453	168.0	170.0	200	200	35100	29040	-3.9	ACIDO	0.05
256	MM-453	170.0	174.0	300	200	30800	27050	-3.6	ACIDO	0.07
257	MM-453	174.0	180.0	300	200	30800	27050	-3.6	ACIDO	0.08
258	MM-453	180.0	186.0	200	200	34400	31520	-4.2	ACIDO	0.06
259	MM-453	200.0	204.0	200	200	38100	36570	-4.9	ACIDO	0.09
260	MM-453	216.0	220.0	200	200	35600	33940	-4.6	ACIDO	0.07
261	MM-455	12.0	13.2	1250	200	5850	4010	-0.5	LIGERAMENTE ACIDO	0.08
262	MM-457	60.0	66.0	1020	200	52500	49700	-6.7	ACIDO	0.08
263	MM-459	0.0	10.0	910	200	30730	0	0.1	INERTE	0.08
264	MM-459	10.0	20.7	400	200	29110	150	0.1	INERTE	0.06
265	MM-459	20.7	30.0	380	200	34860	0	0.1	INERTE	0.06
266	MM-459	30.0	40.0	440	200	39800	0	0.1	INERTE	0.09
267	MM-459	40.0	50.8	290	200	47370	0	0.1	INERTE	0.09
268	MM-459	50.8	60.0	290	200	69670	13630	-1.8	ACIDO	0.09
269	MM-459	60.0	67.5	240	200	83790	29090	-3.9	ACIDO	0.07
270	MM-459	67.5	80.0	220	200	81840	34420	-4.6	ACIDO	0.05
271	MM-459	80.0	90.6	250	200	82660	31310	-4.2	ACIDO	0.07
272	MM-459	90.6	99.5	200	200	73480	26550	-3.6	ACIDO	0.08
273	MM-459	110.3	120.0	270	200	79770	26100	-3.5	ACIDO	0.08
274	MM-459	120.0	130.0	200	200	67400	23090	-3.1	ACIDO	0.07
275	MM-459	130.0	140.0	220	200	74650	29650	-4.0	ACIDO	0.08
276	MM-459	140.0	150.7	200	200	70700	33910	-4.6	ACIDO	0.09
277	MM-461	80.7	90.5	200	200	90640	68410	-9.3	ACIDO	0.10
278	MM-463	30.5	40.7	600	200	6700	190	0.0	INERTE	0.09
279	MM-463	40.7	50.0	450	200	16830	2190	-0.2	LIGERAMENTE ACIDO	0.04
280	MM-463	50.0	57.8	440	200	15290	690	0.0	INERTE	0.03
281	MM-463	57.8	63.7	390	200	33190	1820	-0.2	LIGERAMENTE ACIDO	0.07
282	MM-463	63.7	69.6	340	200	63700	39210	-5.3	ACIDO	0.09
283	MM-463	69.6	80.5	310	200	71540	39540	-5.3	ACIDO	0.08
284	MM-463	80.5	90.0	350	200	60600	31310	-4.2	ACIDO	0.06
285	MM-463	90.0	100.0	410	200	71370	34200	-4.6	ACIDO	0.08
286	MM-464	0.0	12.0	500	500	31120	29160	-3.8	ACIDO	0.03
287	MM-464	12.0	24.0	7590	500	30460	26360	-3.4	ACIDO	0.03
288	MM-464	24.0	36.0	500	500	31170	29730	-3.9	ACIDO	0.02
289	MM-464	36.0	44.0	500	500	29330	28220	-3.7	ACIDO	0.04
290	MM-464	44.0	50.0	500	500	29280	28190	-3.7	ACIDO	0.01
291	MM-464	50.0	61.8	500	500	27080	25830	-3.4	ACIDO	0.01
292	MM-464	61.8	74.0	500	500	30370	29040	-3.8	ACIDO	0.02
293	MM-466	60.0	72.0	500	500	1570	0	0.2	LIGERAMENTE BASICO	0.05
294	MM-466	72.0	84.0	500	500	1120	0	0.2	LIGERAMENTE BASICO	0.08
295	MM-477	56.0	68.0	1270	500	45470	38420	-5.1	ACIDO	0.10
296	MM-477	68.0	80.0	1670	500	35890	32780	-4.3	ACIDO	0.05
297	MM-481	42.5	48.7	1200	100	39600	37200	-5.1	ACIDO	0.02
298	MM-481	48.7	55.0	600	50	46000	42400	-5.8	ACIDO	0.02
299	MM-481	55.0	61.0	800	50	45000	41500	-5.7	ACIDO	0.03
300	MM-481	61.0	67.5	900	50	43200	39900	-5.4	ACIDO	0.03
301	MM-481	67.5	73.5	700	50	46500	43100	-5.9	ACIDO	0.05
302	MM-481	73.5	80.0	700	50	44000	40000	-5.5	ACIDO	0.07
303	MM-484	4.9	11.3	1300	50	49900	32800	-4.5	ACIDO	0.09
304	MM-484	11.3	16.0	200	50	700	400	0.0	INERTE	0.08
305	MM-484	16.0	22.0	200	50	100	50	0.0	INERTE	0.01
306	MM-484	22.0	28.0	300	50	100	50	0.0	INERTE	0.02
307	MM-484	28.0	34.0	300	50	50	0	0.0	INERTE	0.03
308	MM-484	64.7	71.0	300	50	22700	16000	-2.2	ACIDO	0.08
309	MM-484	76.7	81.7	400	50	54600	39000	-5.3	ACIDO	0.07
310	MM-484	81.7	87.2	700	50	24800	18300	-2.5	ACIDO	0.06
311	MM-484	87.2	93.5	100	50	18000	12900	-1.7	ACIDO	0.06
312	MM-484	93.5	100.5	400	50	7400	6100	-0.8	LIGERAMENTE ACIDO	0.04
313	MM-484	100.5	106.5	400	50	200	100	0.0	INERTE	0.04
314	MM-484	106.5	112.0	400	50	900	400	0.0	INERTE	0.04
315	MM-484	112.0	117.0	100	50	200	100	0.0	INERTE	0.03
316	MM-484	147.5	154.0	100	50	1300	900	-0.1	LIGERAMENTE ACIDO	0.09
317	MM-485	12.0	18.0	800	50	1200	500	-0.1	INERTE	0.06
318	MM-485	18.0	24.0	600	50	1000	400	0.0	INERTE	0.03
319	MM-485	83.7	90.0	2900	50	10400	9900	-1.3	ACIDO	0.01
320	MM-485	90.0	96.0	1600	50	12000	11600	-1.6	ACIDO	0.01
321	MM-485	96.0	101.5	1600	50	23600	22600	-3.1	ACIDO	0.01
322	MM-485	101.5	107.0	3500	50	34200	32700	-4.5	ACIDO	0.01
323	MM-485	107.0	113.0	1600	50	32200	30800	-4.2	ACIDO	0.01
324	MM-485	113.0	119.0	2100	50	35200	33300	-4.5	ACIDO	0.03
325	MM-485	119.0	125.0	700	50	34000	31900	-4.4	ACIDO	0.02
326	MM-485	125.0	130.5	1300	50	44000	40300	-5.5	ACIDO	0.04
327	MM-485	130.5	136.5	700	50	30000	28700	-3.9	ACIDO	0.04
328	MM-485	136.5	142.5	1500	50	40500	37200	-5.1	ACIDO	0.04
329	MM-485	142.5	150.5	1800	50	28100	27200	-3.7	ACIDO	0.04
330	MM-486	11.0	18.4	100	50	3200	2200	-0.3	LIGERAMENTE ACIDO	0.04
331	MM-486	18.4	24.9	300	50	8400	6100	-0.8	LIGERAMENTE ACIDO	0.09
332	MM-486	168.5	174.1	600	50	52600	36400	-5.0	ACIDO	0.07
333	MM-486	180.7	187.0	200	50	48400	33100	-4.5	ACIDO	0.04
334	MM-486	187.0	193.0	200	50	52600	42000	-5.7	ACIDO	0.04
335	MM-486	193.0	198.0	100	50	33700	25500	-3.5	ACIDO	0.07
336	MM-486	198.0	204.0	100	50	52200	39700	-5.4	ACIDO	0.08
337	MM-486	204.0	209.5	500	50	9000	6600	-0.9	LIGERAMENTE ACIDO	0.04
338	MM-486	209.5	216.3	300	50	24700	17800	-2.4	ACIDO	0.03
339	MM-486	216.3	222.5	200	50	27900	19800	-2.7	ACIDO	0.02
340	MM-486	222.5	228.5	500	50	34700	25400	-3.5	ACIDO	0.08
341	MM-486	228.5	234.5	200	50	22100	16300	-2.2	ACIDO	0.05
342	MM-486	234.5	240.0	200	50	31300	22700	-3.1	ACIDO	0.02
343	MM-486	240.0	245.6	500	50	41300	28900	-3.9	ACIDO	0.04
344	MM-486	245.6	253.0	200	50	31300	22700	-3.1	ACIDO	0.06
345	MM-486	253.0	258.5	400	50	16100	10700	-1.4	ACIDO	0.05
346	MM-486	258.5	264.3	500	50	35400	26900	-3.7	ACIDO	0.05
347	MM-486	264.3	270.0	400	50	49100	34200	-4.7	ACIDO	0.06
348	MM-486	270.0	276.0	500	50	24900	17300	-2.4	ACIDO	0.06
349	MM-486	276.0	282.0	400	50	25500	18500	-2.5	ACIDO	0.06
350	MM-486	282.0	288.0	300	50	31700	24500	-3.3	ACIDO	0.05
351	MM-486	288.0	294.0	300	50	51600	42700	-5.8	ACIDO	0.02
352	MM-486	294.0	301.0	500	50	58800	47200	-6.4	ACIDO	0.05
353	MM-486	301.0	307.0	300	50	40500	26300	-3.6	ACIDO	0.06
354	MM-486	307.0	313.5	400	50	40500	34300	-4.7	ACIDO	0.05
355	MM-486	313.5	319.5	400	50	35900	28900	-3.9	ACIDO	0.05
356	MM-486	319.5	325.5	200	50	37300	27700	-3.8	ACIDO	0.03
357	MM-486	325.5	331.5	200	50	47900	34300	-4.7	ACIDO	0.08
358	MM-486	331.5	336.5	200	50	54600	43000	-5.9	ACIDO	0.05
359	MM-487	145.0	151.5	400	100	70200	50700	-6.9	ACIDO	0.09
360	MM-490	48.5	54.5	3700	50	34100	32400	-4.4	ACIDO	0.03

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
361	MM-490	54.5	59.0	3300	50	52700	49200	-6.7	ACIDO	0.03
362	MM-490	84.0	90.0	3700	50	42000	40900	-5.6	ACIDO	0.06
363	MM-490	90.0	96.0	3100	50	48400	47100	-6.4	ACIDO	0.06
364	MM-490	96.0	102.0	4200	50	36900	35600	-4.9	ACIDO	0.06
365	MM-490	102.0	108.0	3800	50	31700	30900	-4.2	ACIDO	0.07
366	MM-490	119.0	125.0	3600	50	34400	33400	-4.6	ACIDO	0.08
367	MM-490	125.0	130.4	3300	50	31300	30600	-4.2	ACIDO	0.06
368	MM-490	130.4	136.0	2900	50	34200	33400	-4.6	ACIDO	0.06
369	MM-490	136.0	142.0	2500	50	25500	24800	-3.4	ACIDO	0.04
370	MM-491	18.8	23.0	2600	50	34300	33500	-4.6	ACIDO	0.09
371	MM-496	47.0	52.5	2400	100	23400	22200	-3.0	ACIDO	0.08
372	MM-497	112.0	118.0	1100	50	39200	36700	-5.0	ACIDO	0.08
373	MM-500	79.0	85.0	1300	50	42800	27200	-3.7	ACIDO	0.04
374	MM-500	85.0	90.5	3100	50	42500	40700	-5.6	ACIDO	0.03
375	MM-500	179.5	184.8	500	50	44400	33400	-4.6	ACIDO	0.09
376	MM-501	55.0	61.0	600	50	34600	32400	-4.4	ACIDO	0.02
377	MM-502	18.0	24.5	400	50	37100	17800	-2.4	ACIDO	0.08
378	MM-502	24.5	30.5	400	50	35200	17700	-2.4	ACIDO	0.09
379	MM-502	30.5	36.6	500	50	32100	18000	-2.4	ACIDO	0.08
380	MM-502	72.0	78.4	400	50	27200	16300	-2.2	ACIDO	0.08
381	MM-502	78.4	84.5	600	50	27700	16900	-2.3	ACIDO	0.09
382	MM-502	84.5	89.7	300	50	5400	3200	-0.4	LIGERAMENTE ACIDO	0.06
383	MM-502	89.7	95.5	300	50	9100	5000	-0.7	LIGERAMENTE ACIDO	0.09
384	MM-502	95.5	101.4	300	50	2000	1200	-0.1	LIGERAMENTE ACIDO	0.07
385	MM-502	101.4	107.0	300	50	200	100	0.0	INERTE	0.08
386	MM-502	107.0	113.5	300	50	200	100	0.0	INERTE	0.09
387	MM-502	162.0	168.0	300	50	400	200	0.0	INERTE	0.09
388	MM-502	168.0	173.3	300	50	700	400	0.0	INERTE	0.10
389	MM-502	173.3	180.0	300	50	300	100	0.0	INERTE	0.07
390	MM-502	180.0	186.0	400	50	300	100	0.0	INERTE	0.07
391	MM-502	186.0	192.0	300	50	200	0	0.0	INERTE	0.06
392	MM-502	192.0	198.0	300	50	300	100	0.0	INERTE	0.06
393	MM-502	198.0	203.5	300	50	200	0	0.0	INERTE	0.06
394	MM-502	203.5	210.6	300	200	200	0	0.1	INERTE	0.06
395	MM-502	210.6	217.0	300	50	200	0	0.0	INERTE	0.10
396	MM-502	217.0	223.0	400	50	300	200	0.0	INERTE	0.09
397	MM-502	228.5	234.1	300	100	300	100	0.0	INERTE	0.08
398	MM-502	234.1	241.0	200	100	300	100	0.0	INERTE	0.10
399	MM-502	241.0	245.7	500	100	3300	1500	-0.2	LIGERAMENTE ACIDO	0.10
400	MM-502	265.0	271.0	400	50	37000	34000	-4.6	ACIDO	0.08
401	MM-502	271.0	277.0	800	100	39900	37900	-5.2	ACIDO	0.06
402	MM-502	277.0	282.0	400	50	45600	40900	-5.6	ACIDO	0.07
403	MM-502	282.0	287.5	400	100	53700	37200	-5.1	ACIDO	0.06
404	MM-502	300.5	304.5	300	50	52600	49700	-6.8	ACIDO	0.07
405	MM-502	304.5	310.0	300	50	39800	38300	-5.2	ACIDO	0.03
406	MM-508	24.5	29.3	500	100	12400	10500	-1.4	ACIDO	0.09
407	MM-508	40.2	46.8	300	50	31700	29700	-4.1	ACIDO	0.10
408	MM-508	106.0	112.0	200	100	200	0	0.0	INERTE	0.09
409	MM-508	143.0	149.0	200	50	300	100	0.0	INERTE	0.10
410	MM-508	149.0	154.5	200	50	200	0	0.0	INERTE	0.08
411	MM-508	268.3	273.1	300	50	200	0	0.0	INERTE	0.10
412	MM-509	32.0	39.0	300	50	43900	38000	-5.2	ACIDO	0.07
413	MM-509	39.0	45.0	400	50	40500	37100	-5.1	ACIDO	0.05
414	MM-509	45.0	50.5	400	50	38000	34800	-4.7	ACIDO	0.04
415	MM-509	50.5	56.5	300	50	39200	36000	-4.9	ACIDO	0.04
416	MM-509	56.5	62.6	500	50	31700	29600	-4.0	ACIDO	0.03
417	MM-509	62.6	68.5	400	50	41600	36800	-5.0	ACIDO	0.02
418	MM-509	68.5	74.5	500	50	40300	32500	-4.4	ACIDO	0.03
419	MM-509	74.5	80.0	400	50	39100	35300	-4.8	ACIDO	0.02
420	MM-512	55.5	62.5	1800	100	36700	35400	-4.8	ACIDO	0.08
421	MM-517	154.0	160.0	1500	50	28100	26700	-3.6	ACIDO	0.09
422	MM-517	196.5	204.5	2500	200	30200	28100	-3.8	ACIDO	0.09
423	MM-518	62.0	68.3	600	200	51100	29600	-4.0	ACIDO	0.06
424	MM-518	76.5	80.5	600	100	73300	35900	-4.9	ACIDO	0.09
425	MM-518	80.5	86.5	400	50	39000	20700	-2.8	ACIDO	0.08
426	MM-518	86.5	92.5	400	50	20500	13300	-1.8	ACIDO	0.08
427	MM-520	48.0	54.7	3500	100	14200	13300	-1.8	ACIDO	0.08
428	MM-521	131.0	137.0	500	100	27300	26000	-3.5	ACIDO	0.06
429	MM-524	4.8	9.8	2200	50	32600	29400	-4.0	ACIDO	0.00
430	MM-524	9.8	16.9	800	50	116500	114800	-15.7	ACIDO	0.01
431	MM-524	16.9	22.5	2900	600	52800	49500	-6.6	ACIDO	0.00
432	MM-524	33.2	40.0	2000	50	47900	44800	-6.1	ACIDO	0.01
433	MM-524	40.0	46.0	1700	50	41500	40100	-5.5	ACIDO	0.00
434	MM-524	46.0	52.0	1200	50	40800	38700	-5.3	ACIDO	0.00
435	MM-524	52.0	57.0	1200	50	35400	34200	-4.7	ACIDO	0.00
436	MM-524	57.0	64.8	800	50	32400	31500	-4.3	ACIDO	0.00
437	MM-524	64.8	71.0	800	50	28600	27400	-3.7	ACIDO	0.00
438	MM-524	71.0	75.6	700	50	26800	25900	-3.5	ACIDO	0.00
439	MM-524	75.6	81.5	600	50	36600	35800	-4.9	ACIDO	0.00
440	MM-524	81.5	87.5	600	50	34900	34100	-4.7	ACIDO	0.01
441	MM-524	87.5	93.5	700	50	32500	31600	-4.3	ACIDO	0.00
442	MM-524	93.5	99.5	600	50	30700	29600	-4.0	ACIDO	0.01
443	MM-524	99.5	105.5	1100	50	32300	31300	-4.3	ACIDO	0.01
444	MM-524	105.5	111.5	700	50	32900	31700	-4.3	ACIDO	0.00
445	MM-524	111.5	117.5	600	50	30300	29200	-4.0	ACIDO	0.00
446	MM-524	117.5	123.5	500	50	32500	31400	-4.3	ACIDO	0.01
447	MM-524	123.5	129.5	500	50	31100	29900	-4.1	ACIDO	0.00
448	MM-524	129.5	135.5	500	50	36100	34500	-4.7	ACIDO	0.01
449	MM-524	135.5	141.5	1000	50	33800	32600	-4.4	ACIDO	0.00
450	MM-524	141.5	147.5	1100	50	47500	40500	-5.5	ACIDO	0.00
451	MM-524	147.5	153.9	1200	50	40600	39300	-5.4	ACIDO	0.00
452	MM-524	153.9	160.0	700	50	65900	54400	-7.4	ACIDO	0.01
453	MM-524	160.0	166.6	1100	50	49800	45200	-6.2	ACIDO	0.01
454	MM-524	166.6	172.5	1100	200	38800	37900	-5.1	ACIDO	0.00
455	MM-524	172.5	177.5	1500	50	37700	36600	-5.0	ACIDO	0.01
456	MM-524	177.5	183.0	900	50	45700	42900	-5.9	ACIDO	0.01
457	MM-524	183.0	189.0	1100	50	42100	40700	-5.6	ACIDO	0.00
458	MM-524	189.0	196.0	1000	50	32300	31500	-4.3	ACIDO	0.00
459	MM-524	196.0	202.0	1100	50	37900	36800	-5.0	ACIDO	0.00
460	MM-524	202.0	208.0	1100	50	32600	31800	-4.3	ACIDO	0.00
461	MM-524	208.0	214.0	800	50	33900	33200	-4.5	ACIDO	0.00
462	MM-524	214.0	220.0	1200	50	32800	32000	-4.4	ACIDO	0.00
463	MM-524	220.0	226.0	1100	50	32800	31700	-4.3	ACIDO	0.00
464	MM-524	226.0	232.0	1200	50	35300	34300	-4.7	ACIDO	0.00
465	MM-524	232.0	239.7	1100	50	36900	34400	-4.7	ACIDO	0.00
466	MM-525	78.5	84.5	300	100	35000	33700	-4.6	ACIDO	0.02
467	MM-525	84.5	89.0	200	50	34900	34000	-4.6	ACIDO	0.01
468	MM-525	89.0	95.0	200	50	32500	31600	-4.3	ACIDO	0.01
469	MM-525	95.0	100.0	200	50	34500	33600	-4.6	ACIDO	0.02
470	MM-526	78.0	84.0	300	50	38000	35600	-4.9	ACIDO	0.10
471	MM-526	198.5	205.9	300	300	27400	26000	-3.5	ACIDO	0.08
472	MM-527	29.5	36.1	300	50	700	300	0.0	INERTE	0.07
473	MM-527	36.1	41.8	300	50	4200	900	-0.1	LIGERAMENTE ACIDO	0.07
474	MM-527	41.8	46.9	800	50	4000	500	-0.1	INERTE	0.06
475	MM-527	197.6	204.3	200	50	87500	44500	-6.1	ACIDO	0.10
476	MM-527	204.3	210.9	200	50	60400	20300	-2.8	ACIDO	0.07
477	MM-527	216.8	222.1	200	50	58800	13300	-1.8	ACIDO	0.08
478	MM-527	222.1	228.8	300	50	25400	10900	-1.5	ACIDO	0.07
479	MM-527	228.8	233.7	200	50	36400	12300	-1.7	ACIDO	0.09
480	MM-527	233.7	240.0	200	50	17200	9600	-1.3	ACIDO	0.07
481	MM-527	240.0	247.0	200	50	24800	11500	-1.6	ACIDO	0.04
482	MM-527	247.0	251.9	500	50	37300	13800	-1.9	ACIDO	0.06
483	MM-527	251.9	258.6	200	50	26400	11900	-1.6	ACIDO	0.04
484	MM-528	54.1	60.0	1200	300	41100	37900	-5.1	ACIDO	0.10
485	MM-529	9.5	16.0	300	50	4000	2100	-0.3	LIGERAMENTE ACIDO	0.08
486	MM-529	16.0	22.0	300	50	1700	1000	-0.1	LIGERAMENTE ACIDO	0.07
487	MM-529	22.0	27.3	300	50	600	300	0.0	INERTE	0.05
488	MM-529	27.3	33.5	200	50	600	400	0.0	INERTE	0.04
489	MM-529	33.5	39.9	200	50	800	500	-0.1	INERTE	0.04
490	MM-529	39.9	46.0	500	50	100	0	0.0	INERTE	0.04
491	MM-529	46.0	52.5	300	50	200	100	0.0	INERTE	0.04
492	MM-529	52.5	57.6	300	50	6500	3600	-0.5	LIGERAMENTE ACIDO	0.04
493	MM-529	76.8	81.1	500	50	2300	900	-0.1	LIGERAMENTE ACIDO	0.06
494	MM-529	93.0	100.0	400	50	500	100	0.0	INERTE	0.10
495	MM-529	112.5	118.9	400	50	400	100	0.0	INERTE	0.08
496	MM-529	130.0	135.6	200	50	300	100	0.0	INERTE	0.07
497	MM-529	135.6	142.5	200	50	600	200	0.0	INERTE	0.05
498	MM-529	148.3	153.9	1200	50	900	300	0.0	INERTE	0.09
499	MM-529	160.5	166.6	400	50	17000	13000	-1.8	ACIDO	0.09
500	MM-529	172.6	178.2	300	50	2600	1300	-0.2	LIGERAMENTE ACIDO	0.03
501	MM-529	178.2	183.0	200	50	41700	13600	-1.8	ACIDO	0.02
502	MM-529	183.0	190.5	200	50	40900	13900	-1.9	ACIDO	0.06
503	MM-529	190.5	195.5	300	50	14400	6500	-0.9	LIGERAMENTE ACIDO	0.08
504	MM-529	201.6	210.0	200	50	38500	13300	-1.8	ACIDO	0.05
505	MM-531	58.8	64.5	900	50	62900	49700	-6.8	ACIDO	0.10
506	MM-531	64.5	70.5	1200	600	47200	40700	-5.4	ACIDO	0.05
507	MM-531	70.5	76.0	1700	100	40600	37000	-5.0	ACIDO	0.03
508	MM-531	76.0	81.4	1400	50	41800	39700	-5.4	ACIDO	0.02
509	MM-531	81.4	87.5	1000	50	36100	34800	-4.7	ACIDO	0.01
510	MM-531	87.5	93.5	700	50	38500	37000	-5.1	ACIDO	0.03
511	MM-531	93.5	99.5	800	50	36800	35600	-4.9	ACIDO	0.01
512	MM-531	99.5	106.5	1100	50	33500	32500	-4.4	ACIDO	0.02
513	MM-531	106.5	112.5	1100	50	37700	36300	-5.0	ACIDO	0.05
514	MM-532	160.5	166.5	900	50	36700	35400	-4.8	ACIDO	0.06
515	MM-532	166.5	172.5	800	50	41900	40600	-5.5	ACIDO	0.04
516	MM-532	172.5	178.5	1200	100	35700	34400	-4.7	ACIDO	0.07
517	MM-532	178.5	184.5	1800	50	27200	25900	-3.5	ACIDO	0.06
518	MM-533	78.0	84.6	600	100	34400	32900	-4.5	ACIDO	0.03
519	MM-533	84.6	91.0	800	100	33200	32100	-4.4	ACIDO	0.02
520	MM-533	91.0	97.0	600	200	29100	28000	-3.8	ACIDO	0.02
521	MM-533	97.0	103.0	400	100	31700	29300	-4.0	ACIDO	0.04
522	MM-534	252.5	258.9	500	50	54300	40000	-5.5	ACIDO	0.09
523	MM-534	281.5	288.5	1300	50	46700	39500	-5.4	ACIDO	0.10
524	MM-534	288.5	294.5	900	100	32700	28700	-3.9	ACIDO	0.08
525	MM-537	146.5	152.2	3800	700	39300	37200	-4.8	ACIDO	0.07
526	MM-537	152.2	158.4	2800	300	39900	38200	-5.1	ACIDO	0.05
527	MM-537	158.4	164.7	2400	600	51900	48600	-6.4	ACIDO	0.08
528	MM-537	177.0	183.0	3400	400	28300	25600	-3.4	ACIDO	0.09
529	MM-537	183.0	188.8	2000	300	23900	22600	-3.0	ACIDO	0.06
530	MM-537	195.0	200.0	2100	600	42400	38200	-5.0	ACIDO	0.07
531	MM-537	200.0	206.0	1300	50	45000	41800	-5.7	ACIDO	0.08
532	MM-537	206.0	212.0	600	400	60100	54900	-7.4	ACIDO	0.08
533	MM-537	241.0	246.4	600	600	53200	42600	-5.6	ACIDO	0.10
534	MM-537	246.4	250.4	1100	400	36700	35300	-4.7	ACIDO	0.05
535	MM-539	144.2	150.0	400	50	51500	21500	-2.9	ACIDO	0.08
536	MM-540	176.1	182.5	300	200	71200	26900	-3.6	ACIDO	0.08
537	MM-541	42.0	48.5	300	50	200	100	0.0	INERTE	0.08
538	MM-541	48.5	54.0	300	50	200	100	0.0	INERTE	0.08
539	MM-541	91.7	97.0	200	50	200	100	0.0	INERTE	0.10
540	MM-541	122.0	128.0	300	50	300	100	0.0	INERTE	0.10
541	MM-541	128.0	134.6	300	50	300	200	0.0	INERTE	0.08
542	MM-541	134.6	139.1	500	50	300	100	0.0	INERTE	0.09
543	MM-541	139.1	146.0	300	50	300	100	0.0	INERTE	0.07
544	MM-541	146.0	152.0	400	50	300	0	0.0	INERTE	0.06
545	MM-541	152.0	158.0	600	50	300	100	0.0	INERTE	0.09
546	MM-541	158.0	163.4	300	50	200	0	0.0	INERTE	0.07
547	MM-541	163.4	169.8	900	50	300	100	0.0	INERTE	0.07
548	MM-541	169.8	175.5	500	50	300	200	0.0	INERTE	0.06
549	MM-541	175.5	180.9	500	50	300	100	0.0	INERTE	0.08
550	MM-541	180.9	187.0	100	50	200	0	0.0	INERTE	0.07
551	MM-541	187.0	193.0	300	50	200	0	0.0	INERTE	0.05
552	MM-541	193.0	196.8	300	100	200	0	0.0	INERTE	0.05
553	MM-542	286.5	292.0	500	50	62700	45600	-6.2	ACIDO	0.08
554	MM-544	250.1	255.4	1200	50	54300	42800	-5.8	ACIDO	0.07
555	MM-546	30.9	36.2	400	200	100	50	0.1	INERTE	0.10
556	MM-546	36.2	42.7	500	400	100	50	0.1	LIGERAMENTE BASICO	0.07
557	MM-546	42.7	48.6	300	100	100	50	0.0	INERTE	0.06
558	MM-546	48.6	53.9	800	400	100	50	0.1	LIGERAMENTE BASICO	0.05
559	MM-546	53.9	60.0	500	50	50	0	0.0	INERTE	0.06
560	MM-546	60.0	66.5	200	50	100	50	0.0	INERTE	0.06
561	MM-546	66.5	72.7	1000	800	50	0	0.3	LIGERAMENTE BASICO	0.06
562	MM-546	72.7	78.4	300	200	100	50	0.1	INERTE	0.05
563	MM-546	78.4	84.5	700	200	100	50	0.1	INERTE	0.06
564	MM-546	84.5	90.0	500	50	100	50	0.0	INERTE	0.03
565	MM-546	90.0	95.0	300	200	100	50	0.1	INERTE	0.06
566	MM-546	95.0	101.0	300	100	100	50	0.0	INERTE	0.03
567	MM-546	101.0	107.8	200	50	100	50	0.0	INERTE	0.03
568	MM-546	107.8	114.7	600	200	100	50	0.1	INERTE	0.04
569	MM-546	114.7	120.9	600	300	100	50	0.1	LIGERAMENTE BASICO	0.04
570	MM-546	120.9	126.0	800	600	100	50	0.2	LIGERAMENTE BASICO	0.04
571	MM-546	126.0	131.2	500	200	200	100	0.1	INERTE	0.04
572	MM-546	131.2	138.1	200	100	200	100	0.0	INERTE	0.05
573	MM-546	138.1	144.5	300	200	200	100	0.1	INERTE	0.05
574	MM-546	144.5	150.0	1900	400	100	50	0.1	LIGERAMENTE BASICO	0.05
575	MM-546	150.0	155.0	300	100	200	100	0.0	INERTE	0.06
576	MM-546	155.0	162.0	400	100	100	50	0.0	INERTE	0.06
577	MM-546	162.0	168.0	300	200	100	50	0.1	INERTE	0.07
578	MM-546	168.0	175.0	50	50	100	50	0.0	INERTE	0.06
579	MM-546	175.0	180.5	300	200	200	100	0.1	INERTE	0.06
580	MM-546	180.5	186.0	900	500	200	100	0.2	LIGERAMENTE BASICO	0.08
581	MM-546	186.0	192.0	600	500	200	100	0.2	LIGERAMENTE BASICO	0.10
582	MM-546	198.5	204.5	600	500	11300	6200	-0.7	LIGERAMENTE ACIDO	0.10
583	MM-547	89.0	95.0	900	100	60000	53700	-7.3	ACIDO	0.07
584	MM-547	95.0	101.0	800	100	54200	46300	-6.3	ACIDO	0.06
585	MM-547	101.0	107.0	600	100	55700	47300	-6.4	ACIDO	0.08
586	MM-547	107.0	113.5	800	50	52500	46100	-6.3	ACIDO	0.03
587	MM-547	113.5	119.5	700	50	47200	43800	-6.0	ACIDO	0.03
588	MM-547	119.5	125.0	700	50	52100	46500	-6.4	ACIDO	0.04
589	MM-547	125.0	132.0	800	100	63600	52100	-7.1	ACIDO	0.06
590	MM-547	132.0	137.0	600	100	84100	68500	-9.3	ACIDO	0.06
591	MM-547	137.0	143.5	600	100	51100	44300	-6.0	ACIDO	0.03
592	MM-547	143.5	146.1	1300	400	45200	41800	-5.6	ACIDO	0.02
593	MM-548	164.9	171.0	500	100	36700	36600	-5.0	ACIDO	0.09
594	MM-548	176.7	182.9	400	50	38600	38400	-5.2	ACIDO	0.08
595	MM-548	182.9	189.0	400	100	40700	40500	-5.5	ACIDO	0.08
596	MM-549	153.0	159.3	1500	50	33700	31300	-4.3	ACIDO	0.07
597	MM-549	159.3	165.5	800	100	#####	98500	-13.5	ACIDO	0.09
598	MM-549	165.5	171.0	500	100	#####	124500	-17.0	ACIDO	0.10
599	MM-549	171.0	177.7	1300	100	43700	39400	-5.4	ACIDO	0.09
600	MM-549	177.7	181.9	2300	100	30900	29900	-4.1	ACIDO	0.04
601	MM-549	181.9	188.7	3000	200	29900	28600	-3.8	ACIDO	0.05
602	MM-549	188.7	193.9	3600	100	40400	37800	-5.1	ACIDO	0.09
603	MM-551	187.0	194.5	600	50	78800	55600	-7.6	ACIDO	0.06
604	MM-551	194.5	199.5	400	50	83100	65400	-8.9	ACIDO	0.07
605	MM-551	199.5	205.9	400	50	89900	66300	-9.1	ACIDO	0.08
606	MM-551	205.9	211.7	300	50	86500	65000	-8.9	ACIDO	0.05
607	MM-551	211.7	217.3	800	200	88400	64700	-8.8	ACIDO	0.08
608	MM-551	229.9	236.0	1000	50	43500	30200	-4.1	ACIDO	0.04
609	MM-551	236.0	241.0	700	50	55100	42800	-5.8	ACIDO	0.04
610	MM-551	241.0	245.0	600	50	58300	47700	-6.5	ACIDO	0.04
611	MM-552	51.4	57.2	700	100	100000	81600	-11.1	ACIDO	0.09
612	MM-552	57.2	63.5	1500	50	43300	40800	-5.6	ACIDO	0.08
613	MM-552	63.5	70.5	1300	50	53500	48700	-6.7	ACIDO	0.05
614	MM-552	70.5	76.0	1600	100	110000	80600	-11.0	ACIDO	0.07
615	MM-552	76.0	81.5	600	100	112000	67900	-9.3	ACIDO	0.08
616	MM-552	81.5	87.9	600	50	107000	69400	-9.5	ACIDO	0.07
617	MM-552	87.9	94.0	600	200	84900	66100	-9.0	ACIDO	0.07
618	MM-552	105.7	112.5	800	200	59600	37900	-5.1	ACIDO	0.06
619	MM-552	112.5	118.0	1200	100	46100	34800	-4.7	ACIDO	0.04
620	MM-552	118.0	126.0	900	100	62700	51000	-7.0	ACIDO	0.07
621	MM-553	9.0	15.0	1200	100	33400	31500	-4.3	ACIDO	0.10
622	MM-553	15.0	20.9	1100	100	34100	32100	-4.4	ACIDO	0.09
623	MM-553	33.6	40.0	1300	100	29600	27800	-3.8	ACIDO	0.10
624	MM-553	135.0	141.0	900	100	35100	32500	-4.4	ACIDO	0.09
625	MM-553	148.3	154.0	1000	50	30500	28700	-3.9	ACIDO	0.07
626	MM-554	55.0	61.0	600	50	42400	40700	-5.6	ACIDO	0.07
627	MM-554	61.0	67.8	500	50	40100	37900	-5.2	ACIDO	0.08
628	MM-554	132.9	138.4	500	50	34400	25800	-3.5	ACIDO	0.10
629	MM-554	138.4	143.7	400	50	52200	34200	-4.7	ACIDO	0.09
630	MM-554	143.7	150.2	700	50	44300	37600	-5.1	ACIDO	0.07
631	MM-554	150.2	155.4	600	50	53300	44500	-6.1	ACIDO	0.08
632	MM-554	155.4	161.0	500	50	44100	34600	-4.7	ACIDO	0.06
633	MM-554	161.0	167.0	900	50	56800	47200	-6.4	ACIDO	0.07
634	MM-554	167.0	173.0	600	50	50400	42000	-5.7	ACIDO	0.08
635	MM-554	173.0	179.0	500	50	49400	42300	-5.8	ACIDO	0.05
636	MM-554	186.4	192.6	500	50	41900	32300	-4.4	ACIDO	0.08
637	MM-554	199.0	203.0	700	50	15300	7300	-1.0	LIGERAMENTE ACIDO	0.06
638	MM-554	203.0	209.2	500	50	8900	4000	-0.5	LIGERAMENTE ACIDO	0.07
639	MM-554	209.2	215.0	1100	50	14800	7300	-1.0	LIGERAMENTE ACIDO	0.07
640	MM-554	215.0	222.5	500	50	9100	3900	-0.5	LIGERAMENTE ACIDO	0.07
641	MM-554	222.5	228.0	600	50	8400	3500	-0.5	LIGERAMENTE ACIDO	0.07
642	MM-554	228.0	234.0	500	50	15700	7400	-1.0	LIGERAMENTE ACIDO	0.07
643	MM-554	234.0	240.0	500	50	15200	7400	-1.0	LIGERAMENTE ACIDO	0.08
644	MM-554	240.0	246.0	500	50	9500	4300	-0.6	LIGERAMENTE ACIDO	0.08
645	MM-554	246.0	251.1	500	50	9600	4900	-0.7	LIGERAMENTE ACIDO	0.08
646	MM-554	251.1	257.7	500	50	55000	46300	-6.3	ACIDO	0.10
647	MM-557	100.0	106.0	300	50	82900	62100	-8.5	ACIDO	0.10
648	MM-557	173.0	179.0	600	50	68800	55900	-7.6	ACIDO	0.08
649	MM-557	179.0	185.0	500	50	70800	54200	-7.4	ACIDO	0.08
650	MM-557	185.0	191.9	600	50	62500	49100	-6.7	ACIDO	0.08
651	MM-557	191.9	196.8	800	50	68200	43700	-6.0	ACIDO	0.06
652	MM-557	220.0	224.1	500	50	68500	43500	-5.9	ACIDO	0.05
653	MM-558	66.0	72.0	800	50	47700	42200	-5.8	ACIDO	0.08
654	MM-558	72.0	77.6	600	50	58100	50400	-6.9	ACIDO	0.09
655	MM-558	138.0	143.5	600	50	49300	37800	-5.2	ACIDO	0.10
656	MM-558	162.5	168.5	400	50	40800	37000	-5.1	ACIDO	0.05
657	MM-558	168.5	174.0	700	50	40100	36400	-5.0	ACIDO	0.05
658	MM-558	174.0	180.0	500	50	40000	35600	-4.9	ACIDO	0.05
659	MM-558	180.0	186.0	600	50	32500	30900	-4.2	ACIDO	0.04
660	MM-558	186.0	192.0	600	50	36900	34300	-4.7	ACIDO	0.04
661	MM-558	192.0	198.0	500	50	40600	39100	-5.3	ACIDO	0.05
662	MM-558	198.0	203.2	500	50	40000	38500	-5.3	ACIDO	0.06
663	MM-559	57.5	63.8	800	50	55300	42400	-5.8	ACIDO	0.07
664	MM-559	63.8	70.5	400	300	100000	86900	-11.8	ACIDO	0.05
665	MM-559	70.5	75.9	600	50	119600	107000	-14.6	ACIDO	0.05
666	MM-559	75.9	82.0	700	50	74500	62600	-8.6	ACIDO	0.05
667	MM-559	82.0	87.5	500	50	102200	77700	-10.6	ACIDO	0.07
668	MM-559	87.5	93.7	400	50	94700	66700	-9.1	ACIDO	0.08
669	MM-559	93.7	100.0	600	50	61400	49400	-6.7	ACIDO	0.07
670	MM-559	100.0	106.0	500	50	62100	49800	-6.8	ACIDO	0.07
671	MM-559	106.0	112.0	700	200	68400	47300	-6.4	ACIDO	0.06
672	MM-559	112.0	118.0	400	50	62800	39900	-5.4	ACIDO	0.05
673	MM-559	118.0	124.0	700	50	62100	45100	-6.2	ACIDO	0.05
674	MM-559	124.0	130.4	300	50	39800	29000	-4.0	ACIDO	0.07
675	MM-559	130.4	136.5	500	50	55900	44100	-6.0	ACIDO	0.05
676	MM-559	136.5	141.7	400	50	63100	42100	-5.7	ACIDO	0.06
677	MM-559	147.5	153.5	600	50	65000	51400	-7.0	ACIDO	0.08
678	MM-559	153.5	159.0	900	50	51300	42000	-5.7	ACIDO	0.04
679	MM-560	8.0	14.4	1300	100	38100	18700	-2.5	ACIDO	0.10
680	MM-560	32.8	37.3	900	200	49800	22300	-3.0	ACIDO	0.09
681	MM-560	56.0	61.6	400	100	28400	15500	-2.1	ACIDO	0.07
682	MM-560	61.6	67.2	600	50	44600	17700	-2.4	ACIDO	0.06
683	MM-560	67.2	74.0	200	200	61300	20300	-2.7	ACIDO	0.08
684	MM-560	74.0	79.4	1000	100	49500	25700	-3.5	ACIDO	0.08
685	MM-560	79.4	85.5	300	100	23000	9600	-1.3	ACIDO	0.05
686	MM-560	85.5	91.5	800	100	2500	0	0.0	INERTE	0.05
687	MM-560	91.5	98.0	400	300	41800	20900	-2.8	ACIDO	0.04
688	MM-560	98.0	104.5	900	100	15500	8100	-1.1	ACIDO	0.04
689	MM-560	104.5	110.1	700	300	65500	42300	-5.7	ACIDO	0.08
690	MM-560	115.0	121.3	600	100	62300	26300	-3.6	ACIDO	0.06
691	MM-560	121.3	128.0	400	100	52700	23000	-3.1	ACIDO	0.06
692	MM-560	133.6	140.5	500	50	44800	21900	-3.0	ACIDO	0.06
693	MM-560	140.5	146.0	900	50	31400	15500	-2.1	ACIDO	0.04
694	MM-560	146.0	150.0	500	300	57000	22100	-2.9	ACIDO	0.05
695	MM-561	269.4	275.5	600	50	56100	48800	-6.7	ACIDO	0.07
696	MM-561	275.5	282.5	400	50	59300	51200	-7.0	ACIDO	0.10
697	MM-561	282.5	288.0	900	50	36500	34400	-4.7	ACIDO	0.08
698	MM-561	294.2	300.0	900	50	54000	45900	-6.3	ACIDO	0.07
699	MM-561	300.0	305.1	800	50	50100	43600	-6.0	ACIDO	0.09
700	MM-562	48.0	55.0	300	50	35200	34300	-4.7	ACIDO	0.07
701	MM-562	55.0	61.0	500	50	21300	20600	-2.8	ACIDO	0.06
702	MM-563	97.0	103.0	300	50	200	100	0.0	INERTE	0.09
703	MM-563	128.2	134.3	200	50	200	100	0.0	INERTE	0.10
704	MM-563	134.3	139.7	300	50	100	50	0.0	INERTE	0.08
705	MM-563	139.7	145.5	300	50	200	100	0.0	INERTE	0.06
706	MM-563	145.5	151.9	300	50	200	100	0.0	INERTE	0.05
707	MM-563	151.9	158.9	200	50	500	200	0.0	INERTE	0.05
708	MM-563	158.9	164.2	300	50	200	100	0.0	INERTE	0.07
709	MM-563	164.2	170.0	300	50	300	200	0.0	INERTE	0.06
710	MM-564	86.0	92.0	1800	50	29500	27200	-3.7	ACIDO	0.09
711	MM-564	98.0	104.0	2000	50	36300	33300	-4.5	ACIDO	0.08
712	MM-564	118.3	118.9	2900	100	40200	38400	-5.2	ACIDO	0.05
713	MM-565	18.0	24.0	1000	200	28400	26800	-3.6	ACIDO	0.09
714	MM-565	89.5	96.5	900	100	28100	23500	-3.2	ACIDO	0.09
715	MM-565	113.7	120.0	800	400	34900	32300	-4.3	ACIDO	0.10
716	MM-565	120.0	126.0	700	100	33900	31900	-4.3	ACIDO	0.10
717	MM-565	143.5	149.0	700	50	38600	36700	-5.0	ACIDO	0.09
718	MM-565	155.0	162.1	700	300	47800	45500	-6.1	ACIDO	0.09
719	MM-565	168.5	174.0	800	100	27000	25300	-3.4	ACIDO	0.07
720	MM-565	174.0	181.0	600	50	5300	2800	-0.4	LIGERAMENTE ACIDO	0.07
721	MM-565	181.0	187.0	700	50	5400	2700	-0.4	LIGERAMENTE ACIDO	0.07
722	MM-565	187.0	193.5	600	100	14900	7700	-1.0	ACIDO	0.09

Apéndice 4
Resultados Análisis NCV de Muestras de Mineral

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
723	CSU-005	56.0	64.0	700	50	42200	33100	-4.5	ACIDO	0.66
724	CSU-005	64.0	72.0	700	50	45000	34600	-4.7	ACIDO	0.72
725	CSU-005	120.0	128.0	600	50	5600	5000	-0.7	LIGERAMENTE ACIDO	1.66
726	CSU-005	128.0	136.0	600	50	11400	10300	-1.4	ACIDO	1.61
727	CSU-014	72.0	80.0	500	50	29000	24200	-3.3	ACIDO	0.20
728	CSU-018	84.0	90.0	600	50	37300	21700	-3.0	ACIDO	0.43
729	CSU-018	90.0	96.0	500	50	11900	6900	-0.9	LIGERAMENTE ACIDO	0.57
730	CSU-018	114.0	120.0	700	50	27800	16500	-2.2	ACIDO	0.70
731	CSU-019	10.0	20.0	500	500	53830	1120	0.0	INERTE	0.12
732	CSU-019	20.0	30.0	500	500	44880	490	0.1	LIGERAMENTE BASICO	0.11
733	CSU-019	30.0	40.0	500	500	43320	4020	-0.4	LIGERAMENTE ACIDO	0.12
734	CSU-019	40.0	50.0	500	500	38520	6860	-0.8	LIGERAMENTE ACIDO	0.15
735	CSU-019	72.3	80.0	500	50	44300	36500	-5.0	ACIDO	0.17
736	CSU-020	40.0	48.0	500	50	36100	25300	-3.4	ACIDO	0.13
737	CSU-020	80.0	88.0	500	50	38200	27200	-3.7	ACIDO	0.37
738	DST-113	32.0	38.0	600	200	500	200	0.0	INERTE	0.11
739	DST-113	63.1	69.8	1400	200	800	0	0.1	INERTE	0.10
740	DST-113	69.8	76.6	1200	300	900	0	0.1	LIGERAMENTE BASICO	0.50
741	DST-113	76.6	82.5	800	200	800	0	0.1	INERTE	0.11
742	DST-113	87.9	94.0	1400	200	7400	600	0.0	INERTE	0.46
743	DST-113	94.0	100.0	800	200	2000	300	0.0	INERTE	0.17
744	DST-114	11.9	18.0	500	100	400	100	0.0	INERTE	0.34
745	DST-115	56.5	62.0	1100	50	1100	300	0.0	INERTE	0.18
746	DST-116	0.0	6.0	1300	500	400	0	0.2	LIGERAMENTE BASICO	0.22
747	DST-116	6.0	12.0	800	50	500	0	0.0	INERTE	0.24
748	DST-116	12.0	18.4	1900	50	700	0	0.0	INERTE	0.53
749	DST-116	18.4	24.3	2100	100	600	0	0.0	INERTE	0.69
750	DST-116	24.3	30.0	1100	100	600	0	0.0	INERTE	0.21
751	DST-116	30.0	36.0	1400	50	12000	5900	-0.8	LIGERAMENTE ACIDO	0.11
752	DST-117	42.0	48.1	400	50	900	200	0.0	INERTE	0.16
753	DST-117	48.1	54.0	300	50	600	100	0.0	INERTE	0.28
754	DST-117	54.0	59.4	400	50	900	0	0.0	INERTE	0.13
755	DST-117	59.4	65.9	300	50	500	100	0.0	INERTE	0.24
756	DST-117	65.9	71.4	600	50	800	200	0.0	INERTE	0.25
757	DST-117	71.4	76.2	400	50	1100	300	0.0	INERTE	0.41
758	MM-006	66.0	72.0	400	200	600	200	0.0	INERTE	0.15
759	MM-054	144.0	150.0	1500	200	101300	87800	-12.0	ACIDO	1.33
760	MM-247	138.0	144.0	400	100	42800	41900	-5.7	ACIDO	1.24
761	MM-247	150.0	156.0	600	100	71600	70500	-9.6	ACIDO	1.62
762	MM-247	156.0	162.0	500	100	58900	57000	-7.8	ACIDO	1.39
763	MM-247	180.0	186.0	400	100	70200	69100	-9.4	ACIDO	0.97
764	MM-247	186.0	192.0	500	50	77900	76600	-10.5	ACIDO	0.69
765	MM-247	198.0	204.0	700	100	61200	59900	-8.2	ACIDO	0.30
766	MM-247	210.0	214.2	700	100	62800	61100	-8.3	ACIDO	0.35
767	MM-248	108.0	116.0	1300	100	1600	600	0.0	INERTE	0.84
768	MM-248	116.0	124.0	1500	100	38200	33700	-4.6	ACIDO	0.89
769	MM-248	156.0	164.0	1000	100	900	400	0.0	INERTE	5.19
770	MM-248	172.0	180.0	1300	100	27500	21800	-2.9	ACIDO	1.25
771	MM-248	180.0	189.0	1800	100	36000	32500	-4.4	ACIDO	0.65
772	MM-253	70.0	76.0	900	100	76000	74200	-10.1	ACIDO	0.34
773	MM-253	106.0	112.0	500	100	34900	34100	-4.6	ACIDO	0.17
774	MM-253	118.0	124.0	500	100	14900	14500	-1.9	ACIDO	0.22
775	MM-256	112.0	120.0	300	100	3600	3400	-0.4	LIGERAMENTE ACIDO	0.39
776	MM-256	120.0	124.0	300	100	4100	3800	-0.5	LIGERAMENTE ACIDO	0.57
777	MM-258	78.0	84.0	1900	50	100	50	0.0	INERTE	0.19
778	MM-258	84.0	90.0	400	50	50	0	0.0	INERTE	0.23
779	MM-258	120.0	126.0	400	100	6400	6100	-0.8	LIGERAMENTE ACIDO	0.17
780	MM-258	126.0	132.0	400	200	5600	5200	-0.6	LIGERAMENTE ACIDO	0.15
781	MM-259	48.0	54.0	200	50	100	0	0.0	INERTE	0.18
782	MM-259	54.0	60.0	200	50	50	0	0.0	INERTE	0.10
783	MM-259	60.0	66.0	200	50	100	50	0.0	INERTE	0.12
784	MM-270	104.0	110.0	500	200	1100	800	0.0	NEUTRAL	0.36
785	MM-270	128.0	134.0	400	200	700	400	0.0	INERTE	0.43
786	MM-270	134.0	140.0	600	100	6600	6000	-0.8	LIGERAMENTE ACIDO	0.63
787	MM-271	66.0	76.0	800	100	34000	30100	-4.1	ACIDO	0.88
788	MM-272	28.0	34.0	1300	200	46400	41600	-5.6	ACIDO	0.69
789	MM-272	70.0	76.0	1400	100	17500	11600	-1.6	ACIDO	0.69
790	MM-273	94.0	102.0	300	100	8200	7400	-1.0	LIGERAMENTE ACIDO	0.28
791	MM-273	102.0	110.0	500	100	5700	5200	-0.7	LIGERAMENTE ACIDO	0.40
792	MM-273	110.0	120.0	500	100	6300	5600	-0.7	LIGERAMENTE ACIDO	0.28
793	MM-274	78.0	84.0	500	50	100	0	0.0	INERTE	0.30
794	MM-274	84.0	90.0	400	50	100	0	0.0	INERTE	0.27
795	MM-274	90.0	96.0	500	100	200	100	0.0	INERTE	0.24
796	MM-275	66.0	72.0	500	100	42300	37100	-5.0	ACIDO	2.03
797	MM-275	72.0	78.0	500	200	27800	21500	-2.9	ACIDO	2.68
798	MM-275	78.0	80.0	600	200	28900	25900	-3.5	ACIDO	2.31
799	MM-275	80.0	84.0	600	100	36600	33500	-4.6	ACIDO	2.12
800	MM-275	84.0	86.0	600	100	36600	33500	-4.6	ACIDO	1.85
801	MM-275	86.0	90.0	900	200	73400	71200	-9.7	ACIDO	1.79
802	MM-275	92.0	98.0	600	100	26000	23900	-3.2	ACIDO	3.04
803	MM-275	104.0	110.0	1200	200	29900	26600	-3.6	ACIDO	1.99
804	MM-275	110.0	116.0	2700	100	20100	18600	-2.5	ACIDO	1.32
805	MM-275	122.0	128.0	600	100	44100	38200	-5.2	ACIDO	0.90
806	MM-275	128.0	134.0	600	100	34100	31500	-4.3	ACIDO	0.53
807	MM-296	24.0	32.0	700	100	6000	1900	-0.2	LIGERAMENTE ACIDO	0.11
808	MM-296	32.0	40.0	700	100	4200	1600	-0.2	LIGERAMENTE ACIDO	0.28
809	MM-297	40.0	48.0	700	100	4000	2200	-0.3	LIGERAMENTE ACIDO	0.11
810	MM-297	48.0	56.0	600	100	4900	2800	-0.3	LIGERAMENTE ACIDO	0.32
811	MM-299	120.0	128.0	800	200	32600	31100	-4.2	ACIDO	0.31
812	MM-299	136.0	144.0	700	100	51400	49000	-6.7	ACIDO	1.13
813	MM-302	64.0	72.0	1100	200	2100	1100	-0.1	NEUTRAL	0.65
814	MM-302	72.0	80.0	1100	200	69400	66700	-9.1	ACIDO	0.56
815	MM-304	0.0	8.0	1100	100	2800	600	0.0	INERTE	0.16
816	MM-304	8.0	16.0	1200	100	3400	500	0.0	INERTE	0.15
817	MM-304	16.0	24.0	1600	100	4600	1400	-0.2	LIGERAMENTE ACIDO	0.18
818	MM-304	56.0	64.0	1400	100	3100	1100	-0.1	LIGERAMENTE ACIDO	0.12
819	MM-310	20.0	30.0	500	500	20960	15030	-1.9	ACIDO	0.29
820	MM-312	0.0	8.0	400	100	4500	4000	-0.5	LIGERAMENTE ACIDO	0.92
821	MM-312	30.0	38.0	500	100	47000	45300	-6.2	ACIDO	1.72
822	MM-312	46.0	54.0	800	100	50400	44200	-6.0	ACIDO	0.77
823	MM-312	70.0	78.0	800	100	50300	44000	-6.0	ACIDO	2.87
824	MM-313	8.0	16.0	500	200	85700	83600	-11.4	ACIDO	0.26
825	MM-313	16.0	24.0	600	100	57800	55200	-7.5	ACIDO	0.10
826	MM-314	0.0	8.0	500	400	22900	19300	-2.5	ACIDO	3.24
827	MM-314	16.0	24.0	700	100	21800	20900	-2.8	ACIDO	1.96
828	MM-314	24.0	32.0	500	100	30400	29200	-4.0	ACIDO	2.43
829	MM-314	40.0	48.0	800	400	41900	40700	-5.4	ACIDO	1.60
830	MM-314	48.0	56.0	300	200	44300	43100	-5.8	ACIDO	1.69
831	MM-314	64.0	72.4	300	200	80300	77900	-10.6	ACIDO	1.96
832	MM-314	82.0	90.0	400	200	116600	112600	-15.4	ACIDO	1.81
833	MM-315	152.0	160.0	500	300	85800	82800	-11.2	ACIDO	0.32
834	MM-315	216.0	220.0	800	300	35100	32100	-4.3	ACIDO	0.37
835	MM-347A	86.0	88.0	700	200	39800	36400	-4.9	ACIDO	0.69
836	MM-356	8.0	16.0	700	300	42200	39100	-5.2	ACIDO	0.53
837	MM-356	16.0	24.0	500	400	47400	44700	-6.0	ACIDO	0.45
838	MM-356	24.0	32.0	600	300	46900	43300	-5.8	ACIDO	0.55
839	MM-356	32.0	40.0	500	200	32800	30300	-4.1	ACIDO	0.60
840	MM-356	48.0	56.0	600	300	43200	36700	-4.9	ACIDO	0.48
841	MM-356	56.0	64.0	500	200	44300	34700	-4.7	ACIDO	0.53
842	MM-357	24.0	32.0	1400	200	64300	51500	-7.0	ACIDO	0.15
843	MM-357	32.0	40.0	1000	200	64500	56100	-7.6	ACIDO	0.25
844	MM-357	40.0	48.0	500	200	41700	37900	-5.1	ACIDO	0.42
845	MM-357	48.0	56.0	600	300	55900	43700	-5.9	ACIDO	0.37
846	MM-357	56.0	64.0	1000	300	59600	55600	-7.5	ACIDO	0.50
847	MM-357	64.0	72.0	700	200	40700	36500	-4.9	ACIDO	0.24
848	MM-358	24.0	32.0	2300	100	30800	28500	-3.9	ACIDO	0.15
849	MM-358	32.0	40.0	2500	100	30400	28100	-3.8	ACIDO	0.42
850	MM-358	40.0	48.0	2800	100	44100	40200	-5.5	ACIDO	0.41
851	MM-358	64.0	72.0	1000	100	26700	22900	-3.1	ACIDO	0.17
852	MM-358	72.0	80.0	1300	200	34100	30000	-4.0	ACIDO	0.21
853	MM-358	80.0	88.0	1600	50	27900	24500	-3.3	ACIDO	0.13
854	MM-358	88.0	96.0	1000	50	32200	28700	-3.9	ACIDO	0.12
855	MM-364	104.0	112.0	400	100	16000	15300	-2.1	ACIDO	0.18
856	MM-364	112.0	120.0	400	100	3300	3000	-0.4	LIGERAMENTE ACIDO	0.11
857	MM-364	128.0	136.0	400	100	28000	27100	-3.7	ACIDO	0.20
858	MM-364	136.0	144.0	400	50	30200	29200	-4.0	ACIDO	0.18
859	MM-364	144.0	152.0	500	100	30400	29100	-4.0	ACIDO	0.14
860	MM-364	152.0	160.0	400	100	32000	30500	-4.1	ACIDO	0.35
861	MM-364	160.0	168.0	300	200	25100	24100	-3.2	ACIDO	0.26
862	MM-365	24.0	32.0	600	50	40700	34100	-4.7	ACIDO	0.12
863	MM-365	32.0	40.0	500	50	38700	33500	-4.6	ACIDO	0.14
864	MM-365	40.0	48.0	900	50	45100	38900	-5.3	ACIDO	0.18
865	MM-365	48.0	56.0	600	50	40300	36200	-4.9	ACIDO	0.19
866	MM-365	56.0	64.0	500	50	51000	45200	-6.2	ACIDO	0.30
867	MM-365	96.0	104.0	600	50	46400	42500	-5.8	ACIDO	0.20
868	MM-365	104.0	112.0	400	50	61100	54100	-7.4	ACIDO	0.91
869	MM-365	112.0	120.0	400	100	1600	300	0.0	INERTE	0.64
870	MM-365	120.0	128.0	600	100	4200	2700	-0.3	LIGERAMENTE ACIDO	1.60
871	MM-365	136.0	144.0	600	100	80200	77000	-10.5	ACIDO	0.92
872	MM-365	144.0	152.0	500	100	23400	21800	-2.9	ACIDO	0.61
873	MM-365	152.0	160.0	600	100	2800	1300	-0.1	LIGERAMENTE ACIDO	0.99
874	MM-365	160.0	168.0	500	200	2400	1000	-0.1	NEUTRAL	1.74
875	MM-365	168.0	176.0	600	100	1700	100	0.0	INERTE	2.07
876	MM-367	0.0	8.0	500	100	95100	92100	-12.6	ACIDO	0.27
877	MM-367	8.0	16.0	500	200	140800	137800	-18.8	ACIDO	0.38
878	MM-367	16.0	24.0	500	100	106600	104400	-14.3	ACIDO	0.24
879	MM-367	24.0	32.0	300	200	117000	114500	-15.6	ACIDO	0.19
880	MM-367	32.0	40.0	400	300	100300	97800	-13.3	ACIDO	0.35
881	MM-367	40.0	48.0	400	100	82500	79700	-10.9	ACIDO	0.35
882	MM-367	48.0	56.0	400	100	77500	75000	-10.2	ACIDO	0.33
883	MM-367	56.0	64.0	600	200	62700	58500	-7.9	ACIDO	0.36
884	MM-367	88.0	96.0	700	200	44100	39500	-5.3	ACIDO	0.27
885	MM-367	96.0	104.0	400	200	51700	45100	-6.1	ACIDO	0.29
886	MM-367	104.0	112.0	400	300	44300	42300	-5.7	ACIDO	0.47
887	MM-367	112.0	120.0	300	100	49000	46100	-6.3	ACIDO	0.33
888	MM-367	128.0	136.0	400	300	49600	48000	-6.5	ACIDO	0.86
889	MM-367	136.0	144.0	400	100	44900	43100	-5.9	ACIDO	0.58
890	MM-367	144.0	152.0	300	100	79000	76700	-10.5	ACIDO	1.10
891	MM-367	152.0	160.0	200	50	61500	59800	-8.2	ACIDO	0.60
892	MM-367	160.0	168.0	300	100	70700	64300	-8.8	ACIDO	0.77
893	MM-367	168.0	176.0	400	100	69100	55000	-7.5	ACIDO	0.40
894	MM-377	120.0	128.0	800	100	75800	73000	-10.0	ACIDO	0.99
895	MM-377	128.0	136.0	800	100	78100	75300	-10.3	ACIDO	0.73
896	MM-377	136.0	144.0	900	50	66100	62600	-8.6	ACIDO	0.87
897	MM-377	144.0	152.0	700	50	69700	65400	-8.9	ACIDO	0.69
898	MM-377	152.0	160.0	800	50	73700	70200	-9.6	ACIDO	1.08
899	MM-381	8.0	16.0	400	50	200	100	0.0	INERTE	0.10
900	MM-381	16.0	24.0	500	400	200	0	0.1	LIGERAMENTE BASICO	0.12
901	MM-381	24.0	32.0	400	50	200	100	0.0	INERTE	0.13
902	MM-381	40.0	47.6	300	50	200	0	0.0	INERTE	0.10
903	MM-381	208.0	216.0	700	200	200	100	0.1	INERTE	0.12
904	MM-381	224.0	232.0	500	200	200	100	0.1	INERTE	0.10
905	MM-381	232.0	240.1	500	200	200	100	0.1	INERTE	0.11
906	MM-381	240.1	247.7	600	200	200	100	0.1	INERTE	0.15
907	MM-381	247.7	256.0	300	200	200	100	0.1	INERTE	0.16
908	MM-381	256.0	264.0	300	200	200	100	0.1	INERTE	0.11
909	MM-381	264.0	272.0	500	200	6300	1100	-0.1	INERTE	0.14
910	MM-381	272.0	280.0	700	200	21200	5500	-0.7	LIGERAMENTE ACIDO	0.41
911	MM-381	280.0	288.0	400	200	5900	700	0.0	INERTE	0.57
912	MM-381	288.0	296.0	500	200	5700	600	0.0	INERTE	0.30
913	MM-381	296.0	304.0	400	200	800	200	0.0	INERTE	0.27
914	MM-381	304.0	312.0	800	200	53200	13600	-1.8	ACIDO	0.17
915	MM-381	312.0	320.0	800	200	15900	3800	-0.4	LIGERAMENTE ACIDO	0.20
916	MM-381	320.0	328.0	500	200	16500	4000	-0.5	LIGERAMENTE ACIDO	0.32
917	MM-381	328.0	336.0	500	200	11800	1700	-0.2	LIGERAMENTE ACIDO	1.54
918	MM-381	336.0	344.0	500	200	39000	11200	-1.5	ACIDO	0.64
919	MM-384	0.0	8.0	2200	200	20400	4100	-0.5	LIGERAMENTE ACIDO	0.12
920	MM-384	212.0	220.0	500	200	56700	32300	-4.4	ACIDO	0.11
921	MM-384	228.0	236.0	300	200	54700	35800	-4.8	ACIDO	0.11
922	MM-393	0.0	8.0	400	100	43900	41600	-5.7	ACIDO	0.18
923	MM-393	8.0	16.0	300	100	136800	134600	-18.4	ACIDO	0.29
924	MM-393	41.5	50.0	300	50	61800	60500	-8.3	ACIDO	0.43
925	MM-393	99.0	108.0	300	100	65000	48100	-6.6	ACIDO	0.18
926	MM-393	108.0	116.0	100	50	79600	55600	-7.6	ACIDO	0.13
927	MM-395	8.6	16.0	400	100	159300	156200	-21.4	ACIDO	0.18
928	MM-395	16.0	24.0	300	100	102000	100100	-13.7	ACIDO	0.36
929	MM-395	32.0	40.0	300	100	88900	86500	-11.8	ACIDO	0.12
930	MM-395	56.0	64.0	300	100	73000	71400	-9.7	ACIDO	0.33
931	MM-395	160.0	168.0	300	100	61600	50900	-6.9	ACIDO	0.27
932	MM-397	66.0	74.0	600	200	57100	54000	-7.3	ACIDO	0.96
933	MM-397	106.0	114.0	600	100	43400	38800	-5.3	ACIDO	0.16
934	MM-397	130.0	138.0	500	200	31300	27500	-3.7	ACIDO	0.31
935	MM-397	170.0	178.0	400	100	24200	21700	-2.9	ACIDO	0.12
936	MM-397	226.0	233.5	400	100	74300	60200	-8.2	ACIDO	0.52
937	MM-397	250.0	258.0	300	100	90700	74600	-10.2	ACIDO	0.45
938	MM-397	306.0	314.0	200	100	87700	65500	-8.9	ACIDO	0.47
939	MM-398	224.0	232.0	200	100	38900	30500	-4.1	ACIDO	0.13
940	MM-398	232.0	240.0	200	50	36100	28400	-3.9	ACIDO	0.15
941	MM-399	104.0	112.8	300	50	31600	19800	-2.7	ACIDO	0.71
942	MM-399	120.0	128.0	300	50	46100	29000	-4.0	ACIDO	1.55
943	MM-400	12.0	18.5	400	50	44000	41200	-5.6	ACIDO	3.67
944	MM-400	18.5	24.0	410	200	790	220	0.0	INERTE	0.45
945	MM-400	24.0	29.4	370	200	2100	1750	-0.2	LIGERAMENTE ACIDO	0.44
946	MM-400	29.4	36.0	460	200	400	200	0.1	INERTE	2.05
947	MM-400	36.0	42.0	440	230	690	200	0.1	INERTE	0.95
948	MM-400	42.0	48.0	440	200	880	200	0.1	INERTE	1.86
949	MM-400	48.0	54.0	600	200	10700	7830	-1.0	LIGERAMENTE ACIDO	0.83
950	MM-400	54.0	60.0	410	200	810	200	0.1	INERTE	0.21
951	MM-400	60.0	66.0	470	200	1360	200	0.1	INERTE	0.41
952	MM-400	66.0	72.0	380	200	3250	200	0.1	INERTE	0.17
953	MM-400	72.0	78.0	490	200	1800	200	0.1	INERTE	0.18
954	MM-400	78.0	84.0	450	200	1010	200	0.1	INERTE	0.27
955	MM-400	84.0	90.0	510	200	1240	200	0.1	INERTE	0.30
956	MM-400	90.0	96.0	650	200	1410	200	0.0	INERTE	0.51
957	MM-400	96.0	102.3	580	200	1350	200	0.1	INERTE	1.31
958	MM-400	102.3	108.0	400	200	2640	580	0.0	INERTE	0.81
959	MM-400	108.0	114.0	430	200	1140	200	0.1	INERTE	0.40
960	MM-400	114.0	120.0	490	200	980	200	0.1	INERTE	0.51
961	MM-400	120.0	126.0	410	200	830	200	0.1	INERTE	0.72
962	MM-400	126.0	132.0	460	200	810	200	0.1	INERTE	1.28
963	MM-400	132.0	138.0	470	200	1100	200	0.073	INERTE	0.82
964	MM-400	138.0	144.0	530	220	21000	15900	-2.1	ACIDO	0.29
965	MM-400	144.0	150.0	600	50	35100	22000	-3.0	ACIDO	0.28
966	MM-400	150.0	156.0	530	200	1060	200	0.1	INERTE	0.85
967	MM-400	156.0	162.0	470	200	20900	500	0.0	INERTE	0.27
968	MM-400	162.0	168.1	390	200	42400	5200	-0.6	LIGERAMENTE ACIDO	0.11
969	MM-400	168.1	174.0	520	200	33900	15500	-2.1	ACIDO	0.32
970	MM-400	174.0	180.0	640	250	19300	300	0.1	INERTE	0.25
971	MM-400	180.0	186.0	1160	550	44700	17100	-2.1	ACIDO	0.41
972	MM-400	186.0	192.0	440	200	61700	15600	-2.1	ACIDO	0.57
973	MM-400	192.0	198.5	270	200	52200	29100	-3.9	ACIDO	0.81
974	MM-400	198.5	204.0	290	200	57100	37100	-5.0	ACIDO	0.66
975	MM-400	204.0	210.0	220	200	49600	38100	-5.1	ACIDO	0.58
976	MM-400	210.0	216.0	350	200	51000	34700	-4.7	ACIDO	0.45
977	MM-400	216.0	222.0	350	200	38500	30760	-4.1	ACIDO	0.85
978	MM-400	222.0	228.0	240	200	55300	38700	-5.2	ACIDO	0.72
979	MM-400	228.0	234.0	320	200	67900	36000	-4.9	ACIDO	1.08
980	MM-400	234.0	240.0	380	200	55100	45520	-6.2	ACIDO	1.38
981	MM-400	240.0	246.0	1040	500	52300	38700	-5.1	ACIDO	0.62
982	MM-400	246.0	252.0	200	200	48400	34500	-4.7	ACIDO	1.01
983	MM-400	252.0	258.0	290	200	53900	44050	-6.0	ACIDO	1.19
984	MM-400	258.0	264.0	240	200	47500	39540	-5.3	ACIDO	0.67
985	MM-400	264.0	270.0	300	200	47400	39030	-5.3	ACIDO	0.38
986	MM-400	270.0	273.3	320	200	46100	37400	-5.1	ACIDO	0.39
987	MM-401	7.0	12.6	450	200	70900	64290	-8.7	ACIDO	1.04
988	MM-401	12.6	14.5	300	50	52900	51100	-7.0	ACIDO	1.49
989	MM-401	14.5	19.0	300	50	52900	51100	-7.0	ACIDO	3.18
990	MM-401	19.0	23.0	600	50	27000	24800	-3.4	ACIDO	1.35
991	MM-401	23.0	25.0	600	50	27000	24800	-3.4	ACIDO	2.44
992	MM-401	25.0	31.0	580	200	58900	53030	-7.2	ACIDO	1.46
993	MM-401	31.0	39.2	550	200	85100	77140	-10.5	ACIDO	1.43
994	MM-401	40.4	49.0	600	200	154000	147300	-20.1	ACIDO	3.23
995	MM-401	49.0	56.3	530	200	105000	99320	-13.5	ACIDO	1.68
996	MM-401	56.3	57.8	100	50	103500	101700	-13.9	ACIDO	1.00
997	MM-401	57.8	63.5	100	50	103500	101700	-13.9	ACIDO	0.57
998	MM-401	63.5	66.0	420	200	101000	96900	-13.2	ACIDO	0.23
999	MM-401	66.0	69.6	350	200	96300	93450	-12.7	ACIDO	0.19
1000	MM-401	69.6	74.5	100	50	84200	83400	-11.4	ACIDO	0.25
1001	MM-401	74.5	76.9	100	50	84200	83400	-11.4	ACIDO	0.32
1002	MM-401	76.9	82.9	400	50	28900	28000	-3.8	ACIDO	1.05
1003	MM-401	82.9	89.6	300	50	101500	99200	-13.6	ACIDO	0.63
1004	MM-401	89.6	92.0	620	200	95000	89990	-12.3	ACIDO	0.68
1005	MM-401	92.0	96.0	630	200	48100	43190	-5.8	ACIDO	0.87
1006	MM-401	96.0	100.0	300	100	74900	73500	-10.0	ACIDO	1.23
1007	MM-401	100.0	102.0	300	100	74900	73500	-10.0	ACIDO	1.92
1008	MM-401	102.0	108.8	480	200	84700	77920	-10.6	ACIDO	3.87
1009	MM-401	108.8	115.5	500	100	50700	45000	-6.1	ACIDO	0.69
1010	MM-401	115.5	118.0	910	200	50800	40880	-5.5	ACIDO	0.68
1011	MM-401	118.0	126.0	1150	290	51000	40700	-5.5	ACIDO	0.47
1012	MM-401	126.0	134.8	1950	220	37800	28590	-3.8	ACIDO	0.23
1013	MM-401	134.8	142.0	1320	200	40100	34760	-4.7	ACIDO	0.41
1014	MM-401	142.0	146.0	640	200	62400	41900	-5.7	ACIDO	0.88
1015	MM-401	146.0	150.0	300	100	66100	56700	-7.7	ACIDO	1.01
1016	MM-401	150.0	152.0	300	100	66100	56700	-7.7	ACIDO	1.20
1017	MM-401	152.0	156.8	650	200	59200	46300	-6.3	ACIDO	0.43
1018	MM-401	156.8	161.6	400	50	143100	139000	-19.0	ACIDO	1.61
1019	MM-401	161.6	170.0	680	200	93500	83100	-11.3	ACIDO	0.31
1020	MM-401	170.0	177.7	600	200	81400	74220	-10.1	ACIDO	0.20
1021	MM-401	177.7	185.2	1290	370	34700	28160	-3.7	ACIDO	0.21
1022	MM-401	185.2	194.0	470	220	66500	53400	-7.2	ACIDO	0.80
1023	MM-401	194.0	202.0	500	230	118000	101400	-13.8	ACIDO	0.99
1024	MM-401	202.0	210.0	460	200	63300	46100	-6.2	ACIDO	0.58
1025	MM-401	225.5	234.3	400	310	41400	11200	-1.4	ACIDO	0.14
1026	MM-401	234.3	240.4	470	200	57900	38200	-5.2	ACIDO	0.30
1027	MM-402	16.0	18.0	500	100	79600	77800	-10.6	ACIDO	2.17
1028	MM-402	18.0	24.0	550	200	116000	109260	-14.9	ACIDO	2.75
1029	MM-402	24.0	30.0	570	320	60400	55050	-7.4	ACIDO	2.26
1030	MM-402	30.0	32.0	400	100	58600	56600	-7.7	ACIDO	2.92
1031	MM-402	32.0	36.0	400	100	58600	56600	-7.7	ACIDO	1.48
1032	MM-402	36.0	39.7	730	200	83000	76700	-10.4	ACIDO	1.30
1033	MM-402	39.7	48.0	850	200	68300	56300	-7.6	ACIDO	1.50
1034	MM-402	48.0	53.5	300	100	53200	51000	-7.0	ACIDO	1.61
1035	MM-402	53.5	55.9	600	100	59000	49200	-6.7	ACIDO	0.63
1036	MM-402	55.9	60.0	600	100	59000	49200	-6.7	ACIDO	1.07
1037	MM-402	60.0	64.5	400	100	31500	19100	-2.6	ACIDO	1.72
1038	MM-402	64.5	66.5	400	100	31500	19100	-2.6	ACIDO	1.16
1039	MM-402	66.5	72.2	600	100	23100	16000	-2.2	ACIDO	1.30
1040	MM-402	72.2	78.0	560	200	14300	200	0.1	INERTE	0.78
1041	MM-402	78.0	80.2	400	100	37100	31400	-4.3	ACIDO	0.71
1042	MM-402	80.2	84.5	400	100	37100	31400	-4.3	ACIDO	0.82
1043	MM-402	84.5	89.1	790	430	58000	42700	-5.7	ACIDO	0.77
1044	MM-402	89.1	98.0	630	200	6770	3450	-0.4	LIGERAMENTE ACIDO	1.98
1045	MM-402	98.0	106.0	670	200	2170	260	0.0	INERTE	1.86
1046	MM-402	106.0	114.0	620	200	1460	200	0.1	INERTE	1.22
1047	MM-402	114.0	122.5	1020	200	21500	15950	-2.1	ACIDO	1.69
1048	MM-402	122.5	130.0	710	200	39600	35870	-4.8	ACIDO	0.30
1049	MM-402	130.0	134.0	710	200	43800	35800	-4.8	ACIDO	0.37
1050	MM-402	134.0	138.0	800	300	49800	44400	-6.0	ACIDO	0.54
1051	MM-402	138.0	140.0	800	300	49800	44400	-6.0	ACIDO	0.97
1052	MM-402	140.0	146.0	720	220	43400	34800	-4.7	ACIDO	1.69
1053	MM-402	146.0	154.0	540	200	44200	39790	-5.4	ACIDO	0.45
1054	MM-402	154.0	162.0	610	200	39600	35420	-4.8	ACIDO	0.69
1055	MM-402	162.0	170.0	420	250	62800	46500	-6.3	ACIDO	0.83
1056	MM-402	170.0	178.0	430	200	40500	33190	-4.5	ACIDO	0.29
1057	MM-402	178.0	186.0	490	200	43300	38190	-5.2	ACIDO	0.58
1058	MM-402	186.0	194.0	390	200	45900	39350	-5.3	ACIDO	0.90
1059	MM-402	194.0	202.0	500	360	46300	40010	-5.3	ACIDO	0.47
1060	MM-402	202.0	210.6	700	200	42500	37820	-5.1	ACIDO	0.26
1061	MM-403	0.5	8.5	2430	250	113000	104310	-14.2	ACIDO	11.18
1062	MM-403	8.5	16.0	600	200	50400	45950	-6.2	ACIDO	1.41
1063	MM-403	16.0	24.0	590	200	73400	61600	-8.4	ACIDO	0.54
1064	MM-403	24.0	30.0	800	100	75400	69800	-9.5	ACIDO	0.38
1065	MM-403	30.0	32.0	540	200	83600	73100	-9.9	ACIDO	0.40
1066	MM-403	32.0	41.0	520	200	81100	75740	-10.3	ACIDO	0.68
1067	MM-403	41.0	43.0	470	200	65300	60220	-8.2	ACIDO	0.58
1068	MM-403	43.0	48.0	400	100	77400	74800	-10.2	ACIDO	1.53
1069	MM-403	48.0	55.0	400	100	87000	84600	-11.6	ACIDO	1.31
1070	MM-403	55.0	62.5	810	200	83500	76830	-10.5	ACIDO	0.22
1071	MM-403	62.5	70.0	520	200	67600	60730	-8.2	ACIDO	0.28
1072	MM-403	72.5	79.0	800	100	64000	59500	-8.1	ACIDO	0.46
1073	MM-403	79.0	84.0	400	100	42200	40700	-5.5	ACIDO	0.72
1074	MM-403	84.0	86.5	530	260	56200	51470	-7.0	ACIDO	0.64
1075	MM-403	86.5	91.0	630	200	82800	76090	-10.4	ACIDO	0.14
1076	MM-403	91.0	95.0	700	200	56700	52400	-7.1	ACIDO	0.12
1077	MM-403	95.0	97.0	700	200	56700	52400	-7.1	ACIDO	0.44
1078	MM-403	97.0	103.0	500	200	66700	57290	-7.8	ACIDO	0.50
1079	MM-403	103.0	112.0	640	300	43700	38760	-5.2	ACIDO	0.27
1080	MM-403	112.0	119.5	660	200	29800	25950	-3.5	ACIDO	0.31
1081	MM-403	119.5	126.5	650	200	25900	23900	-3.2	ACIDO	0.15
1082	MM-403	126.5	133.7	520	200	30200	27760	-3.7	ACIDO	0.33

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1083	MM-403	133.7	136.0	860	200	41700	37750	-5.1	ACIDO	0.18
1084	MM-403	136.0	141.4	600	200	44000	41700	-5.6	ACIDO	0.85
1085	MM-403	141.4	148.4	400	100	7400	6800	-0.9	LIGERAMENTE ACIDO	0.22
1086	MM-403	148.4	150.0	540	200	12300	5100	-0.6	LIGERAMENTE ACIDO	0.19
1087	MM-403	150.0	158.0	650	210	76500	43700	-5.9	ACIDO	0.76
1088	MM-403	158.0	166.5	840	200	35300	32120	-4.3	ACIDO	0.66
1089	MM-403	166.5	173.0	900	100	35200	32800	-4.5	ACIDO	0.20
1090	MM-403	173.0	175.3	610	200	37300	34120	-4.6	ACIDO	0.13
1091	MM-403	175.3	184.0	860	200	43900	40070	-5.4	ACIDO	0.29
1092	MM-403	184.0	193.0	670	220	39600	34110	-4.6	ACIDO	0.32
1093	MM-403	193.0	202.4	400	200	45300	33200	-4.5	ACIDO	1.37
1094	MM-403	202.4	210.0	410	200	41600	27800	-3.7	ACIDO	0.64
1095	MM-403	210.0	218.5	760	200	86200	73900	-10.1	ACIDO	0.89
1096	MM-403	218.5	226.2	620	220	44100	39640	-5.3	ACIDO	0.75
1097	MM-404	16.0	24.0	530	200	53600	26800	-3.6	ACIDO	0.31
1098	MM-404	24.0	32.0	690	200	27300	11000	-1.4	ACIDO	0.25
1099	MM-404	32.0	39.5	780	200	25500	6200	-0.8	LIGERAMENTE ACIDO	0.21
1100	MM-404	39.5	48.1	400	200	54200	34500	-4.7	ACIDO	0.18
1101	MM-404	48.1	56.5	720	200	38200	6700	-0.8	LIGERAMENTE ACIDO	0.30
1102	MM-404	56.5	64.0	530	200	46200	9900	-1.3	ACIDO	0.24
1103	MM-404	64.0	72.0	760	400	38800	8500	-1.0	ACIDO	0.33
1104	MM-404	72.0	79.8	600	200	55900	9700	-1.3	ACIDO	0.23
1105	MM-404	79.8	88.0	520	200	29200	1800	-0.2	LIGERAMENTE ACIDO	0.14
1106	MM-404	88.0	96.3	650	200	38400	3300	-0.4	LIGERAMENTE ACIDO	0.15
1107	MM-404	96.3	104.5	560	200	33600	3000	-0.3	LIGERAMENTE ACIDO	0.11
1108	MM-404	104.5	112.0	890	200	35100	1300	-0.1	LIGERAMENTE ACIDO	0.12
1109	MM-404	112.0	120.0	700	420	28900	1100	0.0	INERTE	0.22
1110	MM-404	120.0	128.0	940	200	10500	200	0.1	INERTE	0.33
1111	MM-404	128.0	136.0	940	200	17900	2200	-0.2	LIGERAMENTE ACIDO	0.12
1112	MM-404	144.0	151.5	720	200	12700	200	0.1	INERTE	0.11
1113	MM-404	151.5	160.0	640	200	16400	200	0.1	INERTE	0.20
1114	MM-404	160.0	168.5	750	200	12700	200	0.1	INERTE	0.41
1115	MM-404	168.5	176.1	870	200	33000	6200	-0.8	LIGERAMENTE ACIDO	0.19
1116	MM-404	176.1	184.0	780	200	24400	1200	-0.1	INERTE	0.14
1117	MM-404	184.0	191.6	630	200	36600	13200	-1.7	ACIDO	0.13
1118	MM-404	191.6	200.0	580	200	35400	15100	-2.0	ACIDO	0.17
1119	MM-404	200.0	208.0	330	260	50300	30200	-4.0	ACIDO	0.23
1120	MM-404	208.0	216.0	600	200	37100	24500	-3.3	ACIDO	0.21
1121	MM-404	216.0	224.0	570	200	36700	27260	-3.7	ACIDO	0.25
1122	MM-404	224.0	232.0	760	200	30300	20370	-2.7	ACIDO	0.17
1123	MM-404	240.0	248.0	460	200	39200	11900	-1.6	ACIDO	0.11
1124	MM-404	248.0	255.6	530	200	58700	23400	-3.1	ACIDO	0.17
1125	MM-405	20.0	27.2	630	200	35800	3800	-0.4	LIGERAMENTE ACIDO	0.70
1126	MM-405	27.2	36.0	530	200	2950	220	0.0	INERTE	0.56
1127	MM-405	36.0	44.0	720	200	2810	200	0.1	INERTE	0.66
1128	MM-405	44.0	52.0	520	200	7370	200	0.1	INERTE	0.63
1129	MM-405	52.0	60.0	560	200	7220	200	0.1	INERTE	1.05
1130	MM-405	60.0	68.5	590	200	4920	200	0.1	INERTE	0.43
1131	MM-405	68.5	76.0	630	280	7360	940	0.0	INERTE	0.45
1132	MM-405	76.0	84.0	710	200	23400	2200	-0.2	LIGERAMENTE ACIDO	0.31
1133	MM-405	84.0	92.1	300	100	37100	30400	-4.1	ACIDO	0.79
1134	MM-405	92.1	100.0	300	100	74300	59500	-8.1	ACIDO	1.24
1135	MM-405	100.0	108.0	300	100	69900	60500	-8.3	ACIDO	3.05
1136	MM-405	108.0	116.0	400	100	51900	46600	-6.3	ACIDO	0.70
1137	MM-405	116.0	124.0	300	100	47000	41300	-5.6	ACIDO	0.21
1138	MM-405	124.0	132.0	500	200	41700	32080	-4.3	ACIDO	0.28
1139	MM-405	132.0	140.0	520	330	49400	23500	-3.1	ACIDO	0.35
1140	MM-405	140.0	148.0	200	100	44000	29700	-4.0	ACIDO	0.23
1141	MM-405	148.0	155.3	610	200	38500	5400	-0.7	LIGERAMENTE ACIDO	0.12
1142	MM-405	155.3	164.0	610	200	38100	22500	-3.0	ACIDO	0.32
1143	MM-405	164.0	172.0	580	200	49400	30000	-4.0	ACIDO	0.39
1144	MM-405	172.0	180.0	500	200	65400	11500	-1.5	ACIDO	0.23
1145	MM-405	180.0	188.0	480	220	64300	5700	-0.7	LIGERAMENTE ACIDO	0.19
1146	MM-405	188.0	196.0	450	200	47800	20100	-2.7	ACIDO	0.40
1147	MM-405	196.0	204.0	500	200	55800	25000	-3.4	ACIDO	0.44
1148	MM-405	204.0	212.8	610	230	57400	24900	-3.3	ACIDO	0.46
1149	MM-406	66.0	74.0	2900	200	8600	4000	-0.5	LIGERAMENTE ACIDO	0.42
1150	MM-406	113.2	122.0	600	200	77600	69000	-9.4	ACIDO	1.79
1151	MM-408	38.0	45.6	600	100	31000	29300	-4.0	ACIDO	0.26
1152	MM-408	126.0	134.0	700	200	51600	48200	-6.5	ACIDO	17.31
1153	MM-408	142.0	150.0	700	100	45700	39700	-5.4	ACIDO	10.96
1154	MM-408	167.0	176.0	700	100	38800	36500	-5.0	ACIDO	1.40
1155	MM-409	16.0	24.0	530	200	3550	2060	-0.2	LIGERAMENTE ACIDO	0.50
1156	MM-409	24.0	32.0	240	200	17300	13430	-1.8	ACIDO	1.52
1157	MM-409	32.0	40.0	200	200	9790	6040	-0.8	LIGERAMENTE ACIDO	1.25
1158	MM-409	40.0	48.0	290	200	10800	7330	-0.9	LIGERAMENTE ACIDO	0.99
1159	MM-409	48.0	56.0	300	200	32800	27580	-3.7	ACIDO	1.32
1160	MM-409	56.0	64.0	690	320	59200	54140	-7.3	ACIDO	1.02
1161	MM-409	64.0	72.0	440	310	96000	88080	-12.0	ACIDO	1.38
1162	MM-409	72.0	80.0	700	100	37000	34800	-4.7	ACIDO	1.08
1163	MM-409	80.0	88.5	240	200	33600	29900	-4.0	ACIDO	1.06
1164	MM-409	88.5	96.0	330	200	37300	31650	-4.3	ACIDO	1.05
1165	MM-409	96.0	104.0	700	100	39600	35800	-4.9	ACIDO	0.62
1166	MM-409	104.0	112.0	230	220	61500	13700	-1.8	ACIDO	0.38
1167	MM-409	112.0	120.0	200	200	33900	7700	-1.0	LIGERAMENTE ACIDO	0.26
1168	MM-409	120.0	128.0	1400	100	56700	39900	-5.4	ACIDO	0.31
1169	MM-409	128.0	136.0	200	200	38100	30730	-4.1	ACIDO	0.28
1170	MM-409	136.0	144.0	240	220	49400	30400	-4.1	ACIDO	0.21
1171	MM-409	144.0	151.9	270	200	39300	30840	-4.2	ACIDO	0.27
1172	MM-409	151.9	160.5	210	200	27900	11500	-1.5	ACIDO	0.31
1173	MM-409	160.5	168.0	240	200	51900	22600	-3.0	ACIDO	0.17
1174	MM-409	168.0	176.0	300	200	59300	22200	-3.0	ACIDO	0.16
1175	MM-409	176.0	184.0	230	200	51400	27900	-3.7	ACIDO	0.22
1176	MM-409	184.0	192.0	240	200	57400	33500	-4.5	ACIDO	0.20
1177	MM-409	192.0	200.0	230	230	57400	42800	-5.8	ACIDO	0.25
1178	MM-410	100.0	108.0	380	220	6280	200	0.1	INERTE	0.30
1179	MM-410	108.0	116.4	350	200	14500	400	0.0	INERTE	0.35
1180	MM-410	124.0	132.0	460	210	200	200	0.1	INERTE	0.13
1181	MM-410	132.0	139.0	200	200	200	200	0.1	INERTE	0.14
1182	MM-410	139.0	148.0	350	200	200	200	0.1	INERTE	0.14
1183	MM-410	148.0	156.0	240	200	200	200	0.1	INERTE	0.28
1184	MM-410	156.0	164.0	200	200	260	200	0.1	INERTE	0.26
1185	MM-410	164.0	172.0	420	200	230	200	0.1	INERTE	0.11
1186	MM-410	204.0	212.0	340	310	17100	200	0.1	LIGERAMENTE BASICO	0.18
1187	MM-410	236.0	244.0	200	200	3020	200	0.1	INERTE	0.18
1188	MM-410	244.0	252.0	200	200	1870	200	0.1	INERTE	0.14
1189	MM-410	252.0	260.0	230	230	990	430	0.0	INERTE	0.23
1190	MM-410	260.0	270.0	240	240	1970	1360	-0.1	INERTE	0.18
1191	MM-411	24.0	32.0	500	100	71300	50200	-6.8	ACIDO	0.26
1192	MM-411	98.0	106.0	500	50	41800	38100	-5.2	ACIDO	0.25
1193	MM-412	14.0	20.0	300	100	35800	34500	-4.7	ACIDO	3.83
1194	MM-412	26.5	32.0	300	100	30700	28800	-3.9	ACIDO	2.99
1195	MM-412	38.0	44.5	400	100	25600	24500	-3.3	ACIDO	2.50
1196	MM-412	62.0	68.5	400	300	18900	18200	-2.4	ACIDO	1.66
1197	MM-412	74.0	80.0	300	200	21900	21200	-2.8	ACIDO	4.79
1198	MM-412	86.0	92.0	300	200	12400	11700	-1.5	ACIDO	2.84
1199	MM-412	110.0	116.0	400	100	62700	55500	-7.6	ACIDO	0.51
1200	MM-412	116.0	122.0	500	200	16900	15700	-2.1	ACIDO	2.05
1201	MM-413	8.4	14.0	330	200	34500	27570	-3.7	ACIDO	0.21
1202	MM-413	14.0	20.0	450	200	38400	30850	-4.2	ACIDO	0.23
1203	MM-413	20.0	26.0	430	200	27300	23840	-3.2	ACIDO	0.24
1204	MM-413	26.0	32.0	300	200	30200	22580	-3.0	ACIDO	0.21
1205	MM-413	32.0	39.0	710	200	39600	29630	-4.0	ACIDO	0.18
1206	MM-413	39.0	44.5	680	200	51500	36800	-5.0	ACIDO	0.20
1207	MM-413	44.5	49.8	370	200	26500	13000	-1.7	ACIDO	0.17
1208	MM-413	49.8	56.0	1200	200	22900	20800	-2.8	ACIDO	0.22
1209	MM-413	56.0	62.0	1100	100	9200	8200	-1.1	ACIDO	0.29
1210	MM-413	62.0	68.0	310	200	17000	14650	-1.9	ACIDO	0.41
1211	MM-413	68.0	74.3	470	200	32900	25150	-3.4	ACIDO	1.44
1212	MM-413	74.3	80.2	900	100	86300	65200	-8.9	ACIDO	1.48
1213	MM-413	80.2	86.0	1000	100	62800	47600	-6.5	ACIDO	2.73
1214	MM-413	86.0	92.0	800	100	54900	36700	-5.0	ACIDO	2.00
1215	MM-413	92.0	98.0	640	200	63800	19920	-2.7	ACIDO	0.84
1216	MM-413	98.0	103.1	420	200	67600	21700	-2.9	ACIDO	3.46
1217	MM-413	103.1	108.5	520	200	56000	20620	-2.8	ACIDO	0.57
1218	MM-413	108.5	114.0	700	200	53000	22600	-3.0	ACIDO	0.69
1219	MM-413	114.0	120.5	240	200	33700	29760	-4.0	ACIDO	0.52
1220	MM-413	120.5	126.5	600	200	51100	15800	-2.1	ACIDO	0.44
1221	MM-413	126.5	132.0	690	200	68300	20030	-2.7	ACIDO	0.39
1222	MM-413	132.0	138.0	540	200	46600	17600	-2.3	ACIDO	0.42
1223	MM-413	138.0	144.0	530	200	51100	21800	-2.9	ACIDO	0.47
1224	MM-413	144.0	150.0	740	200	45100	10500	-1.4	ACIDO	0.26
1225	MM-413	150.0	156.5	450	200	48300	11280	-1.5	ACIDO	0.21
1226	MM-413	156.5	162.0	640	200	64700	25550	-3.4	ACIDO	0.54
1227	MM-413	162.0	168.0	650	200	54300	34000	-4.6	ACIDO	0.42
1228	MM-413	168.0	172.0	640	200	53000	44370	-6.0	ACIDO	0.48
1229	MM-414	11.9	16.0	600	200	89400	64500	-8.8	ACIDO	0.15
1230	MM-414	16.0	18.0	600	200	89400	64500	-8.8	ACIDO	0.18
1231	MM-414	18.0	24.0	790	200	63900	43700	-5.9	ACIDO	0.18
1232	MM-414	24.0	24.2	790	200	63900	43700	-5.9	ACIDO	0.24
1233	MM-414	24.2	30.6	680	200	58000	36300	-4.9	ACIDO	0.23
1234	MM-414	30.6	32.0	550	200	46500	25400	-3.4	ACIDO	0.35
1235	MM-414	32.0	36.0	550	200	46500	25400	-3.4	ACIDO	0.25
1236	MM-414	36.0	40.0	1120	200	56300	27600	-3.7	ACIDO	0.35
1237	MM-414	40.0	41.8	1120	200	56300	27600	-3.7	ACIDO	0.19
1238	MM-414	41.8	47.3	610	200	70400	27740	-3.7	ACIDO	0.37
1239	MM-414	47.3	48.0	990	200	67600	38100	-5.1	ACIDO	0.29
1240	MM-414	48.0	54.0	990	200	67600	38100	-5.1	ACIDO	0.22
1241	MM-414	54.0	56.0	780	200	61600	38000	-5.1	ACIDO	0.30
1242	MM-414	56.0	60.5	780	200	61600	38000	-5.1	ACIDO	0.12
1243	MM-414	60.5	64.0	830	200	46200	35700	-4.8	ACIDO	0.12
1244	MM-414	64.0	66.0	830	200	46200	35700	-4.8	ACIDO	0.15
1245	MM-414	66.0	72.0	720	200	34000	30390	-4.1	ACIDO	0.13
1246	MM-414	72.0	78.0	950	200	45600	34800	-4.7	ACIDO	0.27
1247	MM-414	78.0	80.0	1010	200	66800	42700	-5.8	ACIDO	0.50
1248	MM-414	80.0	84.5	1010	200	66800	42700	-5.8	ACIDO	0.46
1249	MM-414	84.5	88.0	740	200	65100	37000	-5.0	ACIDO	0.63
1250	MM-414	88.0	89.5	740	200	65100	37000	-5.0	ACIDO	1.09
1251	MM-414	89.5	96.0	510	200	43400	36910	-5.0	ACIDO	0.42
1252	MM-414	96.0	103.0	540	200	39200	35740	-4.8	ACIDO	1.61
1253	MM-414	103.0	104.0	630	200	44600	40130	-5.4	ACIDO	2.47
1254	MM-414	104.0	110.0	630	200	44600	40130	-5.4	ACIDO	1.22
1255	MM-414	110.0	112.0	510	200	44300	40100	-5.4	ACIDO	0.77
1256	MM-414	112.0	116.0	510	200	44300	40100	-5.4	ACIDO	0.70
1257	MM-414	116.0	120.0	500	200	41800	34070	-4.6	ACIDO	0.45
1258	MM-414	120.0	122.9	500	200	41800	34070	-4.6	ACIDO	0.43
1259	MM-414	122.9	128.0	260	200	32600	29030	-3.9	ACIDO	1.79
1260	MM-414	128.0	128.7	260	200	32600	29030	-3.9	ACIDO	3.02
1261	MM-414	128.7	134.5	450	200	33100	30510	-4.1	ACIDO	1.33
1262	MM-414	134.5	136.0	370	200	32600	29610	-4.0	ACIDO	1.19
1263	MM-414	136.0	140.0	370	200	32600	29610	-4.0	ACIDO	1.13
1264	MM-414	140.0	144.0	350	200	37700	34330	-4.6	ACIDO	1.09
1265	MM-414	144.0	146.5	350	200	37700	34330	-4.6	ACIDO	0.67
1266	MM-414	146.5	152.0	350	200	28300	27580	-3.7	ACIDO	0.27
1267	MM-414	152.0	157.8	390	200	32600	29430	-4.0	ACIDO	0.15
1268	MM-414	157.8	160.0	320	200	35200	27600	-3.7	ACIDO	0.15
1269	MM-414	160.0	164.5	320	200	35200	27600	-3.7	ACIDO	0.13
1270	MM-414	164.5	168.0	800	200	44300	40060	-5.4	ACIDO	0.20
1271	MM-414	168.0	170.0	800	200	44300	40060	-5.4	ACIDO	0.30
1272	MM-414	170.0	176.0	690	200	50600	42350	-5.7	ACIDO	0.30
1273	MM-414	176.0	177.0	690	200	50600	42350	-5.7	ACIDO	0.28
1274	MM-414	177.0	184.0	420	200	46100	37080	-5.0	ACIDO	0.35
1275	MM-414	184.0	190.0	470	200	44300	34970	-4.7	ACIDO	0.21
1276	MM-414	190.0	192.0	320	200	36400	30490	-4.1	ACIDO	0.89
1277	MM-414	192.0	196.0	320	200	36400	30490	-4.1	ACIDO	0.51
1278	MM-414	196.0	200.0	480	200	36400	31500	-4.2	ACIDO	0.53
1279	MM-414	200.0	202.0	480	200	36400	31500	-4.2	ACIDO	0.33
1280	MM-414	202.0	208.0	240	200	39700	35310	-4.8	ACIDO	0.31
1281	MM-414	208.0	208.9	240	200	39700	35310	-4.8	ACIDO	0.28
1282	MM-414	208.9	214.0	680	200	29900	18400	-2.4	ACIDO	1.23
1283	MM-414	214.0	216.0	420	200	40700	37970	-5.1	ACIDO	0.39
1284	MM-414	216.0	220.0	420	200	40700	37970	-5.1	ACIDO	0.48
1285	MM-414	220.0	224.0	360	200	37900	32050	-4.3	ACIDO	0.36
1286	MM-414	224.0	226.0	360	200	37900	32050	-4.3	ACIDO	1.00
1287	MM-414	226.0	232.0	860	200	58000	51720	-7.0	ACIDO	4.13
1288	MM-414	232.0	238.3	740	200	61000	54140	-7.3	ACIDO	2.37
1289	MM-414	238.3	240.0	460	200	31800	17300	-2.3	ACIDO	1.32
1290	MM-414	240.0	244.0	460	200	31800	17300	-2.3	ACIDO	0.48
1291	MM-414	244.0	248.0	700	200	35400	26120	-3.5	ACIDO	0.53
1292	MM-414	248.0	250.0	700	200	35400	26120	-3.5	ACIDO	0.11
1293	MM-414	250.0	255.0	250	200	31900	16600	-2.2	ACIDO	0.15
1294	MM-415	6.0	8.6	1080	200	1920	200	0.1	INERTE	0.20
1295	MM-415	26.0	30.0	390	200	2280	200	0.1	INERTE	0.11
1296	MM-415	38.0	39.0	410	200	2370	880	0.0	INERTE	0.11
1297	MM-415	39.0	44.0	310	200	2170	200	0.1	INERTE	0.27
1298	MM-415	44.0	46.0	240	200	1810	200	0.1	INERTE	0.12
1299	MM-415	46.0	49.5	240	200	1810	200	0.1	INERTE	0.15
1300	MM-415	49.5	54.0	410	200	2430	200	0.1	INERTE	0.28
1301	MM-415	54.0	55.0	410	200	2430	200	0.1	INERTE	0.32
1302	MM-415	55.0	62.0	240	200	2710	200	0.1	INERTE	0.25
1303	MM-415	62.0	68.0	1130	200	2970	400	0.0	INERTE	0.19
1304	MM-415	68.0	70.0	470	200	1210	200	0.1	INERTE	0.41
1305	MM-415	70.0	74.0	470	200	1210	200	0.1	INERTE	0.29
1306	MM-415	74.0	78.0	550	200	102000	88100	-12.0	ACIDO	0.33
1307	MM-415	78.0	81.0	550	200	102000	88100	-12.0	ACIDO	0.38
1308	MM-415	81.0	86.0	480	200	89300	76800	-10.4	ACIDO	0.36
1309	MM-415	86.0	92.0	530	200	28700	23590	-3.2	ACIDO	0.35
1310	MM-415	92.0	94.0	2010	200	85400	79930	-10.9	ACIDO	0.38
1311	MM-415	94.0	97.7	2010	200	85400	79930	-10.9	ACIDO	0.23
1312	MM-415	97.7	102.0	530	200	61900	50300	-6.8	ACIDO	0.20
1313	MM-415	102.0	104.0	530	200	61900	50300	-6.8	ACIDO	0.27
1314	MM-415	104.0	110.0	620	200	104000	92800	-12.6	ACIDO	0.22
1315	MM-415	110.0	116.5	480	200	75400	64000	-8.7	ACIDO	0.27
1316	MM-415	116.5	118.0	740	200	99900	83300	-11.3	ACIDO	0.27
1317	MM-415	118.0	122.0	740	200	99900	83300	-11.3	ACIDO	0.12
1318	MM-415	133.8	136.0	630	200	87900	47060	-6.4	ACIDO	0.16
1319	MM-415	136.0	140.0	630	200	87900	47060	-6.4	ACIDO	0.13
1320	MM-415	140.0	144.0	710	200	95500	62340	-8.5	ACIDO	0.13
1321	MM-415	144.0	146.0	710	200	95500	62340	-8.5	ACIDO	0.12
1322	MM-415	146.0	152.0	590	200	74100	63300	-8.6	ACIDO	0.31
1323	MM-415	152.0	152.5	590	200	74100	63300	-8.6	ACIDO	0.39
1324	MM-415	152.5	158.0	790	200	107000	97460	-13.3	ACIDO	0.44
1325	MM-415	158.0	160.0	660	200	69200	62980	-8.6	ACIDO	0.19
1326	MM-415	160.0	164.0	660	200	69200	62980	-8.6	ACIDO	0.19
1327	MM-415	164.0	165.5	550	200	101000	90500	-12.3	ACIDO	0.22
1328	MM-415	169.0	174.0	470	200	45700	9600	-1.2	ACIDO	0.89
1329	MM-415	174.0	178.0	200	200	34400	1900	-0.2	LIGERAMENTE ACIDO	0.26
1330	MM-415	178.0	180.0	200	200	34400	1900	-0.2	LIGERAMENTE ACIDO	0.14
1331	MM-415	180.0	186.0	200	200	1580	200	0.1	INERTE	0.33
1332	MM-415	186.0	192.0	210	200	1030	200	0.1	INERTE	0.22
1333	MM-415	192.0	194.0	220	200	27400	2200	-0.2	LIGERAMENTE ACIDO	0.15
1334	MM-415	194.0	198.0	220	200	27400	2200	-0.2	LIGERAMENTE ACIDO	0.22
1335	MM-415	198.0	202.0	200	200	18400	2000	-0.2	LIGERAMENTE ACIDO	0.13
1336	MM-415	202.0	205.4	200	200	18400	2000	-0.2	LIGERAMENTE ACIDO	0.14
1337	MM-415	212.0	218.0	290	200	8020	1460	-0.1	LIGERAMENTE ACIDO	0.11
1338	MM-415	224.0	226.0	230	200	4190	500	0.0	INERTE	0.15
1339	MM-415	226.0	230.0	230	200	4190	500	0.0	INERTE	0.10
1340	MM-415	234.0	236.5	200	200	33000	1800	-0.2	LIGERAMENTE ACIDO	0.18
1341	MM-415	236.5	242.0	200	200	32700	4700	-0.6	LIGERAMENTE ACIDO	0.11
1342	MM-415	242.0	242.5	200	200	32700	4700	-0.6	LIGERAMENTE ACIDO	0.12
1343	MM-415	242.5	248.5	490	200	65000	24090	-3.2	ACIDO	0.14
1344	MM-415	248.5	250.0	400	200	44100	11700	-1.5	ACIDO	0.14
1345	MM-415	250.0	254.0	400	200	44100	11700	-1.5	ACIDO	0.12
1346	MM-415	261.0	266.0	450	200	42300	4420	-0.5	LIGERAMENTE ACIDO	0.11
1347	MM-415	292.5	298.0	530	200	75500	26850	-3.6	ACIDO	0.12
1348	MM-415	298.0	300.0	530	200	75500	26850	-3.6	ACIDO	0.16
1349	MM-416	0.5	6.5	900	100	91200	89100	-12.2	ACIDO	4.38
1350	MM-416	6.5	12.0	780	200	23000	19940	-2.7	ACIDO	0.72
1351	MM-416	12.0	18.0	600	200	10300	9300	-1.2	ACIDO	0.93
1352	MM-416	18.0	24.0	390	200	9170	5740	-0.7	LIGERAMENTE ACIDO	2.28
1353	MM-416	24.5	30.0	500	100	5300	4700	-0.6	LIGERAMENTE ACIDO	1.32
1354	MM-416	30.0	36.0	600	100	7100	6400	-0.8	LIGERAMENTE ACIDO	0.93
1355	MM-416	36.0	42.0	790	200	106000	101980	-13.9	ACIDO	2.87
1356	MM-416	42.0	48.0	420	200	38200	33040	-4.5	ACIDO	3.11
1357	MM-416	48.0	54.0	600	100	44100	42000	-5.7	ACIDO	3.11
1358	MM-416	54.0	60.0	800	100	49500	47500	-6.5	ACIDO	2.54
1359	MM-416	60.0	66.0	490	200	41200	38610	-5.2	ACIDO	1.68
1360	MM-416	68.5	73.0	1200	100	128300	118100	-16.1	ACIDO	1.12
1361	MM-417	28.0	35.8	400	100	71000	50000	-6.8	ACIDO	0.42
1362	MM-417	132.0	139.7	300	100	46400	44100	-6.0	ACIDO	0.45
1363	MM-417	156.0	164.0	300	100	62500	46400	-6.3	ACIDO	0.56
1364	MM-417	172.0	180.0	300	100	4800	3500	-0.4	LIGERAMENTE ACIDO	0.33
1365	MM-417	180.0	188.0	200	100	15600	11600	-1.6	ACIDO	0.50
1366	MM-417	188.0	196.0	200	100	48900	36800	-5.0	ACIDO	0.35
1367	MM-417	212.0	220.0	500	100	56400	43600	-5.9	ACIDO	0.44
1368	MM-419	4.0	6.0	500	100	32400	30200	-4.1	ACIDO	2.79
1369	MM-419	25.6	28.0	400	100	7300	6600	-0.9	LIGERAMENTE ACIDO	0.97
1370	MM-419	28.0	30.0	400	100	21000	16100	-2.2	ACIDO	1.26
1371	MM-419	30.0	32.0	900	100	4000	3600	-0.5	LIGERAMENTE ACIDO	0.56
1372	MM-419	32.0	34.0	400	50	1900	1500	-0.2	LIGERAMENTE ACIDO	0.32
1373	MM-419	59.5	62.0	600	100	105900	104000	-14.2	ACIDO	0.93
1374	MM-419	62.0	64.0	600	100	87300	75500	-10.3	ACIDO	0.65
1375	MM-419	66.0	68.0	800	50	55900	53700	-7.3	ACIDO	0.85
1376	MM-419	72.0	74.0	600	100	18700	17500	-2.4	ACIDO	1.08
1377	MM-419	74.0	76.0	600	50	17800	16300	-2.2	ACIDO	0.98
1378	MM-419	78.6	80.0	900	100	53200	50600	-6.9	ACIDO	1.70
1379	MM-419	92.0	94.0	800	50	41800	40000	-5.5	ACIDO	1.55
1380	MM-419	102.0	104.0	300	100	9000	8500	-1.1	ACIDO	1.13
1381	MM-419	104.0	106.0	500	100	39100	36800	-5.0	ACIDO	1.26
1382	MM-419	124.3	126.7	400	200	81600	79000	-10.7	ACIDO	1.52
1383	MM-419	134.0	136.0	800	100	45000	42200	-5.7	ACIDO	0.85
1384	MM-419	144.0	146.0	800	50	36000	32300	-4.4	ACIDO	1.81
1385	MM-419	148.0	150.0	700	50	41500	37400	-5.1	ACIDO	2.43
1386	MM-419	155.6	158.0	400	100	48000	40600	-5.5	ACIDO	2.11
1387	MM-420	72.0	78.0	600	50	35400	21000	-2.9	ACIDO	0.32
1388	MM-420	78.0	84.0	800	50	24100	11800	-1.6	ACIDO	0.51
1389	MM-420	294.0	300.5	500	50	1300	700	-0.1	INERTE	3.45
1390	MM-420	312.2	318.0	700	50	93300	89100	-12.2	ACIDO	1.82
1391	MM-421	72.0	78.0	700	50	44600	41300	-5.6	ACIDO	0.38
1392	MM-421	114.5	120.0	600	50	16500	15000	-2.0	ACIDO	0.57
1393	MM-421	132.0	138.0	800	50	41300	37000	-5.1	ACIDO	0.49
1394	MM-421	138.0	144.0	500	50	33600	31900	-4.4	ACIDO	1.09
1395	MM-421	156.0	162.0	500	50	30300	25300	-3.4	ACIDO	0.94
1396	MM-421	168.0	174.0	600	50	10800	8600	-1.2	ACIDO	0.54
1397	MM-421	174.0	180.8	500	50	18000	12900	-1.7	ACIDO	0.34
1398	MM-422	44.0	50.0	900	50	32100	17300	-2.4	ACIDO	0.38
1399	MM-423	152.0	158.9	900	50	32200	24700	-3.4	ACIDO	0.32
1400	MM-423	164.1	170.0	500	100	55000	46000	-6.3	ACIDO	1.47
1401	MM-423	170.0	176.0	900	50	33500	32300	-4.4	ACIDO	0.74
1402	MM-424	12.0	18.2	500	50	58400	49100	-6.7	ACIDO	0.97
1403	MM-424	198.0	204.0	400	50	53100	39000	-5.3	ACIDO	0.27
1404	MM-428	148.5	150.3	600	100	6700	5100	-0.7	LIGERAMENTE ACIDO	1.15
1405	MM-428	150.3	152.0	400	50	94900	93500	-12.8	ACIDO	1.78
1406	MM-428	154.5	156.6	1600	100	87900	83000	-11.3	ACIDO	0.81
1407	MM-428	160.0	162.5	400	50	39600	38000	-5.2	ACIDO	2.01
1408	MM-428	162.5	164.9	300	100	74000	72300	-9.9	ACIDO	3.32
1409	MM-428	164.9	167.1	400	50	18700	17800	-2.4	ACIDO	2.16
1410	MM-431	93.5	95.0	600	100	14100	7300	-1.0	LIGERAMENTE ACIDO	0.38
1411	MM-441	54.0	60.0	310	200	17800	10540	-1.4	ACIDO	0.20
1412	MM-441	72.0	78.0	200	200	42900	30600	-4.1	ACIDO	1.04
1413	MM-441	78.0	84.0	530	200	41000	28500	-3.8	ACIDO	0.58
1414	MM-441	84.0	90.0	780	200	47700	34300	-4.6	ACIDO	1.44
1415	MM-441	90.0	90.4	780	200	47700	34300	-4.6	ACIDO	2.01
1416	MM-441	90.4	98.4	810	200	51600	39300	-5.3	ACIDO	1.31
1417	MM-442	0.0	6.0	440	200	14900	11580	-1.5	ACIDO	0.63
1418	MM-442	6.0	12.0	200	200	33300	29400	-4.0	ACIDO	0.86
1419	MM-442	12.0	18.0	200	200	840	570	0.0	INERTE	0.53
1420	MM-442	18.0	24.0	330	200	46700	39740	-5.4	ACIDO	1.67
1421	MM-442	24.0	30.0	350	200	56400	50150	-6.8	ACIDO	2.16
1422	MM-442	30.0	36.0	200	200	1920	1090	-0.1	INERTE	0.91
1423	MM-442	36.0	42.0	200	200	380	0	0.1	INERTE	0.83
1424	MM-442	42.0	47.6	200	200	540	0	0.1	INERTE	1.21
1425	MM-442	47.6	48.0	200	200	21700	800	0.0	INERTE	1.72
1426	MM-442	48.0	54.0	200	200	21700	800	0.0	INERTE	1.65
1427	MM-442	54.0	60.0	200	200	12700	11620	-1.5	ACIDO	0.76
1428	MM-442	60.0	66.0	380	200	71200	66260	-9.0	ACIDO	1.04
1429	MM-442	66.0	72.0	200	200	81400	71680	-9.7	ACIDO	1.47
1430	MM-442	72.0	78.0	240	200	50400	39100	-5.3	ACIDO	1.14
1431	MM-442	78.0	84.0	200	200	8500	4230	-0.5	LIGERAMENTE ACIDO	0.91
1432	MM-442	84.0	90.0	200	200	3970	1150	-0.1	INERTE	0.53
1433	MM-442	90.0	96.0	200	200	18400	9410	-1.2	ACIDO	1.07
1434	MM-442	96.0	100.1	200	200	15800	9880	-1.3	ACIDO	0.83
1435	MM-443	24.0	30.0	200	200	42500	40950	-5.5	ACIDO	1.36
1436	MM-443	30.0	36.0	200	200	8170	6680	-0.8	LIGERAMENTE ACIDO	0.46
1437	MM-443	36.0	42.0	200	200	21200	18150	-2.4	ACIDO	2.35
1438	MM-443	42.0	48.0	200	200	12100	9630	-1.2	ACIDO	1.01
1439	MM-443	48.0	54.0	200	200	5860	4360	-0.5	LIGERAMENTE ACIDO	0.51
1440	MM-443	54.0	60.0	200	200	13500	11330	-1.5	ACIDO	1.82
1441	MM-443	60.0	66.0	200	200	26400	22730	-3.0	ACIDO	2.07
1442	MM-443	66.0	72.0	200	200	55600	28300	-3.8	ACIDO	3.61

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1443	MM-443	72.0	78.0	200	200	71700	51300	-7.0	ACIDO	0.93
1444	MM-443	78.0	84.0	200	200	7180	6450	-0.8	LIGERAMENTE ACIDO	0.64
1445	MM-443	84.0	90.0	200	200	20000	18450	-2.5	ACIDO	0.68
1446	MM-443	90.0	96.0	200	200	13200	11260	-1.5	ACIDO	0.95
1447	MM-443	96.0	102.0	200	200	11300	9970	-1.3	ACIDO	0.97
1448	MM-443	102.0	108.0	200	200	23000	21230	-2.8	ACIDO	0.38
1449	MM-443	108.0	114.0	200	200	11800	11330	-1.5	ACIDO	0.26
1450	MM-443	114.0	114.3	200	200	11800	11330	-1.5	ACIDO	0.20
1451	MM-444	36.0	42.0	200	200	19600	13270	-1.7	ACIDO	0.67
1452	MM-444	42.0	48.0	200	200	16700	14780	-2.0	ACIDO	0.60
1453	MM-444	48.0	54.0	200	200	34000	23500	-3.1	ACIDO	0.49
1454	MM-444	54.0	60.0	200	200	55700	28700	-3.9	ACIDO	0.32
1455	MM-444	60.0	66.0	200	200	72900	58600	-8.0	ACIDO	0.68
1456	MM-444	66.0	72.0	200	200	30200	20560	-2.7	ACIDO	0.44
1457	MM-444	72.0	78.0	200	200	32700	11900	-1.6	ACIDO	0.20
1458	MM-444	78.0	84.0	200	200	36800	26500	-3.6	ACIDO	0.37
1459	MM-444	84.0	90.5	200	200	22800	15440	-2.0	ACIDO	0.35
1460	MM-445	6.0	10.0	340	200	23800	1100	-0.1	INERTE	0.17
1461	MM-445	10.0	12.0	300	200	20100	0	0.1	INERTE	0.11
1462	MM-445	12.0	18.0	300	200	20100	0	0.1	INERTE	0.28
1463	MM-445	30.0	36.0	200	200	36400	3400	-0.4	LIGERAMENTE ACIDO	0.12
1464	MM-445	36.0	40.0	200	200	36400	3400	-0.4	LIGERAMENTE ACIDO	0.13
1465	MM-445	48.0	50.0	200	200	13700	900	0.0	INERTE	0.15
1466	MM-445	70.0	72.0	4850	3610	2000	0	1.3	BASICO	0.15
1467	MM-445	72.0	74.8	4850	3610	2000	0	1.3	BASICO	0.60
1468	MM-445	74.8	78.0	860	200	102000	57400	-7.8	ACIDO	1.32
1469	MM-445	78.0	83.8	860	200	102000	57400	-7.8	ACIDO	0.20
1470	MM-445	83.8	84.0	630	200	5340	0	0.1	INERTE	0.11
1471	MM-445	84.0	90.0	630	200	5340	0	0.1	INERTE	0.70
1472	MM-445	90.0	94.0	630	200	5340	0	0.1	INERTE	0.82
1473	MM-445	94.0	96.0	200	200	2240	120	0.1	INERTE	0.45
1474	MM-445	96.0	99.8	200	200	2240	120	0.1	INERTE	1.20
1475	MM-445	99.8	102.0	530	200	97700	74900	-10.2	ACIDO	1.24
1476	MM-445	102.0	108.0	530	200	97700	74900	-10.2	ACIDO	0.93
1477	MM-446	6.0	10.0	200	200	310	0	0.1	INERTE	0.14
1478	MM-446	10.0	12.0	200	200	390	50	0.1	INERTE	0.14
1479	MM-446	12.0	18.0	200	200	390	50	0.1	INERTE	0.13
1480	MM-446	18.0	20.0	200	200	390	50	0.1	INERTE	0.11
1481	MM-446	24.0	30.0	390	200	420	50	0.1	INERTE	0.11
1482	MM-446	73.5	78.0	300	200	380	20	0.1	INERTE	0.14
1483	MM-446	78.0	84.0	300	200	380	20	0.1	INERTE	0.10
1484	MM-446	84.0	90.0	310	300	310	0	0.1	LIGERAMENTE BASICO	0.10
1485	MM-446	90.0	94.0	310	300	310	0	0.1	LIGERAMENTE BASICO	0.12
1486	MM-446	126.0	132.0	200	200	230	0	0.1	INERTE	0.11
1487	MM-446	150.0	151.1	200	200	200	0	0.1	INERTE	0.23
1488	MM-446	156.0	162.0	200	200	35200	34610	-4.7	ACIDO	0.12
1489	MM-446	162.0	168.0	200	200	34000	32960	-4.4	ACIDO	0.11
1490	MM-446	168.0	172.0	200	200	34000	32960	-4.4	ACIDO	0.15
1491	MM-446	172.0	174.0	200	200	32800	31920	-4.3	ACIDO	0.19
1492	MM-446	174.0	180.0	200	200	32800	31920	-4.3	ACIDO	0.21
1493	MM-446	180.0	182.0	200	200	32800	31920	-4.3	ACIDO	0.21
1494	MM-446	182.0	186.0	200	200	37000	35870	-4.8	ACIDO	0.34
1495	MM-446	186.0	192.0	200	200	37000	35870	-4.8	ACIDO	0.18
1496	MM-446	192.0	198.0	200	200	33100	31960	-4.3	ACIDO	0.22
1497	MM-446	198.0	202.0	200	200	33100	31960	-4.3	ACIDO	0.14
1498	MM-446	202.0	204.0	200	200	35400	34530	-4.7	ACIDO	0.23
1499	MM-446	204.0	210.0	200	200	35400	34530	-4.7	ACIDO	0.32
1500	MM-446	210.0	212.0	200	200	35400	34530	-4.7	ACIDO	0.34
1501	MM-446	212.0	216.0	200	200	37300	35720	-4.8	ACIDO	0.49
1502	MM-446	216.0	222.0	200	200	37300	35720	-4.8	ACIDO	0.52
1503	MM-446	222.0	228.0	200	200	41100	37960	-5.1	ACIDO	0.52
1504	MM-446	228.0	232.0	200	200	41100	37960	-5.1	ACIDO	0.65
1505	MM-446	232.0	234.0	230	200	44900	44700	-6.1	ACIDO	0.39
1506	MM-446	234.0	240.0	230	200	44900	44700	-6.1	ACIDO	0.75
1507	MM-446	240.0	242.0	230	200	44900	44700	-6.1	ACIDO	0.91
1508	MM-446	242.0	246.0	200	200	56000	52890	-7.2	ACIDO	1.31
1509	MM-446	246.0	252.0	200	200	56000	52890	-7.2	ACIDO	2.00
1510	MM-446	252.0	258.0	200	200	54600	50580	-6.9	ACIDO	1.83
1511	MM-446	258.0	262.0	200	200	54600	50580	-6.9	ACIDO	0.95
1512	MM-446	262.0	264.0	200	200	85800	64600	-8.8	ACIDO	3.02
1513	MM-446	264.0	270.0	200	200	85800	64600	-8.8	ACIDO	0.63
1514	MM-446	270.0	272.0	200	200	85800	64600	-8.8	ACIDO	0.62
1515	MM-446	272.0	276.0	200	200	88300	76100	-10.4	ACIDO	0.87
1516	MM-446	276.0	282.0	200	200	88300	76100	-10.4	ACIDO	0.75
1517	MM-446	282.0	288.0	240	200	79500	69720	-9.5	ACIDO	0.97
1518	MM-446	288.0	292.0	240	200	79500	69720	-9.5	ACIDO	0.89
1519	MM-446	292.0	294.0	200	200	69000	43400	-5.9	ACIDO	0.58
1520	MM-446	294.0	300.0	200	200	69000	43400	-5.9	ACIDO	0.49
1521	MM-446	300.0	300.8	200	200	69000	43400	-5.9	ACIDO	0.83
1522	MM-447	60.0	66.0	200	200	38800	36730	-5.0	ACIDO	0.12
1523	MM-447	66.0	72.0	200	200	43900	41590	-5.6	ACIDO	0.53
1524	MM-447	72.0	78.0	200	200	40200	38000	-5.1	ACIDO	0.35
1525	MM-447	78.0	84.0	200	200	36700	34460	-4.6	ACIDO	0.28
1526	MM-447	84.0	90.0	200	200	66500	43000	-5.8	ACIDO	0.42
1527	MM-447	90.0	96.0	200	200	102000	54200	-7.4	ACIDO	0.65
1528	MM-447	96.0	102.0	200	200	94600	55000	-7.5	ACIDO	0.65
1529	MM-447	102.0	108.0	200	200	54400	44300	-6.0	ACIDO	0.49
1530	MM-447	108.0	114.0	390	200	53800	44330	-6.0	ACIDO	0.56
1531	MM-447	114.0	118.5	200	200	70400	46200	-6.3	ACIDO	1.17
1532	MM-447	122.5	128.0	200	200	55700	40700	-5.5	ACIDO	0.51
1533	MM-447	128.0	134.0	200	200	50500	40910	-5.5	ACIDO	0.63
1534	MM-447	134.0	140.0	200	200	47200	34800	-4.7	ACIDO	0.63
1535	MM-447	140.0	146.0	300	200	48700	38100	-5.1	ACIDO	0.43
1536	MM-447	146.0	152.0	200	200	37100	34100	-4.6	ACIDO	0.40
1537	MM-447	152.0	158.0	200	200	46600	43960	-5.9	ACIDO	0.35
1538	MM-447	158.0	164.0	200	200	51800	49000	-6.6	ACIDO	1.05
1539	MM-447	164.0	170.0	380	200	33900	31710	-4.3	ACIDO	0.73
1540	MM-447	170.0	176.0	200	200	32400	29930	-4.0	ACIDO	1.13
1541	MM-447	176.0	182.0	200	200	38800	36800	-5.0	ACIDO	0.61
1542	MM-447	182.0	188.0	200	200	43800	34340	-4.6	ACIDO	0.77
1543	MM-447	188.0	188.5	200	200	43800	34340	-4.6	ACIDO	1.14
1544	MM-447	188.5	194.0	200	200	35700	29190	-3.9	ACIDO	0.59
1545	MM-447	194.0	200.0	200	200	36500	34710	-4.7	ACIDO	0.53
1546	MM-448	0.0	6.0	2040	200	3560	1630	-0.1	LIGERAMENTE ACIDO	0.26
1547	MM-448	6.0	10.0	2040	200	3560	1630	-0.1	LIGERAMENTE ACIDO	0.11
1548	MM-448	10.0	12.0	4270	200	29400	26130	-3.5	ACIDO	0.24
1549	MM-448	12.0	18.0	4270	200	29400	26130	-3.5	ACIDO	0.17
1550	MM-448	18.0	20.0	4270	200	29400	26130	-3.5	ACIDO	0.42
1551	MM-448	20.0	24.0	1260	200	28100	20500	-2.7	ACIDO	0.39
1552	MM-448	24.0	28.4	1260	200	28100	20500	-2.7	ACIDO	0.87
1553	MM-448	28.4	30.0	1010	200	46600	44130	-6.0	ACIDO	2.18
1554	MM-448	30.0	36.0	1010	200	46600	44130	-6.0	ACIDO	1.16
1555	MM-448	36.0	38.0	1010	200	46600	44130	-6.0	ACIDO	0.79
1556	MM-448	38.0	42.0	670	200	45000	42050	-5.7	ACIDO	0.76
1557	MM-448	42.0	48.0	670	200	45000	42050	-5.7	ACIDO	1.28
1558	MM-448	48.0	54.0	1060	200	43000	40340	-5.5	ACIDO	1.04
1559	MM-448	54.0	58.0	1060	200	43000	40340	-5.5	ACIDO	0.55
1560	MM-448	58.0	60.0	1060	200	45100	40550	-5.5	ACIDO	0.44
1561	MM-448	60.0	66.0	1060	200	45100	40550	-5.5	ACIDO	0.37
1562	MM-448	66.0	68.0	1060	200	45100	40550	-5.5	ACIDO	0.62
1563	MM-448	68.0	72.0	1010	200	43600	41100	-5.6	ACIDO	0.59
1564	MM-448	72.0	78.0	1010	200	43600	41100	-5.6	ACIDO	0.58
1565	MM-448	78.0	84.0	1190	200	47600	44910	-6.1	ACIDO	0.60
1566	MM-448	84.0	88.0	1190	200	47600	44910	-6.1	ACIDO	0.40
1567	MM-448	88.0	90.0	1340	200	42500	39710	-5.4	ACIDO	0.47
1568	MM-448	90.0	96.0	1340	200	42500	39710	-5.4	ACIDO	0.36
1569	MM-448	96.0	98.0	1340	200	42500	39710	-5.4	ACIDO	0.39
1570	MM-448	98.0	102.0	1270	200	42200	38250	-5.2	ACIDO	0.51
1571	MM-448	102.0	108.0	1270	200	42200	38250	-5.2	ACIDO	0.46
1572	MM-448	108.0	114.0	2280	200	14000	12510	-1.6	ACIDO	0.26
1573	MM-448	114.0	118.0	2280	200	14000	12510	-1.6	ACIDO	0.34
1574	MM-448	118.0	120.0	960	200	39900	34650	-4.7	ACIDO	0.48
1575	MM-448	120.0	126.0	960	200	39900	34650	-4.7	ACIDO	0.45
1576	MM-448	126.0	128.0	960	200	39900	34650	-4.7	ACIDO	0.36
1577	MM-448	128.0	132.0	1180	200	31100	28580	-3.8	ACIDO	0.48
1578	MM-448	132.0	137.9	1180	200	31100	28580	-3.8	ACIDO	0.71
1579	MM-448	137.9	138.0	970	200	20700	17070	-2.3	ACIDO	0.46
1580	MM-448	138.0	144.0	970	200	20700	17070	-2.3	ACIDO	0.50
1581	MM-448	144.0	148.0	970	200	20700	17070	-2.3	ACIDO	0.94
1582	MM-448	148.0	150.0	1300	200	22300	17920	-2.4	ACIDO	1.15
1583	MM-448	150.0	156.0	1300	200	22300	17920	-2.4	ACIDO	0.84
1584	MM-448	156.0	158.0	1300	200	22300	17920	-2.4	ACIDO	0.96
1585	MM-448	158.0	162.0	210	200	16600	13070	-1.7	ACIDO	0.84
1586	MM-448	162.0	168.0	210	200	16600	13070	-1.7	ACIDO	1.25
1587	MM-448	168.0	168.2	210	200	16600	13070	-1.7	ACIDO	1.29
1588	MM-448	168.2	174.0	430	200	33400	28930	-3.9	ACIDO	1.95
1589	MM-448	174.0	178.0	430	200	33400	28930	-3.9	ACIDO	1.13
1590	MM-448	178.0	180.0	290	200	33600	22900	-3.1	ACIDO	0.72
1591	MM-448	180.0	186.0	290	200	33600	22900	-3.1	ACIDO	0.71
1592	MM-448	186.0	188.0	290	200	33600	22900	-3.1	ACIDO	0.37
1593	MM-448	188.0	192.0	720	200	35300	28750	-3.9	ACIDO	0.57
1594	MM-448	192.0	198.0	720	200	35300	28750	-3.9	ACIDO	0.65
1595	MM-448	198.0	204.0	680	200	36100	27900	-3.7	ACIDO	0.66
1596	MM-448	204.0	208.0	680	200	36100	27900	-3.7	ACIDO	1.06
1597	MM-448	208.0	210.0	320	200	36000	29430	-4.0	ACIDO	1.25
1598	MM-448	210.0	216.0	320	200	36000	29430	-4.0	ACIDO	1.36
1599	MM-448	216.0	218.0	320	200	36000	29430	-4.0	ACIDO	0.27
1600	MM-448	218.0	222.0	400	200	32700	28510	-3.8	ACIDO	0.74
1601	MM-448	222.0	228.0	400	200	32700	28510	-3.8	ACIDO	0.43
1602	MM-448	228.0	234.0	250	200	40100	21300	-2.8	ACIDO	0.39
1603	MM-448	234.0	238.4	250	200	40100	21300	-2.8	ACIDO	0.18
1604	MM-448	238.4	240.0	200	200	40700	19100	-2.5	ACIDO	0.14
1605	MM-448	240.0	246.0	200	200	40700	19100	-2.5	ACIDO	0.30
1606	MM-448	246.0	250.0	200	200	40700	19100	-2.5	ACIDO	0.31
1607	MM-449	60.2	65.7	200	200	135000	102300	-13.9	ACIDO	0.12
1608	MM-449	90.0	96.0	370	200	10100	8390	-1.1	ACIDO	0.19
1609	MM-449	96.0	96.3	370	200	10100	8390	-1.1	ACIDO	0.20
1610	MM-449	96.3	102.0	3590	200	3980	1700	-0.2	LIGERAMENTE ACIDO	0.15
1611	MM-450	24.0	30.0	390	200	24000	17150	-2.3	ACIDO	0.43
1612	MM-450	30.0	36.0	320	200	32100	19000	-2.5	ACIDO	0.49
1613	MM-450	36.0	40.0	320	200	32100	19000	-2.5	ACIDO	0.78
1614	MM-450	40.0	42.0	540	200	29700	24250	-3.2	ACIDO	0.74
1615	MM-450	42.0	48.0	540	200	29700	24250	-3.2	ACIDO	0.43
1616	MM-450	48.0	50.0	540	200	29700	24250	-3.2	ACIDO	0.40
1617	MM-450	50.0	54.0	1000	200	15400	13760	-1.8	ACIDO	0.53
1618	MM-450	54.0	60.0	1000	200	15400	13760	-1.8	ACIDO	0.43
1619	MM-450	60.0	60.2	1000	200	15400	13760	-1.8	ACIDO	0.35
1620	MM-450	60.2	66.0	650	200	6320	5360	-0.7	LIGERAMENTE ACIDO	0.32
1621	MM-450	66.0	70.0	650	200	6320	5360	-0.7	LIGERAMENTE ACIDO	0.27
1622	MM-450	70.0	72.0	660	200	21700	20160	-2.7	ACIDO	0.43
1623	MM-450	72.0	78.0	660	200	21700	20160	-2.7	ACIDO	0.50
1624	MM-450	78.0	80.0	660	200	21700	20160	-2.7	ACIDO	0.39
1625	MM-450	80.0	84.0	350	200	22400	20530	-2.7	ACIDO	0.45
1626	MM-450	84.0	90.0	350	200	22400	20530	-2.7	ACIDO	0.38
1627	MM-450	90.0	96.0	610	200	24100	22540	-3.0	ACIDO	0.62
1628	MM-450	96.0	100.0	610	200	24100	22540	-3.0	ACIDO	0.43
1629	MM-450	100.0	102.0	930	200	20100	18710	-2.5	ACIDO	0.22
1630	MM-450	102.0	108.0	930	200	20100	18710	-2.5	ACIDO	0.24
1631	MM-450	108.0	110.0	930	200	20100	18710	-2.5	ACIDO	0.36
1632	MM-450	110.0	114.0	700	200	24400	21900	-2.9	ACIDO	0.45
1633	MM-450	114.0	120.0	700	200	24400	21900	-2.9	ACIDO	0.61
1634	MM-450	120.0	126.0	800	200	32700	23610	-3.2	ACIDO	0.75
1635	MM-450	126.0	130.0	800	200	32700	23610	-3.2	ACIDO	0.43
1636	MM-450	130.0	132.0	790	200	32400	7700	-1.0	LIGERAMENTE ACIDO	1.50
1637	MM-450	132.0	138.0	790	200	32400	7700	-1.0	LIGERAMENTE ACIDO	0.69
1638	MM-450	138.0	140.0	790	200	32400	7700	-1.0	LIGERAMENTE ACIDO	0.20
1639	MM-450	140.0	144.0	1140	200	61000	32000	-4.3	ACIDO	0.69
1640	MM-450	144.0	150.0	1140	200	61000	32000	-4.3	ACIDO	0.47
1641	MM-450	150.0	156.0	680	200	57100	35900	-4.8	ACIDO	1.02
1642	MM-450	156.0	160.0	680	200	57100	35900	-4.8	ACIDO	2.38
1643	MM-450	160.0	162.0	760	200	53700	40200	-5.4	ACIDO	3.21
1644	MM-450	162.0	168.0	760	200	53700	40200	-5.4	ACIDO	0.84
1645	MM-450	168.0	170.0	760	200	53700	40200	-5.4	ACIDO	0.70
1646	MM-450	170.0	174.0	200	200	11100	0	0.1	INERTE	0.58
1647	MM-450	174.0	180.0	200	200	11100	0	0.1	INERTE	0.98
1648	MM-450	180.0	186.0	570	200	44700	38610	-5.2	ACIDO	0.83
1649	MM-450	186.0	190.0	570	200	44700	38610	-5.2	ACIDO	0.45
1650	MM-450	190.0	192.0	700	200	28300	26170	-3.5	ACIDO	0.21
1651	MM-450	192.0	198.0	700	200	28300	26170	-3.5	ACIDO	0.29
1652	MM-450	198.0	200.0	700	200	28300	26170	-3.5	ACIDO	0.41
1653	MM-450	200.0	204.0	940	200	22100	19710	-2.6	ACIDO	0.22
1654	MM-450	204.0	210.0	940	200	22100	19710	-2.6	ACIDO	0.24
1655	MM-450	210.0	216.0	1310	200	22500	20480	-2.7	ACIDO	0.16
1656	MM-450	216.0	220.0	1310	200	22500	20480	-2.7	ACIDO	0.19
1657	MM-450	220.0	222.0	1900	200	26500	24450	-3.3	ACIDO	0.24
1658	MM-450	222.0	228.0	1900	200	26500	24450	-3.3	ACIDO	0.29
1659	MM-450	228.0	230.0	1900	200	26500	24450	-3.3	ACIDO	0.13
1660	MM-450	230.0	234.0	2020	200	55400	51640	-7.0	ACIDO	0.14
1661	MM-450	234.0	240.0	2020	200	55400	51640	-7.0	ACIDO	0.14
1662	MM-450	240.0	246.0	2750	200	68300	50400	-6.8	ACIDO	0.17
1663	MM-451	54.3	60.0	1050	200	32700	25340	-3.4	ACIDO	0.13
1664	MM-452	0.0	6.0	910	200	2380	0	0.1	INERTE	0.62
1665	MM-452	6.0	6.1	910	200	2380	0	0.1	INERTE	1.52
1666	MM-452	6.1	12.0	650	200	6650	4500	-0.5	LIGERAMENTE ACIDO	0.56
1667	MM-452	12.0	18.0	560	200	16200	12390	-1.6	ACIDO	1.10
1668	MM-452	18.0	24.0	510	200	56500	53610	-7.3	ACIDO	0.22
1669	MM-452	24.0	30.0	710	200	5270	1450	-0.1	LIGERAMENTE ACIDO	1.29
1670	MM-452	30.0	36.0	720	200	4970	0	0.1	INERTE	0.19
1671	MM-452	36.0	42.0	910	200	14500	12160	-1.6	ACIDO	0.35
1672	MM-452	42.0	48.0	810	200	20300	17430	-2.3	ACIDO	0.78
1673	MM-452	48.0	54.0	730	200	21500	20050	-2.7	ACIDO	0.39
1674	MM-452	54.0	60.0	530	200	34000	32220	-4.3	ACIDO	0.47
1675	MM-452	60.0	66.0	480	200	47000	44510	-6.0	ACIDO	0.46
1676	MM-452	66.0	72.0	1020	200	24600	21070	-2.8	ACIDO	1.58
1677	MM-452	72.0	78.0	750	200	20500	12370	-1.6	ACIDO	1.57
1678	MM-453	18.0	20.0	960	200	47200	27900	-3.7	ACIDO	0.24
1679	MM-453	20.0	24.0	800	200	45200	25600	-3.4	ACIDO	0.21
1680	MM-453	24.0	30.0	800	200	45200	25600	-3.4	ACIDO	0.17
1681	MM-453	30.0	36.0	360	200	48100	28000	-3.8	ACIDO	0.30
1682	MM-453	36.0	40.0	360	200	48100	28000	-3.8	ACIDO	0.35
1683	MM-453	40.0	42.0	1040	200	45900	28600	-3.8	ACIDO	0.38
1684	MM-453	42.0	48.0	1040	200	45900	28600	-3.8	ACIDO	0.37
1685	MM-453	48.0	50.0	1040	200	45900	28600	-3.8	ACIDO	0.28
1686	MM-453	50.0	54.0	520	200	43900	37890	-5.1	ACIDO	0.53
1687	MM-453	54.0	60.0	520	200	43900	37890	-5.1	ACIDO	0.85
1688	MM-453	60.0	66.0	280	200	62200	47300	-6.4	ACIDO	0.30
1689	MM-453	66.0	70.0	280	200	62200	47300	-6.4	ACIDO	0.93
1690	MM-453	70.0	72.0	690	200	45900	39380	-5.3	ACIDO	0.88
1691	MM-453	72.0	78.0	690	200	45900	39380	-5.3	ACIDO	3.82
1692	MM-453	78.0	80.0	690	200	45900	39380	-5.3	ACIDO	0.51
1693	MM-453	80.0	84.0	510	200	59000	43100	-5.8	ACIDO	0.36
1694	MM-453	84.0	90.0	510	200	59000	43100	-5.8	ACIDO	0.48
1695	MM-453	90.0	96.0	970	200	58800	36800	-5.0	ACIDO	0.41
1696	MM-453	96.0	100.0	970	200	58800	36800	-5.0	ACIDO	0.29
1697	MM-453	100.0	102.0	350	200	47900	30300	-4.1	ACIDO	0.33
1698	MM-453	102.0	108.0	350	200	47900	30300	-4.1	ACIDO	0.35
1699	MM-453	108.0	110.0	350	200	47900	30300	-4.1	ACIDO	0.61
1700	MM-453	110.0	114.0	480	200	41800	37060	-5.0	ACIDO	0.21
1701	MM-453	114.0	120.0	480	200	41800	37060	-5.0	ACIDO	0.14
1702	MM-453	120.0	126.0	650	200	42500	35920	-4.8	ACIDO	0.10
1703	MM-453	126.0	130.0	650	200	42500	35920	-4.8	ACIDO	0.12
1704	MM-453	130.0	132.0	650	200	47100	30700	-4.1	ACIDO	0.12
1705	MM-453	132.0	138.0	650	200	47100	30700	-4.1	ACIDO	0.31
1706	MM-453	138.0	140.0	650	200	47100	30700	-4.1	ACIDO	0.42
1707	MM-453	140.0	144.0	58100	200	24000	6700	-0.8	LIGERAMENTE ACIDO	0.43
1708	MM-453	144.0	150.0	58100	200	24000	6700	-0.8	LIGERAMENTE ACIDO	0.37
1709	MM-453	150.0	156.0	200	200	47100	37000	-5.0	ACIDO	0.13
1710	MM-453	156.0	160.0	200	200	47100	37000	-5.0	ACIDO	0.15
1711	MM-453	186.0	190.0	200	200	34400	31520	-4.2	ACIDO	0.10
1712	MM-453	190.0	192.0	310	200	36600	34370	-4.6	ACIDO	0.12
1713	MM-453	192.0	198.0	310	200	36600	34370	-4.6	ACIDO	0.22
1714	MM-453	198.0	200.0	310	200	36600	34370	-4.6	ACIDO	0.16
1715	MM-453	204.0	210.0	200	200	38100	36570	-4.9	ACIDO	0.11
1716	MM-453	210.0	216.0	200	200	35600	33940	-4.6	ACIDO	0.15
1717	MM-453	220.0	222.0	200	200	35000	33550	-4.5	ACIDO	0.15
1718	MM-453	222.0	228.0	200	200	35000	33550	-4.5	ACIDO	0.50
1719	MM-453	228.0	230.0	200	200	35000	33550	-4.5	ACIDO	0.27
1720	MM-453	230.0	234.0	200	200	38500	36400	-4.9	ACIDO	0.18
1721	MM-453	234.0	240.0	200	200	38500	36400	-4.9	ACIDO	0.25
1722	MM-453	240.0	246.0	200	200	34600	32330	-4.4	ACIDO	0.23
1723	MM-453	246.0	250.0	200	200	34600	32330	-4.4	ACIDO	0.37
1724	MM-453	250.0	252.0	430	200	40700	37280	-5.0	ACIDO	0.39
1725	MM-453	252.0	258.0	430	200	40700	37280	-5.0	ACIDO	0.32
1726	MM-453	258.0	260.0	430	200	40700	37280	-5.0	ACIDO	0.54
1727	MM-453	260.0	264.0	200	200	41000	38230	-5.2	ACIDO	0.58
1728	MM-453	264.0	270.0	200	200	41000	38230	-5.2	ACIDO	0.44
1729	MM-453	270.0	276.0	200	200	40600	36850	-5.0	ACIDO	0.41
1730	MM-453	276.0	280.0	200	200	40600	36850	-5.0	ACIDO	0.53
1731	MM-453	280.0	282.0	200	200	40600	37760	-5.1	ACIDO	0.56
1732	MM-453	282.0	288.0	200	200	40600	37760	-5.1	ACIDO	0.61
1733	MM-453	288.0	290.0	200	200	40600	37760	-5.1	ACIDO	0.46
1734	MM-453	290.0	294.0	200	200	46600	41850	-5.7	ACIDO	0.20
1735	MM-453	294.0	300.0	200	200	46600	41850	-5.7	ACIDO	0.40
1736	MM-454	0.0	6.0	1470	200	3780	0	0.1	INERTE	0.16
1737	MM-454	6.0	10.0	1470	200	3780	0	0.1	INERTE	0.34
1738	MM-454	10.0	12.0	590	200	11400	3700	-0.4	LIGERAMENTE ACIDO	0.27
1739	MM-454	12.0	18.0	590	200	11400	3700	-0.4	LIGERAMENTE ACIDO	0.28
1740	MM-454	18.0	19.6	590	200	11400	3700	-0.4	LIGERAMENTE ACIDO	0.16
1741	MM-454	19.6	24.0	1140	200	71000	53600	-7.3	ACIDO	0.32
1742	MM-454	24.0	30.0	1140	200	71000	53600	-7.3	ACIDO	0.42
1743	MM-454	30.0	36.0	500	200	87500	85490	-11.6	ACIDO	0.45
1744	MM-454	36.0	40.0	500	200	87500	85490	-11.6	ACIDO	0.29
1745	MM-454	40.0	42.0	300	200	97700	94280	-12.8	ACIDO	0.30
1746	MM-454	42.0	48.0	300	200	97700	94280	-12.8	ACIDO	0.46
1747	MM-454	48.0	50.0	300	200	97700	94280	-12.8	ACIDO	0.44
1748	MM-454	50.0	54.0	970	200	117000	111340	-15.2	ACIDO	0.47
1749	MM-454	54.0	60.0	970	200	117000	111340	-15.2	ACIDO	0.24
1750	MM-454	60.0	66.0	1110	200	126000	93700	-12.8	ACIDO	0.29
1751	MM-454	66.0	70.0	1110	200	126000	93700	-12.8	ACIDO	0.22
1752	MM-454	70.0	72.0	290	200	137000	84300	-11.5	ACIDO	0.16
1753	MM-454	72.0	78.0	290	200	137000	84300	-11.5	ACIDO	0.11
1754	MM-454	78.0	80.0	290	200	137000	84300	-11.5	ACIDO	0.14
1755	MM-454	80.0	84.0	590	200	112000	69100	-9.4	ACIDO	0.27
1756	MM-454	84.0	90.0	590	200	112000	69100	-9.4	ACIDO	0.34
1757	MM-454	90.0	96.0	550	200	124000	78800	-10.7	ACIDO	0.26
1758	MM-454	96.0	100.0	550	200	124000	78800	-10.7	ACIDO	0.51
1759	MM-454	100.0	102.0	1610	200	118000	110450	-15.1	ACIDO	0.61
1760	MM-454	102.0	108.0	1610	200	118000	110450	-15.1	ACIDO	0.38
1761	MM-454	108.0	110.0	1610	200	118000	110450	-15.1	ACIDO	0.19
1762	MM-454	110.0	114.0	1670	200	104000	76900	-10.5	ACIDO	0.23
1763	MM-454	114.0	120.0	1670	200	104000	76900	-10.5	ACIDO	0.22
1764	MM-454	120.0	126.0	400	200	98500	64600	-8.8	ACIDO	0.22
1765	MM-454	126.0	130.0	400	200	98500	64600	-8.8	ACIDO	0.31
1766	MM-454	130.0	132.0	1230	200	102000	74700	-10.2	ACIDO	0.20
1767	MM-454	132.0	138.0	1230	200	102000	74700	-10.2	ACIDO	0.16
1768	MM-454	138.0	140.0	1230	200	102000	74700	-10.2	ACIDO	0.25
1769	MM-454	140.0	144.0	770	200	86600	71500	-9.7	ACIDO	0.43
1770	MM-454	144.0	150.0	770	200	86600	71500	-9.7	ACIDO	0.39
1771	MM-455	6.0	12.0	1250	200	5850	4010	-0.5	LIGERAMENTE ACIDO	0.12
1772	MM-455	13.2	18.0	1070	200	74300	43500	-5.9	ACIDO	0.13
1773	MM-455	18.0	18.7	1070	200	74300	43500	-5.9	ACIDO	0.13
1774	MM-455	18.7	24.0	930	200	2470	1180	-0.1	INERTE	0.27
1775	MM-455	24.0	29.3	930	200	2470	1180	-0.1	INERTE	0.62
1776	MM-455	29.3	30.0	1160	200	86000	48600	-6.6	ACIDO	0.29
1777	MM-455	30.0	34.5	1160	200	86000	48600	-6.6	ACIDO	0.18
1778	MM-455	34.5	36.0	1580	200	6330	3280	-0.4	LIGERAMENTE ACIDO	0.17
1779	MM-455	36.0	41.1	1580	200	6330	3280	-0.4	LIGERAMENTE ACIDO	0.21
1780	MM-455	41.1	42.0	1150	200	151000	143720	-19.6	ACIDO	0.21
1781	MM-455	42.0	48.0	1150	200	151000	143720	-19.6	ACIDO	0.17
1782	MM-455	48.0	50.0	1150	200	151000	143720	-19.6	ACIDO	0.20
1783	MM-455	50.0	54.0	1880	200	120000	112660	-15.4	ACIDO	0.28
1784	MM-455	60.0	66.0	1750	200	102000	92740	-12.6	ACIDO	0.47
1785	MM-455	66.0	70.0	1750	200	102000	92740	-12.6	ACIDO	0.38
1786	MM-455	70.0	72.0	1030	200	86100	50700	-6.9	ACIDO	0.23
1787	MM-455	72.0	78.0	1030	200	86100	50700	-6.9	ACIDO	0.28
1788	MM-455	78.0	80.0	1030	200	86100	50700	-6.9	ACIDO	0.35
1789	MM-455	80.0	84.0	1070	200	100000	42400	-5.7	ACIDO	0.28
1790	MM-455	84.0	90.0	1070	200	100000	42400	-5.7	ACIDO	0.12
1791	MM-455	90.0	96.0	1480	200	70500	30300	-4.1	ACIDO	0.28
1792	MM-455	96.0	100.0	1480	200	70500	30300	-4.1	ACIDO	0.53
1793	MM-455	100.0	102.0	600	200	29000	20650	-2.8	ACIDO	0.86
1794	MM-455	102.0	108.0	600	200	29000	20650	-2.8	ACIDO	1.07
1795	MM-455	108.0	110.0	600	200	29000	20650	-2.8	ACIDO	2.41
1796	MM-455	110.0	114.0	1190	200	73500	66350	-9.0	ACIDO	1.08
1797	MM-455	114.0	120.0	1190	200	73500	66350	-9.0	ACIDO	0.73
1798	MM-455	120.0	126.0	720	200	116000	108710	-14.8	ACIDO	0.57
1799	MM-455	126.0	130.0	720	200	116000	108710	-14.8	ACIDO	0.53
1800	MM-455	130.0	132.0	480	200	97400	91450	-12.5	ACIDO	0.85
1801	MM-455	132.0	138.0	480	200	97400	91450	-12.5	ACIDO	1.52
1802	MM-455	138.0	140.0	480	200	97400	91450	-12.5	ACIDO	0.89

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
1803	MM-455	140.0	144.0	520	200	73600	70990	-9.7	ACIDO	0.96
1804	MM-455	144.0	150.0	520	200	73600	70990	-9.7	ACIDO	1.28
1805	MM-455	150.0	156.0	1080	200	117000	107870	-14.7	ACIDO	1.24
1806	MM-455	156.0	160.0	1080	200	117000	107870	-14.7	ACIDO	1.67
1807	MM-455	160.0	162.0	1060	200	106000	100080	-13.6	ACIDO	0.45
1808	MM-455	162.0	168.0	1060	200	106000	100080	-13.6	ACIDO	0.75
1809	MM-455	168.0	170.0	1060	200	106000	100080	-13.6	ACIDO	0.53
1810	MM-455	170.0	174.0	1850	200	94300	89800	-12.2	ACIDO	0.81
1811	MM-455	174.0	180.0	1850	200	94300	89800	-12.2	ACIDO	0.48
1812	MM-455	180.0	186.0	780	200	91000	86520	-11.8	ACIDO	1.29
1813	MM-455	186.0	190.0	780	200	91000	86520	-11.8	ACIDO	1.18
1814	MM-455	190.0	192.0	370	200	84100	78940	-10.7	ACIDO	0.57
1815	MM-455	192.0	198.0	370	200	84100	78940	-10.7	ACIDO	0.48
1816	MM-455	198.0	200.0	370	200	84100	78940	-10.7	ACIDO	0.72
1817	MM-455	200.0	204.0	1140	200	84100	79470	-10.8	ACIDO	0.70
1818	MM-455	204.0	210.0	1140	200	84100	79470	-10.8	ACIDO	0.78
1819	MM-455	210.0	216.0	3230	200	87900	82830	-11.3	ACIDO	0.77
1820	MM-455	216.0	220.0	3230	200	87900	82830	-11.3	ACIDO	0.52
1821	MM-455	220.0	222.0	550	200	80400	76400	-10.4	ACIDO	0.87
1822	MM-455	222.0	228.0	550	200	80400	76400	-10.4	ACIDO	0.65
1823	MM-455	228.0	230.0	550	200	80400	76400	-10.4	ACIDO	0.87
1824	MM-455	230.0	234.0	800	200	104000	98810	-13.5	ACIDO	0.60
1825	MM-455	234.0	240.0	800	200	104000	98810	-13.5	ACIDO	1.01
1826	MM-455	240.0	246.0	1060	200	126000	114600	-15.6	ACIDO	0.80
1827	MM-455	246.0	250.0	1060	200	126000	114600	-15.6	ACIDO	1.31
1828	MM-455	250.0	252.0	1210	200	88300	80730	-11.0	ACIDO	1.36
1829	MM-455	252.0	258.0	1210	200	88300	80730	-11.0	ACIDO	0.78
1830	MM-455	258.0	260.0	1210	200	88300	80730	-11.0	ACIDO	0.82
1831	MM-455	260.0	264.0	1500	200	137000	122400	-16.7	ACIDO	0.60
1832	MM-455	264.0	270.0	1500	200	137000	122400	-16.7	ACIDO	0.55
1833	MM-455	270.0	276.0	2400	200	84900	77970	-10.6	ACIDO	0.56
1834	MM-455	276.0	280.0	2400	200	84900	77970	-10.6	ACIDO	0.64
1835	MM-455	280.0	282.0	1430	200	103000	88200	-12.0	ACIDO	0.45
1836	MM-455	282.0	288.0	1430	200	103000	88200	-12.0	ACIDO	0.56
1837	MM-455	288.0	290.0	1430	200	103000	88200	-12.0	ACIDO	0.63
1838	MM-455	290.0	294.0	470	200	118000	107400	-14.6	ACIDO	0.70
1839	MM-455	294.0	300.0	470	200	118000	107400	-14.6	ACIDO	0.66
1840	MM-456	48.0	50.0	2480	200	21900	19470	-2.6	ACIDO	0.45
1841	MM-456	50.0	54.0	1490	200	28100	17400	-2.3	ACIDO	0.86
1842	MM-456	54.0	60.0	1490	200	28100	17400	-2.3	ACIDO	0.64
1843	MM-456	60.0	66.0	690	200	35800	23700	-3.2	ACIDO	0.19
1844	MM-456	66.0	70.0	690	200	35800	23700	-3.2	ACIDO	0.26
1845	MM-456	70.0	72.0	210	200	36200	30500	-4.1	ACIDO	0.21
1846	MM-456	72.0	78.0	210	200	36200	30500	-4.1	ACIDO	0.25
1847	MM-456	78.0	80.0	210	200	36200	30500	-4.1	ACIDO	0.42
1848	MM-456	80.0	84.0	900	200	14000	11560	-1.5	ACIDO	1.09
1849	MM-456	84.0	90.0	900	200	14000	11560	-1.5	ACIDO	0.59
1850	MM-456	90.0	96.0	1530	200	39600	32980	-4.4	ACIDO	0.67
1851	MM-456	96.0	100.0	1530	200	39600	32980	-4.4	ACIDO	0.45
1852	MM-456	100.0	102.0	1750	200	30500	25240	-3.4	ACIDO	0.50
1853	MM-456	102.0	108.0	1750	200	30500	25240	-3.4	ACIDO	0.94
1854	MM-456	108.0	110.0	1750	200	30500	25240	-3.4	ACIDO	0.78
1855	MM-456	110.0	114.0	920	200	50700	38500	-5.2	ACIDO	0.90
1856	MM-456	114.0	120.0	920	200	50700	38500	-5.2	ACIDO	1.27
1857	MM-456	120.0	126.0	500	200	35900	32790	-4.4	ACIDO	1.22
1858	MM-456	126.0	130.0	500	200	35900	32790	-4.4	ACIDO	0.96
1859	MM-456	130.0	132.0	1810	200	33500	30820	-4.1	ACIDO	0.56
1860	MM-456	132.0	138.0	1810	200	33500	30820	-4.1	ACIDO	1.49
1861	MM-456	138.0	140.0	1810	200	33500	30820	-4.1	ACIDO	0.69
1862	MM-456	140.0	144.0	1180	200	36600	16900	-2.2	ACIDO	1.04
1863	MM-456	144.0	150.0	1180	200	36600	16900	-2.2	ACIDO	1.03
1864	MM-456	150.0	156.0	550	200	48400	26700	-3.6	ACIDO	0.97
1865	MM-456	156.0	160.0	550	200	48400	26700	-3.6	ACIDO	0.71
1866	MM-456	160.0	162.0	2040	200	60000	51950	-7.0	ACIDO	0.89
1867	MM-456	162.0	168.0	2040	200	60000	51950	-7.0	ACIDO	1.92
1868	MM-456	168.0	170.0	2040	200	60000	51950	-7.0	ACIDO	1.67
1869	MM-456	170.0	174.0	830	200	57000	53210	-7.2	ACIDO	1.13
1870	MM-456	174.0	180.0	830	200	57000	53210	-7.2	ACIDO	1.55
1871	MM-456	180.0	186.0	1970	200	47300	30400	-4.1	ACIDO	0.56
1872	MM-456	186.0	190.0	1970	200	47300	30400	-4.1	ACIDO	0.49
1873	MM-456	190.0	192.0	1930	200	63400	43300	-5.9	ACIDO	0.58
1874	MM-456	192.0	198.0	1930	200	63400	43300	-5.9	ACIDO	1.82
1875	MM-456	198.0	200.0	1930	200	63400	43300	-5.9	ACIDO	1.00
1876	MM-456	200.0	204.0	930	200	81700	50300	-6.8	ACIDO	2.33
1877	MM-456	204.0	210.0	930	200	81700	50300	-6.8	ACIDO	0.84
1878	MM-456	210.0	216.0	740	200	49300	33700	-4.5	ACIDO	0.29
1879	MM-456	216.0	220.0	740	200	49300	33700	-4.5	ACIDO	0.36
1880	MM-456	220.0	222.0	390	200	20800	15040	-2.0	ACIDO	0.23
1881	MM-456	222.0	228.0	390	200	20800	15040	-2.0	ACIDO	0.30
1882	MM-456	228.0	229.6	390	200	20800	15040	-2.0	ACIDO	0.61
1883	MM-456	229.6	234.0	990	200	55500	31100	-4.2	ACIDO	1.05
1884	MM-456	234.0	240.0	990	200	55500	31100	-4.2	ACIDO	0.82
1885	MM-456	240.0	246.0	830	200	18900	15120	-2.0	ACIDO	0.42
1886	MM-456	246.0	250.0	830	200	18900	15120	-2.0	ACIDO	0.20
1887	MM-457	24.0	30.0	380	200	29500	22110	-3.0	ACIDO	0.23
1888	MM-457	30.0	30.2	380	200	29500	22110	-3.0	ACIDO	0.18
1889	MM-457	30.2	36.0	1570	200	30000	26720	-3.6	ACIDO	0.24
1890	MM-457	36.0	40.0	1570	200	30000	26720	-3.6	ACIDO	0.22
1891	MM-457	40.0	42.0	1040	200	28200	25630	-3.4	ACIDO	0.21
1892	MM-457	42.0	48.0	1040	200	28200	25630	-3.4	ACIDO	0.21
1893	MM-457	48.0	50.0	1040	200	28200	25630	-3.4	ACIDO	0.38
1894	MM-457	50.0	54.0	2130	200	31500	29220	-3.9	ACIDO	0.46
1895	MM-457	54.0	60.0	2130	200	31500	29220	-3.9	ACIDO	0.31
1896	MM-457	66.0	70.0	1020	200	52500	49700	-6.7	ACIDO	0.39
1897	MM-457	70.0	72.0	510	200	47800	44950	-6.1	ACIDO	0.37
1898	MM-457	72.0	78.0	510	200	47800	44950	-6.1	ACIDO	2.41
1899	MM-457	78.0	80.0	510	200	47800	44950	-6.1	ACIDO	1.76
1900	MM-457	80.0	84.0	1550	200	51100	48160	-6.5	ACIDO	0.75
1901	MM-457	84.0	90.0	1550	200	51100	48160	-6.5	ACIDO	0.71
1902	MM-457	90.0	96.0	1070	200	31900	28960	-3.9	ACIDO	3.75
1903	MM-457	96.0	100.0	1070	200	31900	28960	-3.9	ACIDO	6.08
1904	MM-457	100.0	102.0	840	200	50600	46280	-6.3	ACIDO	3.47
1905	MM-457	102.0	108.0	840	200	50600	46280	-6.3	ACIDO	3.17
1906	MM-457	108.0	110.0	840	200	50600	46280	-6.3	ACIDO	1.71
1907	MM-457	110.0	114.0	1970	200	31200	26410	-3.5	ACIDO	1.12
1908	MM-457	114.0	120.0	1970	200	31200	26410	-3.5	ACIDO	0.79
1909	MM-457	120.0	126.0	710	200	31800	29110	-3.9	ACIDO	0.81
1910	MM-457	126.0	130.3	710	200	31800	29110	-3.9	ACIDO	1.28
1911	MM-457	130.3	132.0	760	200	30500	27510	-3.7	ACIDO	1.74
1912	MM-457	132.0	138.0	760	200	30500	27510	-3.7	ACIDO	1.26
1913	MM-457	138.0	140.0	760	200	30500	27510	-3.7	ACIDO	2.32
1914	MM-457	140.0	144.0	970	200	56600	50420	-6.8	ACIDO	1.60
1915	MM-457	144.0	150.0	970	200	56600	50420	-6.8	ACIDO	1.36
1916	MM-457	150.0	156.0	1180	200	45000	41610	-5.6	ACIDO	2.77
1917	MM-457	156.0	160.0	1180	200	45000	41610	-5.6	ACIDO	2.58
1918	MM-457	160.0	162.0	1840	200	44500	34000	-4.6	ACIDO	1.68
1919	MM-457	162.0	170.0	1840	200	44500	34000	-4.6	ACIDO	2.21
1920	MM-458	20.0	30.0	210	200	24680	19870	-2.6	ACIDO	0.49
1921	MM-458	30.0	40.0	250	200	28300	23640	-3.2	ACIDO	0.44
1922	MM-458	40.0	50.0	250	200	22830	18760	-2.5	ACIDO	0.31
1923	MM-458	50.0	50.5	250	200	22830	18760	-2.5	ACIDO	0.17
1924	MM-458	50.5	60.0	230	200	48730	45250	-6.1	ACIDO	0.35
1925	MM-458	60.0	69.7	200	200	52200	48910	-6.6	ACIDO	0.26
1926	MM-458	69.7	70.0	240	200	40260	36880	-5.0	ACIDO	0.24
1927	MM-458	70.0	79.4	240	200	40260	36880	-5.0	ACIDO	1.21
1928	MM-458	79.4	80.0	320	200	12920	10410	-1.4	ACIDO	1.41
1929	MM-458	80.0	90.5	320	200	12920	10410	-1.4	ACIDO	1.98
1930	MM-458	90.5	100.0	500	200	17100	13520	-1.8	ACIDO	0.56
1931	MM-458	100.0	111.0	350	220	5010	2780	-0.3	LIGERAMENTE ACIDO	0.50
1932	MM-458	111.0	119.9	300	200	23910	16690	-2.2	ACIDO	0.49
1933	MM-458	119.9	130.4	260	200	30310	20560	-2.7	ACIDO	2.55
1934	MM-458	130.4	140.5	210	200	29540	23180	-3.1	ACIDO	2.52
1935	MM-458	140.5	149.8	450	200	44630	30300	-4.1	ACIDO	3.98
1936	MM-458	149.8	160.0	230	200	38250	27810	-3.7	ACIDO	4.83
1937	MM-458	160.0	170.0	240	200	35440	23390	-3.1	ACIDO	2.45
1938	MM-458	170.0	180.0	250	200	39740	34780	-4.7	ACIDO	1.20
1939	MM-458	180.0	189.9	200	200	42700	39140	-5.3	ACIDO	0.89
1940	MM-458	189.9	200.0	260	200	39670	36340	-4.9	ACIDO	0.49
1941	MM-459	99.5	110.3	250	200	88740	44340	-6.0	ACIDO	0.11
1942	MM-460	0.0	9.6	680	200	32030	29210	-3.9	ACIDO	1.02
1943	MM-460	9.6	20.0	400	200	61140	57690	-7.8	ACIDO	1.92
1944	MM-460	20.0	30.0	220	200	13340	11790	-1.5	ACIDO	1.79
1945	MM-460	30.0	40.0	450	200	21200	18620	-2.5	ACIDO	3.12
1946	MM-460	40.0	50.0	480	200	61710	58090	-7.9	ACIDO	2.77
1947	MM-460	50.0	60.0	510	200	37910	34780	-4.7	ACIDO	3.21
1948	MM-460	60.0	70.0	380	200	14600	13120	-1.7	ACIDO	1.67
1949	MM-460	70.0	80.0	560	200	28950	28420	-3.8	ACIDO	2.23
1950	MM-460	80.0	90.0	310	200	34640	31550	-4.2	ACIDO	1.69
1951	MM-460	90.0	100.0	220	200	31250	27200	-3.7	ACIDO	0.50
1952	MM-460	100.0	110.3	330	200	52620	43940	-5.9	ACIDO	0.53
1953	MM-460	110.3	119.9	510	200	55940	40690	-5.5	ACIDO	0.36
1954	MM-460	119.9	130.0	300	200	46360	30860	-4.2	ACIDO	0.32
1955	MM-460	130.0	140.8	410	200	49190	28920	-3.9	ACIDO	0.54
1956	MM-461	0.0	10.0	430	200	4850	3620	-0.4	LIGERAMENTE ACIDO	0.29
1957	MM-461	10.0	14.4	1550	200	2460	1180	-0.1	INERTE	0.12
1958	MM-461	14.4	19.7	570	200	71340	55090	-7.5	ACIDO	0.15
1959	MM-461	19.7	30.0	270	200	102900	98940	-13.5	ACIDO	0.11
1960	MM-461	30.0	40.0	310	200	118800	110670	-15.1	ACIDO	0.20
1961	MM-461	40.0	50.0	290	200	117000	93480	-12.7	ACIDO	0.15
1962	MM-461	50.0	60.0	230	200	106400	72130	-9.8	ACIDO	0.13
1963	MM-461	60.0	70.0	260	200	100100	73630	-10.0	ACIDO	0.12
1964	MM-461	70.0	80.7	260	200	126900	82150	-11.2	ACIDO	0.12
1965	MM-461	90.5	100.5	310	200	87330	60690	-8.2	ACIDO	0.12
1966	MM-461	100.5	110.0	350	200	67850	58210	-7.9	ACIDO	0.11
1967	MM-461	110.0	120.4	260	200	63680	45990	-6.2	ACIDO	0.16
1968	MM-461	120.4	130.0	220	200	71510	54550	-7.4	ACIDO	0.28
1969	MM-461	130.0	140.0	200	200	47050	34120	-4.6	ACIDO	0.30
1970	MM-461	140.0	150.6	230	200	43150	27830	-3.7	ACIDO	0.14
1971	MM-462	0.0	9.6	440	200	24500	21840	-2.9	ACIDO	1.17
1972	MM-462	9.6	20.2	210	200	56860	49580	-6.7	ACIDO	1.36
1973	MM-462	20.2	30.0	340	200	55320	51740	-7.0	ACIDO	1.19
1974	MM-462	30.0	39.6	230	200	48490	47250	-6.4	ACIDO	0.72
1975	MM-462	39.6	50.2	300	200	82490	78140	-10.6	ACIDO	1.02
1976	MM-462	50.2	60.0	290	200	108800	103460	-14.1	ACIDO	0.82
1977	MM-462	60.0	70.0	300	200	89950	86310	-11.8	ACIDO	1.92
1978	MM-462	70.0	80.0	300	200	91690	85510	-11.6	ACIDO	0.68
1979	MM-462	80.0	90.0	390	200	44050	36600	-4.9	ACIDO	0.69
1980	MM-462	90.0	100.0	600	260	27290	24000	-3.2	ACIDO	0.35
1981	MM-462	100.0	110.0	520	280	19410	16810	-2.2	ACIDO	0.18
1982	MM-462	110.0	120.0	400	400	39790	28350	-3.7	ACIDO	0.30
1983	MM-462	120.0	129.5	270	270	33570	30570	-4.1	ACIDO	0.72
1984	MM-462	129.5	139.5	630	200	65730	53890	-7.3	ACIDO	0.73
1985	MM-462	139.5	150.2	480	200	67900	38160	-5.2	ACIDO	0.77
1986	MM-463	10.0	19.8	1090	200	3300	0	0.1	INERTE	0.18
1987	MM-463	19.8	30.5	1220	200	8350	550	0.0	INERTE	0.27
1988	MM-463	100.0	110.1	380	200	71050	38200	-5.2	ACIDO	0.20
1989	MM-463	110.1	120.5	250	200	59260	13180	-1.7	ACIDO	0.10
1990	MM-463	120.5	130.3	230	200	76510	44620	-6.0	ACIDO	0.12
1991	MM-465	0.0	12.0	500	500	73890	70910	-9.5	ACIDO	1.76
1992	MM-465	12.0	23.5	500	500	42010	38320	-5.1	ACIDO	2.90
1993	MM-465	23.5	36.0	500	500	11340	9470	-1.1	ACIDO	1.39
1994	MM-465	36.0	48.1	500	500	39630	37720	-5.0	ACIDO	1.53
1995	MM-465	48.1	60.2	500	500	67060	60400	-8.1	ACIDO	2.19
1996	MM-465	60.2	72.0	500	500	3060	1140	0.0	INERTE	2.97
1997	MM-465	72.0	84.0	500	500	50530	47760	-6.4	ACIDO	3.15
1998	MM-465	84.0	92.8	500	500	87030	83670	-11.3	ACIDO	1.48
1999	MM-465	92.8	104.0	1560	500	13190	11470	-1.4	ACIDO	0.39
2000	MM-465	104.0	116.0	1350	500	12250	10110	-1.2	ACIDO	0.89
2001	MM-465	116.0	128.0	1240	500	35380	32320	-4.2	ACIDO	0.47
2002	MM-465	128.0	140.0	500	500	54860	50300	-6.7	ACIDO	1.54
2003	MM-465	140.0	152.0	1210	500	53810	50820	-6.8	ACIDO	1.80
2004	MM-465	152.0	164.3	500	500	65320	56460	-7.6	ACIDO	1.22
2005	MM-465	164.3	172.0	500	500	40360	35550	-4.7	ACIDO	0.89
2006	MM-465	172.0	178.1	500	500	38530	26450	-3.4	ACIDO	0.65
2007	MM-466	84.0	94.0	500	500	61910	59830	-8.0	ACIDO	0.19
2008	MM-466	94.0	100.4	500	500	106100	102850	-13.9	ACIDO	0.31
2009	MM-467	15.0	26.2	500	500	11470	9570	-1.1	ACIDO	0.57
2010	MM-467	26.2	38.0	500	500	1410	910	0.1	INERTE	0.97
2011	MM-467	38.0	49.7	500	500	500	0	0.2	LIGERAMENTE BASICO	1.25
2012	MM-467	49.7	62.0	500	500	59850	58050	-7.8	ACIDO	2.23
2013	MM-467	62.0	74.2	500	500	21450	19520	-2.5	ACIDO	1.14
2014	MM-467	74.2	80.1	500	500	43070	39310	-5.2	ACIDO	1.55
2015	MM-467	80.1	94.0	1720	500	29360	27380	-3.6	ACIDO	1.16
2016	MM-467	94.0	106.5	1060	500	36250	33970	-4.5	ACIDO	1.15
2017	MM-467	106.5	112.0	500	500	135200	131940	-17.9	ACIDO	1.32
2018	MM-467	112.0	120.2	500	500	54220	49450	-6.6	ACIDO	1.74
2019	MM-468	12.0	24.0	500	500	51470	43840	-5.8	ACIDO	0.50
2020	MM-468	24.0	36.0	500	500	40640	34640	-4.6	ACIDO	0.47
2021	MM-468	36.0	48.0	500	500	38520	32160	-4.2	ACIDO	0.89
2022	MM-468	48.0	60.0	500	500	35620	31840	-4.2	ACIDO	0.27
2023	MM-468	60.0	72.0	500	500	37910	34800	-4.6	ACIDO	0.15
2024	MM-468	72.0	84.0	500	500	33060	29470	-3.9	ACIDO	0.17
2025	MM-468	84.0	88.5	500	500	30100	28430	-3.7	ACIDO	0.21
2026	MM-469	24.0	36.0	1320	500	39010	35650	-4.7	ACIDO	0.94
2027	MM-469	36.0	48.0	500	500	2830	220	0.2	LIGERAMENTE BASICO	2.59
2028	MM-469	48.0	60.0	500	500	1560	0	0.2	LIGERAMENTE BASICO	3.05
2029	MM-469	60.0	72.0	500	500	1730	0	0.2	LIGERAMENTE BASICO	6.14
2030	MM-469	72.0	84.7	500	500	5580	340	0.1	LIGERAMENTE BASICO	3.04
2031	MM-469	84.7	96.1	500	500	4340	140	0.2	LIGERAMENTE BASICO	3.66
2032	MM-469	96.1	108.0	500	500	5900	840	0.1	INERTE	0.72
2033	MM-469	108.0	120.0	500	500	20990	6870	-0.8	LIGERAMENTE ACIDO	0.85
2034	MM-470	0.0	12.0	500	500	29490	26580	-3.5	ACIDO	2.89
2035	MM-470	12.0	24.0	500	500	44360	36980	-4.9	ACIDO	1.97
2036	MM-470	24.0	36.0	500	500	31440	25390	-3.3	ACIDO	0.42
2037	MM-470	36.0	48.0	1090	500	36690	32980	-4.3	ACIDO	0.29
2038	MM-470	48.0	60.0	500	500	61030	43480	-5.8	ACIDO	0.60
2039	MM-470	60.0	72.0	1200	500	35780	30380	-4.0	ACIDO	0.23
2040	MM-470	72.0	84.0	500	500	56160	43140	-5.7	ACIDO	0.47
2041	MM-470	84.0	96.0	500	500	32890	28190	-3.7	ACIDO	0.11
2042	MM-470	96.0	108.5	500	500	34490	28250	-3.7	ACIDO	0.25
2043	MM-470	108.5	114.0	500	500	46380	38080	-5.0	ACIDO	0.25
2044	MM-471	12.0	24.0	500	500	53940	50570	-6.7	ACIDO	1.60
2045	MM-471	24.0	36.0	500	500	83990	80800	-10.9	ACIDO	1.06
2046	MM-471	36.0	48.0	500	500	36080	33680	-4.4	ACIDO	0.42
2047	MM-471	48.0	60.3	500	500	37940	33660	-4.4	ACIDO	0.18
2048	MM-471	60.3	72.0	500	500	47340	41280	-5.5	ACIDO	0.35
2049	MM-471	72.0	84.0	500	500	31400	28410	-3.7	ACIDO	0.48
2050	MM-472	12.0	24.4	500	500	31430	29140	-3.8	ACIDO	0.82
2051	MM-472	24.4	36.0	500	500	23030	20560	-2.6	ACIDO	0.23
2052	MM-472	36.0	48.0	500	500	38510	36060	-4.8	ACIDO	0.36
2053	MM-472	48.0	60.8	1280	500	35430	29310	-3.8	ACIDO	1.31
2054	MM-472	60.8	72.0	500	500	113900	96220	-13.0	ACIDO	0.56
2055	MM-472	72.0	84.3	500	500	18480	13850	-1.7	ACIDO	2.18
2056	MM-472	84.3	96.1	1330	500	93990	84620	-11.4	ACIDO	2.54
2057	MM-472	96.1	108.0	500	500	81110	75100	-10.1	ACIDO	0.98
2058	MM-472	108.0	120.5	1080	500	52910	47820	-6.4	ACIDO	0.72
2059	MM-472	120.5	132.0	500	500	73610	68370	-9.2	ACIDO	1.03
2060	MM-472	132.0	144.0	500	500	86000	70510	-9.5	ACIDO	1.00
2061	MM-472	144.0	156.0	500	500	49900	35460	-4.7	ACIDO	1.24
2062	MM-472	156.0	160.0	500	500	47780	36640	-4.8	ACIDO	1.13
2063	MM-473	24.0	36.0	500	500	35690	32130	-4.2	ACIDO	0.46
2064	MM-473	36.0	48.0	500	500	196900	190850	-26.0	ACIDO	1.50
2065	MM-473	48.0	60.9	500	500	115500	109240	-14.8	ACIDO	4.66
2066	MM-473	60.9	72.0	500	500	99990	88240	-11.9	ACIDO	1.40
2067	MM-473	72.0	84.0	500	500	48980	41830	-5.5	ACIDO	0.79
2068	MM-473	84.0	90.0	500	500	57270	36990	-4.9	ACIDO	0.42
2069	MM-474	12.0	24.8	1030	500	88880	83910	-11.3	ACIDO	1.77
2070	MM-474	24.8	35.8	500	500	68240	66420	-8.9	ACIDO	1.22
2071	MM-474	35.8	48.0	500	500	44330	42740	-5.7	ACIDO	0.64
2072	MM-474	48.0	60.0	500	500	66900	65540	-8.8	ACIDO	2.17
2073	MM-474	60.0	72.0	500	500	124400	121600	-16.5	ACIDO	4.87
2074	MM-474	72.0	84.0	500	500	63680	59890	-8.0	ACIDO	1.45
2075	MM-474	84.0	96.0	500	500	13590	12570	-1.5	ACIDO	0.52
2076	MM-474	96.0	100.2	1350	500	44710	43120	-5.7	ACIDO	2.17
2077	MM-475	108.0	120.0	500	500	122000	111220	-15.1	ACIDO	1.01
2078	MM-475	120.0	131.9	500	500	59600	57270	-7.7	ACIDO	0.26
2079	MM-475	131.9	144.0	500	500	67270	64160	-8.6	ACIDO	1.36
2080	MM-475	144.0	156.0	1120	500	64130	60830	-8.2	ACIDO	0.80
2081	MM-475	156.0	164.0	1210	500	48260	43380	-5.8	ACIDO	0.20
2082	MM-475	164.0	170.0	1140	500	34200	31050	-4.1	ACIDO	0.62
2083	MM-476	24.0	36.1	500	500	44460	33530	-4.4	ACIDO	0.51
2084	MM-476	36.1	48.5	500	500	56940	35710	-4.7	ACIDO	0.53
2085	MM-476	48.5	60.0	500	500	41210	26720	-3.5	ACIDO	0.36
2086	MM-476	60.0	72.5	500	500	35620	23610	-3.1	ACIDO	0.62
2087	MM-476	72.5	84.0	500	500	28820	22800	-2.9	ACIDO	0.68
2088	MM-476	84.0	96.2	500	500	41980	31290	-4.1	ACIDO	1.06
2089	MM-476	96.2	108.3	500	500	52660	36150	-4.8	ACIDO	0.57
2090	MM-476	108.3	120.0	500	500	43320	31330	-4.1	ACIDO	0.81
2091	MM-476	120.0	132.0	500	500	31340	23810	-3.1	ACIDO	1.14
2092	MM-476	132.0	140.0	500	500	37890	28170	-3.7	ACIDO	0.56
2093	MM-476	140.0	146.0	500	500	38450	34900	-4.6	ACIDO	0.59
2094	MM-477	8.0	20.0	2310	500	11030	2900	-0.2	LIGERAMENTE ACIDO	2.32
2095	MM-477	20.0	32.0	1130	500	20920	16620	-2.1	ACIDO	1.04
2096	MM-477	32.0	44.0	500	500	49590	44130	-5.9	ACIDO	0.55
2097	MM-477	44.0	56.0	1260	500	66450	51680	-6.9	ACIDO	0.55
2098	MM-477	80.0	92.2	500	500	31860	18770	-2.4	ACIDO	0.31
2099	MM-477	92.2	104.0	1000	500	26300	23940	-3.1	ACIDO	0.48
2100	MM-477	104.0	116.5	1000	500	40170	21100	-2.7	ACIDO	0.23
2101	MM-477	116.5	128.2	500	500	41630	23740	-3.1	ACIDO	0.23
2102	MM-477	128.2	140.1	500	500	20420	10720	-1.3	ACIDO	0.93
2103	MM-477	140.1	145.0	500	500	17150	15260	-1.9	ACIDO	0.68
2104	MM-478	12.0	24.9	500	500	16340	13060	-1.6	ACIDO	0.20
2105	MM-478	24.9	36.0	1500	500	6100	2210	-0.1	LIGERAMENTE ACIDO	0.21
2106	MM-478	36.0	48.0	500	500	45380	39920	-5.3	ACIDO	0.15
2107	MM-478	48.0	60.0	500	500	36240	32070	-4.2	ACIDO	0.11
2108	MM-478	60.0	72.0	500	500	36710	31820	-4.2	ACIDO	0.16
2109	MM-478	72.0	83.7	1070	500	31740	23730	-3.1	ACIDO	0.86
2110	MM-478	83.7	96.0	500	500	31600	24530	-3.2	ACIDO	0.87
2111	MM-478	96.0	108.0	500	500	34290	29250	-3.8	ACIDO	1.31
2112	MM-478	108.0	119.8	1030	500	42270	23040	-3.0	ACIDO	0.44
2113	MM-478	119.8	132.0	500	500	47820	30940	-4.1	ACIDO	0.61
2114	MM-478	132.0	144.0	500	500	105800	79120	-10.7	ACIDO	0.32
2115	MM-478	144.0	156.0	500	500	49880	19580	-2.5	ACIDO	0.22
2116	MM-478	156.0	166.2	500	500	72130	31440	-4.1	ACIDO	0.26
2117	MM-479	12.9	24.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.28
2118	MM-479	24.0	36.5	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
2119	MM-479	36.5	48.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.24
2120	MM-479	48.0	60.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.21
2121	MM-479	60.0	72.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
2122	MM-479	72.0	83.6	500	500	500	0	0.2	LIGERAMENTE BASICO	0.22
2123	MM-479	83.6	96.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.21
2124	MM-479	96.0	108.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.23
2125	MM-479	108.0	120.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.20
2126	MM-479	120.0	131.7	500	500	500	0	0.2	LIGERAMENTE BASICO	0.40
2127	MM-479	131.7	144.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.28
2128	MM-479	144.0	156.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.21
2129	MM-479	156.0	168.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.25
2130	MM-479	168.0	180.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.45
2131	MM-479	180.0	192.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.59
2132	MM-479	192.0	204.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.39
2133	MM-479	204.0	216.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.23
2134	MM-479	216.0	228.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.17
2135	MM-479	228.0	240.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.25
2136	MM-479	240.0	252.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.45
2137	MM-479	252.0	258.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.39
2138	MM-479	258.0	270.0	500	500	50650	48530	-6.5	ACIDO	1.14
2139	MM-479	270.0	282.0	500	500	93690	83920	-11.3	ACIDO	0.71
2140	MM-479	282.0	294.0	500	500	10140	9640	-1.1	ACIDO	0.31
2141	MM-479	294.0	300.0	500	500	500	0	0.2	LIGERAMENTE BASICO	0.16
2142	MM-482	36.0	42.4	900	100	127200	123000	-16.8	ACIDO	0.96
2143	MM-482	42.4	47.5	2700	50	39200	37000	-5.1	ACIDO	0.13
2144	MM-482	47.5	53.5	1800	50	33400	32400	-4.4	ACIDO	0.19
2145	MM-482	53.5	59.5	3100	50	43700	42200	-5.8	ACIDO	0.51
2146	MM-482	59.5	65.5	1800	50	39100	38000	-5.2	ACIDO	0.32
2147	MM-482	65.5	72.2	3100	50	36500	34200	-4.7	ACIDO	0.20
2148	MM-482	72.2	79.0	2000	50	44000	40900	-5.6	ACIDO	0.34
2149	MM-482	79.0	84.7	2300	50	55700	51800	-7.1	ACIDO	0.46
2150	MM-482	84.7	91.0	2200	100	52400	50800	-6.9	ACIDO	0.15
2151	MM-482	91.0	95.1	1600	50	64700	60800	-8.3	ACIDO	0.30
2152	MM-483	24.0	30.0	2100	50	31500	30100	-4.1	ACIDO	0.30
2153	MM-483	30.0	35.8	900	50	74500	65600	-9.0	ACIDO	0.72
2154	MM-483	35.8	42.0	900	50	40200	35500	-4.8	ACIDO	0.21
2155	MM-483	42.0	48.0	1300	50	32600	30000	-4.1	ACIDO	0.20
2156	MM-483	48.0	54.0	1200	50	32800	31700	-4.3	ACIDO	0.31
2157	MM-483	54.0	60.2	1200	50	46500	45200	-6.2	ACIDO	0.25
2158	MM-483	60.2	66.0	1100	50	35500	33800	-4.6	ACIDO	0.31
2159	MM-483	66.0	72.0	600	50	33500	31900	-4.4	ACIDO	0.51
2160	MM-483	72.0	77.3	500	50	42700	41700	-5.7	ACIDO	0.11
2161	MM-483	77.3	84.0	600	50	34000	33200	-4.5	ACIDO	0.48
2162	MM-483	84.0	90.0	1000	50	27400	26600	-3.6	ACIDO	1.81

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2163	MM-484	34.0	40.0	500	50	62900	44600	-6.1	ACIDO	0.10
2164	MM-484	40.0	46.0	300	50	31400	22700	-3.1	ACIDO	0.11
2165	MM-484	46.0	52.0	300	50	24400	17700	-2.4	ACIDO	0.19
2166	MM-484	52.0	58.0	500	50	38300	27700	-3.8	ACIDO	0.21
2167	MM-484	58.0	64.7	200	50	32500	23200	-3.2	ACIDO	0.17
2168	MM-484	71.0	76.7	500	50	46600	33000	-4.5	ACIDO	0.16
2169	MM-484	117.0	124.0	900	50	700	100	0.0	INERTE	0.12
2170	MM-484	124.0	130.6	800	50	1600	200	0.0	INERTE	0.13
2171	MM-484	130.6	135.7	900	50	26800	14900	-2.0	ACIDO	0.19
2172	MM-484	135.7	142.5	300	50	23600	16000	-2.2	ACIDO	0.37
2173	MM-484	142.5	147.5	500	50	19300	13800	-1.9	ACIDO	0.33
2174	MM-484	154.0	160.5	100	50	200	100	0.0	INERTE	0.19
2175	MM-484	160.5	166.0	100	50	400	100	0.0	INERTE	0.22
2176	MM-484	166.0	172.2	100	50	600	100	0.0	INERTE	0.18
2177	MM-484	172.2	178.9	100	50	700	100	0.0	INERTE	0.48
2178	MM-484	178.9	185.0	200	50	600	100	0.0	INERTE	0.76
2179	MM-484	185.0	190.3	100	50	400	100	0.0	INERTE	0.28
2180	MM-484	190.3	197.8	200	50	600	100	0.0	INERTE	0.86
2181	MM-485	24.0	29.5	400	50	1100	300	0.0	INERTE	0.14
2182	MM-485	29.5	36.0	900	50	1100	400	0.0	INERTE	0.70
2183	MM-485	36.0	42.0	500	50	1700	700	-0.1	INERTE	1.16
2184	MM-485	42.0	47.5	600	50	3700	2800	-0.4	LIGERAMENTE ACIDO	0.47
2185	MM-485	47.5	54.4	400	50	5300	4000	-0.5	LIGERAMENTE ACIDO	0.43
2186	MM-485	54.4	60.0	300	50	4500	3800	-0.5	LIGERAMENTE ACIDO	0.42
2187	MM-485	60.0	66.0	1100	50	5600	4400	-0.6	LIGERAMENTE ACIDO	0.45
2188	MM-485	66.0	72.9	1100	100	46800	44900	-6.1	ACIDO	1.18
2189	MM-485	72.9	78.0	1000	50	160300	159200	-21.8	ACIDO	0.28
2190	MM-485	78.0	83.7	1100	50	316800	315400	-43.2	ACIDO	0.10
2191	MM-486	5.5	11.0	500	50	38900	26900	-3.7	ACIDO	0.12
2192	MM-486	24.9	30.5	50	50	500	-700	0.1	LIGERAMENTE BASICO	0.15
2193	MM-486	30.5	35.1	200	50	3700	1800	-0.2	LIGERAMENTE ACIDO	0.12
2194	MM-486	35.1	41.9	500	50	2600	-900	0.1	LIGERAMENTE BASICO	0.22
2195	MM-486	41.9	48.9	100	50	2500	-200	0.0	INERTE	0.32
2196	MM-486	48.9	55.0	100	50	1900	0	0.0	INERTE	0.36
2197	MM-486	55.0	61.0	500	50	4400	-600	0.1	LIGERAMENTE BASICO	0.80
2198	MM-486	61.0	67.6	100	50	2300	200	0.0	INERTE	0.37
2199	MM-486	67.6	72.0	400	50	1800	-300	0.1	INERTE	0.16
2200	MM-486	72.0	77.5	300	50	1700	100	0.0	INERTE	0.20
2201	MM-486	77.5	83.3	200	50	1000	200	0.0	INERTE	0.28
2202	MM-486	83.3	90.0	100	50	900	200	0.0	INERTE	0.32
2203	MM-486	90.0	95.0	300	50	1300	100	0.0	INERTE	0.61
2204	MM-486	95.0	101.0	200	50	1700	200	0.0	INERTE	0.72
2205	MM-486	101.0	107.0	200	50	1500	200	0.0	INERTE	0.60
2206	MM-486	107.0	113.0	400	50	1300	200	0.0	INERTE	0.52
2207	MM-486	113.0	120.0	400	50	900	400	0.0	INERTE	0.66
2208	MM-486	120.0	126.8	300	50	1100	300	0.0	INERTE	0.46
2209	MM-486	126.8	132.5	200	50	1700	800	-0.1	NEUTRAL	0.14
2210	MM-486	132.5	137.8	300	50	1100	500	-0.1	INERTE	0.15
2211	MM-486	137.8	144.5	200	50	11700	8900	-1.2	ACIDO	0.98
2212	MM-486	144.5	149.9	300	50	23000	16900	-2.3	ACIDO	0.27
2213	MM-486	149.9	156.7	400	50	22000	16200	-2.2	ACIDO	0.19
2214	MM-486	156.7	163.0	400	50	27400	19700	-2.7	ACIDO	0.34
2215	MM-486	163.0	168.5	300	50	29100	20700	-2.8	ACIDO	0.10
2216	MM-486	174.1	180.7	300	50	41600	28800	-3.9	ACIDO	0.14
2217	MM-487	12.0	18.5	1800	50	37300	34700	-4.7	ACIDO	0.51
2218	MM-487	18.5	24.5	1400	100	38900	36900	-5.0	ACIDO	0.57
2219	MM-487	24.5	30.5	2100	50	46700	44800	-6.1	ACIDO	0.48
2220	MM-487	30.5	36.0	2400	50	46600	45400	-6.2	ACIDO	0.67
2221	MM-487	36.0	42.0	1600	50	48200	47000	-6.4	ACIDO	0.73
2222	MM-487	42.0	48.0	2200	100	39300	37600	-5.1	ACIDO	0.56
2223	MM-487	48.0	54.0	1600	50	47700	45900	-6.3	ACIDO	0.39
2224	MM-487	54.0	60.0	1700	50	50700	49000	-6.7	ACIDO	0.30
2225	MM-487	60.0	66.0	1300	50	38000	36600	-5.0	ACIDO	0.83
2226	MM-487	66.0	72.0	1400	50	47500	45100	-6.2	ACIDO	0.94
2227	MM-487	72.0	78.0	1300	50	43500	41600	-5.7	ACIDO	1.36
2228	MM-487	78.0	84.3	1400	50	37900	36400	-5.0	ACIDO	0.41
2229	MM-487	84.3	90.0	2700	50	35000	33600	-4.6	ACIDO	0.46
2230	MM-487	90.0	96.0	2600	50	38300	37200	-5.1	ACIDO	0.22
2231	MM-487	96.0	103.0	1800	50	39400	38200	-5.2	ACIDO	0.37
2232	MM-487	103.0	108.7	900	100	53200	47700	-6.5	ACIDO	0.59
2233	MM-487	108.7	114.5	400	50	67300	56200	-7.7	ACIDO	0.62
2234	MM-487	114.5	120.5	500	50	45600	39200	-5.4	ACIDO	0.89
2235	MM-487	120.5	126.5	500	50	57800	50700	-6.9	ACIDO	1.17
2236	MM-487	126.5	132.1	300	100	61600	54600	-7.4	ACIDO	3.47
2237	MM-487	132.1	138.5	500	100	61500	49000	-6.7	ACIDO	0.84
2238	MM-487	138.5	145.0	300	100	72600	57000	-7.8	ACIDO	1.16
2239	MM-487	151.5	157.5	300	100	73100	54800	-7.5	ACIDO	0.15
2240	MM-487	157.5	163.5	500	100	63400	48500	-6.6	ACIDO	0.13
2241	MM-487	163.5	169.5	400	100	66800	54100	-7.4	ACIDO	4.32
2242	MM-487	169.5	174.5	300	50	81500	67300	-9.2	ACIDO	2.98
2243	MM-487	174.5	180.2	300	100	69900	57100	-7.8	ACIDO	2.18
2244	MM-488	48.0	54.0	700	50	2300	400	0.0	INERTE	1.18
2245	MM-488	54.0	60.0	500	50	111000	109100	-14.9	ACIDO	2.98
2246	MM-488	60.0	66.0	300	50	260500	259400	-35.5	ACIDO	0.66
2247	MM-488	66.0	72.0	1000	50	247000	245100	-33.6	ACIDO	0.43
2248	MM-488	72.0	78.0	2300	50	34700	34100	-4.7	ACIDO	0.18
2249	MM-488	78.0	84.0	2000	50	29800	29200	-4.0	ACIDO	0.30
2250	MM-488	84.0	89.5	3000	100	39500	38500	-5.2	ACIDO	1.02
2251	MM-488	89.5	95.5	1900	50	49200	48300	-6.6	ACIDO	2.23
2252	MM-488	95.5	100.0	1700	50	56800	54800	-7.5	ACIDO	0.29
2253	MM-489	13.4	18.8	2500	100	8000	6000	-0.8	LIGERAMENTE ACIDO	0.27
2254	MM-489	18.8	24.5	3700	50	3500	3100	-0.4	LIGERAMENTE ACIDO	1.92
2255	MM-489	24.5	30.7	2600	50	12700	11900	-1.6	ACIDO	0.36
2256	MM-489	30.7	37.0	3200	50	9700	9000	-1.2	ACIDO	0.39
2257	MM-489	37.0	41.8	4400	50	700	400	0.0	INERTE	0.54
2258	MM-489	41.8	48.0	4500	50	1800	1400	-0.2	LIGERAMENTE ACIDO	0.78
2259	MM-489	48.0	54.0	3900	50	1200	600	-0.1	INERTE	0.64
2260	MM-489	54.0	60.8	4200	50	9500	6600	-0.9	LIGERAMENTE ACIDO	0.26
2261	MM-489	60.8	66.5	3500	50	11800	10500	-1.4	ACIDO	0.31
2262	MM-489	66.5	72.5	4500	50	15300	14200	-1.9	ACIDO	0.42
2263	MM-489	72.5	78.5	4600	50	3900	3400	-0.4	LIGERAMENTE ACIDO	0.30
2264	MM-489	78.5	84.5	3100	50	6500	6400	-0.9	LIGERAMENTE ACIDO	0.44
2265	MM-489	84.5	90.5	2300	50	25800	24100	-3.3	ACIDO	0.64
2266	MM-489	90.5	96.5	2800	50	9300	8100	-1.1	ACIDO	1.09
2267	MM-489	96.5	102.5	4200	50	13800	13100	-1.8	ACIDO	0.60
2268	MM-489	102.5	108.0	5800	50	23300	22000	-3.0	ACIDO	0.43
2269	MM-489	108.0	114.4	800	100	59100	56400	-7.7	ACIDO	0.41
2270	MM-489	114.4	120.5	700	50	23500	18800	-2.6	ACIDO	0.52
2271	MM-489	120.5	126.0	500	50	1100	800	-0.1	NEUTRAL	0.37
2272	MM-489	126.0	131.2	300	50	12500	11600	-1.6	ACIDO	0.14
2273	MM-489	131.2	138.5	4000	100	45300	44100	-6.0	ACIDO	2.71
2274	MM-489	138.5	144.0	1200	50	46400	37400	-5.1	ACIDO	1.57
2275	MM-489	144.0	150.3	200	100	24500	15300	-2.1	ACIDO	2.89
2276	MM-489	150.3	156.5	1800	50	49600	45700	-6.2	ACIDO	1.20
2277	MM-489	156.5	163.0	900	50	24500	22100	-3.0	ACIDO	1.04
2278	MM-489	163.0	169.0	300	50	500	300	0.0	INERTE	0.31
2279	MM-489	169.0	174.0	200	50	400	100	0.0	INERTE	0.46
2280	MM-489	174.0	180.0	200	50	400	100	0.0	INERTE	0.34
2281	MM-489	180.0	185.0	300	50	500	100	0.0	INERTE	0.26
2282	MM-489	185.0	192.0	500	50	700	200	0.0	INERTE	1.71
2283	MM-489	192.0	198.0	100	50	700	300	0.0	INERTE	1.25
2284	MM-489	198.0	204.0	100	50	400	200	0.0	INERTE	0.35
2285	MM-489	204.0	210.0	500	50	300	100	0.0	INERTE	0.17
2286	MM-489	210.0	216.0	300	50	500	300	0.0	INERTE	3.38
2287	MM-489	216.0	221.5	300	50	6900	6700	-0.9	LIGERAMENTE ACIDO	1.41
2288	MM-489	221.5	227.6	300	50	22500	22200	-3.0	ACIDO	0.38
2289	MM-489	227.6	234.2	300	50	56400	47900	-6.5	ACIDO	0.38
2290	MM-489	234.2	240.0	300	50	82200	68700	-9.4	ACIDO	0.46
2291	MM-489	240.0	246.0	300	50	29900	29500	-4.0	ACIDO	0.54
2292	MM-489	246.0	252.0	200	50	28800	28600	-3.9	ACIDO	0.37
2293	MM-489	252.0	258.0	200	100	5500	5200	-0.7	LIGERAMENTE ACIDO	0.17
2294	MM-489	258.0	264.0	200	50	20300	16100	-2.2	ACIDO	0.25
2295	MM-489	264.0	269.9	300	50	74200	58300	-8.0	ACIDO	0.44
2296	MM-489	269.9	277.0	2700	50	51100	46800	-6.4	ACIDO	0.25
2297	MM-489	277.0	282.0	2200	100	50800	47800	-6.5	ACIDO	0.31
2298	MM-489	282.0	288.0	1400	100	45000	41000	-5.6	ACIDO	0.38
2299	MM-489	288.0	294.0	3000	50	25200	24200	-3.3	ACIDO	0.56
2300	MM-489	294.0	300.0	1500	50	54500	47100	-6.4	ACIDO	0.76
2301	MM-490	59.5	65.5	900	50	95500	94500	-12.9	ACIDO	0.12
2302	MM-490	65.5	72.7	1500	50	64400	58800	-8.0	ACIDO	0.15
2303	MM-490	72.7	78.1	800	50	52700	48600	-6.6	ACIDO	4.96
2304	MM-490	78.1	84.0	3200	50	41300	40200	-5.5	ACIDO	0.13
2305	MM-490	108.0	113.0	4400	50	30100	29400	-4.0	ACIDO	0.11
2306	MM-490	113.0	119.0	3700	50	32500	31400	-4.3	ACIDO	0.18
2307	MM-490	142.0	150.8	2200	50	33800	33100	-4.5	ACIDO	0.10
2308	MM-491	12.5	18.8	3000	50	43300	42400	-5.8	ACIDO	0.11
2309	MM-491	23.0	29.0	3700	50	31400	30600	-4.2	ACIDO	0.10
2310	MM-491	29.0	35.0	2200	50	37400	35900	-4.9	ACIDO	0.21
2311	MM-491	35.0	41.0	2200	50	29500	28500	-3.9	ACIDO	0.27
2312	MM-491	41.0	45.0	2300	50	33000	32400	-4.4	ACIDO	0.23
2313	MM-491	45.0	50.0	1800	50	40900	40200	-5.5	ACIDO	0.21
2314	MM-492	12.0	18.2	1400	50	51400	48000	-6.6	ACIDO	0.62
2315	MM-492	18.2	24.0	1100	50	28000	26800	-3.7	ACIDO	0.54
2316	MM-492	24.0	30.0	4100	50	33000	31800	-4.3	ACIDO	0.19
2317	MM-492	30.0	35.1	3400	50	42400	41100	-5.6	ACIDO	0.21
2318	MM-492	35.1	41.0	3000	50	35800	34800	-4.7	ACIDO	0.17
2319	MM-492	41.0	46.9	3800	50	27400	26400	-3.6	ACIDO	0.18
2320	MM-492	46.9	55.0	2600	50	34700	33500	-4.6	ACIDO	0.18
2321	MM-493	11.5	17.5	2900	50	26100	25200	-3.4	ACIDO	0.21
2322	MM-493	17.5	23.2	2800	50	27000	24900	-3.4	ACIDO	0.16
2323	MM-493	23.2	30.0	2600	50	17300	14900	-2.0	ACIDO	0.29
2324	MM-493	30.0	36.4	2800	50	28100	25400	-3.5	ACIDO	0.16
2325	MM-493	36.4	42.5	2500	50	25300	24300	-3.3	ACIDO	0.15
2326	MM-493	42.5	48.5	2000	50	25700	24800	-3.4	ACIDO	0.44
2327	MM-493	48.5	54.5	2000	50	37900	37200	-5.1	ACIDO	0.86
2328	MM-493	54.5	60.5	1500	50	36200	35600	-4.9	ACIDO	0.36
2329	MM-493	60.5	66.5	2000	50	28500	27700	-3.8	ACIDO	0.35
2330	MM-493	66.5	70.2	1800	50	28500	27900	-3.8	ACIDO	0.33
2331	MM-494	5.6	12.0	2400	100	6000	4900	-0.6	LIGERAMENTE ACIDO	0.11
2332	MM-494	12.0	18.0	2300	100	19100	17200	-2.3	ACIDO	0.21
2333	MM-494	18.0	24.0	1700	50	52900	49700	-6.8	ACIDO	0.17
2334	MM-494	24.0	30.0	2900	100	27400	25600	-3.5	ACIDO	0.43
2335	MM-494	30.0	36.5	1200	50	37700	35100	-4.8	ACIDO	0.48
2336	MM-494	36.5	42.0	1100	50	41800	39400	-5.4	ACIDO	0.78
2337	MM-494	42.0	48.0	1300	100	35700	34400	-4.7	ACIDO	0.46
2338	MM-494	48.0	53.8	1700	100	34100	33200	-4.5	ACIDO	0.17
2339	MM-494	53.8	60.0	1600	100	33200	32100	-4.4	ACIDO	0.44
2340	MM-494	60.0	65.0	1000	50	32500	31300	-4.3	ACIDO	0.47
2341	MM-495	7.7	13.7	200	100	71700	71100	-9.7	ACIDO	2.89
2342	MM-495	13.7	18.0	400	100	53800	53400	-7.3	ACIDO	2.28
2343	MM-495	18.0	24.0	600	100	159500	159000	-21.7	ACIDO	3.43
2344	MM-495	24.0	30.0	400	100	36200	35600	-4.8	ACIDO	0.97
2345	MM-495	30.0	35.0	600	100	800	300	0.0	INERTE	0.33
2346	MM-495	35.0	41.0	50	50	12300	12000	-1.6	ACIDO	0.75
2347	MM-495	41.0	46.3	50	50	21100	20600	-2.8	ACIDO	0.80
2348	MM-495	46.3	52.0	1800	100	5000	4800	-0.6	LIGERAMENTE ACIDO	0.54
2349	MM-495	52.0	58.0	200	100	21600	21300	-2.9	ACIDO	1.10
2350	MM-495	58.0	64.5	300	100	12700	12200	-1.6	ACIDO	1.72
2351	MM-495	64.5	70.0	1900	50	31200	30700	-4.2	ACIDO	2.22
2352	MM-495	70.0	76.0	300	100	37600	37000	-5.0	ACIDO	1.51
2353	MM-495	76.0	82.2	400	200	26200	25700	-3.4	ACIDO	1.40
2354	MM-495	82.2	88.0	1200	100	45600	42500	-5.8	ACIDO	1.71
2355	MM-495	88.0	94.0	500	100	18700	16900	-2.3	ACIDO	1.22
2356	MM-495	94.0	99.0	300	200	73700	49100	-6.7	ACIDO	1.66
2357	MM-495	99.0	103.3	400	100	60000	48100	-6.6	ACIDO	1.47
2358	MM-495	104.3	110.6	500	100	55400	42100	-5.7	ACIDO	1.43
2359	MM-495	110.6	116.5	1700	100	41100	39100	-5.3	ACIDO	0.84
2360	MM-495	116.5	122.5	1900	200	41400	39400	-5.3	ACIDO	0.36
2361	MM-495	122.5	128.5	2400	100	46700	44900	-6.1	ACIDO	0.16
2362	MM-495	128.5	134.2	2100	100	48400	46000	-6.3	ACIDO	0.16
2363	MM-495	134.2	140.2	900	50	55600	46900	-6.4	ACIDO	0.25
2364	MM-495	140.2	146.5	800	100	49100	42000	-5.7	ACIDO	0.25
2365	MM-495	146.5	152.0	600	50	58800	50000	-6.8	ACIDO	0.41
2366	MM-495	152.0	158.0	800	100	41800	35500	-4.8	ACIDO	0.44
2367	MM-495	158.0	164.0	700	100	52600	44600	-6.1	ACIDO	0.58
2368	MM-495	164.0	170.0	700	100	60600	51100	-7.0	ACIDO	0.50
2369	MM-495	170.0	176.0	700	100	42600	35800	-4.9	ACIDO	0.64
2370	MM-495	176.0	182.2	600	100	35900	27200	-3.7	ACIDO	0.47
2371	MM-495	182.2	190.0	400	100	45700	29200	-4.0	ACIDO	0.31
2372	MM-496	34.0	41.0	600	50	66000	60600	-8.3	ACIDO	0.41
2373	MM-496	41.0	47.0	3300	100	35300	33400	-4.5	ACIDO	0.13
2374	MM-496	52.5	58.5	2100	100	27600	26300	-3.6	ACIDO	0.14
2375	MM-496	58.5	64.5	1600	50	42400	37700	-5.1	ACIDO	0.29
2376	MM-496	64.5	70.5	1200	50	46500	41200	-5.6	ACIDO	0.66
2377	MM-496	70.5	75.9	1300	50	36600	35200	-4.8	ACIDO	1.10
2378	MM-496	75.9	82.0	1200	50	42400	40100	-5.5	ACIDO	0.91
2379	MM-496	82.0	88.0	900	50	58100	52500	-7.2	ACIDO	0.76
2380	MM-496	88.0	94.0	1100	50	52800	47500	-6.5	ACIDO	0.35
2381	MM-496	94.0	100.4	1000	50	47200	43900	-6.0	ACIDO	0.45
2382	MM-496	100.4	106.0	1300	100	53100	47400	-6.5	ACIDO	0.45
2383	MM-496	106.0	112.0	1600	50	50400	47500	-6.5	ACIDO	0.72
2384	MM-496	112.0	120.4	1300	50	44500	43000	-5.9	ACIDO	0.60
2385	MM-497	40.5	46.5	2300	50	27900	26300	-3.6	ACIDO	0.28
2386	MM-497	46.5	52.5	1900	50	40100	36900	-5.0	ACIDO	0.91
2387	MM-497	52.5	58.5	1700	50	31700	28900	-3.9	ACIDO	0.68
2388	MM-497	58.5	64.8	2200	50	9300	8300	-1.1	ACIDO	0.68
2389	MM-497	64.8	70.0	3700	100	2200	600	0.0	INERTE	0.34
2390	MM-497	70.0	76.0	3900	50	6400	3800	-0.5	LIGERAMENTE ACIDO	0.13
2391	MM-497	76.0	82.0	2000	50	12100	10500	-1.4	ACIDO	0.11
2392	MM-497	82.0	88.0	1900	100	18100	16100	-2.2	ACIDO	0.11
2393	MM-497	88.0	93.7	1500	50	29000	27600	-3.8	ACIDO	0.16
2394	MM-497	93.7	100.0	1600	50	28500	27100	-3.7	ACIDO	0.17
2395	MM-497	100.0	106.0	1600	50	29700	27800	-3.8	ACIDO	0.83
2396	MM-497	106.0	112.0	1300	50	37000	34900	-4.8	ACIDO	0.27
2397	MM-497	118.0	124.0	1500	50	43500	40600	-5.5	ACIDO	1.79
2398	MM-497	124.0	130.2	1000	100	28500	27000	-3.7	ACIDO	0.51
2399	MM-498	24.5	30.3	400	50	2300	900	-0.1	LIGERAMENTE ACIDO	2.74
2400	MM-498	30.3	36.2	400	50	19400	11700	-1.6	ACIDO	6.58
2401	MM-498	36.2	42.5	300	50	20600	11200	-1.5	ACIDO	1.57
2402	MM-498	42.5	48.5	400	50	800	0	0.0	INERTE	3.04
2403	MM-498	48.5	54.5	300	50	900	200	0.0	INERTE	4.99
2404	MM-498	54.5	60.5	300	50	1300	200	0.0	INERTE	1.28
2405	MM-498	60.5	66.0	700	50	4100	2800	-0.4	LIGERAMENTE ACIDO	6.12
2406	MM-498	66.0	73.0	500	50	82000	78500	-10.7	ACIDO	1.07
2407	MM-498	73.0	78.5	1000	50	52600	47800	-6.5	ACIDO	0.51
2408	MM-498	78.5	84.0	1800	50	44300	41900	-5.7	ACIDO	0.37
2409	MM-498	84.0	90.0	1900	50	41800	40500	-5.5	ACIDO	0.16
2410	MM-498	90.0	96.0	1500	50	36500	35100	-4.8	ACIDO	0.22
2411	MM-498	96.0	102.5	2000	50	36000	34500	-4.7	ACIDO	0.13
2412	MM-498	102.5	108.5	1500	50	39400	37100	-5.1	ACIDO	0.15
2413	MM-498	108.5	114.5	1600	50	39300	37200	-5.1	ACIDO	0.25
2414	MM-498	114.5	120.0	1800	50	37700	35900	-4.9	ACIDO	0.28
2415	MM-498	120.0	125.1	1600	50	37500	36200	-4.9	ACIDO	0.14
2416	MM-498	125.1	131.0	2300	50	33800	32500	-4.4	ACIDO	0.27
2417	MM-498	131.0	136.0	1600	50	33900	32800	-4.5	ACIDO	0.15
2418	MM-498	136.0	141.6	1600	50	28500	27400	-3.7	ACIDO	0.35
2419	MM-498	141.6	150.0	1100	50	34000	32600	-4.4	ACIDO	0.32
2420	MM-499	22.5	27.0	600	50	3700	1600	-0.2	LIGERAMENTE ACIDO	0.68
2421	MM-499	27.0	33.0	400	50	3000	700	-0.1	INERTE	2.89
2422	MM-499	33.0	40.2	300	50	2500	1100	-0.1	LIGERAMENTE ACIDO	1.86
2423	MM-499	40.2	46.0	700	50	25600	23300	-3.2	ACIDO	0.12
2424	MM-499	46.0	51.7	900	50	37800	35900	-4.9	ACIDO	0.11
2425	MM-499	51.7	58.0	500	50	2800	1100	-0.1	LIGERAMENTE ACIDO	1.26
2426	MM-499	58.0	64.0	600	50	12600	8700	-1.2	ACIDO	2.53
2427	MM-499	64.0	70.0	500	50	40400	38600	-5.3	ACIDO	0.29
2428	MM-499	70.0	76.9	600	50	52200	47200	-6.4	ACIDO	0.53
2429	MM-499	76.9	83.0	500	50	42800	40000	-5.5	ACIDO	0.67
2430	MM-499	83.0	88.0	500	50	46400	42200	-5.8	ACIDO	1.29
2431	MM-499	88.0	93.8	300	50	32900	28600	-3.9	ACIDO	5.18
2432	MM-499	93.8	99.0	800	50	7200	2400	-0.3	LIGERAMENTE ACIDO	0.91
2433	MM-499	99.0	106.5	600	50	24300	21400	-2.9	ACIDO	4.47
2434	MM-499	106.5	112.0	900	50	37300	34900	-4.8	ACIDO	0.78
2435	MM-499	112.0	118.0	900	50	33700	30700	-4.2	ACIDO	0.41
2436	MM-499	118.0	123.0	500	50	100900	95800	-13.1	ACIDO	2.25
2437	MM-499	123.0	129.1	900	50	42300	37900	-5.2	ACIDO	1.65
2438	MM-499	129.1	135.5	1000	50	44600	36600	-5.0	ACIDO	1.63
2439	MM-499	135.5	141.1	1500	50	31800	29900	-4.1	ACIDO	0.43
2440	MM-499	141.1	150.2	600	50	48000	40700	-5.6	ACIDO	0.34
2441	MM-500	1.0	7.0	300	50	300	100	0.0	INERTE	0.87
2442	MM-500	7.0	13.0	500	100	500	300	0.0	INERTE	0.72
2443	MM-500	13.0	19.0	400	50	500	300	0.0	INERTE	0.43
2444	MM-500	19.0	25.5	400	50	500	300	0.0	INERTE	0.43
2445	MM-500	25.5	31.6	400	200	800	500	0.0	INERTE	0.44
2446	MM-500	31.6	38.0	400	50	4700	4100	-0.5	LIGERAMENTE ACIDO	0.26
2447	MM-500	38.0	44.0	600	50	600	400	0.0	INERTE	0.22
2448	MM-500	44.0	50.0	900	100	600	300	0.0	INERTE	0.15
2449	MM-500	50.0	56.0	400	50	800	500	-0.1	INERTE	0.18
2450	MM-500	56.0	61.5	1400	50	600	300	0.0	INERTE	0.20
2451	MM-500	61.5	67.3	600	50	14200	13600	-1.8	ACIDO	0.37
2452	MM-500	67.3	73.0	400	100	36300	26200	-3.6	ACIDO	0.26
2453	MM-500	73.0	79.0	900	50	45300	23700	-3.2	ACIDO	0.23
2454	MM-500	90.5	96.0	1700	50	35600	19100	-2.6	ACIDO	0.30
2455	MM-500	96.0	102.0	1900	50	18500	8000	-1.1	ACIDO	0.29
2456	MM-500	102.0	108.0	800	50	14000	5400	-0.7	LIGERAMENTE ACIDO	0.34
2457	MM-500	108.0	113.9	700	50	23400	18900	-2.6	ACIDO	0.44
2458	MM-500	113.9	120.5	600	50	11300	4800	-0.6	LIGERAMENTE ACIDO	0.55
2459	MM-500	120.5	127.0	800	50	3900	2100	-0.3	LIGERAMENTE ACIDO	0.77
2460	MM-500	128.3	132.7	600	50	1300	700	-0.1	INERTE	0.52
2461	MM-500	132.7	138.2	400	50	20100	11400	-1.5	ACIDO	0.28
2462	MM-500	138.2	144.0	1500	50	45700	32900	-4.5	ACIDO	0.15
2463	MM-500	144.0	150.0	600	100	64500	48300	-6.6	ACIDO	0.24
2464	MM-500	150.0	155.5	300	50	81100	51100	-7.0	ACIDO	0.19
2465	MM-500	155.5	161.5	500	50	70800	50600	-6.9	ACIDO	0.23
2466	MM-500	161.5	167.5	500	50	77100	46800	-6.4	ACIDO	0.16
2467	MM-500	167.5	173.5	600	100	42600	33100	-4.5	ACIDO	0.12
2468	MM-500	173.5	179.5	500	50	50000	34500	-4.7	ACIDO	0.12
2469	MM-500	184.8	190.1	400	50	74400	33700	-4.6	ACIDO	0.16
2470	MM-500	190.1	195.0	700	50	53000	35900	-4.9	ACIDO	0.18
2471	MM-500	195.0	200.0	1300	50	46700	32500	-4.4	ACIDO	0.17
2472	MM-501	18.5	24.7	500	50	28600	21800	-3.0	ACIDO	0.50
2473	MM-501	24.7	29.7	400	50	82800	81400	-11.1	ACIDO	1.12
2474	MM-501	29.7	36.3	500	50	1500	300	0.0	INERTE	1.30
2475	MM-501	36.3	42.7	400	100	600	0	0.0	INERTE	1.15
2476	MM-501	42.7	49.0	400	50	58400	43200	-5.9	ACIDO	0.60
2477	MM-501	49.0	55.0	400	50	53300	44400	-6.1	ACIDO	0.26
2478	MM-501	61.0	67.0	400	50	41300	35600	-4.9	ACIDO	0.27
2479	MM-501	67.0	73.0	300	50	42100	33700	-4.6	ACIDO	0.22
2480	MM-501	73.0	79.0	500	50	36000	27800	-3.8	ACIDO	0.19
2481	MM-501	79.0	85.0	400	200	35200	23900	-3.2	ACIDO	0.18
2482	MM-501	85.0	91.0	400	50	43400	30500	-4.2	ACIDO	0.23
2483	MM-501	91.0	95.0	700	50	39300	32000	-4.4	ACIDO	0.26
2484	MM-501	95.0	100.0	600	50	46100	39500	-5.4	ACIDO	0.23
2485	MM-502	2.0	6.0	500	50	43500	23700	-3.2	ACIDO	0.14
2486	MM-502	6.0	12.0	400	50	51900	22400	-3.1	ACIDO	0.11
2487	MM-502	12.0	18.0	200	50	37300	13700	-1.9	ACIDO	0.11
2488	MM-502	36.6	42.0	300	50	35800	15700	-2.1	ACIDO	0.14
2489	MM-502	42.0	48.0	300	50	31700	15500	-2.1	ACIDO	0.14
2490	MM-502	48.0	53.5	300	50	30700	19000	-2.6	ACIDO	0.14
2491	MM-502	53.5	59.0	500	50	43800	23000	-3.1	ACIDO	0.21
2492	MM-502	59.0	66.5	400	50	33600	18200	-2.5	ACIDO	0.15
2493	MM-502	66.5	72.0	500	100	24800	13000	-1.7	ACIDO	0.12
2494	MM-502	113.5	119.5	300	200	200	100	0.1	INERTE	0.11
2495	MM-502	119.5	125.5	200	50	200	0	0.0	INERTE	0.11
2496	MM-502	125.5	131.5	200	50	200	0	0.0	INERTE	0.16
2497	MM-502	131.5	137.1	300	50	200	100	0.0	INERTE	0.27
2498	MM-502	137.1	144.5	200	50	300	100	0.0	INERTE	0.14
2499	MM-502	144.5	150.5	300	50	200	100	0.0	INERTE	0.12
2500	MM-502	150.5	156.0	400	50	300	100	0.0	INERTE	0.22
2501	MM-502	156.0	162.0	600	400	2300	1300	0.0	NEUTRAL	0.14
2502	MM-502	223.0	228.5	300	50	2600	2300	-0.3	LIGERAMENTE ACIDO	0.10
2503	MM-502	245.7	252.0	300	50	21900	13600	-1.8	ACIDO	0.14
2504	MM-502	252.0	258.9	400	50	44200	31200	-4.3	ACIDO	0.24
2505	MM-502	258.9	265.0	500	50	46700	36000	-4.9	ACIDO	0.20
2506	MM-502	287.5	293.5	500	100	58000	44700	-6.1	ACIDO	0.13
2507	MM-502	293.5	300.5	500	300	64100	52300	-7.1	ACIDO	0.12
2508	MM-503	11.5	18.5	300	50	81400	80000	-10.9	ACIDO	0.64
2509	MM-503	18.5	24.2	600	50	75600	59900	-8.2	ACIDO	0.48
2510	MM-503	24.2	30.1	1000	50	57300	43900	-6.0	ACIDO	0.30
2511	MM-503	30.1	36.3	400	100	41100	36600	-5.0	ACIDO	1.12
2512	MM-503	36.3	41.5	300	100	34300	32500	-4.4	ACIDO	2.50
2513	MM-503	41.5	48.6	800	200	50100	47000	-6.4	ACIDO	0.75
2514	MM-503	48.6	54.5	800	100	57000	53900	-7.3	ACIDO	0.65
2515	MM-503	54.5	59.6	500	100	62600	60900	-8.3	ACIDO	2.69
2516	MM-503	59.6	67.0	700	100	53200	49000	-6.7	ACIDO	0.82
2517	MM-503	67.0	72.7	1100	100	56700	52000	-7.1	ACIDO	0.43
2518	MM-503	72.7	79.0	400	100	83700	82500	-11.3	ACIDO	1.64
2519	MM-503	79.0	85.0	700	100	89300	87700	-12.0	ACIDO	1.60
2520	MM-503	85.0	90.8	500	50	86600	80200	-11.0	ACIDO	1.24
2521	MM-503	90.8	97.6	400	100	85700	82400	-11.3	ACIDO	0.95
2522	MM-503	97.6	104.8	500	100	138800	137200	-18.8	ACIDO	1.69

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2523	MM-503	104.8	111.0	300	100	78900	77600	-10.6	ACIDO	2.18
2524	MM-504	10.6	16.2	300	50	11700	10700	-1.4	ACIDO	0.80
2525	MM-504	16.2	22.5	200	50	25300	24700	-3.4	ACIDO	1.79
2526	MM-504	22.5	28.8	200	50	39700	39200	-5.4	ACIDO	1.46
2527	MM-504	28.8	34.8	200	50	31300	30900	-4.2	ACIDO	0.84
2528	MM-504	34.8	40.5	300	50	97000	96000	-13.1	ACIDO	1.01
2529	MM-504	40.5	46.0	300	300	114000	113100	-15.4	ACIDO	0.60
2530	MM-504	46.0	51.6	200	50	106000	105000	-14.4	ACIDO	1.16
2531	MM-504	51.6	58.0	200	50	111000	109800	-15.0	ACIDO	1.92
2532	MM-504	58.0	64.9	200	50	95400	91900	-12.6	ACIDO	0.58
2533	MM-504	64.9	71.0	300	50	81800	78800	-10.8	ACIDO	0.83
2534	MM-504	71.0	77.0	300	50	68900	65600	-9.0	ACIDO	0.36
2535	MM-504	77.0	81.1	700	50	57500	54900	-7.5	ACIDO	0.66
2536	MM-504	81.1	88.5	800	50	38600	36400	-5.0	ACIDO	0.90
2537	MM-504	88.5	94.5	1800	50	63300	60200	-8.2	ACIDO	0.49
2538	MM-504	94.5	100.5	2500	50	26100	24800	-3.4	ACIDO	0.30
2539	MM-504	100.5	106.5	2700	50	32000	30600	-4.2	ACIDO	0.44
2540	MM-504	106.5	112.6	1000	50	43700	41600	-5.7	ACIDO	0.84
2541	MM-504	112.6	118.0	300	50	52900	51500	-7.0	ACIDO	2.51
2542	MM-504	118.0	123.5	300	50	17700	16600	-2.3	ACIDO	0.94
2543	MM-504	123.5	130.3	300	50	55300	54700	-7.5	ACIDO	0.31
2544	MM-504	130.3	136.1	200	50	34900	23400	-3.2	ACIDO	0.30
2545	MM-504	136.1	142.5	300	50	53300	30500	-4.2	ACIDO	0.41
2546	MM-504	142.5	148.5	500	50	56100	47000	-6.4	ACIDO	0.74
2547	MM-504	148.5	154.5	600	50	43300	42100	-5.7	ACIDO	1.05
2548	MM-504	154.5	160.5	1200	100	34800	33500	-4.6	ACIDO	0.51
2549	MM-504	160.5	166.0	400	100	33100	31300	-4.3	ACIDO	0.49
2550	MM-504	166.0	172.5	500	50	29200	26300	-3.6	ACIDO	0.40
2551	MM-504	172.5	178.1	600	50	16100	15000	-2.0	ACIDO	0.18
2552	MM-504	178.1	183.6	600	50	37100	34500	-4.7	ACIDO	0.38
2553	MM-504	183.6	190.0	700	100	81700	59500	-8.1	ACIDO	0.97
2554	MM-504	190.0	196.1	400	50	70600	49100	-6.7	ACIDO	1.10
2555	MM-504	196.1	202.0	300	50	79900	60400	-8.3	ACIDO	1.94
2556	MM-504	202.0	207.6	400	50	48200	44600	-6.1	ACIDO	1.56
2557	MM-504	207.6	214.3	300	50	41700	39800	-5.4	ACIDO	0.58
2558	MM-504	214.3	220.5	500	50	48600	46800	-6.4	ACIDO	0.51
2559	MM-504	220.5	226.0	600	50	52300	50100	-6.8	ACIDO	0.90
2560	MM-504	226.0	232.5	300	50	54200	51900	-7.1	ACIDO	0.34
2561	MM-504	232.5	237.8	400	50	45900	44100	-6.0	ACIDO	0.25
2562	MM-504	237.8	244.0	400	50	41000	39400	-5.4	ACIDO	0.51
2563	MM-504	244.0	250.5	500	50	58500	51200	-7.0	ACIDO	1.23
2564	MM-504	250.5	259.0	300	50	85400	58700	-8.0	ACIDO	1.51
2565	MM-504	259.0	265.0	400	50	68400	54100	-7.4	ACIDO	1.44
2566	MM-504	265.0	272.0	400	50	48400	42000	-5.7	ACIDO	0.94
2567	MM-504	272.0	277.7	400	50	36900	34700	-4.7	ACIDO	0.72
2568	MM-504	277.7	284.0	500	50	41500	34800	-4.7	ACIDO	0.68
2569	MM-504	284.0	289.0	400	50	34500	31600	-4.3	ACIDO	0.41
2570	MM-504	289.0	296.1	400	50	48700	41900	-5.7	ACIDO	0.58
2571	MM-504	296.1	301.5	400	50	71300	49300	-6.7	ACIDO	0.45
2572	MM-504	301.5	308.3	300	50	88200	62400	-8.5	ACIDO	0.55
2573	MM-504	308.3	314.2	400	50	70100	53600	-7.3	ACIDO	0.32
2574	MM-504	314.2	321.4	500	50	70400	58500	-8.0	ACIDO	0.26
2575	MM-504	321.4	327.3	300	50	61500	50900	-7.0	ACIDO	0.24
2576	MM-504	327.3	333.0	400	50	56200	47100	-6.4	ACIDO	0.33
2577	MM-504	333.0	338.0	300	50	59700	48300	-6.6	ACIDO	0.75
2578	MM-504	338.0	344.2	400	50	69900	62600	-8.6	ACIDO	1.02
2579	MM-504	344.2	350.5	400	400	42100	38300	-5.1	ACIDO	0.91
2580	MM-504	350.5	356.0	500	50	67600	59400	-8.1	ACIDO	0.58
2581	MM-504	356.0	361.4	400	50	73000	59100	-8.1	ACIDO	0.19
2582	MM-504	361.4	367.0	400	50	73400	62800	-8.6	ACIDO	0.32
2583	MM-504	367.0	374.3	300	50	71900	62800	-8.6	ACIDO	0.13
2584	MM-504	374.3	380.0	300	50	66700	49600	-6.8	ACIDO	0.21
2585	MM-504	380.0	385.9	400	50	46900	37400	-5.1	ACIDO	0.14
2586	MM-504	385.9	392.3	400	100	48700	40200	-5.5	ACIDO	0.30
2587	MM-504	392.3	397.0	400	50	44300	37400	-5.1	ACIDO	0.12
2588	MM-504	397.0	403.1	400	50	53900	44900	-6.1	ACIDO	0.14
2589	MM-505	0.0	6.0	500	50	40400	39700	-5.4	ACIDO	2.35
2590	MM-505	6.0	12.5	400	100	9000	8700	-1.2	ACIDO	0.63
2591	MM-505	12.5	18.7	300	50	4600	4400	-0.6	LIGERAMENTE ACIDO	0.38
2592	MM-505	18.7	25.5	300	200	8500	8200	-1.1	ACIDO	0.84
2593	MM-505	25.5	31.5	300	100	46300	45700	-6.2	ACIDO	1.60
2594	MM-505	31.5	36.0	300	50	29100	28700	-3.9	ACIDO	1.47
2595	MM-505	36.0	42.0	400	50	72100	71200	-9.7	ACIDO	1.92
2596	MM-505	42.0	49.0	900	50	84200	73100	-10.0	ACIDO	0.63
2597	MM-505	49.0	55.0	900	50	82000	60300	-8.2	ACIDO	0.84
2598	MM-506	12.4	17.5	300	50	65700	63500	-8.7	ACIDO	0.25
2599	MM-506	17.5	23.0	400	50	53200	48600	-6.6	ACIDO	0.46
2600	MM-506	23.0	29.0	400	50	57100	48900	-6.7	ACIDO	0.37
2601	MM-506	29.0	36.0	600	50	43700	35600	-4.9	ACIDO	0.78
2602	MM-506	36.0	41.0	300	50	87200	81100	-11.1	ACIDO	1.22
2603	MM-506	41.0	45.0	200	50	9600	9200	-1.2	ACIDO	0.61
2604	MM-506	47.5	53.4	200	50	36400	33500	-4.6	ACIDO	0.79
2605	MM-506	53.4	60.0	500	50	44400	39100	-5.3	ACIDO	0.60
2606	MM-506	60.0	65.5	400	50	37100	34200	-4.7	ACIDO	0.69
2607	MM-506	65.5	71.5	600	50	29200	27200	-3.7	ACIDO	0.54
2608	MM-506	71.5	77.2	300	50	45900	40000	-5.5	ACIDO	0.50
2609	MM-506	77.2	84.0	400	50	46500	38800	-5.3	ACIDO	0.68
2610	MM-506	84.0	89.0	600	50	30500	26800	-3.7	ACIDO	0.46
2611	MM-506	89.0	95.6	1200	50	47400	37600	-5.1	ACIDO	0.80
2612	MM-506	95.6	101.5	400	50	46000	36700	-5.0	ACIDO	0.57
2613	MM-506	101.5	109.0	300	50	57500	46600	-6.4	ACIDO	0.92
2614	MM-506	109.0	113.4	300	50	52200	46100	-6.3	ACIDO	1.17
2615	MM-506	113.4	120.0	200	50	60000	45000	-6.1	ACIDO	0.98
2616	MM-506	120.0	126.0	300	50	55900	49200	-6.7	ACIDO	0.78
2617	MM-506	126.0	132.3	200	50	57100	51000	-7.0	ACIDO	0.92
2618	MM-506	132.3	138.0	300	50	41300	36700	-5.0	ACIDO	1.34
2619	MM-506	138.0	143.5	300	50	80800	56300	-7.7	ACIDO	1.37
2620	MM-506	143.5	149.0	300	50	84500	58600	-8.0	ACIDO	1.38
2621	MM-506	149.0	156.0	300	50	56600	49300	-6.7	ACIDO	1.02
2622	MM-506	156.0	160.0	400	50	65600	51700	-7.1	ACIDO	0.63
2623	MM-507	0.0	7.0	1200	50	23900	20200	-2.7	ACIDO	0.83
2624	MM-507	7.0	13.0	1400	100	39900	37600	-5.1	ACIDO	0.61
2625	MM-507	13.0	19.2	1100	50	87700	84200	-11.5	ACIDO	2.16
2626	MM-507	19.2	24.5	1300	50	34700	27800	-3.8	ACIDO	8.88
2627	MM-507	24.5	29.5	1300	50	75000	70000	-9.6	ACIDO	0.59
2628	MM-507	29.5	35.0	300	100	16000	9100	-1.2	ACIDO	1.13
2629	MM-507	35.0	41.5	300	100	300	100	0.0	INERTE	1.64
2630	MM-507	41.5	47.5	300	50	13000	12700	-1.7	ACIDO	1.18
2631	MM-507	47.5	53.5	300	100	16200	15700	-2.1	ACIDO	1.96
2632	MM-507	53.5	59.5	300	50	7500	7000	-0.9	LIGERAMENTE ACIDO	1.06
2633	MM-507	59.5	66.1	300	200	2000	1800	-0.2	LIGERAMENTE ACIDO	0.65
2634	MM-507	66.1	70.0	300	50	8600	8000	-1.1	ACIDO	1.20
2635	MM-508	6.5	12.5	300	100	48900	42000	-5.7	ACIDO	0.11
2636	MM-508	12.5	17.9	300	100	32700	29300	-4.0	ACIDO	0.13
2637	MM-508	17.9	24.5	300	100	33100	29300	-4.0	ACIDO	0.14
2638	MM-508	29.3	35.5	300	100	18600	16700	-2.3	ACIDO	0.14
2639	MM-508	35.5	39.7	500	100	59800	54000	-7.4	ACIDO	0.23
2640	MM-508	46.8	52.6	500	100	37900	31800	-4.3	ACIDO	0.14
2641	MM-508	52.6	58.6	500	100	39100	20200	-2.7	ACIDO	0.24
2642	MM-508	58.6	63.3	500	100	56600	41600	-5.7	ACIDO	0.34

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2643	MM-508	63.3	69.0	400	100	66900	53300	-7.3	ACIDO	0.22
2644	MM-508	69.0	76.5	400	100	59800	41900	-5.7	ACIDO	0.28
2645	MM-508	76.5	82.0	300	100	71700	54500	-7.4	ACIDO	0.28
2646	MM-508	82.0	88.2	300	100	64400	42700	-5.8	ACIDO	0.25
2647	MM-508	88.2	94.0	300	100	40400	25500	-3.5	ACIDO	0.21
2648	MM-508	94.0	100.0	300	200	6800	3500	-0.4	LIGERAMENTE ACIDO	0.12
2649	MM-508	100.0	106.0	300	100	300	100	0.0	INERTE	0.10
2650	MM-508	112.0	118.0	300	100	300	100	0.0	INERTE	0.14
2651	MM-508	118.0	124.5	400	200	2800	1400	-0.1	LIGERAMENTE ACIDO	0.14
2652	MM-508	124.5	130.0	400	100	1200	600	0.0	INERTE	0.21
2653	MM-508	130.0	135.5	400	100	1300	500	0.0	INERTE	0.16
2654	MM-508	135.5	143.0	300	200	300	100	0.1	INERTE	0.10
2655	MM-508	154.5	160.8	200	100	200	0	0.0	INERTE	0.11
2656	MM-508	160.8	166.5	200	50	200	100	0.0	INERTE	0.11
2657	MM-508	166.5	171.8	200	50	200	100	0.0	INERTE	0.14
2658	MM-508	171.8	177.5	300	100	300	0	0.0	INERTE	0.21
2659	MM-508	177.5	183.1	200	100	200	100	0.0	INERTE	0.15
2660	MM-508	183.1	190.6	200	100	300	100	0.0	INERTE	0.18
2661	MM-508	190.6	195.5	200	50	300	100	0.0	INERTE	0.25
2662	MM-508	195.5	201.0	100	50	200	0	0.0	INERTE	0.18
2663	MM-508	201.0	208.5	200	100	300	200	0.0	INERTE	0.18
2664	MM-508	208.5	214.5	400	50	300	100	0.0	INERTE	0.19
2665	MM-508	214.5	220.4	200	50	600	100	0.0	INERTE	0.15
2666	MM-508	220.4	226.5	200	50	300	200	0.0	INERTE	0.23
2667	MM-508	226.5	232.5	200	100	200	0	0.0	INERTE	0.15
2668	MM-508	232.5	238.5	300	100	200	0	0.0	INERTE	0.13
2669	MM-508	238.5	243.8	300	100	300	100	0.0	INERTE	0.15
2670	MM-508	243.8	250.1	200	100	300	100	0.0	INERTE	0.19
2671	MM-508	250.1	256.5	300	100	200	0	0.0	INERTE	0.28
2672	MM-508	256.5	262.5	200	100	300	100	0.0	INERTE	0.17
2673	MM-508	262.5	268.3	200	100	300	100	0.0	INERTE	0.17
2674	MM-508	273.1	279.0	300	100	200	0	0.0	INERTE	0.14
2675	MM-508	279.0	287.0	200	100	200	0	0.0	INERTE	0.21
2676	MM-508	287.0	292.0	200	50	200	100	0.0	INERTE	0.20
2677	MM-508	292.0	298.1	200	100	200	0	0.0	INERTE	0.16
2678	MM-508	298.1	304.0	200	100	300	100	0.0	INERTE	0.28
2679	MM-508	304.0	310.4	200	100	200	100	0.0	INERTE	0.10
2680	MM-508	310.4	315.8	600	100	200	0	0.0	INERTE	0.11
2681	MM-508	315.8	322.0	300	100	500	300	0.0	INERTE	0.15
2682	MM-508	322.0	327.5	200	100	500	300	0.0	INERTE	0.17
2683	MM-508	327.5	333.8	200	100	300	100	0.0	INERTE	0.18
2684	MM-508	333.8	340.0	100	100	300	100	0.0	INERTE	0.19
2685	MM-508	340.0	346.0	100	50	7100	6800	-0.9	LIGERAMENTE ACIDO	0.29
2686	MM-508	346.0	351.0	200	100	4200	3900	-0.5	LIGERAMENTE ACIDO	0.21
2687	MM-508	351.0	357.7	300	50	200	0	0.0	INERTE	0.18
2688	MM-508	357.7	363.5	200	100	500	100	0.0	INERTE	0.13
2689	MM-508	363.5	369.5	200	100	600	200	0.0	INERTE	0.13
2690	MM-508	369.5	376.3	300	100	800	300	0.0	INERTE	0.12
2691	MM-508	376.3	381.6	100	100	400	100	0.0	INERTE	0.39
2692	MM-508	381.6	388.3	400	50	2400	1700	-0.2	LIGERAMENTE ACIDO	0.20
2693	MM-508	388.3	392.5	200	100	19500	13400	-1.8	ACIDO	0.13
2694	MM-508	392.5	396.3	500	50	60700	26800	-3.7	ACIDO	0.21
2695	MM-510	6.0	12.0	400	100	48500	47500	-6.5	ACIDO	1.77
2696	MM-510	12.0	18.0	300	100	55700	54600	-7.4	ACIDO	1.67
2697	MM-510	18.0	24.0	200	100	14400	13900	-1.9	ACIDO	1.25
2698	MM-510	24.0	29.5	300	100	500	100	0.0	INERTE	1.30
2699	MM-510	29.5	36.5	200	50	500	100	0.0	INERTE	0.48
2700	MM-510	36.5	42.5	200	50	300	100	0.0	INERTE	0.41
2701	MM-510	42.5	47.5	300	100	2500	1700	-0.2	LIGERAMENTE ACIDO	0.25
2702	MM-510	47.5	53.5	400	100	6800	5500	-0.7	LIGERAMENTE ACIDO	0.20
2703	MM-510	53.5	59.5	400	100	800	100	0.0	INERTE	0.13
2704	MM-510	59.5	67.0	300	100	1800	1200	-0.1	LIGERAMENTE ACIDO	0.25
2705	MM-510	67.0	73.0	200	100	18800	18100	-2.4	ACIDO	0.40
2706	MM-510	73.0	79.0	300	100	65200	46400	-6.3	ACIDO	0.16
2707	MM-510	79.0	85.0	600	100	85000	65500	-8.9	ACIDO	0.15
2708	MM-510	85.0	91.0	700	100	53300	32100	-4.4	ACIDO	0.21
2709	MM-510	91.0	97.0	600	100	27000	21700	-2.9	ACIDO	0.15
2710	MM-510	97.0	103.0	300	100	800	200	0.0	INERTE	0.19
2711	MM-510	103.0	109.5	500	100	24800	13000	-1.7	ACIDO	0.65
2712	MM-510	109.5	115.0	900	100	63300	40200	-5.5	ACIDO	0.57
2713	MM-510	115.0	121.1	700	100	50000	20200	-2.7	ACIDO	0.49
2714	MM-510	121.1	127.6	400	100	56600	37200	-5.1	ACIDO	0.41
2715	MM-510	127.6	132.1	400	50	64200	46300	-6.3	ACIDO	0.30
2716	MM-510	132.1	139.5	600	50	67200	39600	-5.4	ACIDO	0.27
2717	MM-510	139.5	144.9	400	100	55000	43900	-6.0	ACIDO	0.23
2718	MM-510	144.9	147.6	600	100	59500	49400	-6.7	ACIDO	0.58
2719	MM-511	33.0	39.0	200	50	1600	700	-0.1	INERTE	6.22
2720	MM-511	39.0	44.6	300	50	1500	300	0.0	INERTE	2.19
2721	MM-511	44.6	50.8	300	50	59200	55800	-7.6	ACIDO	4.82
2722	MM-511	50.8	57.0	400	50	35000	33200	-4.5	ACIDO	0.33
2723	MM-511	57.0	63.0	400	50	14900	13800	-1.9	ACIDO	0.22
2724	MM-511	63.0	67.7	500	50	23000	21400	-2.9	ACIDO	0.29
2725	MM-511	67.7	74.0	500	50	26500	25100	-3.4	ACIDO	0.13
2726	MM-511	74.0	80.0	500	50	20100	18400	-2.5	ACIDO	0.12
2727	MM-511	80.0	86.3	300	50	27000	25200	-3.4	ACIDO	0.24
2728	MM-511	86.3	92.0	300	50	25500	23700	-3.2	ACIDO	0.15
2729	MM-511	92.0	96.3	400	50	32800	31000	-4.2	ACIDO	0.76
2730	MM-512	9.4	14.7	1500	50	46600	44400	-6.1	ACIDO	0.27
2731	MM-512	14.7	20.0	1700	100	40900	39400	-5.4	ACIDO	0.26
2732	MM-512	20.0	26.3	2000	50	37700	36200	-4.9	ACIDO	0.26
2733	MM-512	26.3	32.0	2000	50	30900	29800	-4.1	ACIDO	0.17
2734	MM-512	32.0	38.0	1600	50	33300	32100	-4.4	ACIDO	0.13
2735	MM-512	38.0	44.0	1800	50	29700	28000	-3.8	ACIDO	0.21
2736	MM-512	44.0	50.0	2100	50	22200	21100	-2.9	ACIDO	0.13
2737	MM-512	50.0	55.5	1900	100	31200	29500	-4.0	ACIDO	0.35
2738	MM-512	62.5	67.2	1200	50	50100	45500	-6.2	ACIDO	0.21
2739	MM-512	67.2	73.0	1500	50	40100	37600	-5.1	ACIDO	0.42
2740	MM-512	73.0	79.0	1700	50	31500	29800	-4.1	ACIDO	0.11
2741	MM-512	79.0	85.0	1700	50	36400	34300	-4.7	ACIDO	0.24
2742	MM-512	85.0	92.5	1500	50	35300	32700	-4.5	ACIDO	0.34
2743	MM-512	92.5	98.4	1600	50	35100	32700	-4.5	ACIDO	0.19
2744	MM-512	98.4	105.0	1300	50	32600	28300	-3.9	ACIDO	0.27
2745	MM-512	105.0	110.9	400	50	59500	39100	-5.3	ACIDO	0.41
2746	MM-512	110.9	117.0	400	50	44700	30800	-4.2	ACIDO	0.34
2747	MM-512	117.0	122.5	800	50	39800	35500	-4.8	ACIDO	0.22
2748	MM-512	122.5	128.5	1000	50	32300	29900	-4.1	ACIDO	0.26
2749	MM-512	128.5	134.5	1100	50	31300	29600	-4.0	ACIDO	0.25
2750	MM-512	134.5	141.0	700	50	44500	37700	-5.1	ACIDO	0.26
2751	MM-512	141.0	147.3	600	50	52400	43100	-5.9	ACIDO	0.30
2752	MM-512	147.3	152.5	600	50	63000	50000	-6.8	ACIDO	0.31
2753	MM-512	152.5	158.3	1300	50	40400	36900	-5.0	ACIDO	0.48
2754	MM-512	158.3	164.5	1200	50	44800	41500	-5.7	ACIDO	0.60
2755	MM-512	164.5	169.8	1100	50	51800	47000	-6.4	ACIDO	0.56
2756	MM-512	169.8	176.9	400	50	64000	42900	-5.9	ACIDO	0.13
2757	MM-512	176.9	182.9	400	50	62200	37400	-5.1	ACIDO	0.12
2758	MM-512	182.9	189.1	300	50	72800	48200	-6.6	ACIDO	0.15
2759	MM-512	189.1	194.8	400	50	85600	70200	-9.6	ACIDO	0.38
2760	MM-512	194.8	198.8	500	50	81700	64000	-8.7	ACIDO	0.32
2761	MM-512	198.8	200.6	400	50	83900	65100	-8.9	ACIDO	0.17
2762	MM-512	200.6	204.0	400	50	85000	64300	-8.8	ACIDO	0.30

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2763	MM-513	4.0	9.0	300	50	800	600	-0.1	INERTE	0.43
2764	MM-513	9.0	15.5	200	50	300	100	0.0	INERTE	0.33
2765	MM-513	15.5	21.5	200	50	500	300	0.0	INERTE	0.51
2766	MM-513	21.5	28.5	500	50	9300	5200	-0.7	LIGERAMENTE ACIDO	0.45
2767	MM-513	28.5	34.5	700	50	22700	13600	-1.8	ACIDO	0.18
2768	MM-513	34.5	40.6	200	50	36200	15300	-2.1	ACIDO	0.29
2769	MM-513	40.6	46.5	400	50	26600	14400	-2.0	ACIDO	0.36
2770	MM-513	46.5	52.5	300	50	34200	18800	-2.6	ACIDO	0.48
2771	MM-513	52.5	58.5	500	100	36300	18600	-2.5	ACIDO	0.70
2772	MM-513	58.5	65.0	700	50	25700	13200	-1.8	ACIDO	0.79
2773	MM-513	65.0	70.0	500	50	27700	20600	-2.8	ACIDO	0.73
2774	MM-513	70.0	76.0	500	50	36400	30100	-4.1	ACIDO	0.77
2775	MM-513	76.0	82.0	400	50	46400	43300	-5.9	ACIDO	0.91
2776	MM-513	82.0	87.0	500	50	25800	23000	-3.1	ACIDO	0.80
2777	MM-513	87.0	93.0	500	100	21600	20000	-2.7	ACIDO	0.57
2778	MM-513	93.0	99.5	600	100	29100	26700	-3.6	ACIDO	0.64
2779	MM-513	99.5	106.0	500	100	24300	21300	-2.9	ACIDO	0.55
2780	MM-513	106.0	112.0	500	50	19700	17000	-2.3	ACIDO	0.23
2781	MM-513	112.0	118.4	500	100	22800	19500	-2.6	ACIDO	0.38
2782	MM-513	118.4	124.6	400	50	35200	30500	-4.2	ACIDO	0.42
2783	MM-513	124.6	131.0	400	50	89900	84100	-11.5	ACIDO	0.31
2784	MM-513	131.0	137.0	500	100	28200	26100	-3.5	ACIDO	0.33
2785	MM-513	137.0	142.5	500	50	70500	68000	-9.3	ACIDO	0.26
2786	MM-513	142.5	147.3	400	50	85100	73700	-10.1	ACIDO	0.51
2787	MM-513	147.3	153.1	400	50	76600	72500	-9.9	ACIDO	0.61
2788	MM-513	153.1	159.0	500	50	50900	45800	-6.3	ACIDO	0.62
2789	MM-513	159.0	165.0	700	50	50400	47100	-6.4	ACIDO	0.41
2790	MM-513	165.0	172.0	700	50	22700	20000	-2.7	ACIDO	0.43
2791	MM-513	172.0	179.0	700	50	42200	39600	-5.4	ACIDO	0.46
2792	MM-513	179.0	185.0	700	50	16500	15300	-2.1	ACIDO	0.65
2793	MM-513	185.0	190.3	500	50	85000	75500	-10.3	ACIDO	0.97
2794	MM-513	190.3	197.0	400	50	21400	19800	-2.7	ACIDO	2.19
2795	MM-513	197.0	203.6	400	50	1400	700	-0.1	INERTE	1.57
2796	MM-513	203.6	210.0	400	50	600	100	0.0	INERTE	2.21
2797	MM-513	210.0	216.0	100	50	200	0	0.0	INERTE	0.35
2798	MM-513	216.0	222.0	700	50	200	0	0.0	INERTE	0.32
2799	MM-513	222.0	228.0	1200	50	300	100	0.0	INERTE	0.42
2800	MM-513	228.0	234.0	200	50	200	0	0.0	INERTE	0.53
2801	MM-513	234.0	240.0	100	50	200	100	0.0	INERTE	0.67
2802	MM-513	240.0	246.0	300	50	200	100	0.0	INERTE	0.34
2803	MM-513	246.0	252.0	100	50	200	100	0.0	INERTE	0.23
2804	MM-513	252.0	258.2	100	50	600	400	0.0	INERTE	0.63
2805	MM-513	258.2	263.5	300	50	1900	1100	-0.1	LIGERAMENTE ACIDO	4.99
2806	MM-513	263.5	269.5	200	50	300	100	0.0	INERTE	0.42
2807	MM-513	269.5	275.5	100	50	300	200	0.0	INERTE	0.36
2808	MM-513	275.5	281.5	200	100	300	100	0.0	INERTE	0.35
2809	MM-513	281.5	287.5	900	300	200	0	0.1	LIGERAMENTE BASICO	0.17
2810	MM-513	287.5	294.6	200	50	400	200	0.0	INERTE	0.39
2811	MM-513	294.6	300.5	200	100	1200	800	-0.1	NEUTRAL	0.78
2812	MM-513	300.5	306.5	300	50	1400	1000	-0.1	LIGERAMENTE ACIDO	0.97
2813	MM-513	306.5	312.3	200	50	900	600	-0.1	INERTE	1.29
2814	MM-513	312.3	318.5	200	50	28400	27200	-3.7	ACIDO	0.66
2815	MM-513	318.5	324.0	300	50	34600	31000	-4.2	ACIDO	0.54
2816	MM-513	324.0	329.9	200	100	39400	35300	-4.8	ACIDO	0.74
2817	MM-513	329.9	336.9	400	50	133900	132500	-18.1	ACIDO	0.78
2818	MM-513	336.9	341.3	200	50	23200	22700	-3.1	ACIDO	0.58
2819	MM-513	341.3	348.5	300	50	83700	79000	-10.8	ACIDO	1.11
2820	MM-513	348.5	354.2	200	50	61400	57500	-7.9	ACIDO	0.98
2821	MM-513	354.2	359.1	300	50	55100	40400	-5.5	ACIDO	0.33
2822	MM-513	359.1	366.5	200	50	61300	35600	-4.9	ACIDO	0.25
2823	MM-513	366.5	371.5	300	50	60900	41300	-5.6	ACIDO	0.25
2824	MM-513	371.5	377.5	200	50	65000	32500	-4.4	ACIDO	0.25
2825	MM-513	377.5	383.5	300	50	65200	39000	-5.3	ACIDO	0.26
2826	MM-513	383.5	389.5	300	100	37900	22900	-3.1	ACIDO	0.28
2827	MM-513	389.5	396.0	300	100	44300	26800	-3.6	ACIDO	0.32
2828	MM-513	396.0	402.8	300	50	56400	40300	-5.5	ACIDO	0.46
2829	MM-513	402.8	409.0	300	100	40900	24400	-3.3	ACIDO	0.33
2830	MM-513	409.0	415.0	400	50	49300	34900	-4.8	ACIDO	0.35
2831	MM-513	415.0	419.5	300	50	43900	28500	-3.9	ACIDO	0.13
2832	MM-513	419.5	425.5	400	50	67800	44100	-6.0	ACIDO	0.27
2833	MM-513	425.5	431.5	300	100	58700	36600	-5.0	ACIDO	0.17
2834	MM-513	431.5	437.8	300	50	67900	39900	-5.4	ACIDO	0.28
2835	MM-513	437.8	443.5	300	50	71400	47800	-6.5	ACIDO	0.24
2836	MM-513	443.5	450.5	400	50	70300	55000	-7.5	ACIDO	0.19
2837	MM-513	450.5	457.0	600	50	53800	37400	-5.1	ACIDO	0.18
2838	MM-513	457.0	462.3	400	50	49200	36200	-4.9	ACIDO	0.24
2839	MM-513	462.3	468.5	400	50	41500	32500	-4.4	ACIDO	0.15
2840	MM-513	468.5	473.2	400	100	61000	49800	-6.8	ACIDO	0.16
2841	MM-513	473.2	479.9	300	50	62800	49300	-6.7	ACIDO	0.16
2842	MM-513	479.9	485.7	500	100	66300	54500	-7.4	ACIDO	0.21
2843	MM-513	485.7	492.1	400	100	68400	43800	-6.0	ACIDO	0.13
2844	MM-513	492.1	498.0	400	50	68400	54600	-7.5	ACIDO	0.22
2845	MM-513	498.0	503.1	400	100	72700	47200	-6.4	ACIDO	0.15
2846	MM-514	6.4	12.5	500	50	200	0	0.0	INERTE	0.53
2847	MM-514	12.5	19.0	300	50	100	0	0.0	INERTE	0.27
2848	MM-514	19.0	25.0	300	50	200	100	0.0	INERTE	0.30
2849	MM-514	25.0	30.5	400	50	200	100	0.0	INERTE	0.45
2850	MM-514	30.5	35.6	200	50	200	100	0.0	INERTE	0.29
2851	MM-514	35.6	42.0	400	50	200	100	0.0	INERTE	0.46
2852	MM-514	42.0	48.4	300	50	200	100	0.0	INERTE	0.19
2853	MM-514	48.4	54.8	400	50	100	0	0.0	INERTE	0.63
2854	MM-514	54.8	61.2	300	50	200	100	0.0	INERTE	0.37
2855	MM-514	61.2	67.0	600	50	200	100	0.0	INERTE	1.09
2856	MM-514	67.0	72.6	300	50	200	100	0.0	INERTE	1.43
2857	MM-514	72.6	77.5	300	50	200	100	0.0	INERTE	0.97
2858	MM-514	77.5	83.5	300	50	200	100	0.0	INERTE	0.42
2859	MM-514	83.5	89.5	300	50	200	100	0.0	INERTE	0.42
2860	MM-514	89.5	96.8	300	50	200	0	0.0	INERTE	0.38
2861	MM-514	96.8	103.0	300	50	200	0	0.0	INERTE	0.27
2862	MM-514	103.0	108.0	500	50	300	100	0.0	INERTE	0.29
2863	MM-514	108.0	114.0	300	50	200	100	0.0	INERTE	0.32
2864	MM-514	114.0	119.9	300	50	200	0	0.0	INERTE	0.37
2865	MM-514	119.9	126.0	300	50	200	100	0.0	INERTE	0.41
2866	MM-514	126.0	132.0	300	50	200	100	0.0	INERTE	0.53
2867	MM-514	132.0	138.5	200	50	200	0	0.0	INERTE	0.41
2868	MM-514	138.5	144.5	300	50	300	0	0.0	INERTE	0.58
2869	MM-514	144.5	150.5	400	50	300	0	0.0	INERTE	0.56
2870	MM-514	150.5	156.5	200	50	300	100	0.0	INERTE	0.37
2871	MM-514	156.5	162.0	400	50	300	100	0.0	INERTE	0.37
2872	MM-514	162.0	167.5	300	50	300	0	0.0	INERTE	0.31
2873	MM-514	167.5	174.2	300	100	1200	900	-0.1	NEUTRAL	0.42
2874	MM-514	174.2	180.0	500	50	300	0	0.0	INERTE	0.27
2875	MM-514	180.0	186.0	200	50	200	0	0.0	INERTE	0.16
2876	MM-514	186.0	192.0	200	50	300	100	0.0	INERTE	0.16
2877	MM-514	192.0	198.0	200	50	400	200	0.0	INERTE	0.13
2878	MM-514	198.0	202.6	400	100	300	100	0.0	INERTE	0.19
2879	MM-514	202.6	206.0	400	50	1100	600	-0.1	INERTE	0.30
2880	MM-515	23.2	29.0	1000	50	28000	26400	-3.6	ACIDO	0.23
2881	MM-515	29.0	35.5	500	50	43800	41900	-5.7	ACIDO	0.26
2882	MM-515	35.5	41.5	500	50	37600	34800	-4.7	ACIDO	0.26

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
2883	MM-515	41.5	48.0	400	50	31600	29400	-4.0	ACIDO	0.19
2884	MM-515	48.0	54.0	400	50	36400	34100	-4.7	ACIDO	0.50
2885	MM-515	54.0	59.8	400	50	36700	33200	-4.5	ACIDO	0.95
2886	MM-515	59.8	66.8	500	100	42700	40700	-5.5	ACIDO	0.28
2887	MM-515	66.8	72.0	500	50	36200	34500	-4.7	ACIDO	0.17
2888	MM-515	72.0	78.0	300	50	33900	31900	-4.4	ACIDO	0.31
2889	MM-515	78.0	83.5	1400	50	36700	34700	-4.7	ACIDO	0.26
2890	MM-515	83.5	89.0	900	50	36300	34500	-4.7	ACIDO	0.66
2891	MM-515	89.0	94.9	1000	50	34600	32400	-4.4	ACIDO	0.48
2892	MM-515	94.9	101.0	1300	50	29400	27800	-3.8	ACIDO	0.93
2893	MM-515	101.0	105.0	1000	50	20500	19400	-2.6	ACIDO	0.67
2894	MM-515	105.0	109.4	1100	50	39600	37700	-5.1	ACIDO	0.42
2895	MM-516	23.5	30.0	1800	50	21500	19300	-2.6	ACIDO	0.77
2896	MM-516	30.0	36.0	1200	50	51800	46000	-6.3	ACIDO	0.65
2897	MM-516	36.0	42.0	1100	50	48000	40100	-5.5	ACIDO	0.89
2898	MM-516	42.0	48.0	1400	100	44600	39800	-5.4	ACIDO	1.02
2899	MM-516	48.0	54.5	1000	50	57900	45900	-6.3	ACIDO	0.60
2900	MM-516	54.5	59.0	800	50	62800	52200	-7.1	ACIDO	1.16
2901	MM-516	59.0	65.0	800	50	79000	61500	-8.4	ACIDO	1.01
2902	MM-516	65.0	72.5	800	100	52900	42600	-5.8	ACIDO	0.56
2903	MM-516	72.5	78.5	700	50	40600	31500	-4.3	ACIDO	0.85
2904	MM-516	78.5	83.0	600	50	54000	40000	-5.5	ACIDO	1.73
2905	MM-516	83.0	89.0	600	100	56700	47100	-6.4	ACIDO	1.15
2906	MM-516	89.0	95.0	800	50	49300	41200	-5.6	ACIDO	0.56
2907	MM-516	95.0	100.5	800	50	54500	43700	-6.0	ACIDO	0.49
2908	MM-516	100.5	105.3	800	50	52500	41800	-5.7	ACIDO	0.60
2909	MM-517	11.0	17.0	1100	50	38700	34200	-4.7	ACIDO	0.64
2910	MM-517	17.0	23.5	1600	50	59500	55000	-7.5	ACIDO	0.68
2911	MM-517	23.5	29.3	1300	50	65900	60500	-8.3	ACIDO	0.79
2912	MM-517	29.3	34.2	1300	50	21600	20200	-2.7	ACIDO	0.16
2913	MM-517	34.2	40.5	1800	50	27200	25300	-3.4	ACIDO	0.20
2914	MM-517	40.5	47.0	1700	50	29800	26500	-3.6	ACIDO	0.24
2915	MM-517	47.0	53.0	1600	50	13600	11100	-1.5	ACIDO	0.39
2916	MM-517	53.0	59.0	2400	50	28800	27400	-3.7	ACIDO	0.29
2917	MM-517	59.0	64.5	2000	50	24500	23300	-3.2	ACIDO	0.40
2918	MM-517	64.5	71.5	1900	50	24900	23600	-3.2	ACIDO	0.49
2919	MM-517	71.5	77.5	2400	50	11500	9700	-1.3	ACIDO	0.27
2920	MM-517	77.5	83.0	2100	50	23500	21000	-2.9	ACIDO	0.27
2921	MM-517	83.0	89.5	1200	50	33600	31700	-4.3	ACIDO	0.44
2922	MM-517	89.5	95.5	2000	50	28000	26600	-3.6	ACIDO	0.24
2923	MM-517	95.5	101.5	1600	50	20000	18900	-2.6	ACIDO	0.48
2924	MM-517	101.5	107.0	1700	50	18200	17000	-2.3	ACIDO	0.43
2925	MM-517	107.0	112.5	2000	50	20600	19300	-2.6	ACIDO	0.38
2926	MM-517	112.5	118.5	2000	50	22900	21200	-2.9	ACIDO	1.23
2927	MM-517	118.5	124.8	1200	50	28800	27300	-3.7	ACIDO	0.13
2928	MM-517	124.8	130.0	2100	50	38800	36800	-5.0	ACIDO	0.24
2929	MM-517	130.0	136.0	1500	50	22000	20800	-2.8	ACIDO	0.18
2930	MM-517	136.0	142.0	1100	100	27400	26000	-3.5	ACIDO	0.29
2931	MM-517	142.0	148.0	1900	100	33500	31200	-4.2	ACIDO	0.21
2932	MM-517	148.0	154.0	1300	200	32800	31300	-4.2	ACIDO	0.20
2933	MM-517	160.0	166.0	1500	100	29200	27600	-3.7	ACIDO	0.18
2934	MM-517	166.0	172.4	1800	200	38600	34400	-4.6	ACIDO	0.44
2935	MM-517	172.4	178.5	2100	50	33600	32100	-4.4	ACIDO	0.26
2936	MM-517	178.5	184.5	1700	50	25800	24500	-3.3	ACIDO	0.15
2937	MM-517	184.5	190.5	1700	100	34500	32500	-4.4	ACIDO	0.19
2938	MM-517	190.5	196.5	1600	100	32900	30700	-4.2	ACIDO	0.18
2939	MM-518	2.8	7.5	1200	200	22000	19600	-2.6	ACIDO	0.61
2940	MM-518	7.5	13.5	2800	50	7800	6700	-0.9	LIGERAMENTE ACIDO	0.47
2941	MM-518	13.5	20.1	1000	50	28300	21000	-2.9	ACIDO	0.48
2942	MM-518	20.1	27.0	400	100	13000	8100	-1.1	ACIDO	0.17
2943	MM-518	27.0	31.0	400	50	11200	6500	-0.9	LIGERAMENTE ACIDO	0.17
2944	MM-518	31.0	37.4	400	50	13500	8500	-1.1	ACIDO	0.21
2945	MM-518	37.4	43.5	400	50	18900	12600	-1.7	ACIDO	0.13
2946	MM-518	43.5	49.0	500	50	39700	26100	-3.6	ACIDO	0.14
2947	MM-518	49.0	55.0	500	50	42100	28800	-3.9	ACIDO	0.17
2948	MM-518	55.0	62.0	700	100	52400	32500	-4.4	ACIDO	0.22
2949	MM-518	68.3	76.5	400	100	65100	40100	-5.5	ACIDO	0.18
2950	MM-518	92.5	97.5	400	50	24700	14700	-2.0	ACIDO	0.23
2951	MM-518	97.5	103.5	500	100	25800	15200	-2.0	ACIDO	0.16
2952	MM-518	103.5	109.5	400	200	54200	27500	-3.7	ACIDO	0.20
2953	MM-518	109.5	115.5	400	100	45100	16600	-2.2	ACIDO	0.15
2954	MM-518	115.5	119.5	400	200	75700	15600	-2.1	ACIDO	0.10
2955	MM-518	119.5	124.5	400	100	47600	14000	-1.9	ACIDO	0.30
2956	MM-519	12.0	18.5	2000	50	19100	16200	-2.2	ACIDO	0.61
2957	MM-519	18.5	26.7	900	50	2600	1300	-0.2	LIGERAMENTE ACIDO	0.66
2958	MM-519	26.7	30.6	1100	50	4300	2200	-0.3	LIGERAMENTE ACIDO	1.92
2959	MM-520	0.0	6.0	1100	100	17900	12900	-1.7	ACIDO	0.42
2960	MM-520	6.0	12.5	3600	50	31800	28000	-3.8	ACIDO	0.68
2961	MM-520	12.5	18.5	5700	50	15600	11900	-1.6	ACIDO	0.27
2962	MM-520	18.5	24.7	5500	100	6300	3700	-0.5	LIGERAMENTE ACIDO	0.88
2963	MM-520	24.7	30.3	4300	50	5200	2600	-0.3	LIGERAMENTE ACIDO	0.62
2964	MM-520	30.3	36.0	2000	50	30300	26400	-3.6	ACIDO	1.00
2965	MM-520	36.0	42.7	2900	50	23100	21800	-3.0	ACIDO	0.64
2966	MM-520	42.7	48.0	3200	50	20100	18600	-2.5	ACIDO	0.66
2967	MM-520	54.7	61.0	500	50	37900	37000	-5.1	ACIDO	0.84
2968	MM-520	61.0	67.0	400	100	2000	1100	-0.1	LIGERAMENTE ACIDO	0.23
2969	MM-520	67.0	73.0	400	50	700	200	0.0	INERTE	0.33
2970	MM-520	73.0	79.7	400	50	1100	700	-0.1	INERTE	0.41
2971	MM-520	79.7	85.5	400	100	600	400	0.0	INERTE	0.64
2972	MM-520	85.5	92.0	300	50	500	300	0.0	INERTE	0.65
2973	MM-520	92.0	97.5	400	50	400	200	0.0	INERTE	0.64
2974	MM-520	97.5	104.7	400	100	300	200	0.0	INERTE	0.50
2975	MM-520	104.7	110.0	400	50	400	200	0.0	INERTE	0.64
2976	MM-520	110.0	116.0	300	100	300	100	0.0	INERTE	0.29
2977	MM-520	116.0	122.0	300	50	300	100	0.0	INERTE	0.41
2978	MM-520	122.0	128.0	400	50	1000	600	-0.1	INERTE	0.33
2979	MM-520	128.0	132.4	400	50	37300	12400	-1.7	ACIDO	0.34
2980	MM-521	25.7	30.1	800	50	70800	61100	-8.4	ACIDO	0.30
2981	MM-521	30.1	36.0	800	50	36600	33600	-4.6	ACIDO	0.21
2982	MM-521	36.0	41.0	600	50	42700	40900	-5.6	ACIDO	0.18
2983	MM-521	41.0	47.0	600	50	30800	28700	-3.9	ACIDO	0.32
2984	MM-521	47.0	53.0	1100	50	28900	27300	-3.7	ACIDO	0.12
2985	MM-521	53.0	59.0	1200	50	33900	32600	-4.4	ACIDO	0.21
2986	MM-521	59.0	65.0	900	50	37400	35800	-4.9	ACIDO	0.22
2987	MM-521	65.0	71.0	600	50	39000	37400	-5.1	ACIDO	0.53
2988	MM-521	71.0	78.0	600	50	74400	71600	-9.8	ACIDO	10.55
2989	MM-521	78.0	84.0	700	50	59500	57600	-7.9	ACIDO	3.19
2990	MM-521	84.0	90.0	600	50	51900	48400	-6.6	ACIDO	4.69
2991	MM-521	90.0	96.0	800	50	47300	45500	-6.2	ACIDO	0.28
2992	MM-521	96.0	102.0	700	50	42500	40800	-5.6	ACIDO	0.39
2993	MM-521	102.0	108.0	600	50	60100	55400	-7.6	ACIDO	0.42
2994	MM-521	108.0	114.0	900	50	29200	26800	-3.7	ACIDO	0.16
2995	MM-521	114.0	120.0	500	50	37700	35000	-4.8	ACIDO	0.17
2996	MM-521	120.0	125.5	500	50	35900	33100	-4.5	ACIDO	0.22
2997	MM-521	125.5	131.0	600	50	30000	28000	-3.8	ACIDO	0.11
2998	MM-521	137.0	143.0	400	50	28100	26400	-3.6	ACIDO	0.11
2999	MM-521	143.0	149.0	600	50	32400	30100	-4.1	ACIDO	0.32
3000	MM-521	149.0	155.0	800	100	35100	31400	-4.3	ACIDO	0.37
3001	MM-521	155.0	161.0	600	100	31200	29800	-4.0	ACIDO	0.13
3002	MM-521	161.0	168.4	600	100	27800	26000	-3.5	ACIDO	0.14
3003	MM-522	5.0	11.0	600	100	99200	98100	-13.4	ACIDO	0.51
3004	MM-522	11.0	16.5	500	50	102100	101300	-13.9	ACIDO	1.06
3005	MM-522	16.5	22.5	400	200	74400	73400	-10.0	ACIDO	3.11
3006	MM-522	22.5	28.5	400	100	57100	56000	-7.6	ACIDO	1.52
3007	MM-522	28.5	34.0	400	100	55300	54400	-7.4	ACIDO	1.29
3008	MM-522	34.0	40.5	400	50	53000	52000	-7.1	ACIDO	1.66
3009	MM-522	40.5	46.5	700	50	53000	52100	-7.1	ACIDO	2.61
3010	MM-522	46.5	52.5	600	50	54500	53700	-7.3	ACIDO	3.78
3011	MM-522	52.5	57.2	500	100	40200	39500	-5.4	ACIDO	1.85
3012	MM-522	57.2	63.0	500	50	35600	34900	-4.8	ACIDO	1.03
3013	MM-522	63.0	69.5	500	100	45400	44500	-6.1	ACIDO	2.59
3014	MM-522	69.5	75.5	400	50	42900	41800	-5.7	ACIDO	4.19
3015	MM-522	75.5	81.5	500	50	58500	57500	-7.9	ACIDO	4.51
3016	MM-522	81.5	87.0	500	50	27700	26600	-3.6	ACIDO	1.82
3017	MM-522	87.0	93.2	700	100	23800	22300	-3.0	ACIDO	0.97
3018	MM-522	93.2	100.5	1800	50	71400	69600	-9.5	ACIDO	2.30
3019	MM-522	100.5	106.3	800	50	176400	174700	-23.9	ACIDO	1.79
3020	MM-522	106.3	112.5	700	50	107400	106200	-14.5	ACIDO	0.42
3021	MM-522	112.5	117.8	600	200	74800	71400	-9.7	ACIDO	0.24
3022	MM-522	117.8	123.9	900	100	106800	105800	-14.5	ACIDO	0.71
3023	MM-522	124.4	125.4	700	100	166500	165300	-22.6	ACIDO	0.77
3024	MM-522	125.4	131.8	500	50	151600	150400	-20.6	ACIDO	0.93
3025	MM-522	131.8	137.9	600	100	120500	120000	-16.4	ACIDO	1.03
3026	MM-522	137.9	144.2	600	50	76100	73000	-10.0	ACIDO	0.91
3027	MM-522	144.2	150.0	1000	100	31900	30200	-4.1	ACIDO	0.36
3028	MM-522	150.0	157.0	900	100	44600	41600	-5.7	ACIDO	0.75
3029	MM-522	157.0	164.9	600	100	59500	57100	-7.8	ACIDO	0.79
3030	MM-522	165.1	173.2	600	50	108300	106700	-14.6	ACIDO	1.10
3031	MM-522	174.0	180.0	600	100	95700	90500	-12.4	ACIDO	0.86
3032	MM-522	180.0	186.5	700	50	69800	65900	-9.0	ACIDO	1.00
3033	MM-522	186.5	192.4	500	50	39700	32300	-4.4	ACIDO	0.42
3034	MM-522	192.4	198.5	800	100	67300	57800	-7.9	ACIDO	0.30
3035	MM-522	198.5	203.0	700	50	57200	54800	-7.5	ACIDO	0.19
3036	MM-522	203.0	210.0	600	100	45100	41700	-5.7	ACIDO	0.25
3037	MM-522	210.0	216.0	900	100	47900	42300	-5.8	ACIDO	0.25
3038	MM-522	216.0	222.0	1100	50	36000	32400	-4.4	ACIDO	0.29
3039	MM-522	222.0	228.0	700	100	68100	54200	-7.4	ACIDO	0.39
3040	MM-522	228.0	234.0	600	100	64100	48800	-6.6	ACIDO	0.47
3041	MM-522	234.0	239.7	600	50	67400	45800	-6.3	ACIDO	0.56
3042	MM-522	239.7	246.0	700	50	71900	46900	-6.4	ACIDO	0.47
3043	MM-522	246.0	252.0	500	100	75500	46300	-6.3	ACIDO	0.43
3044	MM-522	252.0	258.0	700	50	58800	40600	-5.5	ACIDO	0.36
3045	MM-522	258.0	264.5	500	200	66100	42200	-5.7	ACIDO	0.40
3046	MM-522	264.5	270.5	600	50	58900	42700	-5.8	ACIDO	0.40
3047	MM-522	270.5	276.5	600	100	57500	46100	-6.3	ACIDO	0.48
3048	MM-522	276.5	281.7	600	100	58700	46500	-6.3	ACIDO	0.59
3049	MM-522	281.7	288.0	400	50	45400	36300	-5.0	ACIDO	0.56
3050	MM-522	288.0	294.0	500	50	49300	45000	-6.1	ACIDO	0.45
3051	MM-522	294.0	299.5	800	100	37800	35400	-4.8	ACIDO	0.53
3052	MM-522	299.5	306.8	500	50	51000	42700	-5.8	ACIDO	0.95
3053	MM-522	306.8	312.0	600	50	50300	44200	-6.0	ACIDO	1.76
3054	MM-522	312.0	318.5	600	100	62200	40100	-5.5	ACIDO	0.47
3055	MM-522	318.5	325.1	300	50	63700	42600	-5.8	ACIDO	0.31
3056	MM-522	325.1	331.0	500	50	47800	35900	-4.9	ACIDO	0.22
3057	MM-522	331.0	337.0	500	100	54300	41900	-5.7	ACIDO	0.17
3058	MM-522	337.0	342.8	500	100	60300	52000	-7.1	ACIDO	0.16
3059	MM-522	342.8	348.1	500	100	52100	43900	-6.0	ACIDO	0.23
3060	MM-522	348.1	354.0	300	50	61500	47300	-6.5	ACIDO	0.20
3061	MM-522	354.0	360.0	500	50	44600	38700	-5.3	ACIDO	0.15
3062	MM-522	360.0	366.0	400	50	41400	37200	-5.1	ACIDO	0.11
3063	MM-522	366.0	372.0	600	200	42900	36500	-4.9	ACIDO	0.11
3064	MM-522	372.0	377.5	600	50	36900	33400	-4.6	ACIDO	0.12
3065	MM-522	377.5	383.5	300	50	36200	31100	-4.2	ACIDO	0.13
3066	MM-522	383.5	388.6	500	50	39100	35200	-4.8	ACIDO	0.26
3067	MM-522	388.6	395.4	600	50	45000	40700	-5.6	ACIDO	0.28
3068	MM-522	395.4	403.0	600	50	39900	37900	-5.2	ACIDO	0.37
3069	MM-522	403.0	409.9	900	50	32300	28900	-3.9	ACIDO	0.49
3070	MM-523	2.9	6.0	600	300	700	200	0.1	NEUTRAL	0.47
3071	MM-523	6.0	12.0	700	300	700	400	0.1	NEUTRAL	0.90
3072	MM-523	12.0	18.0	600	200	6500	6100	-0.8	LIGERAMENTE ACIDO	0.72
3073	MM-523	18.0	23.3	500	200	7400	7000	-0.9	LIGERAMENTE ACIDO	1.84
3074	MM-523	24.3	30.4	700	300	14500	14000	-1.8	ACIDO	1.03
3075	MM-523	30.4	36.0	500	200	32400	31600	-4.3	ACIDO	1.25
3076	MM-523	36.0	41.5	1500	200	63400	61600	-8.4	ACIDO	2.18
3077	MM-523	41.5	47.3	3800	200	8000	6800	-0.9	LIGERAMENTE ACIDO	9.79
3078	MM-523	47.3	53.7	4300	200	3900	3000	-0.3	LIGERAMENTE ACIDO	17.77
3079	MM-523	53.7	60.6	4000	200	4800	3300	-0.4	LIGERAMENTE ACIDO	22.33
3080	MM-523	60.6	66.2	3400	200	2600	1900	-0.2	LIGERAMENTE ACIDO	0.31
3081	MM-523	66.2	72.5	2100	300	27100	22900	-3.0	ACIDO	0.29
3082	MM-523	72.5	78.0	500	200	41500	33900	-4.6	ACIDO	0.32
3083	MM-523	78.0	84.6	500	200	63200	54200	-7.4	ACIDO	0.35
3084	MM-523	84.6	90.0	900	300	41000	36400	-4.9	ACIDO	0.49
3085	MM-523	90.0	97.9	600	200	40600	23600	-3.2	ACIDO	0.92
3086	MM-523	98.3	103.4	800	200	52500	40700	-5.5	ACIDO	1.22
3087	MM-523	103.4	110.5	1200	50	44200	40600	-5.5	ACIDO	1.26
3088	MM-523	110.5	116.0	600	50	61600	36800	-5.0	ACIDO	0.32
3089	MM-523	116.0	120.2	500	50	45100	17000	-2.3	ACIDO	0.30
3090	MM-524	22.5	28.9	700	50	130400	128500	-17.6	ACIDO	0.42
3091	MM-524	28.9	33.2	600	50	111400	107600	-14.7	ACIDO	1.39
3092	MM-525	30.2	36.5	1300	50	32000	30900	-4.2	ACIDO	0.53
3093	MM-525	36.5	42.5	700	50	36800	35400	-4.8	ACIDO	0.33
3094	MM-525	42.5	48.0	1000	50	40300	38600	-5.3	ACIDO	0.34
3095	MM-525	48.0	54.3	1800	100	35800	33700	-4.6	ACIDO	0.86
3096	MM-525	54.3	60.0	1800	50	35000	33400	-4.6	ACIDO	0.35
3097	MM-525	60.0	66.0	1100	50	37400	35600	-4.9	ACIDO	0.27
3098	MM-525	66.0	72.5	1500	50	41900	39600	-5.4	ACIDO	0.27
3099	MM-525	72.5	78.5	300	50	41200	39100	-5.3	ACIDO	0.15
3100	MM-526	0.0	6.0	1000	50	56000	50800	-6.9	ACIDO	0.21
3101	MM-526	6.0	12.0	700	100	54900	45200	-6.2	ACIDO	0.15
3102	MM-526	12.0	18.0	700	400	49400	47000	-6.3	ACIDO	0.21
3103	MM-526	18.0	25.0	300	100	39600	37800	-5.1	ACIDO	0.32
3104	MM-526	25.0	31.0	300	50	44500	43100	-5.9	ACIDO	0.35
3105	MM-526	31.0	35.7	900	100	53500	51100	-7.0	ACIDO	0.15
3106	MM-526	35.7	42.0	400	50	45400	43000	-5.9	ACIDO	0.26
3107	MM-526	42.0	48.5	400	50	37800	35600	-4.9	ACIDO	0.47
3108	MM-526	48.5	54.5	300	50	37600	33700	-4.6	ACIDO	0.62
3109	MM-526	54.5	61.0	800	200	50600	46100	-6.2	ACIDO	0.67
3110	MM-526	61.0	67.0	400	50	44500	40700	-5.6	ACIDO	0.82
3111	MM-526	67.0	72.0	300	200	49200	43600	-5.9	ACIDO	2.59
3112	MM-526	72.0	78.0	300	50	43800	41900	-5.7	ACIDO	2.07
3113	MM-526	84.0	91.0	400	100	57200	48600	-6.6	ACIDO	0.41
3114	MM-526	91.0	97.0	300	100	86600	60400	-8.2	ACIDO	0.13
3115	MM-526	97.0	102.2	500	200	78100	57100	-7.7	ACIDO	0.14
3116	MM-526	102.2	108.0	500	50	66300	53700	-7.3	ACIDO	0.19
3117	MM-526	108.0	113.7	300	50	59500	54200	-7.4	ACIDO	0.23
3118	MM-526	113.7	119.0	300	50	36000	34800	-4.7	ACIDO	0.41
3119	MM-526	119.0	126.5	300	50	35500	34400	-4.7	ACIDO	0.13
3120	MM-526	126.5	132.3	300	50	39800	38100	-5.2	ACIDO	0.38
3121	MM-526	132.3	138.5	300	50	34500	33500	-4.6	ACIDO	0.63
3122	MM-526	138.5	144.5	300	100	38100	37100	-5.0	ACIDO	0.27
3123	MM-526	144.5	150.5	300	100	40700	39600	-5.4	ACIDO	0.32
3124	MM-526	150.5	156.9	400	50	42200	40900	-5.6	ACIDO	0.41
3125	MM-526	156.9	162.5	300	100	32600	31500	-4.3	ACIDO	0.20
3126	MM-526	162.5	168.5	400	300	29600	28500	-3.8	ACIDO	0.17
3127	MM-526	168.5	173.5	300	50	35700	34900	-4.8	ACIDO	0.22
3128	MM-526	173.5	179.5	300	50	32600	32000	-4.4	ACIDO	0.12
3129	MM-526	179.5	185.4	300	100	41200	40200	-5.5	ACIDO	0.17
3130	MM-526	185.4	192.5	200	50	38700	37400	-5.1	ACIDO	0.20
3131	MM-526	192.5	198.5	300	200	30500	29300	-3.9	ACIDO	0.21
3132	MM-527	7.7	13.5	400	50	1600	500	-0.1	INERTE	0.10
3133	MM-527	13.5	19.0	300	50	8800	4800	-0.6	LIGERAMENTE ACIDO	0.12
3134	MM-527	19.0	24.5	600	50	3000	1000	-0.1	LIGERAMENTE ACIDO	0.15
3135	MM-527	24.5	29.5	600	50	2400	900	-0.1	LIGERAMENTE ACIDO	0.15
3136	MM-527	48.4	54.0	300	50	3200	1000	-0.1	LIGERAMENTE ACIDO	0.14
3137	MM-527	54.0	60.0	500	50	2000	300	0.0	INERTE	0.14
3138	MM-527	60.0	66.0	200	50	3300	200	0.0	INERTE	0.26
3139	MM-527	66.0	71.3	300	50	2000	100	0.0	INERTE	0.25
3140	MM-527	71.3	77.9	200	50	1000	100	0.0	INERTE	0.48
3141	MM-527	77.9	84.0	300	50	1500	200	0.0	INERTE	0.60
3142	MM-527	84.0	89.5	300	50	300	0	0.0	INERTE	0.26
3143	MM-527	89.5	95.9	400	50	1500	600	-0.1	INERTE	0.31
3144	MM-527	95.9	101.5	500	50	600	100	0.0	INERTE	0.44
3145	MM-527	101.5	107.7	300	50	600	200	0.0	INERTE	0.35
3146	MM-527	107.7	114.0	300	50	2400	400	0.0	INERTE	0.32
3147	MM-527	114.0	120.0	400	50	800	0	0.0	INERTE	0.53
3148	MM-527	120.0	125.5	200	50	600	100	0.0	INERTE	0.20
3149	MM-527	125.5	131.5	300	50	800	300	0.0	INERTE	0.31
3150	MM-527	131.5	138.0	300	50	12200	10700	-1.4	ACIDO	0.45
3151	MM-527	138.0	143.5	500	50	900	200	0.0	INERTE	0.28
3152	MM-527	143.5	150.5	300	50	13700	6300	-0.8	LIGERAMENTE ACIDO	0.32
3153	MM-527	150.5	155.3	300	50	56000	15000	-2.0	ACIDO	0.14
3154	MM-527	155.3	161.0	300	50	28500	13800	-1.9	ACIDO	0.34
3155	MM-527	161.0	167.0	300	50	2300	1200	-0.1	LIGERAMENTE ACIDO	0.29
3156	MM-527	167.0	174.5	200	50	8200	5000	-0.7	LIGERAMENTE ACIDO	0.19
3157	MM-527	174.5	180.3	200	50	46500	19400	-2.6	ACIDO	0.14
3158	MM-527	180.3	186.5	300	50	54400	20600	-2.8	ACIDO	0.19
3159	MM-527	186.5	192.0	300	50	10900	6600	-0.9	LIGERAMENTE ACIDO	0.21
3160	MM-527	192.0	197.6	300	50	38700	34300	-4.7	ACIDO	0.22
3161	MM-527	210.9	216.8	300	50	38600	15500	-2.1	ACIDO	0.11
3162	MM-527	258.6	265.1	400	50	41100	37600	-5.1	ACIDO	0.10
3163	MM-528	0.0	6.5	1600	200	37200	34100	-4.6	ACIDO	1.79
3164	MM-528	6.5	12.6	1300	200	42400	39500	-5.3	ACIDO	0.34
3165	MM-528	12.6	18.6	1800	200	35400	32800	-4.4	ACIDO	0.41
3166	MM-528	18.6	23.0	1700	300	27300	25400	-3.4	ACIDO	0.47
3167	MM-528	23.0	29.0	1300	300	36300	34300	-4.6	ACIDO	0.21
3168	MM-528	29.0	35.0	1100	200	35300	33300	-4.5	ACIDO	0.18
3169	MM-528	35.0	41.0	1200	200	32200	30600	-4.1	ACIDO	0.15
3170	MM-528	41.0	47.0	1300	200	25700	24000	-3.2	ACIDO	0.16
3171	MM-528	47.0	54.1	1100	200	38800	35500	-4.8	ACIDO	0.24
3172	MM-528	60.0	66.0	700	100	34700	31400	-4.3	ACIDO	0.12
3173	MM-528	66.0	72.0	500	200	46300	37500	-5.1	ACIDO	0.21
3174	MM-528	72.0	78.0	500	200	64700	51300	-7.0	ACIDO	0.33
3175	MM-528	78.0	84.0	600	200	50900	41800	-5.7	ACIDO	0.42
3176	MM-528	84.0	90.9	700	300	49700	43300	-5.8	ACIDO	0.58
3177	MM-528	90.9	95.6	1000	300	66300	35400	-4.7	ACIDO	0.73
3178	MM-528	95.6	102.4	500	200	64800	27200	-3.7	ACIDO	0.34
3179	MM-528	102.4	108.0	400	200	65800	23200	-3.1	ACIDO	0.10
3180	MM-528	108.0	113.9	400	200	66700	27100	-3.6	ACIDO	0.14
3181	MM-528	113.9	119.5	400	100	63900	22700	-3.1	ACIDO	0.44
3182	MM-528	119.5	126.4	600	100	65600	24700	-3.3	ACIDO	0.38
3183	MM-528	126.4	132.5	200	100	68600	30400	-4.1	ACIDO	0.70
3184	MM-528	132.5	138.5	600	100	69600	37300	-5.1	ACIDO	0.51
3185	MM-528	138.5	144.0	200	200	71500	38700	-5.2	ACIDO	0.64
3186	MM-528	144.0	150.0	800	100	39100	32700	-4.4	ACIDO	0.37
3187	MM-528	150.0	156.0	800	100	44100	38500	-5.2	ACIDO	0.44
3188	MM-528	156.0	162.0	1100	50	40900	34000	-4.6	ACIDO	0.38
3189	MM-528	162.0	168.9	800	100	33700	30700	-4.2	ACIDO	0.60
3190	MM-528	168.9	174.1	300	50	66800	48700	-6.7	ACIDO	0.26
3191	MM-528	174.1	180.0	400	50	87100	57000	-7.8	ACIDO	0.39
3192	MM-528	180.0	186.2	400	50	93100	68000	-9.3	ACIDO	0.38
3193	MM-528	186.2	192.0	600	100	92800	73200	-10.0	ACIDO	0.31
3194	MM-528	192.0	200.1	400	100	86600	67100	-9.2	ACIDO	0.21
3195	MM-529	4.4	9.5	800	100	65200	13800	-1.9	ACIDO	0.14
3196	MM-529	57.6	64.4	300	50	70000	20900	-2.8	ACIDO	0.12
3197	MM-529	64.4	70.0	800	50	35200	15800	-2.1	ACIDO	0.13
3198	MM-529	70.0	76.8	500	50	42700	20500	-2.8	ACIDO	0.11
3199	MM-529	81.1	86.6	200	50	400	100	0.0	INERTE	0.16
3200	MM-529	86.6	93.0	300	50	300	100	0.0	INERTE	0.10
3201	MM-529	100.0	106.7	400	50	400	100	0.0	INERTE	0.10
3202	MM-529	106.7	112.5	300	50	300	100	0.0	INERTE	0.14
3203	MM-529	118.9	124.5	200	50	300	100	0.0	INERTE	0.12
3204	MM-529	124.5	130.0	200	50	300	100	0.0	INERTE	0.15
3205	MM-529	142.5	148.3	300	50	3500	2000	-0.3	LIGERAMENTE ACIDO	0.13
3206	MM-529	153.9	160.5	200	50	19200	9500	-1.3	ACIDO	0.11
3207	MM-529	166.6	172.6	200	50	27600	12100	-1.6	ACIDO	0.19
3208	MM-529	195.5	201.6	300	50	26400	12700	-1.7	ACIDO	0.11
3209	MM-530	22.5	28.5	1800	100	36200	34800	-4.7	ACIDO	0.39
3210	MM-530	28.5	34.5	900	50	43400	39700	-5.4	ACIDO	0.35
3211	MM-530	34.5	39.5	1100	400	43100	40500	-5.4	ACIDO	0.34
3212	MM-530	39.5	45.5	1000	50	42400	38500	-5.3	ACIDO	0.48
3213	MM-530	45.5	52.0	800	100	34400	32400	-4.4	ACIDO	0.50
3214	MM-530	52.0	57.8	900	50	31500	29400	-4.0	ACIDO	0.72
3215	MM-530	57.8	64.0	1000	50	25900	24700	-3.4	ACIDO	1.27
3216	MM-530	64.0	69.0	1000	100	25600	24400	-3.3	ACIDO	0.44
3217	MM-530	69.0	75.0	700	50	23600	22400	-3.1	ACIDO	0.45
3218	MM-530	75.0	81.0	800	50	25300	24300	-3.3	ACIDO	0.41
3219	MM-530	81.0	87.5	1100	50	33500	32100	-4.4	ACIDO	0.74
3220	MM-530	87.5	93.5	1000	50	43900	42600	-5.8	ACIDO	1.80
3221	MM-530	93.5	99.5	600	50	41000	39400	-5.4	ACIDO	0.69
3222	MM-530	99.5	105.0	800	50	42800	39900	-5.4	ACIDO	0.97
3223	MM-530	105.0	112.1	1100	50	43200	41400	-5.7	ACIDO	1.10
3224	MM-530	112.1	117.8	1200	50	35100	33700	-4.6	ACIDO	0.23
3225	MM-530	117.8	124.5	1000	50	37300	35500	-4.8	ACIDO	0.18
3226	MM-530	124.5	130.5	1000	50	40700	38800	-5.3	ACIDO	0.30
3227	MM-530	130.5	135.4	900	50	33300	31400	-4.3	ACIDO	0.55
3228	MM-530	135.4	142.5	900	50	41400	37400	-5.1	ACIDO	0.95
3229	MM-530	142.5	147.0	400	50	61600	33200	-4.5	ACIDO	0.23
3230	MM-530	147.0	154.0	400	50	62800	41200	-5.6	ACIDO	0.24
3231	MM-530	154.0	159.8	300	50	73900	47600	-6.5	ACIDO	0.20
3232	MM-530	159.8	165.3	400	50	79700	55700	-7.6	ACIDO	0.19
3233	MM-530	165.3	172.4	700	50	55100	43600	-6.0	ACIDO	0.59
3234	MM-530	172.4	178.5	500	50	68800	50600	-6.9	ACIDO	0.36
3235	MM-530	178.5	185.0	600	50	74600	58400	-8.0	ACIDO	0.47
3236	MM-530	185.0	191.3	400	50	74900	54700	-7.5	ACIDO	0.71
3237	MM-530	191.3	197.0	500	50	80300	55400	-7.6	ACIDO	0.47
3238	MM-530	197.0	204.9	900	50	55700	45000	-6.1	ACIDO	0.26
3239	MM-531	17.1	22.0	3200	50	38100	36600	-5.0	ACIDO	0.53
3240	MM-531	22.0	28.0	1900	50	42200	40100	-5.5	ACIDO	0.27
3241	MM-531	28.0	33.5	3100	50	43900	41700	-5.7	ACIDO	0.23
3242	MM-531	33.5	40.7	2000	50	39100	37000	-5.1	ACIDO	0.32

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
3243	MM-531	40.7	47.0	1900	50	42200	40200	-5.5	ACIDO	0.85
3244	MM-531	47.0	53.0	1800	50	35500	33200	-4.5	ACIDO	0.47
3245	MM-531	53.0	58.8	1500	50	43600	38600	-5.3	ACIDO	0.21
3246	MM-531	112.5	117.5	2100	50	38800	37100	-5.1	ACIDO	0.15
3247	MM-531	117.5	124.4	1200	50	45900	42200	-5.8	ACIDO	0.31
3248	MM-531	124.4	130.0	1400	50	60900	50000	-6.8	ACIDO	0.41
3249	MM-531	130.0	135.8	700	50	80100	53100	-7.3	ACIDO	0.41
3250	MM-531	135.8	141.9	800	50	83300	57900	-7.9	ACIDO	0.34
3251	MM-531	141.9	150.1	1200	50	47700	42100	-5.7	ACIDO	0.20
3252	MM-532	70.8	75.0	400	50	2300	600	-0.1	INERTE	1.45
3253	MM-532	75.0	81.0	400	100	1600	800	-0.1	NEUTRAL	1.10
3254	MM-532	81.0	87.5	300	50	22600	21700	-3.0	ACIDO	1.17
3255	MM-532	87.5	94.3	500	100	87200	85400	-11.7	ACIDO	0.32
3256	MM-532	94.3	100.5	400	50	42700	40600	-5.5	ACIDO	0.34
3257	MM-532	100.5	106.5	1400	50	45500	44600	-6.1	ACIDO	0.52
3258	MM-532	106.5	112.5	500	50	48500	47300	-6.5	ACIDO	0.54
3259	MM-532	112.5	118.5	500	50	52900	51500	-7.0	ACIDO	0.41
3260	MM-532	118.5	124.5	300	50	48100	42900	-5.9	ACIDO	0.77
3261	MM-532	124.5	130.9	2000	50	49900	48100	-6.6	ACIDO	0.37
3262	MM-532	130.9	136.2	2400	100	55500	52300	-7.1	ACIDO	0.24
3263	MM-532	136.2	142.9	400	50	66500	53300	-7.3	ACIDO	0.35
3264	MM-532	142.9	148.5	600	50	55700	48800	-6.7	ACIDO	0.26
3265	MM-532	148.5	154.7	1100	50	61900	59900	-8.2	ACIDO	0.10
3266	MM-532	154.7	160.5	1200	50	41000	39200	-5.4	ACIDO	0.12
3267	MM-532	184.5	190.5	1100	50	40500	39000	-5.3	ACIDO	0.10
3268	MM-532	190.5	196.9	700	50	33800	32400	-4.4	ACIDO	0.31
3269	MM-532	196.9	203.0	500	50	28000	25800	-3.5	ACIDO	0.30
3270	MM-532	203.0	209.0	500	50	29400	28500	-3.9	ACIDO	0.19
3271	MM-532	209.0	213.0	400	50	32500	31600	-4.3	ACIDO	0.21
3272	MM-532	213.0	217.9	200	50	30200	29300	-4.0	ACIDO	0.11
3273	MM-533	24.0	30.0	800	200	38600	36300	-4.9	ACIDO	0.18
3274	MM-533	30.0	36.0	1200	200	46400	43700	-5.9	ACIDO	0.46
3275	MM-533	36.0	42.0	1200	200	30000	28400	-3.8	ACIDO	0.46
3276	MM-533	42.0	48.0	1000	200	22200	21000	-2.8	ACIDO	0.31
3277	MM-533	48.0	54.0	800	200	51000	47500	-6.4	ACIDO	0.75
3278	MM-533	54.0	60.0	1200	200	38100	35800	-4.8	ACIDO	0.46
3279	MM-533	60.0	66.0	1200	200	47500	44700	-6.1	ACIDO	0.45
3280	MM-533	66.0	72.0	600	100	46900	44700	-6.1	ACIDO	0.18
3281	MM-533	72.0	78.0	1200	200	35700	33500	-4.5	ACIDO	0.70
3282	MM-533	103.0	106.9	400	100	78600	46900	-6.4	ACIDO	0.51
3283	MM-534	1.3	7.0	400	100	47000	32600	-4.4	ACIDO	0.57
3284	MM-534	7.0	13.0	700	50	54900	52200	-7.1	ACIDO	1.15
3285	MM-534	13.0	19.0	1900	600	38000	36500	-4.8	ACIDO	0.45
3286	MM-534	19.0	24.5	1900	50	22100	21000	-2.9	ACIDO	1.21
3287	MM-534	24.5	30.5	1200	100	54600	53000	-7.2	ACIDO	0.79
3288	MM-534	30.5	37.0	1300	50	47800	45500	-6.2	ACIDO	1.68
3289	MM-534	37.0	42.7	900	200	36000	32700	-4.4	ACIDO	1.32
3290	MM-534	42.7	48.5	500	100	47700	42400	-5.8	ACIDO	1.85
3291	MM-534	48.5	54.0	500	100	48300	37600	-5.1	ACIDO	1.03
3292	MM-534	54.0	60.7	300	200	70400	45100	-6.1	ACIDO	0.81
3293	MM-534	60.7	67.0	400	100	96500	65600	-9.0	ACIDO	1.13
3294	MM-534	67.0	72.2	700	200	27200	25200	-3.4	ACIDO	1.99
3295	MM-534	72.2	78.5	600	200	37900	31600	-4.3	ACIDO	1.16
3296	MM-534	78.5	84.5	1200	50	59400	44800	-6.1	ACIDO	1.07
3297	MM-534	84.5	89.6	600	50	33500	23500	-3.2	ACIDO	0.51
3298	MM-534	89.6	96.3	400	100	40400	30600	-4.2	ACIDO	0.79
3299	MM-534	96.3	102.0	300	50	52500	40300	-5.5	ACIDO	0.75
3300	MM-534	102.0	109.0	1000	50	24700	19600	-2.7	ACIDO	0.86
3301	MM-534	109.0	114.0	700	50	44500	39700	-5.4	ACIDO	1.15
3302	MM-534	114.0	119.5	800	50	32400	27500	-3.7	ACIDO	1.18
3303	MM-534	119.5	127.0	700	50	43200	36000	-4.9	ACIDO	0.66
3304	MM-534	127.0	132.5	600	50	40800	35300	-4.8	ACIDO	0.37
3305	MM-534	132.5	140.2	400	50	65300	45800	-6.3	ACIDO	0.25
3306	MM-534	143.8	150.0	1000	50	50200	41600	-5.7	ACIDO	0.61
3307	MM-534	150.0	156.5	400	50	59000	47200	-6.4	ACIDO	0.40
3308	MM-534	156.5	162.9	600	50	44700	35200	-4.8	ACIDO	0.44
3309	MM-534	162.9	169.0	600	50	51800	45500	-6.2	ACIDO	0.27
3310	MM-534	169.0	175.0	600	50	58200	45900	-6.3	ACIDO	0.25
3311	MM-534	175.0	181.0	700	50	66600	50900	-7.0	ACIDO	0.35
3312	MM-534	181.0	187.0	800	400	55900	44100	-5.9	ACIDO	0.19
3313	MM-534	187.0	193.0	800	50	49000	38200	-5.2	ACIDO	0.15
3314	MM-534	193.0	199.0	800	100	39200	28900	-3.9	ACIDO	0.19
3315	MM-534	199.0	203.9	700	50	28800	21700	-3.0	ACIDO	0.18
3316	MM-534	203.9	209.7	900	50	44300	34500	-4.7	ACIDO	0.15
3317	MM-534	209.7	215.5	700	100	52400	43800	-6.0	ACIDO	0.21
3318	MM-534	215.5	221.5	800	50	57400	45900	-6.3	ACIDO	0.20
3319	MM-534	221.5	227.5	800	100	69100	58300	-8.0	ACIDO	0.57
3320	MM-534	227.5	233.2	500	50	53200	42800	-5.8	ACIDO	0.25
3321	MM-534	233.2	240.0	700	50	60600	36300	-5.0	ACIDO	0.15
3322	MM-534	240.0	246.8	700	200	55400	48800	-6.6	ACIDO	0.18
3323	MM-534	246.8	252.5	700	50	44500	38500	-5.3	ACIDO	0.12
3324	MM-534	258.9	264.0	1100	200	39500	34300	-4.6	ACIDO	0.11
3325	MM-534	264.0	269.2	700	50	53200	44700	-6.1	ACIDO	0.16
3326	MM-534	269.2	275.5	1100	600	39100	37200	-4.9	ACIDO	0.13
3327	MM-534	275.5	281.5	800	50	46800	42500	-5.8	ACIDO	0.10
3328	MM-534	294.5	300.5	1000	200	29600	26300	-3.5	ACIDO	0.12
3329	MM-534	300.5	305.0	400	200	36900	29000	-3.9	ACIDO	0.14
3330	MM-535	0.0	6.5	1900	100	17500	14800	-2.0	ACIDO	0.28
3331	MM-535	6.5	11.5	1800	100	14800	12900	-1.7	ACIDO	0.56
3332	MM-535	11.5	17.0	3500	50	24200	21800	-3.0	ACIDO	0.30
3333	MM-535	17.0	24.0	1400	100	33500	31200	-4.2	ACIDO	0.29
3334	MM-535	24.0	29.4	1300	300	49400	46500	-6.3	ACIDO	0.63
3335	MM-535	29.4	36.0	900	200	34900	31800	-4.3	ACIDO	0.36
3336	MM-535	36.0	42.5	600	100	34000	31700	-4.3	ACIDO	0.54
3337	MM-535	42.5	48.5	700	100	34600	32100	-4.4	ACIDO	0.28
3338	MM-535	48.5	54.5	700	50	42200	36000	-4.9	ACIDO	0.33
3339	MM-535	54.5	60.3	1600	50	37700	35900	-4.9	ACIDO	1.04
3340	MM-535	60.3	66.5	1000	100	33400	31600	-4.3	ACIDO	0.94
3341	MM-535	66.5	72.5	900	100	31900	29500	-4.0	ACIDO	0.73
3342	MM-535	72.5	78.8	800	200	35200	33500	-4.5	ACIDO	0.59
3343	MM-535	78.8	84.5	500	100	33100	29300	-4.0	ACIDO	0.27
3344	MM-535	84.5	90.5	1000	100	41700	40800	-5.6	ACIDO	0.38
3345	MM-535	90.5	96.5	900	50	40800	39800	-5.4	ACIDO	0.54
3346	MM-535	96.5	102.5	1400	200	25300	24000	-3.2	ACIDO	0.42
3347	MM-535	102.5	108.5	1200	50	35700	33900	-4.6	ACIDO	0.55
3348	MM-535	108.5	114.0	900	200	31000	29800	-4.0	ACIDO	0.57
3349	MM-535	114.0	120.0	1000	100	29200	28100	-3.8	ACIDO	0.57
3350	MM-535	120.0	126.0	1100	100	35700	34500	-4.7	ACIDO	0.34
3351	MM-535	126.0	131.2	1000	50	37500	36100	-4.9	ACIDO	0.25
3352	MM-535	131.2	138.4	1000	50	33200	29600	-4.0	ACIDO	0.19
3353	MM-535	138.4	144.0	1000	500	37200	36200	-4.8	ACIDO	0.26
3354	MM-535	144.0	150.6	1000	500	36700	35500	-4.7	ACIDO	0.87
3355	MM-536	0.0	5.2	1700	100	6000	4300	-0.6	LIGERAMENTE ACIDO	0.19
3356	MM-536	5.2	11.5	2100	100	10500	9000	-1.2	ACIDO	0.30
3357	MM-536	11.5	17.6	1600	200	7400	6400	-0.8	LIGERAMENTE ACIDO	0.37
3358	MM-536	17.6	23.0	700	300	54600	52800	-7.1	ACIDO	1.61
3359	MM-536	23.0	30.3	1500	200	7900	7200	-0.9	LIGERAMENTE ACIDO	0.69
3360	MM-536	30.3	36.0	1800	100	8900	8200	-1.1	ACIDO	0.62
3361	MM-536	36.0	42.2	1400	400	24400	23600	-3.1	ACIDO	2.79
3362	MM-536	42.2	48.0	2200	400	10700	9800	-1.2	ACIDO	1.26
3363	MM-536	48.0	51.3	1100	300	21800	21000	-2.8	ACIDO	0.58
3364	MM-536	52.3	58.5	700	300	36700	36100	-4.8	ACIDO	0.86
3365	MM-536	58.5	65.3	1100	200	52000	49800	-6.7	ACIDO	1.35
3366	MM-536	65.3	71.5	1800	100	58000	48000	-6.5	ACIDO	0.70
3367	MM-536	71.5	77.5	1500	100	42900	36200	-4.9	ACIDO	0.73
3368	MM-536	77.5	83.6	600	300	58400	45900	-6.2	ACIDO	0.79
3369	MM-536	83.6	88.1	500	100	77900	52500	-7.2	ACIDO	0.92
3370	MM-536	88.1	93.5	400	100	82100	48000	-6.5	ACIDO	0.37
3371	MM-536	93.5	100.5	400	50	76800	49900	-6.8	ACIDO	1.53
3372	MM-536	100.5	106.0	300	50	61300	42200	-5.8	ACIDO	3.96
3373	MM-536	106.0	112.0	500	200	49700	37900	-5.1	ACIDO	1.15
3374	MM-536	112.0	118.1	500	50	63600	44200	-6.0	ACIDO	2.19
3375	MM-536	118.1	124.0	1200	50	45400	43500	-5.9	ACIDO	2.46
3376	MM-536	124.0	130.0	1600	100	55100	53100	-7.2	ACIDO	1.42
3377	MM-536	130.0	136.3	700	200	72700	60800	-8.3	ACIDO	0.97
3378	MM-536	136.3	141.0	800	100	50400	47800	-6.5	ACIDO	0.31
3379	MM-536	141.0	147.7	1100	50	54700	48400	-6.6	ACIDO	0.70
3380	MM-536	147.7	154.5	1200	100	49000	46600	-6.3	ACIDO	1.11
3381	MM-536	154.5	160.7	1400	100	53600	51300	-7.0	ACIDO	2.16
3382	MM-536	160.7	165.5	1100	50	53500	49900	-6.8	ACIDO	1.47
3383	MM-536	165.5	171.7	700	50	55100	49200	-6.7	ACIDO	2.01
3384	MM-536	171.7	178.0	1200	50	47100	41700	-5.7	ACIDO	0.24
3385	MM-536	178.0	183.0	1100	100	44900	43300	-5.9	ACIDO	0.59
3386	MM-536	183.0	186.0	1200	100	40000	37000	-5.0	ACIDO	0.19
3387	MM-537	9.2	14.8	600	500	33700	32800	-4.3	ACIDO	2.58
3388	MM-537	14.8	21.0	400	400	38500	35600	-4.7	ACIDO	4.68
3389	MM-537	21.0	27.0	400	400	28100	26100	-3.4	ACIDO	3.17
3390	MM-537	27.0	32.5	400	400	18200	17400	-2.2	ACIDO	1.31
3391	MM-537	32.5	38.8	300	300	28500	27700	-3.7	ACIDO	2.26
3392	MM-537	38.8	45.0	400	400	39800	38500	-5.1	ACIDO	3.17
3393	MM-537	45.0	51.4	400	400	29900	29200	-3.9	ACIDO	2.98
3394	MM-537	51.4	56.3	400	400	33600	32200	-4.3	ACIDO	3.84
3395	MM-537	56.3	63.0	300	300	35100	34200	-4.6	ACIDO	2.42
3396	MM-537	63.0	69.7	400	300	86300	83500	-11.3	ACIDO	3.56
3397	MM-537	69.7	75.0	400	400	43800	42200	-5.6	ACIDO	1.11
3398	MM-537	75.0	80.0	400	400	42300	40900	-5.5	ACIDO	1.08
3399	MM-537	80.0	86.0	400	400	61000	58700	-7.9	ACIDO	2.12
3400	MM-537	86.0	92.0	400	200	61400	60300	-8.2	ACIDO	1.32
3401	MM-537	92.0	98.0	400	300	73700	72700	-9.8	ACIDO	2.68
3402	MM-537	98.0	104.2	300	300	53000	52600	-7.1	ACIDO	1.99
3403	MM-537	104.2	111.9	500	400	65800	65400	-8.8	ACIDO	1.63
3404	MM-537	111.9	118.0	400	300	116100	115400	-15.7	ACIDO	1.62
3405	MM-537	118.0	123.0	600	400	73200	70900	-9.6	ACIDO	1.18
3406	MM-537	123.0	128.1	1300	500	49700	45100	-6.0	ACIDO	0.64
3407	MM-537	128.1	134.7	1100	600	41500	39200	-5.2	ACIDO	1.26
3408	MM-537	134.7	140.2	400	300	133000	131000	-17.8	ACIDO	0.97
3409	MM-537	140.2	146.5	1100	500	69200	64600	-8.7	ACIDO	0.59
3410	MM-537	164.7	171.0	2000	500	43700	40200	-5.3	ACIDO	0.15
3411	MM-537	171.0	177.0	1700	700	26500	24700	-3.1	ACIDO	0.11
3412	MM-537	188.8	195.0	1200	1000	55800	52300	-6.8	ACIDO	0.18
3413	MM-537	212.0	217.5	400	300	75500	75200	-10.2	ACIDO	0.14
3414	MM-537	217.5	224.5	400	50	100600	99400	-13.6	ACIDO	0.21
3415	MM-537	224.5	230.5	400	300	87700	83700	-11.4	ACIDO	0.25
3416	MM-537	230.5	235.5	600	400	95600	85900	-11.6	ACIDO	0.42
3417	MM-537	235.5	241.0	800	600	51000	40700	-5.4	ACIDO	0.15
3418	MM-538	24.0	29.3	1400	300	40700	36600	-4.9	ACIDO	0.25
3419	MM-538	29.3	36.0	1200	100	44400	42700	-5.8	ACIDO	0.35
3420	MM-538	36.0	42.0	1300	100	33400	32300	-4.4	ACIDO	0.36
3421	MM-538	42.0	48.0	900	50	36300	35300	-4.8	ACIDO	0.36
3422	MM-538	48.0	53.0	1300	200	29900	28900	-3.9	ACIDO	0.43
3423	MM-538	53.0	59.0	1400	100	27800	26000	-3.5	ACIDO	0.44
3424	MM-538	59.0	64.6	1500	50	36500	34400	-4.7	ACIDO	0.71
3425	MM-538	64.6	71.0	1400	200	26500	25100	-3.4	ACIDO	0.64
3426	MM-538	71.0	77.0	2000	50	32300	30900	-4.2	ACIDO	0.42
3427	MM-538	77.0	83.0	1200	100	37800	36100	-4.9	ACIDO	0.79
3428	MM-538	83.0	88.0	800	100	29800	27600	-3.7	ACIDO	0.64
3429	MM-538	88.0	94.5	1500	50	27800	26500	-3.6	ACIDO	0.88
3430	MM-538	94.5	99.5	1900	50	35300	33700	-4.6	ACIDO	1.27
3431	MM-538	99.5	105.7	1100	50	36200	35100	-4.8	ACIDO	0.88
3432	MM-538	105.7	112.5	1000	100	51800	50200	-6.8	ACIDO	0.55
3433	MM-538	112.5	118.5	1100	100	51700	49600	-6.8	ACIDO	0.27
3434	MM-538	118.5	124.5	1300	100	44500	42600	-5.8	ACIDO	1.36
3435	MM-538	124.5	129.5	1900	100	28700	27500	-3.7	ACIDO	2.34
3436	MM-538	129.5	136.4	1400	300	41500	40100	-5.4	ACIDO	1.72
3437	MM-538	136.4	143.2	1100	100	39000	37000	-5.0	ACIDO	0.81
3438	MM-538	143.2	148.0	1200	600	41700	38200	-5.0	ACIDO	0.93
3439	MM-538	148.0	154.0	900	200	43900	42400	-5.7	ACIDO	0.42
3440	MM-538	154.0	160.0	1000	100	35200	33900	-4.6	ACIDO	0.32
3441	MM-539	7.3	12.0	800	100	13300	9400	-1.3	ACIDO	1.45
3442	MM-539	12.0	18.2	200	50	600	200	0.0	INERTE	2.24
3443	MM-539	18.2	24.0	700	200	1500	600	0.0	INERTE	2.93
3444	MM-539	24.0	30.1	700	50	12300	11500	-1.6	ACIDO	2.27
3445	MM-539	30.1	36.3	200	50	2300	1800	-0.2	LIGERAMENTE ACIDO	1.79
3446	MM-539	36.3	42.7	200	50	6100	5700	-0.8	LIGERAMENTE ACIDO	1.65
3447	MM-539	42.7	48.4	400	100	27800	27300	-3.7	ACIDO	2.50
3448	MM-539	48.4	53.5	700	100	1500	800	-0.1	NEUTRAL	2.06
3449	MM-539	53.5	59.4	400	50	3900	3500	-0.5	LIGERAMENTE ACIDO	0.92
3450	MM-539	59.4	66.5	400	50	30400	29900	-4.1	ACIDO	1.11
3451	MM-539	66.5	73.0	700	100	105700	104900	-14.3	ACIDO	3.29
3452	MM-539	73.0	78.6	500	200	77100	76300	-10.4	ACIDO	2.51
3453	MM-539	78.6	83.5	300	50	38800	38600	-5.3	ACIDO	0.50
3454	MM-539	83.5	89.5	500	50	35600	35200	-4.8	ACIDO	1.53
3455	MM-539	89.5	95.3	500	100	49700	49300	-6.7	ACIDO	1.88
3456	MM-539	95.3	101.6	500	50	2600	2200	-0.3	LIGERAMENTE ACIDO	2.26
3457	MM-539	101.6	108.0	500	50	6000	5600	-0.7	LIGERAMENTE ACIDO	1.85
3458	MM-539	108.0	113.0	500	50	300	200	0.0	INERTE	0.92
3459	MM-539	113.0	119.0	600	100	1400	900	-0.1	NEUTRAL	1.62
3460	MM-539	119.0	125.1	600	50	10600	9600	-1.3	ACIDO	1.24
3461	MM-539	125.1	132.7	500	50	1200	500	-0.1	INERTE	0.40
3462	MM-539	132.7	138.5	600	50	13900	12200	-1.7	ACIDO	0.42
3463	MM-539	138.5	144.2	400	50	51800	42500	-5.8	ACIDO	0.25
3464	MM-539	150.0	155.5	300	50	98800	91900	-12.6	ACIDO	0.64
3465	MM-539	155.5	162.0	300	50	75800	53200	-7.3	ACIDO	0.25
3466	MM-539	162.0	168.2	500	50	71800	34500	-4.7	ACIDO	0.15
3467	MM-539	168.2	174.7	500	50	47300	32200	-4.4	ACIDO	0.24
3468	MM-539	174.7	179.5	400	50	77600	45900	-6.3	ACIDO	0.22
3469	MM-539	179.5	186.5	400	50	56700	43500	-5.9	ACIDO	0.13
3470	MM-539	186.5	192.0	500	50	65700	49100	-6.7	ACIDO	0.11
3471	MM-539	192.0	197.3	600	50	63400	49900	-6.8	ACIDO	0.11
3472	MM-540	14.1	20.4	700	200	2400	800	0.0	NEUTRAL	0.22
3473	MM-540	20.4	26.6	800	100	2200	800	-0.1	NEUTRAL	0.46
3474	MM-540	26.6	32.0	1000	50	2200	600	-0.1	INERTE	0.37
3475	MM-540	32.0	37.5	900	200	1900	400	0.0	INERTE	0.15
3476	MM-540	37.5	43.5	1000	50	2200	700	-0.1	INERTE	0.27
3477	MM-540	43.5	50.7	700	200	20800	19600	-2.6	ACIDO	1.01
3478	MM-540	50.7	56.0	1500	50	55600	52600	-7.2	ACIDO	1.00
3479	MM-540	56.0	61.7	900	50	55900	48600	-6.6	ACIDO	1.03
3480	MM-540	61.7	67.7	1300	50	55400	44100	-6.0	ACIDO	2.07
3481	MM-540	67.7	73.5	500	50	68100	55500	-7.6	ACIDO	1.58
3482	MM-540	73.5	79.5	600	500	64800	45500	-6.1	ACIDO	2.70
3483	MM-540	79.5	86.0	900	50	58200	45900	-6.3	ACIDO	1.30
3484	MM-540	86.0	91.6	1300	50	53200	50700	-6.9	ACIDO	0.77
3485	MM-540	91.6	98.8	500	100	72300	47300	-6.4	ACIDO	0.47
3486	MM-540	98.8	103.4	600	50	75100	57400	-7.8	ACIDO	0.86
3487	MM-540	103.4	110.3	600	100	78200	63100	-8.6	ACIDO	1.06
3488	MM-540	110.3	116.0	700	50	51600	48900	-6.7	ACIDO	1.22
3489	MM-540	116.0	121.6	700	50	53900	43700	-6.0	ACIDO	2.46
3490	MM-540	121.6	128.2	500	50	71200	47900	-6.5	ACIDO	1.06
3491	MM-540	128.2	134.4	500	50	68200	47400	-6.5	ACIDO	1.36
3492	MM-540	134.4	140.0	1000	50	63400	57800	-7.9	ACIDO	1.89
3493	MM-540	140.0	145.7	800	200	71600	65100	-8.8	ACIDO	2.05
3494	MM-540	145.7	151.0	800	50	59900	55200	-7.5	ACIDO	1.76
3495	MM-540	151.0	158.2	900	100	52700	48600	-6.6	ACIDO	0.83
3496	MM-540	158.2	164.5	900	100	61800	46400	-6.3	ACIDO	0.83
3497	MM-540	164.5	170.3	400	50	53800	42600	-5.8	ACIDO	0.52
3498	MM-540	170.3	176.1	500	50	65100	36500	-5.0	ACIDO	0.46
3499	MM-540	182.5	188.5	300	50	75900	35500	-4.8	ACIDO	0.29
3500	MM-540	188.5	194.1	200	50	73300	35300	-4.8	ACIDO	0.15
3501	MM-540	194.1	200.9	500	200	79800	42600	-5.8	ACIDO	0.29
3502	MM-541	0.0	5.9	600	50	5400	3100	-0.4	LIGERAMENTE ACIDO	0.16
3503	MM-541	5.9	12.0	1300	50	13700	6800	-0.9	LIGERAMENTE ACIDO	0.15
3504	MM-541	12.0	18.0	400	50	200	0	0.0	INERTE	0.13
3505	MM-541	18.0	24.0	200	50	200	0	0.0	INERTE	0.13
3506	MM-541	24.0	30.0	300	50	200	100	0.0	INERTE	0.12
3507	MM-541	30.0	36.0	200	50	200	100	0.0	INERTE	0.14
3508	MM-541	36.0	42.0	300	50	400	200	0.0	INERTE	0.12
3509	MM-541	54.0	60.0	300	50	200	100	0.0	INERTE	0.10
3510	MM-541	60.0	66.5	300	50	200	0	0.0	INERTE	0.10
3511	MM-541	66.5	72.5	500	50	200	100	0.0	INERTE	0.10
3512	MM-541	72.5	79.1	400	50	200	100	0.0	INERTE	0.13
3513	MM-541	79.1	85.0	300	50	300	100	0.0	INERTE	0.18
3514	MM-541	85.0	91.7	300	50	300	100	0.0	INERTE	0.12
3515	MM-541	97.0	103.0	600	50	200	0	0.0	INERTE	0.15
3516	MM-541	103.0	109.0	700	50	300	200	0.0	INERTE	0.17
3517	MM-541	109.0	115.0	900	50	400	300	0.0	INERTE	0.13
3518	MM-541	115.0	122.0	900	50	300	100	0.0	INERTE	0.11
3519	MM-542	11.5	16.4	700	100	100	50	0.0	INERTE	0.23
3520	MM-542	16.4	22.6	400	300	200	150	0.1	NEUTRAL	0.17
3521	MM-542	22.6	28.1	500	100	300	200	0.0	INERTE	0.31
3522	MM-542	28.1	34.6	500	200	300	250	0.0	INERTE	0.37
3523	MM-542	34.6	40.1	400	200	200	100	0.1	INERTE	0.18
3524	MM-542	40.1	46.4	900	500	200	150	0.2	LIGERAMENTE BASICO	0.29
3525	MM-542	46.4	52.0	700	200	200	100	0.1	INERTE	0.20
3526	MM-542	52.0	58.5	400	200	2100	1600	-0.1	LIGERAMENTE ACIDO	0.27
3527	MM-542	58.5	64.5	600	300	200	100	0.1	NEUTRAL	0.27
3528	MM-542	64.5	70.5	400	50	200	150	0.0	INERTE	0.44
3529	MM-542	70.5	76.9	500	200	300	250	0.0	INERTE	0.25
3530	MM-542	76.9	81.6	700	300	200	100	0.1	NEUTRAL	0.31
3531	MM-542	81.6	87.5	1000	300	200	100	0.1	NEUTRAL	0.24
3532	MM-542	87.5	93.5	400	200	100	50	0.1	INERTE	0.29
3533	MM-542	93.5	99.5	1000	300	100	50	0.1	LIGERAMENTE BASICO	0.27
3534	MM-542	99.5	104.9	400	200	200	150	0.1	INERTE	0.15
3535	MM-542	104.9	111.3	400	200	200	100	0.1	INERTE	0.15
3536	MM-542	111.3	117.5	700	200	200	100	0.1	INERTE	0.20
3537	MM-542	117.5	124.1	700	200	200	100	0.1	INERTE	0.18
3538	MM-542	124.1	129.0	300	100	100	50	0.0	INERTE	0.26
3539	MM-542	129.0	135.0	400	100	200	150	0.0	INERTE	0.72
3540	MM-542	135.0	141.0	500	200	200	100	0.1	INERTE	0.31
3541	MM-542	141.0	147.5	900	200	1000	300	0.0	INERTE	1.14
3542	MM-542	147.5	153.5	600	50	300	200	0.0	INERTE	0.62
3543	MM-542	153.5	159.7	600	200	200	100	0.1	INERTE	0.25
3544	MM-542	159.7	165.5	800	100	200	100	0.0	INERTE	0.16
3545	MM-542	165.5	172.5	200	100	200	150	0.0	INERTE	0.23
3546	MM-542	172.5	177.4	400	200	200	100	0.1	INERTE	0.28
3547	MM-542	177.4	183.5	500	300	200	100	0.1	NEUTRAL	0.21
3548	MM-542	183.5	189.5	400	200	300	200	0.0	INERTE	0.12
3549	MM-542	189.5	196.0	300	200	200	100	0.1	INERTE	0.24
3550	MM-542	196.0	202.0	600	400	200	100	0.1	LIGERAMENTE BASICO	0.21
3551	MM-542	202.0	208.5	500	50	300	200	0.0	INERTE	0.17
3552	MM-542	208.5	213.1	200	50	300	100	0.0	INERTE	0.26
3553	MM-542	213.1	220.6	600	100	300	200	0.0	INERTE	0.16
3554	MM-542	220.6	226.5	800	400	300	200	0.1	LIGERAMENTE BASICO	0.14
3555	MM-542	226.5	232.5	700	200	400	300	0.0	INERTE	0.19
3556	MM-542	232.5	238.2	700	50	11600	6700	-0.9	LIGERAMENTE ACIDO	0.16
3557	MM-542	238.2	243.4	600	200	30000	17500	-2.3	ACIDO	0.18
3558	MM-542	243.4	250.5	600	50	31600	21000	-2.9	ACIDO	0.32
3559	MM-542	250.5	256.3	300	50	60700	45500	-6.2	ACIDO	0.40
3560	MM-542	256.3	262.5	500	400	77400	63900	-8.6	ACIDO	0.20
3561	MM-542	262.5	268.0	700	50	57500	46300	-6.3	ACIDO	0.25
3562	MM-542	268.0	274.0	600	50	65400	47600	-6.5	ACIDO	0.30
3563	MM-542	274.0	281.0	600	100	68700	48100	-6.6	ACIDO	0.12
3564	MM-542	281.0	286.5	700	50	64900	48900	-6.7	ACIDO	0.17
3565	MM-542	292.0	300.2	500	300	75200	69000	-9.3	ACIDO	0.23
3566	MM-544	15.9	16.8	1100	50	30900	29400	-4.0	ACIDO	0.35
3567	MM-544	17.2	22.8	1400	50	40500	38500	-5.3	ACIDO	0.35
3568	MM-544	22.8	28.5	1500	50	33400	31200	-4.3	ACIDO	0.44
3569	MM-544	28.5	34.7	1100	50	51300	47800	-6.5	ACIDO	0.40
3570	MM-544	34.7	39.8	600	50	53400	43500	-5.9	ACIDO	0.40
3571	MM-544	39.8	46.5	1400	50	43000	40800	-5.6	ACIDO	0.72
3572	MM-544	46.5	52.0	1200	50	32700	31200	-4.3	ACIDO	0.91
3573	MM-544	52.0	58.0	1000	50	46400	43100	-5.9	ACIDO	0.24
3574	MM-544	58.0	63.5	700	50	70300	67600	-9.2	ACIDO	2.29
3575	MM-544	63.5	69.4	1000	50	39900	37800	-5.2	ACIDO	0.46
3576	MM-544	69.4	75.5	1200	50	48600	44500	-6.1	ACIDO	0.45
3577	MM-544	75.5	82.0	1100	50	39000	37100	-5.1	ACIDO	0.83
3578	MM-544	82.0	89.0	700	50	35800	31600	-4.3	ACIDO	0.87
3579	MM-544	89.0	95.3	1000	50	35100	32300	-4.4	ACIDO	0.94
3580	MM-544	95.3	101.5	700	50	46400	37800	-5.2	ACIDO	0.75
3581	MM-544	101.5	107.8	700	50	43600	37600	-5.1	ACIDO	0.84
3582	MM-544	107.8	111.6	500	50	47600	37900	-5.2	ACIDO	0.60
3583	MM-544	111.6	117.8	800	50	41900	38200	-5.2	ACIDO	1.24
3584	MM-544	117.8	124.3	400	50	63000	49600	-6.8	ACIDO	0.99
3585	MM-544	124.3	129.0	500	50	59400	53700	-7.3	ACIDO	0.58
3586	MM-544	129.0	135.5	600	50	56000	50900	-7.0	ACIDO	0.63
3587	MM-544	135.5	141.1	300	200	62200	53500	-7.3	ACIDO	0.40
3588	MM-544	141.1	147.0	500	50	46100	42600	-5.8	ACIDO	0.32
3589	MM-544	147.0	154.1	500	50	44500	37900	-5.2	ACIDO	0.27
3590	MM-544	154.1	160.7	300	50	20000	12700	-1.7	ACIDO	0.74
3591	MM-544	160.7	165.6	400	50	26600	21500	-2.9	ACIDO	0.50
3592	MM-544	165.6	172.3	600	50	800	300	0.0	INERTE	1.02
3593	MM-544	172.3	178.0	600	50	800	200	0.0	INERTE	0.96
3594	MM-544	178.0	183.3	300	100	300	100	0.0	INERTE	1.66
3595	MM-544	183.3	189.0	400	50	500	100	0.0	INERTE	3.07
3596	MM-544	189.0	196.3	300	50	34500	14500	-2.0	ACIDO	0.34
3597	MM-544	196.3	202.4	700	50	51100	17400	-2.4	ACIDO	0.60
3598	MM-544	202.4	207.1	300	50	44800	16700	-2.3	ACIDO	0.55
3599	MM-544	207.1	214.4	400	50	62600	23200	-3.2	ACIDO	0.29
3600	MM-544	214.4	220.5	400	50	54000	18700	-2.5	ACIDO	0.40
3601	MM-544	220.5	226.5	500	50	58300	26700	-3.6	ACIDO	0.27
3602	MM-544	226.5	231.5	500	50	56600	27200	-3.7	ACIDO	0.32

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
3603	MM-544	231.5	238.1	400	50	48400	20600	-2.8	ACIDO	0.46
3604	MM-544	238.1	244.0	500	50	48600	28200	-3.8	ACIDO	0.12
3605	MM-544	244.0	250.1	400	100	61100	32300	-4.4	ACIDO	0.17
3606	MM-544	255.4	262.5	500	50	40200	31300	-4.3	ACIDO	0.17
3607	MM-544	262.5	267.5	400	100	78200	40900	-5.6	ACIDO	0.61
3608	MM-544	267.5	273.5	300	50	80400	65300	-8.9	ACIDO	0.93
3609	MM-544	273.5	280.0	600	50	59100	52800	-7.2	ACIDO	0.56
3610	MM-544	280.0	286.4	400	50	95900	73200	-10.0	ACIDO	0.37
3611	MM-544	286.4	292.5	400	50	70600	55300	-7.6	ACIDO	0.40
3612	MM-544	292.5	298.0	400	50	82700	60500	-8.3	ACIDO	0.47
3613	MM-544	298.0	304.0	500	50	49900	41500	-5.7	ACIDO	0.56
3614	MM-544	304.0	310.4	500	50	36100	31600	-4.3	ACIDO	0.80
3615	MM-544	310.4	315.6	500	50	36400	30900	-4.2	ACIDO	0.44
3616	MM-545	3.4	9.0	200	100	300	100	0.0	INERTE	1.15
3617	MM-545	9.0	14.9	1100	200	4000	3500	-0.4	LIGERAMENTE ACIDO	0.84
3618	MM-545	14.9	20.4	1400	300	26200	23700	-3.1	ACIDO	0.83
3619	MM-545	20.4	24.5	1100	300	87000	51100	-6.9	ACIDO	0.53
3620	MM-545	26.4	32.4	1100	400	18300	17900	-2.3	ACIDO	2.07
3621	MM-545	32.4	38.6	600	50	112300	111700	-15.3	ACIDO	1.34
3622	MM-545	38.6	44.7	700	300	26500	21700	-2.9	ACIDO	1.31
3623	MM-545	44.7	50.0	2000	300	3200	2200	-0.2	LIGERAMENTE ACIDO	3.90
3624	MM-545	50.0	55.5	2600	300	6100	5000	-0.6	LIGERAMENTE ACIDO	0.22
3625	MM-545	55.5	61.5	1400	300	44500	43400	-5.8	ACIDO	0.48
3626	MM-545	61.5	67.5	100	50	47300	46200	-6.3	ACIDO	0.62
3627	MM-545	67.5	74.6	600	50	20800	17700	-2.4	ACIDO	0.35
3628	MM-545	74.6	79.7	700	50	16400	13500	-1.8	ACIDO	0.29
3629	MM-545	79.7	85.5	900	300	37300	36600	-4.9	ACIDO	0.23
3630	MM-545	85.5	91.2	1300	200	37100	33900	-4.6	ACIDO	0.34
3631	MM-545	91.2	97.5	1300	100	52700	46200	-6.3	ACIDO	0.82
3632	MM-545	97.5	103.5	1700	200	16000	13300	-1.7	ACIDO	1.11
3633	MM-545	103.5	109.5	1600	300	11200	7800	-1.0	LIGERAMENTE ACIDO	2.76
3634	MM-545	109.5	115.5	1700	50	19100	15200	-2.1	ACIDO	2.28
3635	MM-545	115.5	122.5	1100	400	76600	63900	-8.6	ACIDO	3.05
3636	MM-545	122.5	128.4	1600	200	15400	14200	-1.9	ACIDO	0.29
3637	MM-545	128.4	133.8	3000	100	11700	10500	-1.4	ACIDO	0.61
3638	MM-545	133.8	140.7	1800	100	9600	8800	-1.2	ACIDO	0.80
3639	MM-545	140.7	145.0	2000	50	52300	49800	-6.8	ACIDO	0.95
3640	MM-545	145.0	152.5	1500	50	40300	36000	-4.9	ACIDO	1.31
3641	MM-545	152.5	158.8	1000	100	62400	50700	-6.9	ACIDO	1.97
3642	MM-545	158.8	164.4	1300	50	48000	41600	-5.7	ACIDO	1.35
3643	MM-545	164.4	169.5	2700	100	32700	30900	-4.2	ACIDO	0.22
3644	MM-545	169.5	175.6	2200	100	38700	31400	-4.3	ACIDO	1.10
3645	MM-545	175.6	181.2	1200	100	40900	35400	-4.8	ACIDO	0.99
3646	MM-545	181.2	187.5	1100	100	26800	21700	-2.9	ACIDO	1.70
3647	MM-545	187.5	193.0	400	200	54400	42500	-5.7	ACIDO	0.91
3648	MM-545	193.0	199.2	300	100	72500	57200	-7.8	ACIDO	1.34
3649	MM-545	199.2	205.8	300	200	68600	35700	-4.8	ACIDO	0.43
3650	MM-545	205.8	212.0	1400	100	47200	34000	-4.6	ACIDO	0.89
3651	MM-545	212.0	216.0	800	50	47400	39900	-5.4	ACIDO	0.99
3652	MM-545	216.0	221.3	1200	50	57700	50500	-6.9	ACIDO	0.78
3653	MM-546	0.0	6.0	300	200	100	50	0.1	INERTE	0.13
3654	MM-546	6.0	12.1	1000	200	50	0	0.1	INERTE	0.15
3655	MM-546	12.1	18.5	100	50	100	50	0.0	INERTE	0.12
3656	MM-546	18.5	24.5	700	50	100	50	0.0	INERTE	0.14
3657	MM-546	24.5	30.9	600	50	100	50	0.0	INERTE	0.15
3658	MM-546	192.0	198.5	500	400	800	400	0.1	NEUTRAL	0.12
3659	MM-546	204.5	210.2	700	400	6000	3800	-0.4	LIGERAMENTE ACIDO	0.14
3660	MM-546	210.2	216.1	800	500	19700	17600	-2.2	ACIDO	0.20
3661	MM-546	216.1	222.0	1200	600	26200	24800	-3.2	ACIDO	0.25
3662	MM-546	222.0	228.2	900	600	41600	39900	-5.2	ACIDO	0.29
3663	MM-546	228.2	233.5	2100	50	47900	45900	-6.3	ACIDO	0.27
3664	MM-546	233.5	241.0	1300	400	38000	35800	-4.8	ACIDO	0.32
3665	MM-546	241.0	246.3	400	300	21900	14000	-1.8	ACIDO	0.48
3666	MM-546	246.3	251.9	500	100	31000	20400	-2.8	ACIDO	0.18
3667	MM-546	251.9	258.0	400	100	36800	30300	-4.1	ACIDO	0.32
3668	MM-546	258.0	265.0	700	100	53000	45500	-6.2	ACIDO	0.58
3669	MM-546	265.0	271.5	800	200	44200	41400	-5.6	ACIDO	0.50
3670	MM-546	271.5	277.1	600	400	40600	34100	-4.5	ACIDO	0.68
3671	MM-546	277.1	282.7	700	200	31100	26900	-3.6	ACIDO	0.81
3672	MM-546	282.7	288.7	900	50	32700	27800	-3.8	ACIDO	1.45
3673	MM-546	288.7	293.8	700	50	53500	45100	-6.2	ACIDO	0.94
3674	MM-546	293.8	299.0	1100	300	47500	39700	-5.3	ACIDO	0.55
3675	MM-546	299.0	306.1	2200	300	34300	32100	-4.3	ACIDO	0.57
3676	MM-547	5.0	11.5	700	100	1700	1000	-0.1	LIGERAMENTE ACIDO	0.25
3677	MM-547	11.5	18.3	1200	100	18900	17600	-2.4	ACIDO	0.20
3678	MM-547	18.3	24.4	600	50	88000	82200	-11.2	ACIDO	0.16
3679	MM-547	24.4	29.7	500	50	95900	87700	-12.0	ACIDO	0.16
3680	MM-547	29.7	35.5	600	200	75500	66300	-9.0	ACIDO	0.16
3681	MM-547	35.5	41.5	700	50	69700	59600	-8.1	ACIDO	0.15
3682	MM-547	41.5	47.5	700	100	76700	69800	-9.5	ACIDO	0.16
3683	MM-547	47.5	53.5	600	100	67600	58600	-8.0	ACIDO	0.21
3684	MM-547	53.5	59.0	1000	100	68200	59500	-8.1	ACIDO	0.31
3685	MM-547	59.0	66.1	700	100	61200	53400	-7.3	ACIDO	0.22
3686	MM-547	66.1	72.0	700	50	67100	56000	-7.7	ACIDO	0.15
3687	MM-547	72.0	77.0	800	100	70800	63900	-8.7	ACIDO	0.18
3688	MM-547	77.0	83.5	1200	50	66700	58800	-8.0	ACIDO	0.17
3689	MM-547	83.5	89.0	1000	50	64900	59400	-8.1	ACIDO	0.10
3690	MM-548	15.6	21.5	400	50	2200	1600	-0.2	LIGERAMENTE ACIDO	0.29
3691	MM-548	21.5	27.8	300	50	300	250	0.0	INERTE	0.27
3692	MM-548	27.8	33.0	600	50	300	250	0.0	INERTE	0.27
3693	MM-548	33.0	39.0	300	100	300	200	0.0	INERTE	0.34
3694	MM-548	39.0	45.6	500	100	300	200	0.0	INERTE	0.26
3695	MM-548	45.6	50.8	600	100	1100	1000	-0.1	LIGERAMENTE ACIDO	0.26
3696	MM-548	50.8	55.5	400	50	300	200	0.0	INERTE	0.29
3697	MM-548	55.5	61.5	400	100	300	250	0.0	INERTE	0.55
3698	MM-548	61.5	68.2	400	100	300	250	0.0	INERTE	0.34
3699	MM-548	68.2	73.6	400	200	300	250	0.0	INERTE	0.37
3700	MM-548	73.6	80.9	400	50	200	150	0.0	INERTE	0.30
3701	MM-548	80.9	86.0	400	100	400	350	0.0	INERTE	0.40
3702	MM-548	86.0	92.0	300	100	1300	1100	-0.1	LIGERAMENTE ACIDO	0.48
3703	MM-548	92.0	98.9	300	100	300	200	0.0	INERTE	0.34
3704	MM-548	98.9	103.9	300	100	400	350	0.0	INERTE	0.37
3705	MM-548	103.9	110.1	300	200	7100	7000	-0.9	LIGERAMENTE ACIDO	0.50
3706	MM-548	110.1	116.0	400	50	1300	1200	-0.1	LIGERAMENTE ACIDO	0.26
3707	MM-548	116.0	122.0	500	300	8400	8200	-1.0	ACIDO	0.19
3708	MM-548	122.0	128.0	500	100	12800	12600	-1.7	ACIDO	0.16
3709	MM-548	128.0	134.4	400	100	12400	12300	-1.6	ACIDO	0.35
3710	MM-548	134.4	141.0	500	50	3500	3200	-0.4	LIGERAMENTE ACIDO	0.21
3711	MM-548	141.0	146.0	400	50	12700	12600	-1.7	ACIDO	0.19
3712	MM-548	146.0	151.8	400	100	33500	33400	-4.5	ACIDO	0.16
3713	MM-548	151.8	158.4	300	100	4800	4700	-0.6	LIGERAMENTE ACIDO	0.20
3714	MM-548	158.4	164.9	400	50	17700	17600	-2.4	ACIDO	0.19
3715	MM-548	171.0	176.7	300	100	31300	31200	-4.2	ACIDO	0.14
3716	MM-548	189.0	194.1	600	50	38300	38100	-5.2	ACIDO	0.13
3717	MM-548	194.1	200.1	400	50	16900	16800	-2.3	ACIDO	0.32
3718	MM-548	200.1	206.6	400	200	13600	13500	-1.8	ACIDO	0.30
3719	MM-548	206.6	211.5	800	100	10100	10000	-1.3	ACIDO	0.34
3720	MM-548	211.5	218.0	500	100	66500	43900	-6.0	ACIDO	0.43
3721	MM-548	218.0	224.6	400	100	59900	29800	-4.0	ACIDO	0.24
3722	MM-548	224.6	229.8	400	100	87500	45300	-6.2	ACIDO	0.32
3723	MM-548	229.8	235.4	400	50	66800	34700	-4.7	ACIDO	0.16
3724	MM-548	235.4	241.5	600	50	85500	62400	-8.5	ACIDO	0.28
3725	MM-548	241.5	247.0	900	100	40900	33500	-4.6	ACIDO	0.23
3726	MM-548	247.0	254.6	800	200	33300	29500	-4.0	ACIDO	0.24
3727	MM-548	254.6	260.2	500	50	62600	38200	-5.2	ACIDO	0.14
3728	MM-548	260.2	267.2	600	100	53400	36700	-5.0	ACIDO	0.13
3729	MM-548	267.2	273.5	400	100	68600	53600	-7.3	ACIDO	0.12
3730	MM-548	273.5	279.1	500	100	80500	44300	-6.0	ACIDO	0.14
3731	MM-548	279.1	284.4	400	50	59300	42800	-5.8	ACIDO	0.14
3732	MM-548	284.4	290.6	400	50	88300	46900	-6.4	ACIDO	0.11
3733	MM-549	3.1	8.5	800	100	44100	42700	-5.8	ACIDO	1.10
3734	MM-549	8.5	14.4	200	100	35200	34800	-4.7	ACIDO	1.73
3735	MM-549	14.4	19.5	300	100	27200	26900	-3.6	ACIDO	1.79
3736	MM-549	19.5	26.4	600	50	47300	46600	-6.4	ACIDO	4.19
3737	MM-549	26.4	32.7	500	50	96900	96100	-13.1	ACIDO	5.29
3738	MM-549	32.7	38.8	300	100	48800	48100	-6.6	ACIDO	2.30
3739	MM-549	38.8	44.4	400	200	105600	104700	-14.3	ACIDO	6.52
3740	MM-549	44.4	51.0	200	100	45500	44900	-6.1	ACIDO	2.21
3741	MM-549	51.0	56.5	400	50	15800	15300	-2.1	ACIDO	2.07
3742	MM-549	56.5	61.5	500	100	26600	25800	-3.5	ACIDO	1.87
3743	MM-549	61.5	67.3	400	50	36700	36300	-5.0	ACIDO	3.21
3744	MM-549	67.3	74.3	500	100	121700	120600	-16.5	ACIDO	2.57
3745	MM-549	74.3	80.4	900	50	152900	149800	-20.5	ACIDO	1.70
3746	MM-549	80.4	86.2	800	50	90400	81100	-11.1	ACIDO	4.01
3747	MM-549	86.2	92.0	1900	50	60900	57300	-7.8	ACIDO	2.54
3748	MM-549	92.0	98.9	3000	100	45700	42200	-5.7	ACIDO	0.36
3749	MM-549	98.9	104.5	800	50	90900	89800	-12.3	ACIDO	4.62
3750	MM-549	104.5	110.5	400	50	91700	91200	-12.5	ACIDO	1.23
3751	MM-549	110.5	116.9	400	200	34200	33900	-4.6	ACIDO	0.35
3752	MM-549	116.9	121.6	100	50	52000	51600	-7.1	ACIDO	0.29
3753	MM-549	121.6	129.0	600	50	54600	54200	-7.4	ACIDO	0.27
3754	MM-549	129.0	134.1	600	100	99500	99100	-13.5	ACIDO	0.27
3755	MM-549	134.1	140.7	500	100	99900	97800	-13.4	ACIDO	0.19
3756	MM-549	140.7	146.5	800	100	77000	69600	-9.5	ACIDO	0.30
3757	MM-549	146.5	153.0	900	50	92500	86300	-11.8	ACIDO	0.11
3758	MM-549	193.9	200.9	1300	200	59200	49300	-6.7	ACIDO	0.25
3759	MM-549	200.9	206.0	900	100	52800	47900	-6.5	ACIDO	0.56
3760	MM-549	206.0	212.0	1500	100	41800	39400	-5.4	ACIDO	1.01
3761	MM-549	212.0	218.2	600	50	73500	59500	-8.1	ACIDO	0.63
3762	MM-549	218.2	223.7	800	50	67200	59300	-8.1	ACIDO	0.34
3763	MM-549	223.7	229.5	700	50	80800	70400	-9.6	ACIDO	1.47
3764	MM-549	229.5	236.3	600	50	63400	58000	-7.9	ACIDO	1.29
3765	MM-549	236.3	242.7	1100	50	53300	51500	-7.0	ACIDO	1.49
3766	MM-549	242.7	248.0	800	100	60500	55000	-7.5	ACIDO	1.71
3767	MM-549	248.0	253.9	500	200	74600	58400	-7.9	ACIDO	1.75
3768	MM-549	253.9	260.5	600	100	69500	58900	-8.0	ACIDO	0.73
3769	MM-549	260.5	266.0	600	100	46400	41500	-5.6	ACIDO	0.18
3770	MM-549	266.0	272.0	600	100	74700	63500	-8.7	ACIDO	0.48
3771	MM-549	272.0	278.8	500	100	81400	60800	-8.3	ACIDO	0.88
3772	MM-549	278.8	284.5	900	100	62200	46000	-6.3	ACIDO	0.48
3773	MM-549	284.5	290.0	700	100	72500	47500	-6.5	ACIDO	0.38
3774	MM-549	290.0	295.7	600	100	62000	44800	-6.1	ACIDO	0.36
3775	MM-549	295.7	301.3	500	100	61300	43400	-5.9	ACIDO	0.69
3776	MM-549	301.3	308.7	500	100	68100	56700	-7.7	ACIDO	1.32
3777	MM-549	308.7	312.4	900	100	65100	51800	-7.1	ACIDO	0.60
3778	MM-550	26.0	32.0	2200	50	21500	14300	-1.9	ACIDO	1.32
3779	MM-550	32.0	38.5	600	50	2900	2200	-0.3	LIGERAMENTE ACIDO	1.66
3780	MM-550	38.5	44.5	500	50	700	500	-0.1	INERTE	6.08
3781	MM-550	44.5	50.6	500	50	400	300	0.0	INERTE	0.80
3782	MM-550	50.6	56.8	600	50	500	400	0.0	INERTE	0.44
3783	MM-550	56.8	63.0	500	50	600	500	-0.1	INERTE	0.55
3784	MM-550	63.0	68.2	500	50	400	300	0.0	INERTE	0.49
3785	MM-550	68.2	74.7	500	50	300	200	0.0	INERTE	0.43
3786	MM-550	74.7	80.2	500	50	300	250	0.0	INERTE	0.38
3787	MM-550	80.2	85.6	600	50	1000	800	-0.1	NEUTRAL	0.19
3788	MM-550	85.6	92.7	500	50	500	400	0.0	INERTE	0.15
3789	MM-550	92.7	98.8	500	50	1000	900	-0.1	LIGERAMENTE ACIDO	0.16
3790	MM-550	98.8	103.7	700	50	33700	33100	-4.5	ACIDO	1.11
3791	MM-550	103.7	110.2	500	50	11600	11400	-1.5	ACIDO	0.59
3792	MM-550	110.2	115.8	500	50	12000	11900	-1.6	ACIDO	0.37
3793	MM-550	115.8	121.5	700	50	48100	47600	-6.5	ACIDO	0.56
3794	MM-550	121.5	128.3	500	50	81200	80300	-11.0	ACIDO	0.49
3795	MM-550	128.3	134.5	500	50	30100	29800	-4.1	ACIDO	0.68
3796	MM-550	134.5	140.5	600	50	800	700	-0.1	INERTE	0.35
3797	MM-550	140.5	143.3	500	50	1700	1600	-0.2	LIGERAMENTE ACIDO	0.30
3798	MM-550	144.0	150.2	500	50	1200	1100	-0.1	LIGERAMENTE ACIDO	0.31
3799	MM-550	150.2	155.5	400	50	2600	2500	-0.3	LIGERAMENTE ACIDO	0.50
3800	MM-550	155.5	162.8	400	50	4300	4200	-0.6	LIGERAMENTE ACIDO	0.51
3801	MM-550	162.8	166.7	600	400	51400	49000	-6.6	ACIDO	1.73
3802	MM-550	171.3	177.0	600	50	19200	17500	-2.4	ACIDO	0.50
3803	MM-550	177.3	180.2	700	50	22800	22300	-3.0	ACIDO	0.61
3804	MM-550	181.5	182.3	400	50	17500	17100	-2.3	ACIDO	0.50
3805	MM-550	185.6	186.2	700	100	32900	32500	-4.4	ACIDO	0.94
3806	MM-550	187.8	194.4	1000	50	64800	60300	-8.2	ACIDO	1.24
3807	MM-550	194.4	200.3	600	50	79500	64800	-8.9	ACIDO	0.31
3808	MM-550	200.3	205.9	1200	50	54400	50100	-6.8	ACIDO	1.02
3809	MM-550	205.9	212.7	400	50	87400	64100	-8.8	ACIDO	2.34
3810	MM-550	212.7	218.7	600	50	55000	45400	-6.2	ACIDO	1.33
3811	MM-550	218.7	224.3	800	50	59300	56300	-7.7	ACIDO	1.46
3812	MM-550	224.3	227.2	600	50	87000	77500	-10.6	ACIDO	0.91
3813	MM-551	9.8	14.3	300	50	25600	25100	-3.4	ACIDO	1.29
3814	MM-551	15.1	19.7	300	200	13800	13400	-1.8	ACIDO	0.49
3815	MM-551	21.7	27.0	300	50	30700	29900	-4.1	ACIDO	0.56
3816	MM-551	27.0	33.0	400	50	39800	39100	-5.3	ACIDO	0.44
3817	MM-551	33.0	40.1	200	50	41600	41000	-5.6	ACIDO	0.75
3818	MM-551	40.1	45.8	300	50	35400	34600	-4.7	ACIDO	0.84
3819	MM-551	45.8	52.1	300	50	42900	42000	-5.7	ACIDO	0.53
3820	MM-551	52.1	58.0	300	50	36000	35100	-4.8	ACIDO	0.35
3821	MM-551	58.0	64.0	200	50	42300	41600	-5.7	ACIDO	0.22
3822	MM-551	64.0	70.0	400	50	49500	48400	-6.6	ACIDO	0.30
3823	MM-551	70.0	75.5	400	100	57100	56200	-7.7	ACIDO	0.39
3824	MM-551	75.5	81.4	700	50	69200	68400	-9.4	ACIDO	0.25
3825	MM-551	81.4	88.4	500	50	60100	59600	-8.1	ACIDO	1.15
3826	MM-551	88.4	94.9	200	50	42400	42000	-5.7	ACIDO	1.07
3827	MM-551	94.9	100.0	300	50	72300	71500	-9.8	ACIDO	0.69
3828	MM-551	100.0	106.5	300	50	83300	82400	-11.3	ACIDO	0.35
3829	MM-551	106.5	111.6	300	50	69900	69200	-9.5	ACIDO	0.64
3830	MM-551	111.6	117.8	300	50	69800	68800	-9.4	ACIDO	0.81
3831	MM-551	117.8	125.1	300	50	88200	87000	-11.9	ACIDO	1.70
3832	MM-551	125.8	131.8	400	50	87000	86000	-11.8	ACIDO	0.68
3833	MM-551	132.4	132.9	500	50	47400	46400	-6.3	ACIDO	0.48
3834	MM-551	133.4	140.5	400	50	54800	53900	-7.4	ACIDO	0.44
3835	MM-551	140.5	146.2	400	50	72900	70000	-9.6	ACIDO	0.79
3836	MM-551	146.2	152.6	500	50	92700	59400	-8.1	ACIDO	0.31
3837	MM-551	152.6	158.3	200	50	63600	42100	-5.7	ACIDO	0.18
3838	MM-551	158.3	164.0	300	50	83800	58700	-8.0	ACIDO	0.63
3839	MM-551	164.0	169.9	400	50	95300	70800	-9.7	ACIDO	0.25
3840	MM-551	169.9	176.0	500	50	84500	69900	-9.6	ACIDO	0.21
3841	MM-551	176.0	181.0	400	100	81000	64300	-8.8	ACIDO	0.15
3842	MM-551	181.0	187.0	500	50	93100	75100	-10.3	ACIDO	0.12
3843	MM-551	217.3	224.3	400	300	114300	78800	-10.7	ACIDO	0.11
3844	MM-551	224.3	229.9	300	50	88200	45800	-6.3	ACIDO	0.19
3845	MM-552	5.1	10.9	400	200	1400	200	0.0	INERTE	0.28
3846	MM-552	10.9	17.1	700	50	71900	70300	-9.6	ACIDO	0.30
3847	MM-552	17.1	23.7	500	50	77000	76000	-10.4	ACIDO	0.28
3848	MM-552	23.7	30.0	500	100	88900	87900	-12.0	ACIDO	0.37
3849	MM-552	30.0	35.0	1400	50	93100	92300	-12.6	ACIDO	0.30
3850	MM-552	35.0	40.7	500	50	92900	91500	-12.5	ACIDO	0.54
3851	MM-552	40.7	45.6	600	100	75800	75100	-10.3	ACIDO	0.32
3852	MM-552	45.6	51.4	600	50	107000	80900	-11.1	ACIDO	0.18
3853	MM-552	94.0	100.9	700	200	75200	58200	-7.9	ACIDO	0.10
3854	MM-552	100.9	105.7	600	100	86300	46600	-6.3	ACIDO	0.13
3855	MM-553	2.8	9.0	1200	50	32200	30700	-4.2	ACIDO	0.14
3856	MM-553	20.9	27.0	900	50	35500	33700	-4.6	ACIDO	0.20
3857	MM-553	27.0	33.6	1000	50	50200	46300	-6.3	ACIDO	0.17
3858	MM-553	40.0	46.5	1000	50	41600	39200	-5.4	ACIDO	0.13
3859	MM-553	46.5	52.0	1200	100	30700	29000	-3.9	ACIDO	0.38
3860	MM-553	52.0	58.0	900	50	37300	35400	-4.8	ACIDO	0.47
3861	MM-553	58.0	64.0	900	100	44000	41300	-5.6	ACIDO	0.21
3862	MM-553	64.0	70.0	600	50	56600	50200	-6.9	ACIDO	0.19
3863	MM-553	70.0	76.5	400	50	61300	49600	-6.8	ACIDO	0.51
3864	MM-553	76.5	82.0	500	50	60400	51400	-7.0	ACIDO	0.88
3865	MM-553	82.0	87.5	1200	50	48400	43500	-5.9	ACIDO	0.32
3866	MM-553	87.5	94.5	1200	50	40100	36600	-5.0	ACIDO	0.33
3867	MM-553	94.5	100.5	700	50	34100	31300	-4.3	ACIDO	0.21
3868	MM-553	100.5	106.5	1200	100	28000	26600	-3.6	ACIDO	0.22
3869	MM-553	106.5	112.0	900	700	38200	36500	-4.7	ACIDO	0.21
3870	MM-553	112.0	118.0	500	50	46100	37000	-5.1	ACIDO	0.32
3871	MM-553	118.0	123.8	400	50	34300	29500	-4.0	ACIDO	0.20
3872	MM-553	123.8	129.5	700	50	34500	30100	-4.1	ACIDO	0.12
3873	MM-553	129.5	135.0	300	50	46700	35900	-4.9	ACIDO	0.14
3874	MM-553	141.0	148.3	600	50	34100	30800	-4.2	ACIDO	0.13
3875	MM-553	154.0	160.0	1300	100	31700	30300	-4.1	ACIDO	0.14
3876	MM-553	160.0	165.7	1000	50	33200	31900	-4.4	ACIDO	0.13
3877	MM-553	165.7	172.0	900	50	36000	34900	-4.8	ACIDO	0.14
3878	MM-553	172.0	177.8	1400	50	38200	36500	-5.0	ACIDO	0.35
3879	MM-553	177.8	181.0	500	50	90500	68200	-9.3	ACIDO	0.31
3880	MM-554	1.8	7.1	700	50	48200	38600	-5.3	ACIDO	0.14
3881	MM-554	7.1	13.0	1300	50	41000	39100	-5.3	ACIDO	0.13
3882	MM-554	13.0	19.5	800	50	47500	40000	-5.5	ACIDO	0.21
3883	MM-554	19.5	25.1	800	50	42200	40000	-5.5	ACIDO	0.20
3884	MM-554	25.1	30.9	1200	50	35000	33400	-4.6	ACIDO	0.37
3885	MM-554	30.9	37.0	1100	50	21200	19300	-2.6	ACIDO	0.33
3886	MM-554	37.0	42.5	700	50	24400	21200	-2.9	ACIDO	0.36
3887	MM-554	42.5	48.8	500	50	41900	38400	-5.2	ACIDO	0.22
3888	MM-554	48.8	55.0	700	50	38800	37100	-5.1	ACIDO	0.14
3889	MM-554	67.8	72.5	700	50	55400	51700	-7.1	ACIDO	0.36
3890	MM-554	72.5	79.0	500	50	48500	44600	-6.1	ACIDO	0.43
3891	MM-554	79.0	83.4	700	50	37400	33600	-4.6	ACIDO	0.26
3892	MM-554	83.4	90.6	700	50	49400	45500	-6.2	ACIDO	0.18
3893	MM-554	90.6	96.0	500	50	53800	45700	-6.2	ACIDO	0.17
3894	MM-554	96.0	101.5	600	50	56900	51700	-7.1	ACIDO	0.22
3895	MM-554	101.5	108.5	500	50	50600	43200	-5.9	ACIDO	0.17
3896	MM-554	108.5	114.5	500	50	39900	34000	-4.6	ACIDO	0.15
3897	MM-554	114.5	119.9	700	50	35700	29100	-4.0	ACIDO	0.14
3898	MM-554	119.9	126.5	600	50	42200	31800	-4.3	ACIDO	0.16
3899	MM-554	126.5	132.9	800	50	35500	28200	-3.8	ACIDO	0.12
3900	MM-554	179.0	186.4	500	50	61400	49500	-6.8	ACIDO	0.12
3901	MM-554	192.6	199.0	400	50	27900	17700	-2.4	ACIDO	0.10
3902	MM-554	257.7	262.0	1200	50	36300	33100	-4.5	ACIDO	0.20
3903	MM-554	262.0	268.0	600	50	40200	33700	-4.6	ACIDO	0.18
3904	MM-554	268.0	273.6	600	50	39400	35900	-4.9	ACIDO	0.22
3905	MM-555	10.9	15.0	500	100	1700	400	0.0	INERTE	1.81
3906	MM-555	15.0	21.2	800	50	2600	1200	-0.1	LIGERAMENTE ACIDO	0.98
3907	MM-555	21.2	28.5	700	50	15000	12400	-1.7	ACIDO	1.02
3908	MM-555	28.5	35.0	500	50	45100	43800	-6.0	ACIDO	0.73
3909	MM-555	35.0	40.2	400	50	1500	500	-0.1	INERTE	1.80
3910	MM-555	40.2	45.5	600	50	53000	52000	-7.1	ACIDO	0.80
3911	MM-555	45.5	51.5	400	50	67900	66800	-9.1	ACIDO	0.30
3912	MM-555	51.5	57.8	300	50	46500	45500	-6.2	ACIDO	0.68
3913	MM-555	57.8	62.9	500	50	82700	81500	-11.1	ACIDO	0.67
3914	MM-555	62.9	70.9	400	100	105600	104500	-14.3	ACIDO	0.22
3915	MM-555	70.9	75.6	400	50	89200	88300	-12.1	ACIDO	0.39
3916	MM-555	75.6	82.0	400	50	88900	88000	-12.0	ACIDO	0.23
3917	MM-555	82.0	88.0	400	100	75900	75000	-10.2	ACIDO	0.17
3918	MM-555	88.0	93.2	300	50	93100	92400	-12.6	ACIDO	0.18
3919	MM-555	93.2	97.2	700	100	97300	90700	-12.4	ACIDO	0.21
3920	MM-555	97.8	104.0	1100	100	44900	40500	-5.5	ACIDO	0.68
3921	MM-555	104.0	109.5	800	200	49400	41400	-5.6	ACIDO	0.22
3922	MM-555	109.5	116.0	800	50	61400	46100	-6.3	ACIDO	0.16
3923	MM-555	116.0	121.0	500	200	78900	56000	-7.6	ACIDO	0.19
3924	MM-555	121.0	128.3	800	50	62300	43800	-6.0	ACIDO	0.14
3925	MM-555	128.3	133.4	700	100	90400	71700	-9.8	ACIDO	0.22
3926	MM-555	133.4	139.5	600	100	67500	51000	-7.0	ACIDO	0.17
3927	MM-555	139.5	145.5	600	200	65200	48900	-6.6	ACIDO	0.12
3928	MM-555	145.5	151.5	700	50	66700	48100	-6.6	ACIDO	0.19
3929	MM-555	151.5	157.5	500	50	59100	45700	-6.2	ACIDO	0.14
3930	MM-555	157.5	165.3	900	100	60700	48600	-6.6	ACIDO	0.11
3931	MM-556	2.0	7.4	1900	50	41900	39100	-5.3	ACIDO	0.71
3932	MM-556	7.4	13.7	2700	50	42500	36600	-5.0	ACIDO	0.68
3933	MM-556	13.7	20.0	3500	50	23300	22100	-3.0	ACIDO	1.10
3934	MM-556	20.0	26.5	2400	50	33900	30800	-4.2	ACIDO	1.14
3935	MM-556	26.5	32.4	500	300	43100	42100	-5.7	ACIDO	1.48
3936	MM-556	32.4	37.6	400	100	37700	37000	-5.0	ACIDO	1.20
3937	MM-556	37.6	43.8	400	100	49900	46700	-6.4	ACIDO	1.57
3938	MM-556	43.8	50.3	300	100	78400	77100	-10.5	ACIDO	2.00
3939	MM-556	50.3	55.5	700	50	171500	167300	-22.9	ACIDO	1.34
3940	MM-556	55.5	61.0	1000	50	43100	37400	-5.1	ACIDO	0.82
3941	MM-556	61.0	68.5	2200	50	10500	7200	-1.0	LIGERAMENTE ACIDO	1.34
3942	MM-556	68.5	74.5	2400	50	11400	6100	-0.8	LIGERAMENTE ACIDO	1.53
3943	MM-556	74.5	80.4	2700	100	9000	5300	-0.7	LIGERAMENTE ACIDO	0.99
3944	MM-556	80.4	86.4	4200	50	9400	6800	-0.9	LIGERAMENTE ACIDO	0.14
3945	MM-556	86.4	92.0	3000	200	11700	10600	-1.4	ACIDO	0.47
3946	MM-556	92.0	97.0	1400	100	30800	26800	-3.6	ACIDO	0.66
3947	MM-556	97.0	103.6	1500	50	18300	14700	-2.0	ACIDO	1.15
3948	MM-556	103.6	108.9	1200	50	51300	38300	-5.2	ACIDO	0.14
3949	MM-556	108.9	114.5	300	50	40000	27600	-3.8	ACIDO	1.07
3950	MM-556	114.5	119.5	400	50	47900	46000	-6.3	ACIDO	1.67
3951	MM-556	119.5	124.9	400	50	75300	35100	-4.8	ACIDO	0.51
3952	MM-556	124.9	130.4	600	50	79300	45600	-6.2	ACIDO	0.49
3953	MM-556	130.4	135.0	800	50	91100	71000	-9.7	ACIDO	0.81
3954	MM-556	135.0	140.5	2100	100	29900	27400	-3.7	ACIDO	0.31
3955	MM-556	140.5	145.0	3400	50	18300	16000	-2.2	ACIDO	0.13
3956	MM-556	145.0	151.5	3100	100	26100	20500	-2.8	ACIDO	0.83
3957	MM-556	151.5	157.0	1000	50	58100	48100	-6.6	ACIDO	0.51
3958	MM-556	157.0	162.5	800	50	60200	48100	-6.6	ACIDO	0.33
3959	MM-556	162.5	169.0	600	200	55500	45400	-6.1	ACIDO	0.69
3960	MM-556	169.0	175.3	1100	50	35800	32800	-4.5	ACIDO	0.51
3961	MM-556	175.3	180.2	500	50	56300	39400	-5.4	ACIDO	0.38
3962	MM-556	180.2	186.5	900	50	37600	31500	-4.3	ACIDO	0.20

Nro	Taladro	Desde	Hasta	Ctot	Cres	Stot	Ssulf	NCV	Clase NCV	AuFA
3963	MM-556	186.5	192.5	700	100	46300	40300	-5.5	ACIDO	0.14
3964	MM-556	192.5	200.0	700	50	44000	37600	-5.1	ACIDO	0.10
3965	MM-557	9.6	15.5	400	50	32300	31500	-4.3	ACIDO	4.54
3966	MM-557	15.5	21.0	200	50	37700	36700	-5.0	ACIDO	6.54
3967	MM-557	21.0	27.0	200	50	33200	32300	-4.4	ACIDO	2.66
3968	MM-557	27.0	34.0	200	50	39400	38000	-5.2	ACIDO	1.76
3969	MM-557	34.0	40.3	300	50	39600	38600	-5.3	ACIDO	1.75
3970	MM-557	40.3	46.5	2700	50	39300	38200	-5.2	ACIDO	0.84
3971	MM-557	46.5	51.8	600	50	65800	63900	-8.7	ACIDO	1.15
3972	MM-557	51.8	57.8	200	50	94800	93900	-12.8	ACIDO	1.26
3973	MM-557	57.8	64.2	400	50	45600	44900	-6.1	ACIDO	1.12
3974	MM-557	64.2	70.1	200	50	56200	55100	-7.5	ACIDO	1.23
3975	MM-557	70.1	76.6	300	50	77500	76400	-10.4	ACIDO	0.44
3976	MM-557	76.6	82.4	300	50	67600	54600	-7.5	ACIDO	0.16
3977	MM-557	82.4	88.2	500	50	74300	58100	-7.9	ACIDO	0.14
3978	MM-557	88.2	94.2	300	50	71000	52500	-7.2	ACIDO	0.12
3979	MM-557	94.2	100.0	200	50	80700	59000	-8.1	ACIDO	0.15
3980	MM-557	106.0	112.9	400	50	80500	65600	-9.0	ACIDO	0.46
3981	MM-557	112.9	119.2	600	50	62800	52200	-7.1	ACIDO	0.26
3982	MM-557	119.2	125.7	300	50	56700	45500	-6.2	ACIDO	0.13
3983	MM-557	125.7	131.0	1000	50	94700	69900	-9.6	ACIDO	0.20
3984	MM-557	131.0	137.0	300	50	92000	62500	-8.5	ACIDO	0.12
3985	MM-557	137.0	143.0	400	300	80900	59000	-8.0	ACIDO	0.20
3986	MM-557	143.0	148.5	400	50	78400	50800	-6.9	ACIDO	0.22
3987	MM-557	148.5	155.2	400	50	96400	58300	-8.0	ACIDO	0.15
3988	MM-557	155.2	161.0	300	50	93100	82800	-11.3	ACIDO	0.18
3989	MM-557	161.0	167.5	400	50	75200	58500	-8.0	ACIDO	0.11
3990	MM-557	167.5	173.0	500	50	67600	56000	-7.7	ACIDO	0.10
3991	MM-557	196.8	203.2	400	50	78500	35000	-4.8	ACIDO	7.14
3992	MM-557	203.2	209.2	400	50	48600	42000	-5.7	ACIDO	3.26
3993	MM-557	209.2	214.3	300	50	84900	76600	-10.5	ACIDO	2.15
3994	MM-557	214.3	220.0	300	50	49900	41300	-5.6	ACIDO	0.30
3995	MM-558	6.2	12.0	700	50	41700	20900	-2.8	ACIDO	0.18
3996	MM-558	12.0	18.0	800	50	28600	14500	-2.0	ACIDO	0.26
3997	MM-558	18.0	24.2	800	50	33500	19900	-2.7	ACIDO	0.27
3998	MM-558	24.2	30.0	600	50	64100	53400	-7.3	ACIDO	0.21
3999	MM-558	30.0	36.0	600	50	68700	57200	-7.8	ACIDO	0.20
4000	MM-558	36.0	42.0	700	50	64000	53900	-7.4	ACIDO	0.20
4001	MM-558	42.0	48.4	2000	50	71100	55500	-7.6	ACIDO	0.21
4002	MM-558	48.4	55.0	500	50	76900	65200	-8.9	ACIDO	0.24
4003	MM-558	55.0	61.0	600	50	66100	56000	-7.7	ACIDO	0.23
4004	MM-558	61.0	66.0	700	50	68700	56800	-7.8	ACIDO	0.18
4005	MM-558	77.6	84.0	1000	50	57400	48700	-6.7	ACIDO	0.12
4006	MM-558	84.0	90.7	700	50	66700	53100	-7.3	ACIDO	0.11
4007	MM-558	90.7	96.4	600	50	71100	55000	-7.5	ACIDO	0.21
4008	MM-558	96.4	102.5	600	50	55100	40800	-5.6	ACIDO	0.17
4009	MM-558	102.5	108.5	500	50	58200	44000	-6.0	ACIDO	0.15
4010	MM-558	108.5	114.5	800	50	57300	48500	-6.6	ACIDO	0.16
4011	MM-558	114.5	119.8	1000	800	44900	40600	-5.3	ACIDO	0.12
4012	MM-558	119.8	125.0	600	50	60100	49100	-6.7	ACIDO	0.13
4013	MM-558	125.0	132.0	500	50	54100	45000	-6.1	ACIDO	0.24
4014	MM-558	132.0	138.0	500	50	48100	38400	-5.2	ACIDO	0.12
4015	MM-558	143.5	149.1	700	50	54800	35400	-4.8	ACIDO	0.15
4016	MM-558	149.1	156.7	500	50	51800	41000	-5.6	ACIDO	0.16
4017	MM-558	156.7	162.5	300	50	53200	42200	-5.8	ACIDO	0.10
4018	MM-559	0.0	5.5	600	100	2900	400	0.0	INERTE	0.26
4019	MM-559	5.5	11.0	400	50	1900	300	0.0	INERTE	0.23
4020	MM-559	11.0	17.5	400	100	1100	500	0.0	INERTE	0.23
4021	MM-559	17.5	22.0	400	50	22800	21800	-3.0	ACIDO	0.14
4022	MM-559	22.0	27.7	300	50	36400	35800	-4.9	ACIDO	0.20
4023	MM-559	28.7	34.0	400	300	42200	40800	-5.5	ACIDO	0.66
4024	MM-559	34.0	40.2	400	50	64800	63200	-8.6	ACIDO	0.15
4025	MM-559	40.2	46.8	500	50	55400	43800	-6.0	ACIDO	0.13
4026	MM-559	46.8	51.0	600	50	46100	37000	-5.1	ACIDO	0.13
4027	MM-559	51.0	57.5	600	50	60900	50000	-6.8	ACIDO	0.11
4028	MM-559	141.7	147.5	400	50	66300	50700	-6.9	ACIDO	0.10
4029	MM-560	14.4	20.5	800	200	51500	25400	-3.4	ACIDO	0.16
4030	MM-560	20.5	26.5	1300	200	50200	24100	-3.2	ACIDO	0.22
4031	MM-560	26.5	32.8	900	200	52300	25200	-3.4	ACIDO	0.17
4032	MM-560	37.3	44.8	700	100	37800	18800	-2.5	ACIDO	0.18
4033	MM-560	44.8	50.5	1500	100	42800	21400	-2.9	ACIDO	0.15
4034	MM-560	50.5	56.0	1200	100	58700	32000	-4.3	ACIDO	0.12
4035	MM-560	110.1	115.0	600	100	50400	25800	-3.5	ACIDO	0.14
4036	MM-560	128.0	133.6	700	50	43900	21600	-2.9	ACIDO	0.11
4037	MM-561	12.1	19.0	800	50	26700	20700	-2.8	ACIDO	0.44
4038	MM-561	19.0	24.9	1600	100	41300	38000	-5.2	ACIDO	0.32
4039	MM-561	24.9	31.3	1400	50	39200	36900	-5.0	ACIDO	0.24
4040	MM-561	31.3	37.0	1000	50	43600	40300	-5.5	ACIDO	0.31
4041	MM-561	37.0	42.6	1000	50	58000	50600	-6.9	ACIDO	0.21
4042	MM-561	42.9	48.5	600	50	65000	54900	-7.5	ACIDO	0.26
4043	MM-561	48.5	54.0	900	50	62000	54200	-7.4	ACIDO	0.31
4044	MM-561	54.0	60.8	900	50	48800	44300	-6.1	ACIDO	0.21
4045	MM-561	60.8	66.5	600	50	58700	51200	-7.0	ACIDO	0.20
4046	MM-561	66.5	72.1	700	600	57300	50500	-6.7	ACIDO	0.43
4047	MM-561	72.1	78.1	600	50	69400	59400	-8.1	ACIDO	0.24
4048	MM-561	78.1	83.8	600	50	54400	45100	-6.2	ACIDO	0.27
4049	MM-561	83.8	90.0	900	50	46600	43200	-5.9	ACIDO	0.23
4050	MM-561	90.0	95.5	600	50	57100	49100	-6.7	ACIDO	0.22
4051	MM-561	95.5	101.0	600	50	63800	51100	-7.0	ACIDO	0.22
4052	MM-561	101.0	108.4	600	50	58600	49400	-6.7	ACIDO	0.18
4053	MM-561	108.4	114.0	700	50	53400	46400	-6.3	ACIDO	0.25
4054	MM-561	114.0	119.3	700	50	43400	37400	-5.1	ACIDO	0.17
4055	MM-561	119.3	125.0	600	50	46700	42800	-5.8	ACIDO	0.23
4056	MM-561	125.0	131.0	700	50	44000	40400	-5.5	ACIDO	0.20
4057	MM-561	131.0	138.0	500	50	49100	42800	-5.8	ACIDO	0.22
4058	MM-561	138.0	143.8	800	50	49800	46000	-6.3	ACIDO	0.29
4059	MM-561	143.8	150.0	700	200	42700	37500	-5.1	ACIDO	0.28
4060	MM-561	150.0	157.0	500	50	53800	39900	-5.4	ACIDO	0.43
4061	MM-561	157.0	162.8	500	50	48600	37700	-5.1	ACIDO	0.45
4062	MM-561	162.8	167.5	500	50	36300	31500	-4.3	ACIDO	1.44
4063	MM-561	167.5	174.0	600	50	41100	34900	-4.8	ACIDO	0.68
4064	MM-561	174.0	180.0	800	50	47400	41600	-5.7	ACIDO	1.39
4065	MM-561	180.0	186.0	600	50	62000	54000	-7.4	ACIDO	0.80
4066	MM-561	186.0	191.7	700	50	56000	45200	-6.2	ACIDO	0.74
4067	MM-561	191.7	197.6	600	50	42100	36300	-5.0	ACIDO	0.34
4068	MM-561	197.6	203.6	800	50	43900	35800	-4.9	ACIDO	0.26
4069	MM-561	203.6	210.2	500	50	41400	36200	-4.9	ACIDO	0.21
4070	MM-561	210.2	216.5	1400	50	40200	32100	-4.4	ACIDO	0.32
4071	MM-561	216.5	222.5	800	50	29600	26100	-3.6	ACIDO	0.16
4072	MM-561	222.5	227.8	800	50	43200	39200	-5.4	ACIDO	0.21
4073	MM-561	227.8	233.0	600	100	52800	44400	-6.0	ACIDO	0.31
4074	MM-561	233.0	239.7	500	50	53800	45200	-6.2	ACIDO	0.28
4075	MM-561	239.7	246.0	200	50	56500	47700	-6.5	ACIDO	0.30
4076	MM-561	246.0	252.0	500	50	48800	40900	-5.6	ACIDO	0.15
4077	MM-561	252.0	258.0	700	50	57500	50100	-6.8	ACIDO	0.20
4078	MM-561	258.0	264.0	400	50	60800	50500	-6.9	ACIDO	0.12
4079	MM-561	264.0	269.4	500	50	59400	48400	-6.6	ACIDO	0.11
4080	MM-561	288.0	294.2	1200	50	47000	45300	-6.2	ACIDO	0.10
4081	MM-562	1.7	7.0	1700	50	36300	34900	-4.8	ACIDO	0.12
4082	MM-562	7.0	12.0	1900	50	31600	30600	-4.2	ACIDO	0.18
4083	MM-562	12.0	17.2	2200	50	36300	35200	-4.8	ACIDO	0.16
4084	MM-562	17.2	24.5	1700	50	42000	41100	-5.6	ACIDO	0.39
4085	MM-562	24.5	30.5	1800	50	41400	40100	-5.5	ACIDO	0.38
4086	MM-562	30.5	36.0	1500	50	54400	52600	-7.2	ACIDO	2.15
4087	MM-562	36.0	42.0	500	50	43000	42000	-5.7	ACIDO	1.32
4088	MM-562	42.0	48.0	1100	50	39300	38200	-5.2	ACIDO	0.29
4089	MM-562	61.0	66.5	500	50	26800	25700	-3.5	ACIDO	0.12
4090	MM-562	66.5	72.5	800	50	34700	33600	-4.6	ACIDO	0.17
4091	MM-562	72.5	78.8	600	50	18200	17300	-2.4	ACIDO	0.34
4092	MM-562	78.8	85.0	700	50	23300	20500	-2.8	ACIDO	0.31
4093	MM-562	85.0	91.0	1100	50	21200	18200	-2.5	ACIDO	0.40
4094	MM-562	91.0	97.0	600	50	31700	30200	-4.1	ACIDO	0.53
4095	MM-562	97.0	100.3	400	50	33000	31700	-4.3	ACIDO	0.38
4096	MM-563	3.1	9.7	200	50	300	200	0.0	INERTE	0.36
4097	MM-563	9.7	15.2	200	50	300	200	0.0	INERTE	0.37
4098	MM-563	15.2	21.0	200	50	200	100	0.0	INERTE	0.46
4099	MM-563	21.0	27.2	200	50	200	150	0.0	INERTE	0.66
4100	MM-563	27.2	33.4	200	50	200	100	0.0	INERTE	0.34
4101	MM-563	33.4	38.5	300	50	200	0	0.0	INERTE	0.53
4102	MM-563	38.5	44.0	200	50	200	150	0.0	INERTE	0.56
4103	MM-563	44.0	50.0	200	50	200	100	0.0	INERTE	0.45
4104	MM-563	50.0	55.5	300	50	200	150	0.0	INERTE	0.37
4105	MM-563	55.5	61.1	900	50	100	0	0.0	INERTE	0.32
4106	MM-563	61.1	67.0	200	50	200	150	0.0	INERTE	0.31
4107	MM-563	67.0	74.5	200	50	200	100	0.0	INERTE	0.20
4108	MM-563	74.5	79.7	200	50	200	100	0.0	INERTE	0.19
4109	MM-563	79.7	85.3	200	50	200	100	0.0	INERTE	0.16
4110	MM-563	85.3	91.3	200	50	200	100	0.0	INERTE	0.38
4111	MM-563	91.3	97.0	200	50	200	100	0.0	INERTE	0.14
4112	MM-563	103.0	110.4	400	50	200	0	0.0	INERTE	0.12
4113	MM-563	110.4	116.9	200	50	300	100	0.0	INERTE	0.11
4114	MM-563	116.9	122.1	200	50	200	100	0.0	INERTE	0.11
4115	MM-563	122.1	128.2	300	50	100	0	0.0	INERTE	0.11
4116	MM-563	170.0	175.8	300	50	400	100	0.0	INERTE	0.11
4117	MM-563	175.8	181.5	300	50	600	200	0.0	INERTE	0.17
4118	MM-563	181.5	188.5	300	50	600	200	0.0	INERTE	0.30
4119	MM-563	188.5	193.5	300	50	800	300	0.0	INERTE	0.27
4120	MM-563	193.5	200.0	300	50	800	300	0.0	INERTE	0.32
4121	MM-563	200.0	207.0	300	50	97500	95100	-13.0	ACIDO	0.46
4122	MM-564	1.0	7.0	1900	100	17200	15200	-2.0	ACIDO	0.70
4123	MM-564	7.0	12.2	2300	300	10700	8200	-1.0	ACIDO	0.30
4124	MM-564	12.2	18.2	1900	200	7700	5500	-0.7	LIGERAMENTE ACIDO	0.16
4125	MM-564	18.2	21.0	2100	100	5200	3100	-0.4	LIGERAMENTE ACIDO	0.16
4126	MM-564	21.3	27.0	2400	50	16300	12900	-1.7	ACIDO	0.31
4127	MM-564	27.0	32.0	3000	50	12000	10000	-1.4	ACIDO	0.11
4128	MM-564	32.0	38.5	3300	50	2300	1000	-0.1	LIGERAMENTE ACIDO	0.13
4129	MM-564	38.5	44.0	3000	100	6900	5000	-0.6	LIGERAMENTE ACIDO	0.19
4130	MM-564	44.0	49.7	3400	50	6700	4600	-0.6	LIGERAMENTE ACIDO	0.37
4131	MM-564	49.7	55.5	2800	100	16600	15300	-2.1	ACIDO	0.36
4132	MM-564	55.5	61.2	2400	50	26300	25000	-3.4	ACIDO	0.42
4133	MM-564	61.2	68.0	1800	200	25800	24400	-3.3	ACIDO	0.21
4134	MM-564	68.0	74.0	1800	100	23000	21900	-3.0	ACIDO	0.26
4135	MM-564	74.0	80.0	2300	100	18900	17500	-2.4	ACIDO	0.13
4136	MM-564	80.0	86.0	2000	100	28600	26900	-3.6	ACIDO	0.15
4137	MM-564	92.0	98.0	1400	50	38700	35400	-4.8	ACIDO	0.13
4138	MM-564	104.0	110.5	1600	50	35500	32200	-4.4	ACIDO	0.10
4139	MM-564	110.5	117.0	3000	50	31100	29300	-4.0	ACIDO	0.14
4140	MM-564	119.4	126.1	1800	50	37600	35800	-4.9	ACIDO	0.12
4141	MM-564	127.1	129.0	200	100	46000	42400	-5.8	ACIDO	0.18
4142	MM-564	130.1	135.8	500	100	39700	35800	-4.9	ACIDO	0.22
4143	MM-564	135.8	141.0	600	50	46600	41000	-5.6	ACIDO	0.15
4144	MM-564	141.0	146.9	600	100	43800	36000	-4.9	ACIDO	0.28
4145	MM-564	146.9	153.4	500	50	69300	59800	-8.2	ACIDO	0.36
4146	MM-564	153.4	155.1	700	50	66900	57600	-7.9	ACIDO	0.30
4147	MM-564	159.6	166.6	500	100	53200	44600	-6.1	ACIDO	0.19
4148	MM-564	166.6	170.2	500	200	52000	41300	-5.6	ACIDO	0.12
4149	MM-565	3.0	7.0	1300	50	36400	33200	-4.5	ACIDO	0.17
4150	MM-565	7.0	13.6	1000	200	27200	23700	-3.2	ACIDO	0.19
4151	MM-565	13.6	18.0	900	100	37400	35400	-4.8	ACIDO	0.12
4152	MM-565	24.0	30.0	700	100	39100	36700	-5.0	ACIDO	0.13
4153	MM-565	30.0	36.0	1400	100	30300	28700	-3.9	ACIDO	0.45
4154	MM-565	36.0	42.0	1600	50	21200	19400	-2.6	ACIDO	0.45
4155	MM-565	42.0	48.0	1700	200	17900	16400	-2.2	ACIDO	0.49
4156	MM-565	48.0	54.0	1100	50	22800	21100	-2.9	ACIDO	0.48
4157	MM-565	54.0	60.3	1700	50	13100	11800	-1.6	ACIDO	0.29
4158	MM-565	60.3	66.0	1300	50	18100	16500	-2.2	ACIDO	0.34
4159	MM-565	66.0	72.0	700	100	12900	11000	-1.5	ACIDO	0.29
4160	MM-565	72.0	78.0	1700	50	20000	18700	-2.5	ACIDO	0.27
4161	MM-565	78.0	83.7	1000	200	18000	16200	-2.1	ACIDO	0.19
4162	MM-565	83.7	89.5	1300	200	12900	11700	-1.5	ACIDO	0.15
4163	MM-565	96.5	102.5	600	100	46000	41500	-5.6	ACIDO	0.20
4164	MM-565	102.5	108.8	700	100	43100	39000	-5.3	ACIDO	0.17
4165	MM-565	108.8	113.7	900	100	35000	30700	-4.2	ACIDO	0.21
4166	MM-565	126.0	131.8	800	100	33800	32100	-4.4	ACIDO	0.13
4167	MM-565	131.8	138.0	800	100	40400	38400	-5.2	ACIDO	0.12
4168	MM-565	138.0	143.5	700	50	45800	41300	-5.6	ACIDO	0.10
4169	MM-565	149.0	155.0	600	100	40800	38800	-5.3	ACIDO	0.10
4170	MM-565	162.1	168.5	500	100	36300	33700	-4.6	ACIDO	0.14
4171	MM-565	193.5	200.4	500	100	12000	6100	-0.8	LIGERAMENTE ACIDO	0.12
4172	MM-566	10.6	16.9	200	50	36900	36300	-5.0	ACIDO	5.09
4173	MM-566	16.9	22.6	200	50	21100	20300	-2.8	ACIDO	3.39
4174	MM-566	22.6	28.5	500	50	44200	43500	-5.9	ACIDO	2.32
4175	MM-566	28.5	34.5	400	50	41600	40900	-5.6	ACIDO	4.12
4176	MM-566	34.5	40.2	300	50	5800	5400	-0.7	LIGERAMENTE ACIDO	1.87
4177	MM-566	40.2	46.7	700	50	1100	900	-0.1	LIGERAMENTE ACIDO	1.33
4178	MM-566	46.7	52.5	500	50	12600	12200	-1.7	ACIDO	2.76
4179	MM-566	52.5	58.0	300	50	10200	9900	-1.3	ACIDO	1.29
4180	MM-566	58.0	66.0	200	100	16000	15700	-2.1	ACIDO	0.63
4181	MM-566	66.5	71.0	400	100	68600	68000	-9.3	ACIDO	1.93
4182	MM-566	71.0	77.0	200	50	89500	88700	-12.1	ACIDO	2.64
4183	MM-566	77.0	82.5	400	50	89600	88900	-12.2	ACIDO	2.31
4184	MM-566	82.5	87.5	300	50	113800	113300	-15.5	ACIDO	2.41
4185	MM-566	87.5	94.0	500	50	95100	93400	-12.8	ACIDO	1.07
4186	MM-566	94.0	102.3	700	50	64600	62500	-8.5	ACIDO	1.55
4187	MMTW-04A	32.0	40.0	300	50	1000	0	0.0	INERTE	0.56
4188	MMTW-04A	40.0	48.0	300	50	1400	500	-0.1	INERTE	2.87
4189	MMTW-04A	56.0	64.0	300	50	14900	13600	-1.8	ACIDO	2.67
4190	MMTW-04A	64.0	68.0	300	50	44000	42400	-5.8	ACIDO	2.20

Apéndice 5
Resultados Análisis SPLP

Nro		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Código		DS-1383308	DS-1383312	DS-1383313	DS-1383314	DS-1383304	DS-1383305	DS-1383306	DS-1383307	DS-1383309	DS-1383310	DS-1383311	DS-1383315	DS-1383316	43337
NCV		Inerte/Neutral	Acido	Acido	Acido	Acido	Acido	Altamente Acido	Inerte/Neutral	Inerte/Neutral	Acido	Ligeramente Acido	Acido	Acido	Acido
Taladro		MM-398	MM-481	MM-490	MM-499	MM-255	MM-275	MM-289	MM-292	MM-423	MM-424	MM-467	MM-516	MM-520	MM-419
Desde		10	22	44.5	41.8	34	80	38	40	76	16	24	10	0	8
Hasta		20	32	54.5	51.7	44	90	48	50	86.8	26	34	19.5	10.7	12
Alteración		SG	ARG	ARG	ARG	AA	SG	SIL	SM	SV	SM	SG	SP	-	SV
Tipo		Desmonte	Desmonte	Desmonte	Desmonte	Ox mill (cola BRT)	Ox mill (cola BRT)	Ox mill (cola BRT)	Ox mill (cola BRT)	Ox mill (cola BRT)	Ox mill (cola BRT)	Ox mill (cola BRT)	Ox mill (cola BRT)	Ox mill (cola BRT)	Sulfuro (cola BRT Flot)
Analito	Unit														
As	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.017	0.013	0.013	2.575
Ba	mg/L	0.255	0.063	0.067	0.063	0.063	0.063	0.063	0.157	0.371	0.063	0.347	0.063	0.063	0.063
Cd	mg/L	0.000	0.004	0.008	0.013	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
Cr	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Hg	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0004	0.0016	0.0001	0.0011
Pb	mg/L	0.003	0.003	0.003	0.003	0.017	0.003	0.004	0.003	0.007	0.003	0.003	0.003	0.006	0.003
Se	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Ag	mg/L	0.000	0.000	0.000	0.000	0.001	0.000	0.002	0.000	0.000	0.000	0.000	0.001	0.000	0.000
Al	mg/L	1.250	1.250	12.920	8.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
B	mg/L	0.340	0.310	0.340	0.370	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
Be	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Bi	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ce	mg/L	0.001	0.001	0.006	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Co	mg/L	0.001	0.056	0.338	0.691	0.002	0.002	0.009	0.001	0.002	0.002	0.001	0.001	0.003	0.010
Cs	mg/L	0.001	0.002	0.002	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Cu	mg/L	0.006	0.006	0.007	3.943	0.009	0.006	0.009	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Fe	mg/L	7.290	1.250	14.130	4.520	1.250	2.600	1.420	2.610	1.250	4.770	1.250	1.250	1.250	1.250
Ga	mg/L	0.001	0.001	0.001	0.001	0.002	0.001	0.018	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ge	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Hf	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
In	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
K	mg/L	1.250	15.890	26.350	26.580	7.000	1.400	5.550	1.250	1.250	7.040	1.250	16.690	8.920	1.250
La	mg/L	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Li	mg/L	0.013	0.013	0.019	0.013	0.013	0.015	0.027	0.017	0.013	0.013	0.013	0.013	0.013	0.013
Lu	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mg	mg/L	1.250	1.250	1.310	2.530	2.010	6.020	3.540	1.250	1.250	1.470	1.250	1.250	2.080	1.250
Mn	mg/L	0.851	0.135	0.189	0.152	0.063	0.174	0.063	0.718	0.063	0.628	0.063	0.063	0.063	0.063
Mo	mg/L	0.039	0.001	0.001	0.001	0.017	0.097	0.013	0.043	0.031	0.001	0.009	0.013	0.014	0.002
Na	mg/L	4.000	15.330	10.860	6.910	3.210	1.330	2.340	1.250	1.250	3.070	1.310	7.920	3.890	1.250
Nb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ni	mg/L	0.006	0.023	0.102	0.185	0.006	0.010	0.025	0.006	0.006	0.006	0.006	0.006	0.006	0.006
P	mg/L	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630
Rb	mg/L	0.004	0.014	0.029	0.028	0.004	0.004	0.005	0.003	0.003	0.005	0.005	0.012	0.007	0.003
Re	mg/L	0.000	0.003	0.000	0.001	0.000	0.000	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000
S	mg/L	44.370	58.430	83.080	70.650	105.690	326.390	569.390	33.400	36.610	49.090	29.990	63.200	33.230	54.830
Sb	mg/L	0.004	0.001	0.001	0.001	0.003	0.008	0.002	0.014	0.002	0.001	0.019	0.001	0.003	0.149
Sc	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Sn	mg/L	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.009	0.004	0.004	0.004	0.004
Sr	mg/L	0.071	0.184	0.333	0.126	0.082	0.243	1.257	0.058	0.034	0.088	0.072	0.061	0.067	0.018
Ta	mg/L	0.026	0.011	0.019	0.015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Tb	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Te	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Th	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Tl	mg/L	0.000	0.001	0.003	0.003	0.000	0.000	0.004	0.000	0.000	0.000	0.001	0.000	0.000	0.001
U	mg/L	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
V	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
W	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.122	0.148
Y	mg/L	0.001	0.001	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Yb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Zn	mg/L	0.013	0.085	0.198	0.816	0.013	0.013	0.013	0.013	0.015	0.013	0.015	0.013	0.017	0.013
Zr	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
pH final		6.74	5.02	4.01	4.07	8.21	7.92	9.97	7.28	7.60	6.57	7.64	7.81	7.87	8.40
Conductividad	uS	42.4	163.5	291.0	249.2	336.0	1063.0	1570.0	51.6	58.7	146.1	77.7	222.1	113.4	90.3
ORP	mV	187	282	330	306	70	136	93	111	92	112	160	91	120	91

Nro		15	16	17	18	19	20	21	22	23	24	25	26
Código		43338	43339	43340	43341	43342	43343	43345	43346	43347	43348	43349	43350
NCV		Acido	Acido	Acido	Acido	Acido	Altamente Acido	Altamente Acido	Acido	Altamente Acido	Altamente Acido	Altamente Acido	Altamente Acido
Taladro		MM-460	MM-460	MM-465	MM-465	MM-465	MM-503	MM-505	MM-537	DST-094	MM-540	MM-540	MM-544
Desde		25.9	32	14	18	22	39.9	27.5	21	78	65.7	73.5	114.8
Hasta		32	35.05	18	22	26	43.1	31.5	25.3	84	71.5	79.5	119.9
Alteración		SM	SM	SM	SM	SM	SM	SM	SM	SA	SC	SC	SC
Tipo		Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)	Sulfuro (cola BRT Flot)
Analito	Unit												
As	mg/L	0.016	0.013	0.015	0.013	0.013	1.151	0.013	0.157	0.018	0.013	0.013	0.054
Ba	mg/L	0.122	0.171	0.265	0.207	0.115	0.101	0.063	0.572	0.063	0.063	0.063	0.063
Cd	mg/L	0.000	0.002	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cr	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Hg	mg/L	0.0002	0.0001	0.0005	0.0003	0.0001	0.0020	0.0012	0.0004	0.0001	0.0010	0.0001	0.0001
Pb	mg/L	0.003	0.003	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.003	0.004
Se	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Ag	mg/L	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
Al	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	3.250	2.650	1.250	16.350
B	mg/L	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
Be	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Bi	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ce	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Co	mg/L	0.002	0.011	0.005	0.053	0.113	0.003	0.004	0.004	0.007	0.002	0.003	0.004
Cs	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003
Cu	mg/L	0.007	0.547	0.007	0.006	0.157	0.010	0.029	0.007	0.006	0.007	0.006	0.008
Fe	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.340
Ga	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.002	0.002	0.008
Ge	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Hf	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
In	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
K	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	4.800	3.820	3.570	8.260
La	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Li	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Lu	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mg	mg/L	1.250	1.250	1.250	1.250	1.420	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Mn	mg/L	0.063	0.186	0.063	0.106	0.224	0.063	0.063	0.063	0.063	0.063	0.063	0.063
Mo	mg/L	0.002	0.001	0.002	0.001	0.001	0.003	0.002	0.004	0.002	0.002	0.001	0.002
Na	mg/L	1.250	1.250	1.250	1.250	1.250	1.250	1.320	2.110	11.110	6.150	5.560	16.250
Nb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ni	mg/L	0.006	0.023	0.006	0.039	0.097	0.006	0.006	0.006	0.006	0.006	0.006	0.006
P	mg/L	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630	0.630
Rb	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.007	0.005	0.004	0.030
Re	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
S	mg/L	19.890	26.740	25.130	27.350	27.570	25.540	32.370	23.520	28.720	35.640	32.480	42.620
Sb	mg/L	0.013	0.002	0.045	0.019	0.007	0.103	0.017	0.032	0.002	0.006	0.006	0.002
Sc	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Sn	mg/L	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.007	0.004
Sr	mg/L	0.009	0.029	0.022	0.025	0.028	0.025	0.025	0.029	0.012	0.026	0.022	0.017
Ta	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Tb	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Te	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Th	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Tl	mg/L	0.006	0.008	0.012	0.021	0.034	0.000	0.001	0.001	0.000	0.000	0.001	0.001
U	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
V	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.027
W	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.004	0.001	0.001
Y	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Yb	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Zn	mg/L	0.038	0.154	0.013	0.013	0.054	0.020	0.013	0.013	0.013	0.015	0.013	0.018
Zr	mg/L	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.013	0.006	0.006	0.006	0.006
pH final		6.70	4.27	6.84	6.59	5.40	8.51	6.95	7.38	8.38	7.40	7.45	8.28
Conductividad	uS	24.8	54.2	58.7	89.3	92.5	78.1	IS	36.8	103.2	79.1	83.7	110.0
ORP	mV	218	317	163	191	189	33	IS	117	33	105	86	57

Apéndice 6
Resultados Ensayo de Celdas de Humedad (Ciclo Incompleto)

Muestra	MQMQ FLOT *		Sulfuro (Flotación + BRT)	SM-SC	Altamente Acido - Acido	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	748.64	748	733.73	
pH @ 25° C	0.1	u pH	7.63	7.34	7.26	
Conductividad @ 25°C	0.1	uS/cm	145	380	390	
Sulfatos	0.01	mg/L	28.92	108.42	119.40	
Nitrogeno amoniacal	0.004	mg/L	0.004	0.005	0.011	
Fluoruro	0.002	mg/L	0.163	0.147	0.143	
Nitrato	0.031	mg/L	<0.149	<0.120	<0.081	
Alcalinidad total(CaCO3)	0.5	mg/L	17.20	13.20	5.50	
Acidez (H2SO4)	0.5	mg/L	1.6	1.7	1.7	
Sb	0.0008	mg/L	0.0392	0.0359	0.0209	
As	0.001	mg/L	0.222	0.085	0.039	
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	
Ba	0.002	mg/L	0.089	0.065	0.041	
Bo	0.01	mg/L	0.01	0.01	0.01	
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	
Cu	0.001	mg/L	0.010	0.002	0.002	
Cd	0.0002	mg/L	0.0002	0.0002	0.0002	
Cr	0.002	mg/L	<0.002	<0.002	<0.002	
Fe	0.001	mg/L	0.194	0.089	0.051	
Mn	0.0006	mg/L	0.0021	0.0034	0.0053	
Hg	0.00003	mg/L	0.0000	0.0026	0.0128	
Mo	0.00014	mg/L	0.0042	0.0135	0.0173	
Ni	0.0004	mg/L	0.0004	0.0004	0.0004	
Pb	0.0003	mg/L	0.0013	0.0003	0.0005	
Se	0.002	mg/L	0.0020	0.0020	0.0020	
Zn	0.0008	mg/L	0.0029	0.0046	0.0045	
Al	0.02	mg/L	0.38	0.06	0.05	
Li	0.0009	mg/L	0.001	0.001	0.001	
Ca	0.003	mg/L	12.58	32.97	40.94	
Mg	0.001	mg/L	0.977	3.217	4.118	
Co	0.00007	mg/L	0.0073	0.0292	0.0198	
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	
Na	0.02	mg/L	24.32	44.12	33.92	
K	0.2	mg/L	3.40	6.50	5.70	
V	0.002	mg/L	<0.002	<0.002	<0.002	
Tl	0.00003	mg/L	0.0011	0.0012	0.0012	
Sr	0.0003	mg/L	0.032	0.049	0.057	
Si	0.04	mg/L	3.55	2.02	1.48	
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	

Muestra	DS-1383305	Ox mill (Cola BRT)		SG	Acido	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	909.35	818.17	829.4	836.73
pH @ 25° C	0.1	u pH	7.64	7.50	7.34	7.60
Conductividad @ 25°C	0.1	uS/cm	2058	1844	1604	1454
Sulfatos	0.01	mg/L	705.15	682.92	722.68	718.53
Nitrogeno amoniacal	0.004	mg/L	0.004	0.004	0.005	0.004
Fluoruro	0.002	mg/L	0.208	0.147	0.191	0.199
Nitrato	0.031	mg/L	<0.588	<0.031	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	20.00	18.20	24.30	28.00
Acidez (H2SO4)	0.5	mg/L	5.7	3.4	2.7	2.1
Sb	0.0008	mg/L	0.0023	0.0020	0.0024	0.0019
As	0.001	mg/L	0.003	0.004	0.006	0.004
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.031	0.024	0.022	0.019
Bo	0.01	mg/L	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.030	0.001	0.001	0.001
Cd	0.0002	mg/L	0.0009	0.0002	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	8.193	5.177	7.330	6.987
Mn	0.0006	mg/L	0.0061	0.0028	0.0042	0.0056
Hg	0.00003	mg/L	0.0143	0.0000	0.0000	0.0000
Mo	0.00014	mg/L	0.0064	0.0060	0.0032	0.0043
Ni	0.0004	mg/L	0.0008	0.0004	0.0004	0.0004
Pb	0.0003	mg/L	0.0003	0.0003	0.0011	0.0036
Se	0.002	mg/L	0.0070	0.0030	0.0030	0.0020
Zn	0.0008	mg/L	0.0037	0.0016	0.0035	0.0048
Al	0.02	mg/L	0.03	0.02	0.02	0.02
Li	0.0009	mg/L	0.007	0.009	0.016	0.014
Ca	0.003	mg/L	440.32	272.85	253.31	287.12
Mg	0.001	mg/L	18.559	26.693	49.147	58.522
Co	0.00007	mg/L	0.0733	0.0350	0.0281	0.0256
Ag	0.0002	mg/L	0.0055	0.0002	0.0002	0.0002
Na	0.02	mg/L	17.14	5.16	4.66	2.61
K	0.2	mg/L	6.20	1.70	2.00	1.40
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0036	0.0020	0.0009	0.0054
Sr	0.0003	mg/L	0.391	0.248	0.305	0.410
Si	0.04	mg/L	0.92	1.11	1.25	1.71
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1383307	Ox mill (Cola BRT)		SM	Inerte/Neutral	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	804.23	790.57	783.1	796.56
pH @ 25° C	0.1	u pH	8.45	8.15	7.79	8.02
Conductividad @ 25°C	0.1	uS/cm	133	221	152	114
Sulfatos	0.01	mg/L	31.85	52.48	30.00	18.03
Nitrogeno amoniacal	0.004	mg/L	0.004	0.004	0.005	0.004
Fluoruro	0.002	mg/L	0.092	0.136	0.177	0.148
Nitrato	0.031	mg/L	<0.031	<0.185	<0.031	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	14.40	16.60	23.60	22.80
Acidez (H2SO4)	0.5	mg/L	1.7	1.0	1.7	1.0
Sb	0.0008	mg/L	0.0112	0.0231	0.0414	0.0308
As	0.001	mg/L	0.205	0.268	0.550	0.572
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.033	0.029	0.024	0.021
Bo	0.01	mg/L	0.01	0.01	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.002	0.003	0.002	0.002
Cd	0.0002	mg/L	0.0002	0.0004	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.003	<0.004
Fe	0.001	mg/L	0.090	0.123	0.131	0.063
Mn	0.0006	mg/L	0.0019	0.0046	0.0044	0.0040
Hg	0.00003	mg/L	0.0000	0.0000	0.0000	0.0002
Mo	0.00014	mg/L	0.0163	0.0161	0.0170	0.0176
Ni	0.0004	mg/L	0.0011	0.0004	0.0004	0.0004
Pb	0.0003	mg/L	0.0003	0.0003	0.0007	0.0006
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0056	0.0027	0.0036	0.0009
Al	0.02	mg/L	0.08	0.02	0.02	0.02
Li	0.0009	mg/L	0.001	0.003	0.003	0.002
Ca	0.003	mg/L	20.07	36.97	24.29	18.75
Mg	0.001	mg/L	0.568	2.031	1.737	1.348
Co	0.00007	mg/L	0.0070	0.0132	0.0069	0.0021
Ag	0.0002	mg/L	0.0002	0.0002	0.0002	0.0002
Na	0.02	mg/L	0.57	1.65	1.27	0.47
K	0.2	mg/L	0.30	0.40	0.50	0.30
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0027	0.0026	0.0014	0.0015
Sr	0.0003	mg/L	0.043	0.073	0.052	0.054
Si	0.04	mg/L	3.21	4.54	7.41	7.95
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Muestra	DS-1383308	Desmonte		SG	Inerte/Neutral	
Analito	Limite Detección	Unidad	Semana 1	Semana 2	Semana 3	Semana 4
Volumen Solución	1	ml	737.69	721.42	727.6	727.73
pH @ 25° C	0.1	u pH	7.60	7.50	7.33	7.60
Conductividad @ 25°C	0.1	uS/cm	158	107	71	47
Sulfatos	0.01	mg/L	31.61	28.82	16.01	10.61
Nitrogeno amoniacal	0.004	mg/L	0.004	0.004	0.004	0.004
Fluoruro	0.002	mg/L	0.119	0.226	0.14	0.132
Nitrato	0.031	mg/L	<2.960	<1.084	<0.205	<0.031
Alcalinidad total(CaCO3)	0.5	mg/L	16.90	12.00	15.70	12.30
Acidez (H2SO4)	0.5	mg/L	3.6	1.5	1.2	1.0
Sb	0.0008	mg/L	0.0008	0.0008	0.0013	0.0008
As	0.001	mg/L	0.006	0.011	0.012	0.012
Be	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Ba	0.002	mg/L	0.030	0.014	0.014	0.016
Bo	0.01	mg/L	0.01	0.02	0.01	0.01
Bi	0.00005	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Cu	0.001	mg/L	0.004	0.005	0.005	0.002
Cd	0.0002	mg/L	0.0006	0.0003	0.0002	0.0002
Cr	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Fe	0.001	mg/L	0.120	0.104	0.097	0.099
Mn	0.0006	mg/L	0.0054	0.0049	0.0044	0.0020
Hg	0.00003	mg/L	0.0003	0.0000	0.0000	0.0001
Mo	0.00014	mg/L	0.0052	0.0103	0.0201	0.0181
Ni	0.0004	mg/L	0.0008	0.0009	0.0013	0.0004
Pb	0.0003	mg/L	0.0003	0.0003	0.0008	0.0008
Se	0.002	mg/L	0.0020	0.0020	0.0020	0.0020
Zn	0.0008	mg/L	0.0090	0.0186	0.0153	0.0102
Al	0.02	mg/L	0.18	0.20	0.22	0.23
Li	0.0009	mg/L	0.003	0.004	0.003	0.002
Ca	0.003	mg/L	3.04	3.13	1.59	1.30
Mg	0.001	mg/L	0.282	0.158	0.142	0.185
Co	0.00007	mg/L	0.0002	0.0003	0.0005	0.0001
Ag	0.0002	mg/L	0.0005	0.0002	0.0002	0.0002
Na	0.02	mg/L	24.83	21.88	20.19	13.54
K	0.2	mg/L	0.50	0.50	0.30	0.20
V	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Tl	0.00003	mg/L	0.0000	0.0000	0.0000	0.0003
Sr	0.0003	mg/L	0.023	0.020	0.010	0.011
Si	0.04	mg/L	2.57	3.38	3.72	3.75
Sn	0.0014	mg/L	<0.0010	<0.0010	<0.0010	<0.0010

Apéndice 7
Resultados Calidad de Agua de Proceso

Nro		1	2	3	4	5	6	7	8	9
Código DS		DS-1383304	DS-1383305	DS-1383306	DS-1383307	DS-1383309	DS-1383310	DS-1383311	DS-1383315	DS-1383316
NCV		Acido	Acido	Altamente Acido	Inerte/Neutral	Inerte/Neutral	Acido	Ligeramente Acido	Acido	Acido
Taladro		MM-255	MM-275	MM-289	MM-292	MM-423	MM-424	MM-467	MM-516	MM-520
Desde		34	80	38	40	76	16	24	10	0
Hasta		44	90	48	50	86.8	26	34	19.5	10.7
Tipo		Oxido Mill	Oxido Mill	Oxido Mill	Oxido Mill	Oxido Mill	Oxido Mill	Oxido Mill	Oxido Mill	Oxido Mill
Tiempo Lix (h)		24	24	24	24	24	24	24	24	24
CN Libre / p80		150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm	150ppm, 150 µm
Analito	**Unidad**									
Cloruro	ppm	8.43	12.56	11.56	10.15	24.02	11.91	54.44	12.01	13.81
Fluoruro	ppm	0.00	7.83	7.62	8.42	8.38	8.58	0.00	8.13	13.44
N-NH3	ppm	328.7	457.6	217.4	246.7	0.0	155.0	0.0	189.2	133.6
N-Nitrato	ppm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N-Nitrito	ppm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sulfato	ppm	379	2189	1846	1901	415	1102	864	1352	544
CN Total	ppm	303.91	216.66	331.11	189.25	132.53	239.88	141.80	293.92	220.80
CN WAD	ppm	249.58	172.54	304.68	169.57	132.53	239.88	141.78	293.91	220.79
Cianato	ppm	26.610	1.260	4.080	1.050	0.900	4.470	1.650	5.070	3.660
Hg	ppb	0.828	4.041	0.774	0.234	30.870	4.482	6.100	0.372	0.494
Ag	ppm	0.030	0.058	0.153	0.010	1.700	0.127	1.419	0.065	0.174
Au	ppm	0.032	0.549	0.025	0.082	0.200	0.176	0.364	0.064	0.080
Cu	ppm	205.535	58.399	234.007	83.183	10.326	126.481	24.312	272.466	116.880
Al	ppm	1.061	1.731	0.556	1.601	0.283	3.447	0.314	3.161	1.335
As	ppm	0.000	0.091	0.000	4.526	0.093	0.058	1.667	0.000	0.158
B	ppm	1.631	3.250	1.361	3.324	0.171	0.000	0.183	0.210	0.166
Ba	ppm	0.041	0.032	0.108	0.053	1.045	0.815	0.829	0.901	0.868
Be	ppm	0.000	0.008	0.000	0.009	0.001	0.001	0.000	0.001	0.000
Bi	ppm	0.005	0.016	0.000	0.127	0.000	0.000	0.000	0.000	0.000
Ca	ppm	122.759	535.645	612.585	525.304	114.647	263.576	245.478	321.000	115.103
Cd	ppm	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
Co	ppm	0.040	0.305	0.156	0.105	0.116	0.798	0.033	0.175	0.243
Cr	ppm	0.198	0.000	0.004	0.000	0.003	0.000	0.018	0.005	0.000
Fe	ppm	0.522	33.239	0.516	5.947	1.755	1.082	2.204	2.028	0.624
Ga	ppm	0.018	0.007	0.000	0.005	0.000	0.000	0.002	0.003	0.000
K	ppm	12.316	15.113	55.784	5.407	3.911	22.521	5.734	35.424	18.669
Li	ppm	0.002	0.009	0.005	0.016	0.000	0.000	0.000	0.000	0.000
Mg	ppm	0.266	0.349	0.205	10.901	1.654	1.908	2.322	1.174	1.134
Mn	ppm	0.005	0.068	0.006	0.064	0.001	0.002	0.002	0.001	0.001
Mo	ppm	0.201	0.205	0.078	0.377	0.083	0.077	0.233	0.044	0.135
Na	ppm	N/A	367.661	N/A	191.824	N/A	N/A	N/A	N/A	N/A
Nb	ppm	0.000	0.031	0.000	0.048	0.000	0.000	0.000	0.000	0.000
Ni	ppm	0.119	0.518	0.231	0.770	0.265	18.025	0.647	0.223	10.366
Pb	ppm	0.081	0.028	0.085	0.027	0.033	0.043	0.001	0.082	0.016
Sb	ppm	0.000	0.052	0.000	0.032	0.013	0.053	0.062	0.000	0.000
Sc	ppm	0.002	0.000	0.002	0.000	0.001	0.009	0.001	0.003	0.002
Se	ppm	0.008	0.352	0.077	0.108	0.000	0.103	0.254	0.104	0.000
Sn	ppm	0.012	0.031	0.023	0.128	0.009	0.023	0.000	0.002	0.019
Sr	ppm	0.205	0.876	0.254	0.726	0.085	0.250	0.253	0.395	0.264
Te	ppm	0.011	0.000	0.025	0.004	0.000	0.000	0.000	0.000	0.000
Ti	ppm	0.002	0.001	0.000	0.009	0.044	0.011	0.093	0.005	0.009
Tl	ppm	0.000	0.000	0.000	0.000	0.003	0.000	0.034	0.004	0.033
V	ppm	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
W	ppm	0.059	0.000	0.068	0.008	0.014	14.725	0.037	0.009	1.383
Zn	ppm	0.083	0.050	0.068	0.000	0.000	0.649	0.000	0.000	3.778
Tiocianato	ppm	104.720	339.950	288.620	71.950	42.650	40.150	60.050	109.950	44.750
TDS	ppm	1685.000	3695.000	4230.000	3130.000	690.000	2015.000	1410.000	2505.000	1100.000
TSS	mg/L	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Yanacocha | Laboratorio Metalúrgico

CENTRO DE INVESTIGACIONES METALÚRGICAS
"DON ALBERTO BENAVIDES"
MINERA YANACOCHA S.R.L

M E M O R A N D U M

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FECHA: 01 de Marzo del 2018

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REPORTE: LM-R-008-18

SUBJECT: RESULTADOS DE CELDAS DE HUMEDAD PARA EL MINERAL DE DESMONTE CHAQUICOCHA UNDERGROUND

INTRODUCCIÓN

El Laboratorio Metalúrgico realizó 8 pruebas de Celdas de Humedad para el mineral de desmonte del proyecto Chaquicocha Underground. El objetivo de las pruebas fue realizar la caracterización química y predecir el potencial de generación o neutralización ácida de las muestras. La prueba cinética de celdas de humedad corresponde a un ensayo ambiental aplicado de acuerdo a la norma ASTM D5744. Esta prueba está diseñada para producir un aceleramiento de la degradación natural de las muestras sólidas potencialmente generadoras de ácido y de esta manera disminuir el tiempo necesario para obtener los parámetros requeridos de las soluciones generadoras producto de esta meteorización. Los análisis de metales en la solución lixiviada fueron analizados en el Laboratorio de QC de Medio Ambiente de MYSR con equipo de ICP-MS (Espectrometría de Masas con Plasma Acoplado Inductivamente) en cambio las cabeza y colas de las muestras evaluadas fueron analizadas en el Laboratorio Analítico de MYSRL con lecturas finales en un equipo de ICP-OES (Espectrometría de Emisión Óptica).

RESUMEN

El Laboratorio Metalúrgico realizó 8 pruebas de Celdas de Humedad para el mineral de desmonte de Chaquicocha Underground. Las muestras fueron sometidas a la prueba cinética de celdas de humedad correspondiente a un ensayo ambiental aplicado de acuerdo a la norma ASTM D5744. Esta prueba está diseñada para producir un aceleramiento de la degradación natural de las muestras sólidas potencialmente generadoras de ácido y de esta manera disminuir el tiempo necesario para obtener los parámetros requeridos de las soluciones generadoras producto de esta meteorización.

Los resultados de la prueba HCT mostraron que todas las muestras evaluadas tiene el potencial para generar acidez en el corto tiempo, los resultados de pH de la muestra 60590, 60591 y 60592 comprados con los de $CaCO_3$ revelan que los carbonatos presentes son insuficientes para neutralizar la generación de acidez producto de la oxidación de los sulfuros, lo que significa que estas muestras también tiene potencial de generar acidez en el tiempo, aunque con un poco de menor proporción que las demás; en cambio analizando los valores de pH, sulfatos, acidez y alcalinidad de las muestra 60594 mostró ser la muestra con mayor potencial para generar acidez, incluso en un muy corto tiempo. También las gráficas de cinética mostraron que en general la disolución de metales se da en las primeras 14 semanas. En el caso del calcio tiende a aumentar a partir de la semana 15, ocurre lo mismo con el magnesio en las muestras 60588, 60589 y 60594; estos resultados obtenidos en el mineral nos indican que contienen carbonatos que están siendo disueltos por el ácido sulfúrico.

MUESTRAS Y PROCEDIMIENTO

Las muestras provienen del material de desmonte Chaquicocha Underground. Las 8 muestras sometidas a la prueba HCT fueron reducidas a un tamaño de partícula de P80 menos 6300 micrones (-1/4 pulg), las muestras recepcionadas se muestran en la tabla I.

Tabla I. Identificación y de las muestras

Sample ID	Descripción	Desde	Hasta
60588	DS -1469403	38	46
60589	DS -1469404	66	74
60590	DS -1469405	20	28
60591	DS -1469406	142	150
60592	DS -1469407	108	116
60593	DS -1469408	80	88
60594	DS -1469409	80	88
60595	DS -1469410	36	44

La prueba cinética de celdas de humedad corresponde a un ensayo ambiental aplicado de acuerdo a la norma ASTM D5744. Esta prueba está diseñada para producir un aceleramiento de la degradación natural de las muestras sólidas potencialmente generadoras de ácido y de esta manera disminuir el tiempo necesario para obtener los parámetros requeridos de las soluciones generadas producto de esta meteorización.

Para producir esta degradación, las muestras son sometidas a ciclos de aire seco y húmedo, semanalmente se colectan soluciones producto de las inundaciones, las cuales fueron a analizadas para observar la evolución de los parámetros de interés (pH, metales, acidez, alcalinidad, etc.). En comparación con el terreno esta prueba utiliza una granulometría más fina sumado al volumen de agua aplicado permiten maximizar la humidificación de la muestra, con la cual no ocurre en la degradación natural de la muestra. De esta manera los resultados obtenidos durante la aplicación de la prueba son más extremos en un comparación a un proceso natural, lo que también se extiende a los metales disueltos en la soluciones lixiviadas que tendrán una mayor concentración que las aguas generadas en terreno.



Figura 1. Equipo de celdas de humedad

RESULTADOS

El rango de los muestreos semanales de las celdas de humedad es presentado en la tabla II, en ella se puede notar que todas las muestras evaluadas podrían generar acidez en el tiempo, los resultados de pH de las muestras 60590, 60591 y 60592 comprados con los de CaCO3 y los valores de Ca y Mg revelan que los carbonatos presentes son insuficientes para neutralizar la generación de acidez producto de la oxidación de los sulfuros, lo que significa que estas muestras también tiene potencial de generar acidez en el tiempo, aunque en una menor proporción que las demás.

Tabla II. Resumen de los rangos de concentración de las soluciones

	Site Limit	60588	60589	60590	60591	60592	60593	60594	60595
pH, s.u.		3-7.1	2.8-7	2.8-5.5	3.1-5.5	3.9-6.8	3.2-6.5	2.1-2.8	3.5-6.7
Cond. uS/cm		29.5-140.6	26.2-562	27.7-1107	76.2-652	6.8-120.8	64-249.5	6.2-2750	7.8-84.6
Acidity, mg/L		0-300.6	0-150.9	0-439.7	0-221.7	0-279.2	0-275.5	0-1601.2	0-221.3
Alk_CaCO3, mg/L		0-0	0-0	0-1	0-1	0-0	0-0	0-0	0-0
SO4, mg/L		7-170	9-130	47-480	31-230	2-48	14-140	225-1355	1-46
Ca, mg/L		0.3-7.3	0.3-7.3	0.3-7.1	0.3-9.1	0.3-7.4	0-7.5	0.3-7.1	0.1-6.8
Mg, mg/L		0-1.6	0.2-1.5	0-0.3	0-2.6	0-1.5	0-0.3	0-1.5	0-0.2
Fe, mg/L		0.5-8	0.3-23.4	5.6-51.1	0.9-16	0.3-4.3	0.7-11.1	38.8-203.3	0.4-8.1

En general los resultados de los análisis de metales y de otros parámetros como los sulfatos tienden a aumentar en las primeras 14 semanas, en el caso del calcio tiende a aumentar a partir de la semana 15 ocurre lo mismo con el magnesio en las muestras 60588, 60589 y 60594, como se muestra en las gráficas de cinética. Las cargas semanales de sulfato en la solución lixiviada fueron significativas para las muestras. Las cargas fueron calculadas multiplicando el efluente por la concentración semanal. Además las cargas semanales fueron acumuladas y graficadas en función de las semanas de tal manera que los ratios de liberación podrían ser calculados de la pendiente del rango lineal. Los ratios de liberación semanal final calculados para los principales analitos son resumidos en la tabla III.

Tabla III. Resumen de los principales ratios de liberación

	60588	60589	60590	60591	60592	60593	60594	60595
SO4, %	17.2	4.0	59.2	171.8	69.4	38.8	1015.4	25.4
Avg. SO4 Release, mg/week	27.6	27.4	80.7	54.0	13.2	32.2	415.8	12.6
SO4 Week Linear Range	1-20	2-20	4-20	2-20	2-20	2-20	2-20	2-20
Ca, %	43.1	59.2	61.3	50.2	19.5	25.8	60.4	27.2
Avg. Ca Release, mg/week	1.8	1.7	1.8	2.3	2.1	1.7	1.7	0.8
Ca Week Linear Range	1-14	1-14	1-14	1-14	4-14	1-14	4-14	1-14
Mg, %	46.3	57.7	15.4	38.9	14.7	6.3	53.3	5.8
Avg. Mg Release, mg/week	0.4	0.4	0.1	0.3	0.3	0.0	0.4	0.0
Mg Week Linear Range	1-14	1-14	9-20	9-20	2-9	3-20	1-14	3-20

Las gráficas 2-4 muestran la tendencia de la carga acumulada usa para identificar los rangos lineales para los principales analitos liberados. En la figura 2 se observa una tendencia lineal constante de generar sulfatos, también se observa que en la muestra 60594 hay una disolución significativa de sulfatos durante toda la prueba, lo que se corrobora con el pH en el rango de 2.1 a 2.8. Al analizar el calcio de la figura 3 se observa una liberación lineal durante las primeras semanas, para luego tener una tendencia a aumentar su disolución, también se puede observar en la figura 4 con el incremento de disolución de Mg a partir de la semana 15 en las muestras 60588, 60589 y 60594.

Las muestras 60590, 60591 y 60592 no es capaz de neutralizar la acidez generada por el ácido sulfúrico; en cambio analizando los valores de pH, sulfatos, acidez y alcalinidad de las muestra 60594 mostró ser la muestra con mayor potencial para generar acidez, incluso en un corto tiempo.

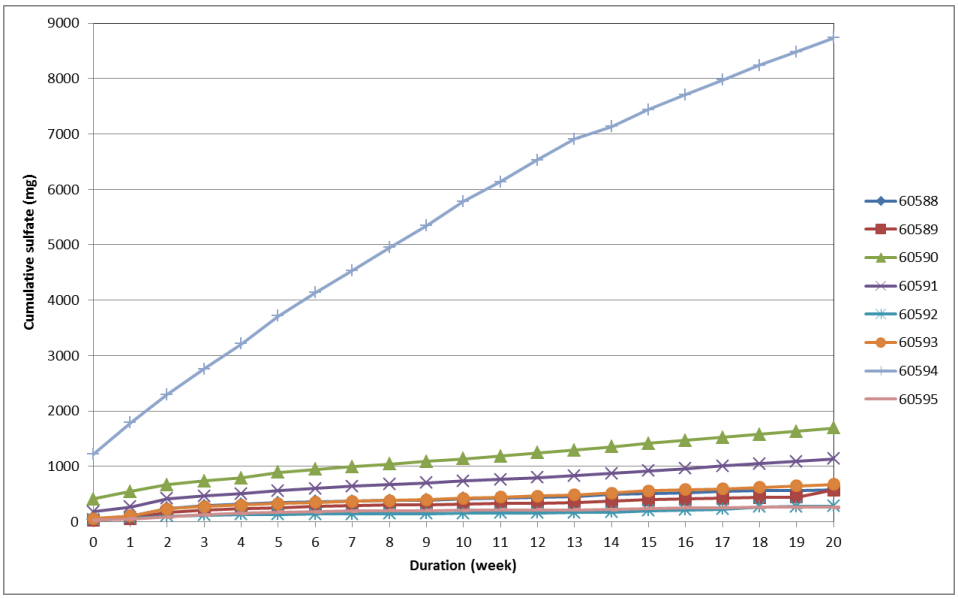


Figura 2. Carga acumulada semanal de Sulfato liberado

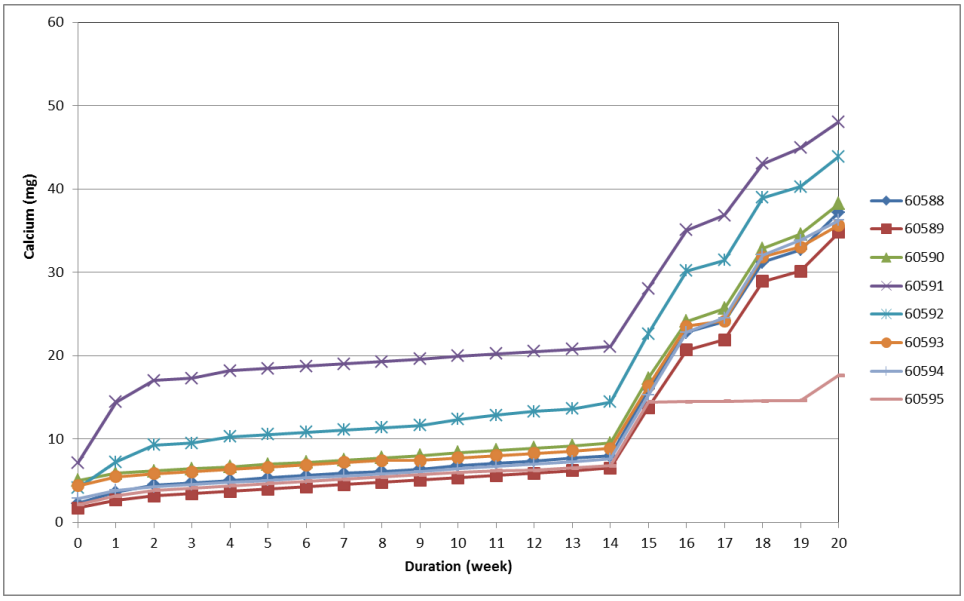


Figura 3. Carga acumulada semanal de Calcio liberado

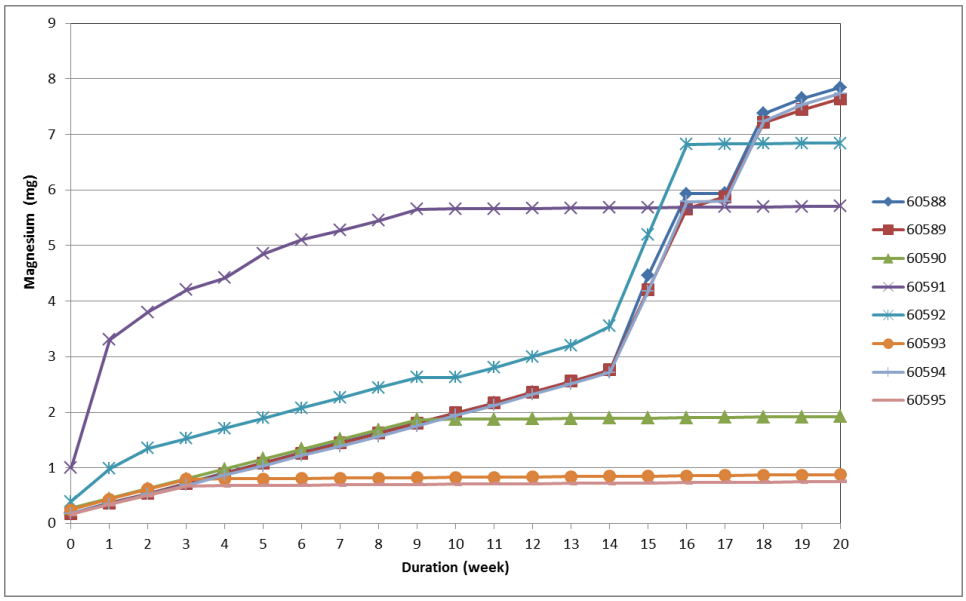
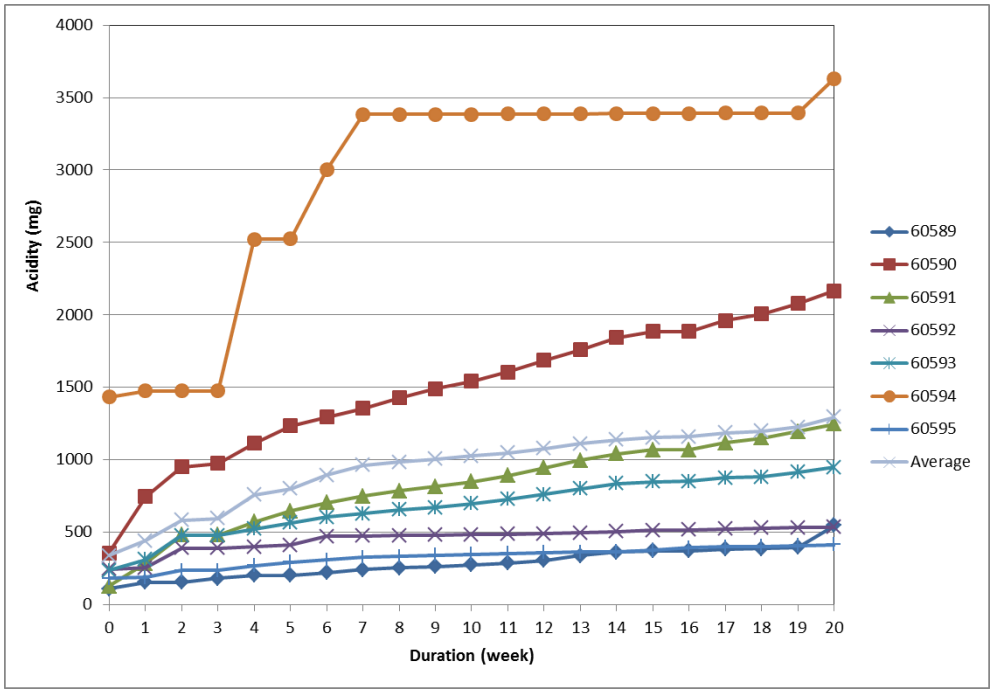
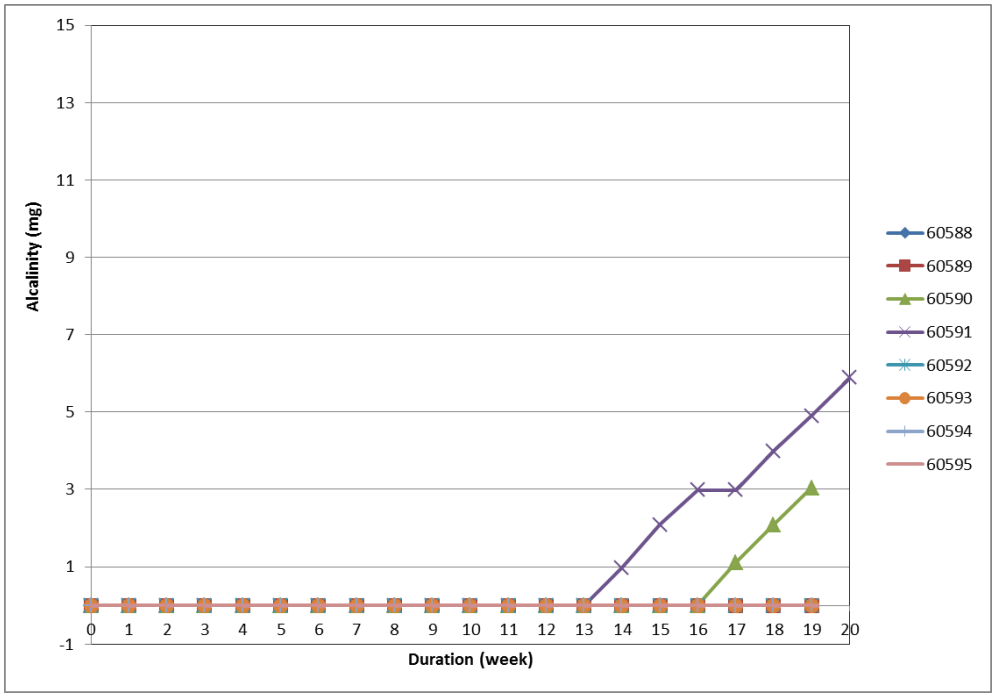
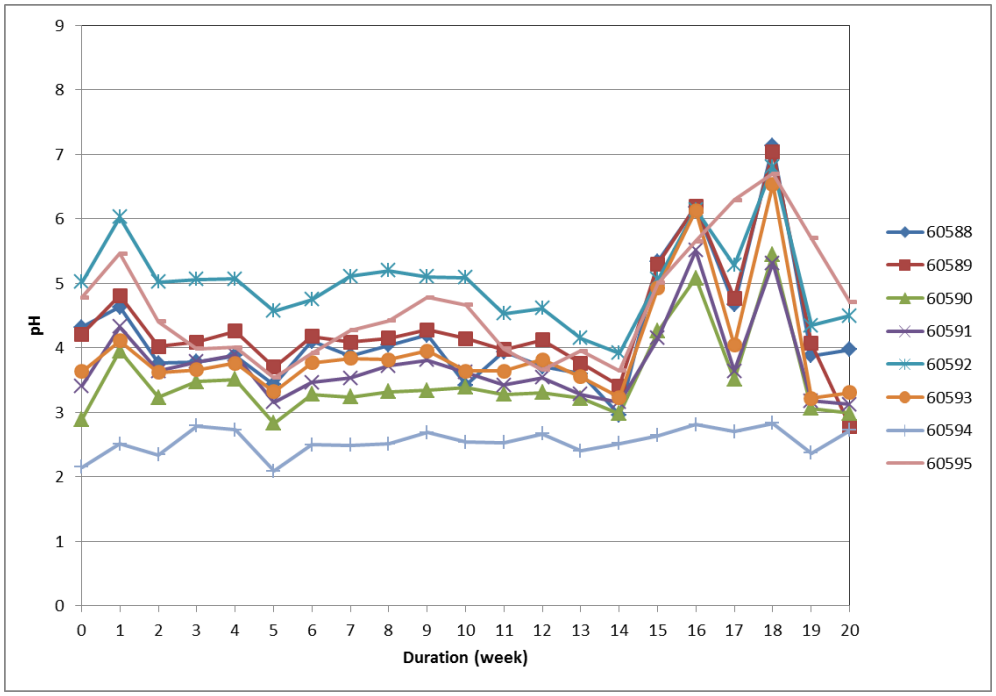


Figura 4. Carga acumulada semanal de Magnesio liberado

APÉNDICE A
Gráficas de Cinética






pH
Duration (week)
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
60588
60589
60590
60591
60592
60593
60594
60595

Yanacocha | Laboratorio Metalúrgico

APÉNDICE B

Head Assay

Elemento	Código Cliente			Au	Ag	Cu	SCIS	S°	Hg
Unidad	DS	From	To	g/t	g/t	g/t	%	%	g/t
60588_HA	DS -1469403	38	46	0.139	0.22	598.3	1.4	8.5	3.31
60589_HA	DS -1469404	66	74	0.464	0.02	3948.8	0.7	5.3	1.91
60590_HA	DS -1469405	20	28	0.088	0.02	60.7	2.1	10.0	0.70
60591_HA	DS -1469406	142	150	0.622	0.02	540.3	2.6	13.2	1.16
60592_HA	DS -1469407	108	116	0.282	0.02	106.4	0.2	5.0	0.64
60593_HA	DS -1469408	80	88	0.180	0.02	22.0	0.2	8.4	0.79
60594_HA	DS -1469409	80	88	0.272	0.02	27.1	10.6	16.8	5.75
60595_HA	DS -1469410	36	44	0.041	0.02	56.9	0.1	5.8	0.40

Elemento	Código Cliente			Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Li	Mg	Mn
Unidad	DS	From	To	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
60588_HA	DS -1469403	38	46	0.04	36.02	264.34	15.83	65.29	0.00	1.22	43.10	0.00	0.98	135.54	506.61	1787.44	2.48	0.53	8.47	12.99
60589_HA	DS -1469404	66	74	0.00	31.37	1322.16	16.26	82.81	0.00	0.00	29.37	0.00	2.66	106.03	4221.40	1864.42	4.19	0.26	6.62	13.46
60590_HA	DS -1469405	20	28	0.12	99.73	145.07	15.44	64.32	0.00	0.46	31.18	1.13	4.22	146.14	62.13	3127.99	3.81	0.52	6.23	12.84
60591_HA	DS -1469406	142	150	0.71	130.64	301.97	2.84	136.90	0.00	0.96	47.85	0.00	1.74	106.64	586.17	2108.64	0.00	0.28	7.33	11.68
60592_HA	DS -1469407	108	116	0.00	59.37	148.43	16.87	145.67	0.00	1.26	112.32	0.00	2.88	366.00	149.12	5786.51	5.95	0.48	23.32	40.46
60593_HA	DS -1469408	80	88	0.00	34.01	113.26	19.10	77.88	0.00	0.23	69.04	0.00	0.88	316.98	17.98	3803.99	1.96	0.51	6.96	36.37
60594_HA	DS -1469409	80	88	0.00	35.93	181.39	8.18	40.06	0.00	0.53	29.99	0.00	12.93	167.97	28.70	13506.16	2.87	0.49	7.26	22.10
60595_HA	DS -1469410	36	44	0.00	39.67	74.74	18.29	147.12	0.00	0.56	32.39	0.00	1.18	136.53	55.28	1616.62	2.86	0.32	6.51	13.00

Elemento	Código Cliente			Mo	Na	Nb	Ni	Pb	Sb	Sc	Se	Sn	Sr	Te	Ti	Tl	V	W	Zn
Unidad	DS	From	To	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
60588_HA	DS -1469403	38	46	2.25	36.69	3.30	6.24	7.80	7.25	0.01	4.95	0.95	7.77	5.34	17.35	0.83	0.31	0.00	9.50
60589_HA	DS -1469404	66	74	7.61	33.28	1.09	6.57	134.83	3.65	0.06	3.70	3.05	33.34	22.12	9.24	5.57	0.77	0.00	32.08
60590_HA	DS -1469405	20	28	14.30	43.87	2.93	7.36	209.43	4.08	0.00	5.99	0.69	11.76	3.83	20.78	15.13	0.53	0.00	110.48
60591_HA	DS -1469406	142	150	15.91	21.18	2.24	5.08	502.97	4.09	0.49	8.76	1.26	22.14	4.52	136.03	5.62	0.47	12.58	15.59
60592_HA	DS -1469407	108	116	3.69	49.36	1.24	14.05	126.78	0.38	0.01	3.43	0.73	1.54	3.25	16.71	0.87	1.50	0.00	12.81
60593_HA	DS -1469408	80	88	8.61	39.33	1.09	12.24	56.05	0.64	0.00	6.05	0.20	5.34	3.04	12.55	1.05	0.86	0.00	154.13
60594_HA	DS -1469409	80	88	0.38	32.95	0.32	11.34	51.38	1.41	0.00	9.09	2.95	2.28	6.78	30.43	19.63	1.00	0.00	7.71
60595_HA	DS -1469410	36	44	8.90	42.40	2.87	5.21	40.46	0.82	0.00	4.58	0.74	4.95	2.47	13.98	0.00	0.24	0.00	11.19

Muestras	Código Cliente			LECO_CS				
	DS	From	To	S(tot), %	SS, %	SO4=, %	C, %	CRES, %
60588_HA	DS -1469403	38	46	10.3	1.60	0.17	0.02	0.02
60589_HA	DS -1469404	66	74	7.02	1.01	0.72	0.02	0.02
60590_HA	DS -1469405	20	28	12.6	2.50	0.14	0.02	0.02
60591_HA	DS -1469406	142	150	15.3	2.11	0.03	0.02	0.02
60592_HA	DS -1469407	108	116	5.47	0.45	0.02	0.02	0.02
60593_HA	DS -1469408	80	88	10.2	1.71	0.09	0.02	0.02
60594_HA	DS -1469409	80	88	20.7	3.91	0.04	0.02	0.02
60595_HA	DS -1469410	36	44	7.1	1.22	0.05	0.02	0.02

APÉNDICE C

Tail Assay

Elemento	Código Cliente			Au	Ag	Cu	SCIS	S°	Hg
Unidad	DS	From	To	g/t	g/t	g/t	%	%	g/t
60588_T	DS -1469403	38	46	0.121	0.16	595.8	1.8	7.7	3.90
60589_T	DS -1469404	66	74	0.407	0.02	4267.5	1.3	4.6	2.21
60590_T	DS -1469405	20	28	0.098	0.22	58.7	5.1	9.6	1.39
60591_T	DS -1469406	142	150	0.609	0.20	350.8	3.6	11.0	1.28
60592_T	DS -1469407	108	116	0.281	0.12	99.9	0.4	4.1	0.74
60593_T	DS -1469408	80	88	0.174	0.20	15.2	1.2	7.9	0.97
60594_T	DS -1469409	80	88	0.242	0.17	24.7	9.4	13.6	6.40
60595_T	DS -1469410	36	44	0.059	0.02	48.4	0.3	5.4	0.58

Elemento	Código Cliente			Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Li	Mg	Mn
Unidad	DS	From	To	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
60588_T	DS -1469403	38	46	0.00	28.70	329.41	17.72	54.13	0.00	1.21	45.26	0.00	0.19	128.94	609.48	1699.60	1.41	0.35	7.00	10.43
60589_T	DS -1469404	66	74	0.00	31.97	1289.76	17.43	77.73	0.00	0.00	32.63	0.00	2.16	298.06	4335.43	4108.11	3.71	0.24	5.83	34.69
60590_T	DS -1469405	20	28	0.00	85.31	131.04	16.63	53.24	0.00	0.28	24.83	0.00	0.16	127.57	52.95	2668.85	2.06	0.39	5.45	9.80
60591_T	DS -1469406	142	150	0.00	62.61	279.39	16.33	74.50	0.00	0.59	27.08	0.00	0.63	186.36	383.05	2400.01	0.65	0.24	7.85	17.50
60592_T	DS -1469407	108	116	0.00	45.97	123.24	16.42	115.93	0.00	0.87	70.70	0.00	0.00	137.38	108.71	3024.37	1.02	0.26	15.63	13.36
60593_T	DS -1469408	80	88	0.00	32.05	119.74	17.43	99.46	0.01	0.24	61.21	0.00	1.32	315.51	18.41	3628.39	0.17	0.29	6.20	31.67
60594_T	DS -1469409	80	88	0.00	29.20	100.92	11.92	45.24	0.00	0.04	26.26	0.00	5.37	121.39	31.60	11071.74	1.50	0.28	6.72	14.82
60595_T	DS -1469410	36	44	0.00	34.76	73.01	18.99	162.53	0.00	0.24	27.19	0.00	0.82	261.67	54.52	3017.26	2.88	0.27	5.68	26.68

Elemento	Código Cliente			Mo	Na	Nb	Ni	Pb	Sb	Sc	Se	Sn	Sr	Te	Ti	Tl	V	W	Zn
Unidad	DS	From	To	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
60588_T	DS -1469403	38	46	2.59	33.70	2.94	4.43	7.50	10.33	0.00	6.68	1.00	7.40	6.04	12.16	0.00	0.62	0.00	7.20
60589_T	DS -1469404	66	74	9.05	36.54	0.42	12.84	95.80	2.62	0.05	3.04	2.95	34.00	21.21	8.91	4.62	0.89	0.00	29.03
60590_T	DS -1469405	20	28	13.54	41.22	3.27	5.90	190.74	3.78	0.00	5.05	0.78	10.22	3.68	13.75	7.01	0.23	0.00	86.18
60591_T	DS -1469406	142	150	11.73	37.85	0.37	6.04	453.35	4.37	0.08	10.90	1.77	7.25	5.13	14.76	2.71	0.67	7.47	8.34
60592_T	DS -1469407	108	116	2.67	34.52	3.28	6.65	103.55	1.45	0.01	1.05	0.06	1.29	2.74	13.46	0.50	0.67	0.00	8.00
60593_T	DS -1469408	80	88	6.94	36.61	0.69	10.89	30.06	0.68	0.00	7.19	0.70	4.88	3.25	12.34	1.17	0.62	0.00	43.09
60594_T	DS -1469409	80	88	0.74	33.88	2.26	9.44	35.20	0.85	0.00	7.56	2.66	2.26	5.23	23.17	8.90	0.69	0.00	4.18
60595_T	DS -1469410	36	44	9.52	36.96	0.54	9.48	33.97	0.40	0.00	2.97	0.46	3.84	2.55	8.06	0.00	0.97	0.00	12.58

				LECO_CS				
Muestras	Código Cliente			S(tot), %	SS, %	SO4=, %	C, %	CRES, %
	DS	From	To					
60588_T	DS -1469403	38	46	9.08	1.23	0.19	0.029	0.02
60589_T	DS -1469404	66	74	6.05	0.68	0.78	0.033	0.02
60590_T	DS -1469405	20	28	10.9	1.13	0.18	0.025	0.02
60591_T	DS -1469406	142	150	12.6	1.56	0.04	0.031	0.02
60592_T	DS -1469407	108	116	4.52	0.39	0.04	0.024	0.02
60593_T	DS -1469408	80	88	8.74	0.71	0.12	0.03	0.02
60594_T	DS -1469409	80	88	16.8	3.11	0.06	0.028	0.02
60595_T	DS -1469410	36	44	6.03	0.61	0.07	0.026	0.02

APÉNDICE D

Spreadsheets

Muestra	60588	26-Sep-2017	3-Oct-2017	10-Oct-2017	20-Oct-2017	27-Oct-2017	3-Nov-2017	10-Nov-2017	17-Nov-2017	24-Nov-2017	4-Dec-2017	8-Dec-2017	15-Dec-2017	22-Dec-2017	8-Jan-2018	9-Jan-2018	15-Jan-2018	19-Jan-2018	31-Jan-2018	7-Feb-2018	31-Jan-2018	7-Feb-2018
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	807.9	937	847	950	911	928	903	896	864	888	891	900	966	946	986	1095	936	1013	1114	946	989
pH a 25° C	u pH	4.32	4.63	3.76	3.78	3.88	3.43	4.10	3.88	4.04	4.20	3.43	3.94	3.71	3.60	2.96	5.34	6.18	4.67	7.13	3.88	3.97
Conductividad a 25°C	uS/cm	140.6	63.7	64.7	113.7	80.2	94.7	94.3	56.9	47.5	42.7	52.1	56.5	29.5	59.6	70.9	75.2	63.8	135.2	74.4	33.8	46.2
Potencial Redox Abs.	mv	746	637.900	620.300	726.800	768.700	705.700	695.100	732.800	774.200	685.100	769.900	765.800	433.100	800.300	752.800	676.500	732.600	557.100	719.200	734.100	764.800
Oxigeno Disuelto	mg/L	5.81	6.170	6.140	6.130	6.310	6.370	6.460	5.920	5.830	6.160	5.900	6.400	5.840	6.000	6.000	5.920	6.000	5.730	6.030	5.780	5.710
Sulfatos	mg/L	57	55.0	170.0	49.0	30.0	29.0	19.0	12.0	12.0	13.0	29.0	10.0	11.0	17.0	39.0	19.0	16.0	21.0	7.0	11.0	13.0
Alcalinidad Total (CaCO3)	mg/L	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Acidez (H2SO4)	mg/L	300.6	67.900	272.200	61.400	40.800	57.500	46.900	28.900	15.000	10.600	36.200	19.900	26.900	29.600	21.600	8.000	13.800	20.900	4.700	11.000	16.000
Mercurio	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.16896	0.093	0.204	0.193	0.092	0.078	0.055	0.022	0.014	0.012	0.046	0.019	0.015	0.014	0.015	0.005	0.005	0.014	0.008	<0.005	0.048
Arsénico	mg/L	0.08343	0.015	0.127	0.019	0.023	0.028	0.026	0.036	0.029	0.013	0.032	0.031	0.033	0.028	0.037	0.019	0.019	0.022	0.014	0.015	0.032
Bario	mg/L	0.7207	0.076	0.160	0.092	0.068	0.119	0.159	0.142	0.340	0.240	0.115	0.152	0.144	0.144	0.330	0.113	0.113	0.103	0.160	0.612	1.639
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Calcio	mg/L	2.817	1.443	1.029	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.506	<0.3	<0.3	<0.3	<0.3	7.302	7.302	1.270	6.386	1.565	4.528
Cadmio	mg/L	0.02926	0.034	0.034	0.012	0.015	0.009	0.006	0.003	0.002	<0.002	0.002	0.003	0.003	0.004	0.006	0.002	0.002	0.006	<0.002	<0.002	0.005
Cobalto	mg/L	0.2184	0.202	0.053	0.027	0.015	0.014	0.008	0.005	0.006	0.005	0.009	0.005	0.005	0.004	0.005	0.003	0.003	0.004	<0.002	0.004	0.003
Cromo	mg/L	0.1411	0.007	0.074	0.084	0.030	0.082	0.059	0.021	0.021	0.011	0.020	0.021	0.017	0.013	0.019	<0.002	<0.002	<0.002	0.002	<0.002	0.017
Cobre	mg/L	0.47895	0.520	1.327	0.770	0.754	0.738	0.554	0.291	0.247	0.163	0.361	0.287	0.439	0.711	1.241	0.233	0.233	0.543	0.139	0.295	0.347
Hierro	mg/L	8.026	4.944	4.961	4.680	0.943	4.245	2.942	2.141	2.137	1.439	4.421	3.062	2.854	2.184	2.230	<0.3	<0.3	1.027	0.483	1.010	1.529
Potasio	mg/L	0.223	<0.2	0.254	0.270	0.241	<0.2	0.837	<0.2	<0.2	0.245	0.472	0.420	0.419	<0.2	<0.2	1.614	1.614	0.613	1.579	0.231	0.751
Magnesio	mg/L	0.2262	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.570	1.570	0.252	1.290	0.287	<0.2
Manganeso	mg/L	0.6906	1.481	0.288	0.174	0.055	0.043	0.022	0.010	0.009	0.008	0.015	0.007	0.004	0.003	0.003	<0.002	<0.002	0.002	<0.002	<0.002	0.002
Molibdeno	mg/L	<0.003	<0.003	0.017	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	1.458	0.811	0.217	<0.2	<0.2	0.357	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.768	4.768	0.636	4.581	0.683	0.867
Niquel	mg/L	0.1395	0.248	0.126	0.114	0.045	0.055	0.019	0.006	0.005	0.005	0.008	0.005	<0.002	0.003	0.004	0.002	0.002	0.005	0.006	0.002	0.004
Plomo	mg/L	0.2059	0.071	0.494	0.156	0.179	0.113	0.100	0.062	0.059	0.045	0.033	0.030	0.029	0.037	0.048	0.004	0.004	0.075	0.002	0.014	0.028
Antimonio (Sb)	mg/L	0.00231	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.003	0.002	<0.002	<0.002	<0.002
Selenio	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.034
Talio (Tl)	mg/L	0.05076	0.059	0.067	0.048	0.041	0.034	0.028	0.015	0.017	0.011	0.014	0.015	0.013	0.013	0.014	0.012	0.012	0.016	0.007	0.010	0.010
Vanadio (V)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cinc	mg/L	0.3452	0.567	0.289	0.223	0.174	0.187	0.138	0.070	0.052	0.035	0.057	0.049	0.046	0.068	0.083	0.038	0.038	0.055	0.019	0.051	0.048
Cromo (VI)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	0.098	0.112	0.076	0.018	0.238	0.118	0.081	0.136	0.079	0.129	0.162	0.135	0.709	0.180	0.275	0.128	0.170	0.183	0.126	0.149	0.155
Sulfuros	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra	60589	26-Sep-2017	3-Oct-2017	10-Oct-2017	20-Oct-2017	27-Oct-2017	3-Nov-2017	10-Nov-2017	17-Nov-2017	24-Nov-2017	4-Dec-2017	8-Dec-2017	15-Dec-2017	22-Dec-2017	8-Jan-2018	9-Jan-2018	15-Jan-2018	19-Jan-2018	31-Jan-2018	7-Feb-2018	31-Jan-2018	7-Feb-2018
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	864.8	939	893	887	906	936	910	907	891	915	905	872	986	990	1029	1113	941	985	1113	979	996
pH a 25° C	u pH	4.21	4.81	4.02	4.09	4.26	3.70	4.18	4.09	4.15	4.28	4.14	3.97	4.12	3.76	3.41	5.30	6.20	4.77	7.04	4.07	2.78
Conductividad a 25°C	uS/cm	143.9	54.1	39.5	41.6	37.3	51.6	45.3	48.8	43.0	36.4	38.4	86.4	26.2	49.5	65.0	61.2	65.4	54.6	78.1	36.6	562.0
Potencial Redox Abs.	mv	672.3	635.500	615.900	706.000	763.300	680.400	691.100	750.300	752.000	728.200	749.700	743.600	457.800	774.700	753.200	707.100	723.000	523.500	740.100	735.200	736.500
Oxigeno Disuelto	mg/L	5.83	6.230	5.940	6.190	6.240	6.410	6.890	5.940	5.850	6.030	5.890	6.540	5.890	5.940	6.010	5.970	6.030	5.960	6.030	5.780	5.140
Sulfatos	mg/L	38	26.0	128.0	48.0	26.0	19.0	17.0	16.0	15.0	9.0	13.0	9.0	10.0	12.0	23.0	22.0	16.0	14.0	10.0	10.0	130.0
Alcalinidad Total (CaCO3)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Acidez (H2SO4)	mg/L	127.6	46.600	195.700	29.300	23.400	23.900	20.900	20.900	13.600	10.300	14.000	14.600	17.900	34.200	22.900	7.300	11.800	12.000	5.000	8.600	150.900
Mercurio	ug/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.09041	0.044	0.084	0.058	0.055	0.094	0.081	0.085	0.045	0.039	0.057	0.049	0.031	0.031	0.055	0.015	<0.005	<0.005	<0.005	<0.005	0.092
Arsénico	mg/L	0.5411	0.007	0.334	0.017	0.078	0.014	0.026	0.059	0.044	0.019	0.030	0.037	0.037	0.049	0.059	0.036	0.024	0.027	0.004	0.034	0.648
Bario	mg/L	6.124	0.108	0.412	0.174	0.124	0.235	0.411	0.188	0.424	0.345	0.156	0.202	0.192	0.196	0.783	0.203	0.200	0.151	0.140	1.933	3.692
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Calcio	mg/L	2.014	0.993	0.561	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	6.533	7.320	1.273	6.288	1.231	4.698
Cadmio	mg/L	0.09781	0.077	0.058	0.021	0.017	0.019	0.012	0.010	0.011	0.007	0.011	0.010	0.008	0.008	0.010	0.003	0.002	0.008	0.004	0.007	0.014
Cobalto	mg/L	0.1392	0.133	0.069	0.029	0.022	0.029	0.018	0.014	0.026	0.017	0.024	0.018	0.012	0.011	0.012	0.009	0.008	0.010	0.007	0.010	0.032
Cromo	mg/L	0.04655	0.003	0.053	0.007	0.010	0.008	0.010	0.007	0.009	0.005	0.013	0.011	0.007	0.008	0.017	0.003	<0.002	<0.002	<0.002	0.003	0.032
Cobre	mg/L	3.16236	1.831	3.516	1.545	1.475	2.426	1.746	1.522	1.281	0.895	1.577	1.731	1.466	1.928	2.644	0.370	0.078	0.936	0.308	1.375	2.871
Hierro	mg/L	4.05	1.998	3.290	1.227	1.577	1.779	1.515	1.787	1.634	0.954	2.287	2.310	2.073	1.864	2.505	0.341	<0.3	0.737	<0.3	0.876	23.400
Potasio	mg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.700	<0.2	<0.2	<0.2	0.362	9.549	<0.2	<0.2	<0.2	1.198	1.179	0.205	1.405	<0.2	0.722
Magnesio	mg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.294	1.549	0.218	1.199	0.237	<0.2
Manganeso	mg/L	0.5938	2.084	0.949	0.292	0.188	0.245	0.086	0.080	0.063	0.035	0.050	0.044	0.032	0.025	0.042	0.010	0.009	0.008	0.006	0.005	0.011
Molibdeno	mg/L	0.01111	<0.003	0.009	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.005	0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	0.5694	0.326	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.294	4.701	0.509	4.172	0.567	0.791
Niquel	mg/L	0.07051	0.154	0.176	0.068	0.045	0.043	0.017	0.016	0.016	0.011	0.016	0.012	0.006	0.008	0.009	0.005	0.005	0.008	0.005	0.006	0.054
Plomo	mg/L	2.387	1.286	2.533	1.665	1.542	1.977	1.742	1.499	1.714	0.876	0.868	0.879	0.676	1.029	1.288	0.237	0.031	0.491	0.024	0.653	1.235
Antimonio (Sb)	mg/L	0.016	<0.002	0.012	0.003	0.004	0.003	0.002	0.004	0.004	<0.002	0.002	0.002	0.002	0.003	0.003	0.004	0.003	0.002	<0.002	<0.002	0.016
Selenio	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.034
Talio (Tl)	mg/L	0.1496	0.122	0.128	0.075	0.051	0.062	0.045	0.043	0.036	0.021	0.033	0.033	0.028	0.031	0.034	0.018	0.014	0.027	0.018	0.027	0.100
Vanadio (V)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002
Cinc	mg/L	0.3039	0.352	0.327	0.146	0.126	0.275	0.154	0.148	0.078	0.123	0.119	0.149	0.141	0.160	0.198	0.044	0.041	0.071	0.045	0.071	3.082
Cromo (VI)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	0.052	0.028	0.024	0.010	0.042	0.076	0.196	0.054	0.082	0.175	0.086	0.166	0.990	0.168	0.120	0.158	0.229	0.103	0.135	0.119	0.194
Sulfuros	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra	60590	26-Sep-2017	3-Oct-2017	10-Oct-2017	20-Oct-2017	27-Oct-2017	3-Nov-2017	10-Nov-2017	17-Nov-2017	24-Nov-2017	4-Dec-2017	8-Dec-2017	15-Dec-2017	22-Dec-2017	8-Jan-2018	9-Jan-2018	15-Jan-2018	19-Jan-2018	31-Jan-2018	7-Feb-2018	31-Jan-2018	7-Feb-2018
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	850.2	878	889	866	893	909	897	879	862	904	893	879	952	914	986	1114	959	982	1115	967	952
pH a 25° C	u pH	2.89	3.95	3.23	3.48	3.51	2.83	3.28	3.24	3.32	3.34	3.39	3.28	3.31	3.22	2.98	4.26	5.08	3.51	5.45	3.06	2.99
Conductividad a 25°C	uS/cm	1107	193.3	196.5	184.1	277.0	378.0	314.0	251.0	27.7	275.0	194.3	268.0	198.6	288.0	330.0	93.4	130.5	241.0	124.8	277.0	323.0
Potencial Redox Abs.	mv	652	626.400	613.500	680.700	716.000	667.900	672.800	730.600	710.600	699.200	704.200	725.200	578.800	721.400	703.900	699.300	752.100	530.900	700.300	708.400	731.300
Oxigeno Disuelto	mg/L	5.62	5.980	5.720	6.130	6.150	6.400	7.200	5.930	5.840	6.030	5.860	6.510	5.920	5.900	6.020	5.730	5.830	5.910	5.890	5.700	5.720
Sulfatos	mg/L	480	155.0	140.0	80.0	61.0	110.0	60.0	55.0	54.0	54.0	51.0	53.0	62.0	54.0	64.0	57.0	53.0	56.0	47.0	57.0	67.0
Alcalinidad Total (CaCO3)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Acidez (H2SO4)	mg/L	421.4	439.700	233.300	27.100	155.800	132.300	66.100	70.800	81.100	69.800	60.500	69.500	85.700	79.800	85.100	39.900	57.150	74.400	41.500	76.100	89.100
Mercurio	ug/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.5765	0.357	0.131	0.092	0.064	0.063	0.036	0.024	0.028	0.022	0.035	0.024	0.019	0.013	0.015	0.006	0.017	0.008	0.008	0.014	0.053
Arsénico	mg/L	0.3076	0.085	0.374	0.125	0.560	0.434	0.438	0.468	0.347	0.458	0.220	0.324	0.569	0.614	0.810	0.063	0.155	0.232	0.010	0.300	0.613
Bario	mg/L	0.3551	0.029	0.060	0.052	0.061	0.074	0.117	0.088	0.090	0.164	0.089	0.070	0.071	0.083	0.231	0.089	0.116	0.077	0.093	0.458	1.810
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Calcio	mg/L	5.94	0.961	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.392	<0.3	<0.3	<0.3	<0.3	7.013	7.127	1.545	6.461	1.767	3.838
Cadmio	mg/L	1.046	1.445	0.421	0.196	0.204	0.250	0.146	0.111	0.105	0.088	0.065	0.081	0.106	0.099	0.122	0.058	0.060	0.074	0.051	0.088	0.088
Cobalto	mg/L	1.877	0.904	0.082	0.031	0.020	0.018	0.010	0.007	0.008	0.005	0.006	0.005	0.004	0.003	0.003	<0.002	<0.002	0.002	<0.002	<0.002	0.002
Cromo	mg/L	0.424	0.079	0.048	0.046	0.063	0.065	0.036	0.018	0.035	0.018	0.029	0.024	0.021	0.008	0.011	<0.002	0.004	0.006	<0.002	0.010	0.019
Cobre	mg/L	2.19852	1.089	0.910	0.578	0.732	0.938	0.622	0.470	0.515	0.390	0.378	0.359	0.488	0.434	0.595	0.202	0.285	0.394	0.284	0.496	0.467
Hierro	mg/L	51.09	47.870	21.070	14.440	18.020	24.400	17.190	15.590	17.320	13.490	13.690	14.800	18.630	15.520	19.170	5.562	8.819	12.900	6.702	18.060	14.840
Potasio	mg/L	<0.2	<0.2	0.797	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.791	<0.2	<0.2	<0.2	<0.2	1.247	1.205	0.256	1.550	<0.2	0.642
Magnesio	mg/L	0.322	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.377	1.586	0.266	1.275	0.332	<0.2
Manganeso	mg/L	0.5414	1.321	0.160	0.027	0.014	0.008	0.008	0.005	0.004	0.003	0.006	0.003	0.003	0.003	0.003	<0.002	<0.002	<0.002	<0.002	0.002	0.003
Molibdeno	mg/L	0.00839	<0.003	0.007	<0.003	0.005	0.004	0.004	0.005	0.004	0.003	<0.003	0.003	0.004	0.003	0.004	<0.003	0.006	<0.003	<0.003	0.003	0.007
Sodio	mg/L	2.336	0.603	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.462	4.969	0.633	4.497	0.696	0.682
Niquel	mg/L	0.5261	0.420	0.103	0.032	0.029	0.069	0.058	0.040	0.042	0.040	0.021	0.014	0.005	0.015	0.019	0.016	0.007	0.017	0.011	0.016	0.030
Plomo	mg/L	3.478	1.577	2.276	0.948	1.500	1.176	1.318	1.137	1.547	1.467	1.337	1.145	0.679	1.274	0.856	0.307	0.482	0.740	0.305	0.794	0.865
Antimonio (Sb)	mg/L	<0.002	0.002	0.023	0.013	0.014	0.014	0.015	0.024	0.017	0.011	0.015	0.015	0.014	0.018	0.016	0.006	0.012	0.014	0.002	0.013	0.017
Selenio	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.028
Talio (Tl)	mg/L	1.774	0.803	0.611	0.473	0.448	0.563	0.475	0.316	0.452	0.317	0.297	0.291	0.270	0.320	0.356	0.202	0.249	0.229	0.201	0.272	0.268
Vanadio (V)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cinc	mg/L	11.39	14.080	8.431	4.357	5.057	6.650	3.331	2.398	2.147	1.608	0.934	1.080	1.622	1.564	1.935	0.872	0.700	0.889	0.630	1.131	1.277
Cromo (VI)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	0.031	0.035	0.049	0.010	0.074	0.098	0.145	0.164	0.099	0.097	0.175	0.227	0.336	0.102	0.162	0.020	0.111	0.099	0.093	0.066	0.096
Sulfuros	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra	60591	26-Sep-2017	3-Oct-2017	10-Oct-2017	20-Oct-2017	27-Oct-2017	3-Nov-2017	10-Nov-2017	17-Nov-2017	24-Nov-2017	4-Dec-2017	8-Dec-2017	15-Dec-2017	22-Dec-2017	8-Jan-2018	9-Jan-2018	15-Jan-2018	19-Jan-2018	31-Jan-2018	7-Feb-2018	31-Jan-2018	7-Feb-2018
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	782.6	883	884	896	890	903	919	845	880	1039	809	776	982	897	977	1109	892	913	1012	914	982
pH a 25° C	u pH	3.41	4.33	3.64	3.78	3.89	3.16	3.46	3.53	3.72	3.81	3.62	3.42	3.54	3.28	3.16	4.15	5.51	3.64	5.31	3.18	3.12
Conductividad a 25°C	uS/cm	652	144.3	113.4	111.0	124.7	201.4	180.8	170.4	130.1	120.0	118.8	178.2	104.2	188.2	174.5	77.2	76.2	170.9	108.4	200.9	232.0
Potencial Redox Abs.	mv	633.8	634.800	612.300	677.500	728.700	645.000	687.800	732.500	719.400	664.100	713.700	726.600	576.400	735.000	716.300	709.500	767.700	534.900	742.400	729.900	740.100
Oxigeno Disuelto	mg/L	5.99	6.140	5.670	6.170	6.110	6.270	7.310	5.910	5.810	6.000	5.820	6.650	5.860	5.880	6.030	5.750	5.800	5.920	5.840	5.740	5.530
Sulfatos	mg/L	230	100.0	165.0	58.0	44.0	58.0	48.0	46.0	36.0	31.0	34.0	37.0	39.0	37.0	39.0	44.0	42.0	54.0	39.0	44.0	49.0
Alcalinidad Total (CaCO3)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Acidez (H2SO4)	mg/L	165.2	177.500	221.700	160.350	99.000	85.700	62.100	51.500	41.500	29.600	39.500	55.800	54.800	58.800	45.900	24.600	37.900	51.200	33.200	48.500	54.200
Mercurio	ug/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.88353	0.878	0.612	0.483	0.438	0.771	0.466	0.340	0.194	0.095	0.113	0.118	0.101	0.088	0.081	0.031	<0.005	0.028	0.019	0.042	0.068
Arsénico	mg/L	1.3	0.060	0.660	0.105	0.208	0.103	0.166	0.393	0.198	0.112	0.186	0.282	0.271	0.371	0.458	0.134	0.023	0.047	0.015	0.545	1.026
Bario	mg/L	0.7851	0.047	0.128	0.079	0.085	0.052	0.051	0.050	0.092	0.062	0.047	0.047	0.054	0.048	0.066	0.066	0.056	0.054	0.051	0.067	0.083
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Calcio	mg/L	9.112	8.286	2.907	<0.3	1.055	<0.3	0.853	<0.3	<0.1	<0.3	0.478	0.312	<0.3	<0.3	<0.3	6.284	7.898	1.906	6.117	2.065	3.202
Cadmio	mg/L	0.8039	0.682	0.272	0.143	0.143	0.200	0.134	0.102	0.092	0.064	0.094	0.091	0.089	0.083	0.080	0.060	0.051	0.061	0.055	0.064	0.072
Cobalto	mg/L	0.4093	0.398	0.063	0.021	0.014	0.020	0.009	0.007	0.007	0.004	0.005	0.005	0.005	0.004	0.003	0.002	0.002	0.002	0.003	0.003	0.003
Cromo	mg/L	0.1301	0.014	0.017	0.007	0.012	0.022	0.017	0.015	0.012	0.006	0.011	0.013	0.009	0.008	0.009	0.002	<0.002	0.004	<0.002	0.008	0.020
Cobre	mg/L	17.00206	15.172	10.377	6.964	7.217	12.029	9.099	6.989	7.243	4.850	6.516	6.699	6.073	7.112	6.775	3.782	1.827	4.213	3.764	5.617	5.380
Hierro	mg/L	15.98	8.878	6.478	4.264	4.914	7.117	5.699	5.920	4.910	3.268	4.998	5.450	4.997	5.096	4.998	0.886	<0.3	4.231	1.296	5.529	4.608
Potasio	mg/L	0.7084	0.593	0.260	0.369	0.930	<0.2	<0.2	<0.2	0.333	1.008	<0.2	<0.2	<0.2	<0.2	<0.2	1.269	1.281	0.305	1.277	0.267	0.621
Magnesio	mg/L	1.279	2.612	0.560	0.446	0.244	0.483	0.270	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.240	1.661	0.323	1.190	0.367	<0.2
Manganeso	mg/L	0.5332	1.039	0.151	0.036	0.018	0.032	0.015	0.010	0.008	0.003	0.004	0.004	0.006	0.004	0.003	<0.002	<0.002	<0.002	<0.002	0.004	<0.002
Molibdeno	mg/L	0.2088	0.003	0.022	0.004	0.005	0.004	0.005	0.008	0.005	<0.003	0.004	0.007	0.005	0.005	0.007	0.012	0.005	<0.003	<0.003	0.005	0.008
Sodio	mg/L	1.145	0.929	0.205	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.398	5.088	0.729	4.106	0.913	0.636
Niquel	mg/L	0.2749	0.376	0.102	0.032	0.024	0.044	0.020	0.010	0.016	0.009	0.009	0.009	0.011	0.008	0.008	0.005	0.006	0.007	0.008	0.008	0.009
Plomo	mg/L	12.58	2.381	3.113	2.219	1.878	1.648	1.607	1.525	1.848	1.762	1.210	1.400	1.161	1.903	1.603	0.176	0.085	1.295	0.513	1.564	1.507
Antimonio (Sb)	mg/L	0.06077	0.004	0.019	0.009	0.010	0.009	0.008	0.013	0.008	0.006	0.006	0.008	0.007	0.008	0.007	0.006	0.005	0.007	0.002	0.008	0.009
Selenio	mg/L	0.04018	0.011	0.024	0.013	0.011	0.017	0.016	0.012	0.014	0.006	0.017	0.016	0.008	0.011	0.008	0.007	<0.005	0.007	0.007	0.009	0.036
Talio (Tl)	mg/L	0.7744	0.522	0.344	0.237	0.196	0.230	0.173	0.152	0.132	0.089	0.109	0.117	0.100	0.099	0.092	0.071	0.090	0.092	0.070	0.089	0.076
Vanadio (V)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cinc	mg/L	1.968	2.457	1.443	0.676	0.658	0.938	0.341	0.263	0.287	0.190	0.192	0.178	0.266	0.144	0.112	0.074	0.048	0.081	0.083	0.083	0.082
Cromo (VI)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	0.063	0.304	0.230	0.020	0.027	0.127	0.226	0.134	0.153	0.069	0.146	0.106	0.371	0.424	0.387	0.013	0.106	0.122	0.085	0.060	0.104
Sulfuros	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra	60592	26-Sep-2017	3-Oct-2017	10-Oct-2017	20-Oct-2017	27-Oct-2017	3-Nov-2017	10-Nov-2017	17-Nov-2017	24-Nov-2017	4-Dec-2017	8-Dec-2017	15-Dec-2017	22-Dec-2017	8-Jan-2018	9-Jan-2018	15-Jan-2018	19-Jan-2018	31-Jan-2018	7-Feb-2018	31-Jan-2018	7-Feb-2018
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	882.9	936	897	885	913	906	919	912	898	924	872	870	991	996	1052	1112	1052	989	1115	990	993
pH a 25° C	u pH	5.02	6.03	5.02	5.06	5.07	4.57	4.75	5.11	5.20	5.10	5.09	4.53	4.61	4.15	3.92	5.06	6.14	5.28	6.81	4.35	4.50
Conductividad a 25°C	uS/cm	120.8	43.9	23.4	12.0	11.5	12.3	10.4	13.0	9.6	10.1	8.6	12.1	6.8	16.7	20.5	64.1	57.4	21.9	72.8	16.7	13.2
Potencial Redox Abs.	mv	692.1	638.800	613.900	697.900	759.900	636.000	696.900	726.400	743.600	679.500	739.500	748.700	482.500	768.000	731.200	712.500	763.700	551.400	735.800	744.000	767.900
Oxigeno Disuelto	mg/L	5.72	6.190	6.030	6.230	6.210	6.380	7.850	5.970	5.930	6.090	5.870	6.280	5.900	5.930	6.190	6.020	6.020	5.960	5.990	5.810	5.710
Sulfatos	mg/L	43	25.0	48.0	16.0	11.0	6.0	4.0	4.0	2.0	4.0	8.0	4.0	3.0	5.0	8.0	25.0	13.0	9.0	41.0	4.0	4.0
Alcalinidad Total (CaCO3)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Acidez (H2SO4)	mg/L	279.2	8.900	151.500	80.200	8.900	15.000	65.800	2.300	4.000	2.700	3.000	3.300	3.000	7.600	6.000	8.600	3.000	6.600	4.300	4.300	4.000
Mercurio	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.2317	<0.005	0.148	<0.005	0.094	<0.005	0.007	<0.005	<0.005	<0.005	0.007	0.010	0.006	0.013	0.037	0.029	<0.005	0.012	0.006	<0.00507	0.052
Arsénico	mg/L	0.2728	0.017	0.096	0.012	0.035	0.013	0.013	0.015	0.011	0.006	0.008	0.012	0.008	0.009	0.010	0.012	0.011	0.012	0.018	0.011	0.023
Bario	mg/L	0.3015	0.035	0.073	0.056	0.102	0.057	0.048	0.051	0.050	0.051	0.062	0.066	0.053	0.065	0.050	0.044	0.039	0.058	0.064	0.032	0.099
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Calcio	mg/L	4.691	3.347	2.223	<0.3	0.813	<0.3	<0.3	<0.3	<0.3	0.339	0.814	0.607	0.443	<0.3	0.790	7.370	7.160	1.288	6.733	1.330	3.630
Cadmio	mg/L	0.04913	0.006	0.012	<0.002	0.008	0.004	0.004	0.004	0.004	0.003	0.005	0.004	0.004	0.004	0.006	0.003	<0.002	0.003	<0.002	<0.002	0.004
Cobalto	mg/L	0.09788	0.090	0.085	0.027	0.038	0.044	0.036	0.038	0.031	0.022	0.029	0.026	0.023	0.021	0.026	0.013	0.007	0.004	0.005	0.003	0.004
Cromo	mg/L	0.02707	<0.002	0.011	<0.002	0.006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.012
Cobre	mg/L	1.04054	0.035	0.605	0.029	0.336	0.067	0.074	0.068	0.097	0.056	0.115	0.120	0.106	0.140	0.209	0.041	0.015	0.170	0.022	0.064	0.094
Hierro	mg/L	4.31	<0.3	1.818	<0.3	0.941	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.331	<0.3	<0.3	<0.3
Potasio	mg/L	<0.2	<0.2	<0.2	<0.2	1.104	<0.2	<0.2	<0.2	0.230	<0.2	<0.2	0.222	<0.2	<0.2	<0.2	1.479	1.178	<0.2	1.430	<0.2	0.682
Magnesio	mg/L	0.4473	0.630	0.413	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.332	1.483	1.542	0.248	1.322	0.238	<0.2
Manganeso	mg/L	0.122	0.302	0.241	0.071	0.092	0.097	0.076	0.079	0.062	0.044	0.051	0.045	0.041	0.037	0.050	0.025	0.013	0.006	0.008	0.005	0.005
Molibdeno	mg/L	0.01536	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	1.855	1.869	0.594	0.207	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.707	4.713	0.501	4.533	0.475	0.626
Níquel	mg/L	0.02759	0.028	0.033	0.009	0.015	0.014	0.014	0.014	0.013	0.012	0.013	0.013	0.010	0.012	0.017	0.007	0.005	0.005	0.004	0.004	0.005
Plomo	mg/L	1.246	0.017	0.404	0.015	0.184	0.034	0.038	0.039	0.047	0.037	0.067	0.070	0.058	0.085	0.126	0.011	0.003	0.064	0.009	0.024	0.063
Antimonio (Sb)	mg/L	0.0054	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Selenio	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.021
Talio (Tl)	mg/L	0.0581	0.019	0.027	0.012	0.017	0.012	0.011	0.010	0.011	0.009	0.011	0.012	0.010	0.012	0.013	0.014	0.013	0.011	0.011	0.009	0.009
Vanadio (V)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cinc	mg/L	0.178	0.055	0.119	0.022	0.069	0.046	0.042	0.051	0.035	0.025	0.044	0.043	0.047	0.056	0.077	0.036	0.016	0.021	0.017	0.021	0.030
Cromo (VI)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	0.065	0.041	0.027	0.020	0.040	0.143	0.245	0.057	0.098	0.100	0.105	0.062	0.114	0.100	0.163	0.019	0.141	0.155	0.062	0.080	0.109
Sulfuros	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra	60593	26-Sep-2017	3-Oct-2017	10-Oct-2017	20-Oct-2017	27-Oct-2017	3-Nov-2017	10-Nov-2017	17-Nov-2017	24-Nov-2017	4-Dec-2017	8-Dec-2017	15-Dec-2017	22-Dec-2017	8-Jan-2018	9-Jan-2018	15-Jan-2018	19-Jan-2018	31-Jan-2018	7-Feb-2018	31-Jan-2018	7-Feb-2018
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	857.2	946	912	886	917	884	920	908	895	934	919	901	984	925	1013	1111	958	917	1114	1002	990
pH a 25° C	u pH	3.63	4.11	3.62	3.66	3.76	3.32	3.77	3.84	3.82	3.95	3.64	3.64	3.82	3.55	3.23	4.93	6.13	4.04	6.54	3.22	3.31
Conductividad a 25°C	uS/cm	249.5	96.2	87.0	124.5	85.1	89.4	85.0	72.6	77.9	81.6	90.0	106.6	64.0	118.9	136.2	69.9	65.2	72.3	85.4	145.2	129.3
Potencial Redox Abs.	mv	652.7	626.800	616.500	672.700	717.100	617.400	679.000	725.700	711.600	679.000	709.400	719.200	548.900	720.200	711.200	704.600	753.400	547.800	723.900	723.500	749.800
Oxigeno Disuelto	mg/L	5.79	6.200	5.950	6.180	6.190	6.340	7.470	5.950	5.830	6.010	5.860	6.510	5.860	5.930	6.110	5.810	5.850	5.910	5.900	5.760	5.560
Sulfatos	mg/L	65	50.0	140.0	52.0	29.0	25.0	26.0	18.0	20.0	17.0	26.0	20.0	22.0	22.0	33.0	35.0	27.0	14.0	20.0	30.0	29.0
Alcalinidad Total (CaCO3)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Acidez (H2SO4)	mg/L	275.5	80.600	179.800	114.750	49.700	49.900	42.200	26.600	27.900	19.300	26.300	33.600	34.600	42.200	35.200	10.600	4.000	26.300	6.000	34.200	31.200
Mercurio	ug/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.19551	0.167	0.144	0.131	0.045	0.040	0.029	0.017	0.017	0.011	0.016	0.016	0.012	0.009	0.006	<0.005	<0.00514	<0.005	0.007	0.012	0.038
Arsénico	mg/L	0.04144	0.030	0.133	0.039	0.073	0.047	0.070	0.062	0.045	0.039	0.030	0.056	0.041	0.037	0.051	0.005	0.012	0.014	0.026	0.041	0.053
Bario	mg/L	0.1052	0.064	0.096	0.087	0.088	0.097	0.096	0.134	0.187	0.310	0.067	0.079	0.074	0.074	0.109	0.108	0.073	0.082	0.059	0.207	0.503
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Calcio	mg/L	5.129	1.155	0.377	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	6.711	7.502	0.684	6.930	1.186	2.646
Cadmio	mg/L	0.0556	0.057	0.026	0.012	0.008	0.007	0.007	0.004	0.005	0.004	0.007	0.005	0.006	0.007	0.009	0.006	0.003	0.003	0.003	0.007	0.007
Cobalto	mg/L	0.2036	0.123	0.037	0.014	0.009	0.011	0.007	0.004	0.004	0.003	0.005	0.005	0.004	0.004	0.004	0.003	0.002	<0.002	<0.002	0.003	0.002
Cromo	mg/L	0.3067	0.040	0.082	0.167	0.060	0.056	0.039	0.018	0.031	0.016	0.030	0.032	0.024	0.017	0.019	<0.002	<0.002	0.005	0.006	0.015	0.021
Cobre	mg/L	0.31242	0.263	0.311	0.183	0.125	0.086	0.086	0.065	0.059	0.047	0.089	0.070	0.064	0.083	0.083	0.004	0.009	0.055	0.015	0.081	0.086
Hierro	mg/L	11.11	8.694	6.500	6.585	4.596	4.717	5.082	3.751	4.467	3.218	5.290	4.893	5.614	5.077	6.247	0.675	1.385	2.906	1.498	6.145	3.820
Potasio	mg/L	0.2019	<0.2	0.835	<0.2	1.886	<0.2	<0.2	<0.2	<0.2	0.870	<0.2	<0.2	<0.2	<0.2	<0.2	1.160	1.161	<0.2	1.438	<0.2	0.670
Magnesio	mg/L	0.29	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.318	1.574	<0.2	1.331	0.218	<0.2
Manganeso	mg/L	0.3824	1.588	0.320	0.072	0.024	0.026	0.019	0.012	0.009	0.002	0.010	0.008	0.007	0.006	0.005	0.003	0.002	<0.002	<0.002	0.005	0.004
Molibdeno	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	2.61	0.803	0.323	0.214	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.470	4.686	0.309	4.530	0.531	0.566
Niquel	mg/L	0.1252	0.229	0.128	0.063	0.040	0.025	0.028	0.012	0.008	0.006	0.013	0.008	0.006	0.013	0.008	0.013	0.003	0.007	0.004	0.016	0.018
Plomo	mg/L	0.5619	0.462	0.587	0.494	0.353	0.382	0.305	0.343	0.383	0.201	0.324	0.323	0.227	0.287	0.311	0.010	0.093	0.252	0.059	0.321	0.260
Antimonio (Sb)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002
Selenio	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.024
Talio (Tl)	mg/L	0.08163	0.053	0.062	0.059	0.037	0.042	0.040	0.030	0.035	0.023	0.039	0.035	0.033	0.032	0.033	0.028	0.023	0.017	0.017	0.028	0.020
Vanadio (V)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cinc	mg/L	0.7308	0.713	0.580	0.425	0.261	0.186	0.250	0.194	0.191	0.158	0.310	0.254	0.294	0.344	0.491	0.363	0.148	0.143	0.147	0.387	0.414
Cromo (VI)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	0.062	<0.010	0.019	0.018	0.029	0.029	0.182	0.070	0.080	0.136	0.079	0.259	0.026	0.424	0.015	0.073	0.211	0.088	0.068	0.142	0.078
Sulfuros	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra	60594	26-Sep-2017	3-Oct-2017	10-Oct-2017	20-Oct-2017	27-Oct-2017	3-Nov-2017	10-Nov-2017	17-Nov-2017	24-Nov-2017	4-Dec-2017	8-Dec-2017	15-Dec-2017	22-Dec-2017	8-Jan-2018	9-Jan-2018	15-Jan-2018	19-Jan-2018	31-Jan-2018	7-Feb-2018	31-Jan-2018	7-Feb-2018
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	896.1	841	877	828	911	823	936	835	877	940	971	884	1002	932	1014	1109	1057	953	1112	992	995
pH a 25° C	u pH	2.15	2.51	2.34	2.79	2.73	2.09	2.50	2.49	2.51	2.69	2.54	2.53	2.67	2.40	2.52	2.64	2.81	2.70	2.83	2.37	2.72
Conductividad a 25°C	uS/cm	6.22	838.0	1517.0	1217.0	1745.0	2750.0	1989.0	1801.0	1615.0	1000.0	1339.0	1771.0	948.0	1596.0	1212.0	896.0	617.0	1259.0	832.0	1459.0	850.0
Potencial Redox Abs.	mv	666.4	646.400	606.500	634.000	668.300	639.600	653.700	695.700	653.800	678.900	650.600	667.600	606.000	671.400	665.900	699.700	738.000	572.800	719.300	698.400	720.300
Oxigeno Disuelto	mg/L	5.95	6.190	4.520	5.640	5.660	6.440	7.360	5.640	5.730	5.970	5.860	6.530	5.850	5.640	5.920	5.510	5.710	5.720	5.860	5.670	4.470
Sulfatos	mg/L	1355	680.0	580.0	560.0	500.0	610.0	450.0	480.0	470.0	420.0	450.0	400.0	395.0	405.0	225.0	270.0	260.0	275.0	237.0	250.0	250.0
Alcalinidad Total (CaCO3)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Acidez (H2SO4)	mg/L	1601.2	49.000	619.500	883.600	1147.700	788.600	510.100	457.300	520.800	526.400	526.400	491.200	527.700	472.600	406.100	346.300	45.500	391.500	266.500	434.700	238.600
Mercurio	µg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.44002	0.534	0.165	0.171	0.044	0.053	0.030	0.041	0.026	0.018	0.025	0.027	0.020	0.020	0.017	0.015	0.013	0.012	0.012	0.018	0.038
Arsénico	mg/L	10.65	7.623	4.729	2.228	2.362	7.659	4.418	3.779	4.389	2.941	3.323	2.707	2.426	2.898	2.716	1.303	1.290	1.432	0.761	2.456	1.154
Bario	mg/L	0.5574	0.029	0.138	0.033	0.040	0.042	0.022	0.023	0.035	0.081	0.034	0.028	0.032	0.027	0.048	0.052	0.069	0.028	0.056	0.079	0.158
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Calcio	mg/L	3.179	1.184	0.506	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.355	<0.3	6.899	7.130	1.821	6.758	1.813	2.397
Cadmio	mg/L	0.1685	0.119	0.042	0.024	0.014	0.016	0.009	0.009	0.008	0.005	0.007	0.006	0.005	0.006	0.005	0.003	0.003	0.005	0.003	0.005	0.004
Cobalto	mg/L	0.8741	1.085	0.417	0.645	0.284	0.368	0.217	0.240	0.218	0.146	0.188	0.160	0.147	0.145	0.123	0.077	0.069	0.089	0.072	0.100	0.041
Cromo	mg/L	0.3378	0.365	0.156	0.082	0.026	0.039	0.070	0.513	0.049	0.055	0.030	0.025	0.025	0.033	0.026	0.014	0.014	0.019	0.014	0.024	0.019
Cobre	mg/L	0.18462	0.058	0.058	0.067	0.041	0.034	0.042	0.030	0.026	0.037	0.025	0.021	0.032	0.110	0.023	0.050	0.047	0.043	0.020	0.055	0.181
Hierro	mg/L	121.5	161.400	115.800	157.000	120.900	203.300	135.300	152.500	137.700	101.100	132.900	115.500	111.900	116.700	104.000	62.730	52.450	80.590	63.000	97.160	38.760
Potasio	mg/L	<0.2	<0.2	<0.2	<0.2	0.245	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.118	1.165	0.306	1.468	0.307	0.566
Magnesio	mg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.326	1.520	0.313	1.291	0.307	<0.2
Manganeso	mg/L	0.5181	0.830	0.183	0.056	0.005	0.005	0.010	0.072	0.007	0.011	0.007	0.005	0.004	0.011	0.005	0.004	0.004	0.003	0.005	0.006	0.004
Molibdeno	mg/L	0.00984	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	0.9694	0.297	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.416	<0.2	4.332	4.703	0.784	4.281	0.885	0.530
Níquel	mg/L	0.3085	0.508	0.350	0.369	0.188	0.266	0.227	0.581	0.219	0.212	0.166	0.129	0.118	0.185	0.121	0.092	0.085	0.093	0.087	0.112	0.064
Plomo	mg/L	0.7691	0.570	0.848	0.984	0.723	0.731	0.738	0.697	0.759	0.866	0.673	0.857	0.673	1.048	0.792	0.646	0.452	0.672	0.440	0.731	0.736
Antimonio (Sb)	mg/L	0.05319	0.035	0.055	0.044	0.053	0.099	0.078	0.083	0.079	0.061	0.077	0.071	0.070	0.071	0.073	0.039	0.033	0.044	0.030	0.054	0.039
Selenio	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.018
Talio (Tl)	mg/L	1.313	1.077	0.730	0.994	0.609	1.012	0.651	0.608	0.599	0.429	0.440	0.392	0.290	0.395	0.334	0.217	0.195	0.239	0.221	0.269	0.137
Vanadio (V)	mg/L	0.00401	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cinc	mg/L	0.3535	0.461	0.298	0.206	0.085	0.105	0.355	1.191	0.079	0.056	0.056	0.046	0.102	1.356	0.313	0.410	0.466	0.180	0.041	0.053	0.117
Cromo (VI)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	0.018	0.130	0.037	0.026	0.054	0.130	0.205	0.485	0.066	0.158	0.067	0.437	0.114	<0.010	0.263	0.236	0.131	0.234	0.112	0.184	0.173
Sulfuros	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.005	0.005	<0.002	<0.002	<0.002	0.095	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra	60595	26-Sep-2017	3-Oct-2017	10-Oct-2017	20-Oct-2017	27-Oct-2017	3-Nov-2017	10-Nov-2017	17-Nov-2017	24-Nov-2017	4-Dec-2017	8-Dec-2017	15-Dec-2017	22-Dec-2017	8-Jan-2018	9-Jan-2018	15-Jan-2018	19-Jan-2018	31-Jan-2018	7-Feb-2018	31-Jan-2018	7-Feb-2018
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	821.4	896	822	843	918	881	918	849	823	914	872	892	868	899	919	1112	925	848	1114	950	990
pH a 25° C	u pH	4.78	5.46	4.41	3.99	4.01	3.54	3.92	4.27	4.42	4.78	4.67	3.99	3.66	3.95	3.65	5.01	5.65	6.29	6.70	5.70	4.71
Conductividad a 25°C	uS/cm	84.6	21.6	20.0	48.7	55.1	43.6	20.3	30.9	16.6	11.9	10.0	17.8	7.8	21.6	10.3	60.2	60.8	17.2	79.5	12.1	10.5
Potencial Redox Abs.	mv	661.4	626.100	614.200	650.700	723.600	633.300	708.200	710.200	729.200	674.800	738.700	739.500	553.700	744.900	710.400	715.600	754.200	589.500	713.700	755.800	766.300
Oxigeno Disuelto	mg/L	5.93	6.210	6.030	6.120	6.140	6.350	7.690	5.960	6.010	6.060	6.000	6.440	6.060	5.920	6.070	5.910	6.000	5.890	5.930	5.790	5.650
Sulfatos	mg/L	40	18.0	46.0	42.0	35.0	17.0	14.0	14.0	6.0	4.0	7.0	3.0	2.0	1.0	9.0	19.0	9.0	2.0	4.0	3.0	3.0
Alcalinidad Total (CaCO3)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Acidez (H2SO4)	mg/L	221.3	6.700	60.800	47.200	33.600	27.600	17.900	21.900	7.600	7.600	9.000	6.300	5.300	4.300	3.700	8.600	19.600	4.300	5.300	3.700	6.000
Mercurio	ug/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.11246	<0.005	0.024	0.143	0.132	0.076	0.027	0.037	0.007	0.006	0.013	0.008	0.006	<0.005	0.006	0.028	<0.005	<0.005	0.008	0.015	0.042
Arsénico	mg/L	0.3337	0.013	0.166	0.013	0.085	0.018	0.013	0.015	0.020	0.005	0.008	0.008	0.008	0.010	0.010	0.008	0.015	0.049	0.009	0.013	0.010
Bario	mg/L	1.088	0.136	0.087	0.102	0.108	0.190	0.147	0.170	0.312	0.196	0.209	0.231	0.208	0.249	0.353	0.136	0.093	0.127	0.189	0.421	0.691
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Calcio	mg/L	2.586	1.184	0.824	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	6.841	7.594	0.767	7.480	0.949	3.053
Cadmio	mg/L	0.0301	0.021	0.033	0.032	0.015	0.009	0.007	0.007	0.005	0.003	0.005	0.004	0.004	0.003	0.004	0.003	<0.002	<0.002	<0.002	<0.002	0.003
Cobalto	mg/L	0.1	0.070	0.068	0.035	0.021	0.009	0.005	0.004	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002
Cromo	mg/L	0.03731	<0.002	0.011	0.023	0.040	0.017	0.004	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.011
Cobre	mg/L	0.28481	0.072	0.252	0.787	0.606	0.378	0.295	0.396	0.203	0.111	0.184	0.149	0.145	0.134	0.179	0.068	0.003	0.014	0.004	0.013	0.069
Hierro	mg/L	8.149	<0.3	4.545	2.828	5.810	1.626	0.765	0.822	0.751	<0.3	0.468	0.456	0.388	<0.3	<0.3	<0.3	<0.3	2.546	<0.3	<0.3	<0.3
Potasio	mg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.265	<0.2	<0.2	<0.2	1.175	1.176	0.203	1.467	<0.2	0.595
Magnesio	mg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.336	1.527	<0.2	1.346	<0.2	<0.2
Manganeso	mg/L	0.1595	0.315	0.248	0.137	0.048	0.042	0.017	0.012	0.005	<0.002	0.005	0.004	0.004	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Molibdeno	mg/L	0.01552	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.004	<0.003	0.004	<0.003
Sodio	mg/L	1.269	0.742	0.317	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.573	4.757	0.595	4.391	0.641	0.557
Niquel	mg/L	0.03779	0.040	0.057	0.037	0.027	0.021	0.011	0.014	0.005	0.005	0.007	0.005	0.002	0.006	0.008	0.002	<0.002	0.004	<0.002	0.002	0.011
Plomo	mg/L	0.4529	0.102	0.320	0.966	0.858	0.826	0.514	0.531	0.471	0.183	0.259	0.274	0.228	0.235	0.246	0.068	0.006	0.034	0.013	0.018	0.051
Antimonio (Sb)	mg/L	0.00613	<0.002	0.003	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002
Selenio	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016
Talio (Tl)	mg/L	0.04739	0.014	0.038	0.019	0.028	0.011	0.007	0.010	0.008	0.004	0.007	0.006	0.005	0.005	0.005	0.009	0.005	0.009	0.006	0.003	0.004
Vanadio (V)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cinc	mg/L	0.1299	0.111	0.178	0.200	0.129	0.098	0.071	0.082	0.036	0.025	0.039	0.033	0.028	0.031	0.031	0.019	<0.005	0.013	<0.005	0.011	0.252
Cromo (VI)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	0.039	0.088	0.023	0.135	0.031	0.130	0.229	0.033	0.119	0.108	0.068	0.364	0.169	0.112	0.093	0.096	0.159	0.084	0.092	0.100	0.084
Sulfuros	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra	60596	26-Sep-2017	3-Oct-2017	10-Oct-2017	20-Oct-2017	27-Oct-2017	3-Nov-2017	10-Nov-2017	17-Nov-2017	24-Nov-2017	4-Dec-2017	8-Dec-2017	15-Dec-2017	22-Dec-2017	8-Jan-2018	9-Jan-2018	15-Jan-2018	19-Jan-2018	31-Jan-2018	7-Feb-2018	31-Jan-2018	7-Feb-2018
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	807.1	939	883	586	917	893	903	884	887	915	984	865	937	916	942	1037	1013	983	1005	994	999
pH a 25° C	u pH	3.43	4.47	3.81	4.12	4.09	3.49	3.75	3.87	3.88	3.91	3.87	3.65	3.64	3.50	3.29	4.74	5.61	4.11	6.17	2.97	3.15
Conductividad a 25°C	uS/cm	646	103.7	128.8	80.0	103.3	129.8	114.0	106.7	100.9	94.3	79.2	101.9	76.2	153.4	142.8	61.4	58.5	81.1	90.2	149.6	230.0
Potencial Redox Abs.	mv	643.3	630.800	613.700	647.900	713.600	634.200	719.400	708.300	700.700	677.700	701.800	708.800	569.100	720.200	704.700	714.400	755.800	566.100	735.200	759.800	753.600
Oxigeno Disuelto	mg/L	6.03	6.080	5.720	6.150	6.170	6.340	7.120	5.940	5.930	6.030	5.820	6.380	5.970	5.920	6.080	5.890	5.950	5.900	5.510	5.710	4.740
Sulfatos	mg/L	200	145.0	175.0	41.0	44.0	46.0	46.0	32.0	33.0	30.0	28.0	23.0	30.0	33.0	35.0	24.0	17.0	23.0	29.0	33.0	51.0
Alcalinidad Total (CaCO3)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Acidez (H2SO4)	mg/L	125	170.400	308.700	184.800	60.900	62.100	68.100	45.200	42.200	33.900	27.300	33.200	49.900	48.900	44.200	17.300	11.600	58.200	7.300	59.200	57.800
Mercurio	ug/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.64199	1.021	0.660	0.107	0.370	0.550	0.373	0.300	0.274	0.167	0.160	0.119	0.131	0.130	0.120	0.030	0.008	0.017	<0.005	0.043	0.079
Arsénico	mg/L	1.593	0.058	0.583	0.079	0.206	0.156	0.190	0.295	0.248	0.206	0.198	0.191	0.239	0.390	0.349	0.211	0.064	0.082	0.020	0.347	0.836
Bario	mg/L	0.8554	0.041	0.069	0.068	0.071	0.064	0.050	0.042	0.062	0.089	0.054	0.058	0.044	0.045	0.052	0.133	0.096	0.060	0.087	0.111	0.090
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Calcio	mg/L	7.825	9.204	4.101	<0.3	1.586	1.096	0.436	<0.3	<0.3	<0.3	0.365	<0.3	<0.3	<0.3	<0.3	6.878	6.626	1.543	6.160	1.669	2.738
Cadmio	mg/L	0.6798	0.774	0.339	0.075	0.118	0.166	0.120	0.078	0.094	0.073	0.083	0.063	0.075	0.071	0.068	0.011	0.020	0.040	0.033	0.050	0.068
Cobalto	mg/L	0.2667	0.473	0.112	0.022	0.018	0.016	0.009	0.006	0.008	0.004	0.005	0.004	0.004	0.004	0.005	<0.002	<0.002	0.002	<0.002	<0.002	0.002
Cromo	mg/L	0.1053	0.018	0.017	0.003	0.010	0.013	0.011	0.010	0.011	0.006	0.007	0.008	0.009	0.010	0.017	<0.002	<0.002	0.002	<0.002	0.010	0.019
Cobre	mg/L	11.92366	16.357	10.612	2.655	5.472	8.625	6.867	4.964	6.699	5.018	5.176	4.089	4.885	6.010	5.356	0.467	0.842	2.575	1.689	4.620	5.543
Hierro	mg/L	11.49	10.420	6.013	2.088	4.006	5.142	4.425	4.688	4.515	3.384	4.045	3.604	4.599	4.044	3.983	0.377	0.409	2.867	<0.3	3.940	4.141
Potasio	mg/L	0.5106	0.592	0.794	<0.2	1.928	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.471	1.114	0.226	1.407	0.258	0.599
Magnesio	mg/L	0.8398	2.768	0.785	<0.2	0.329	0.327	0.218	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.356	1.470	0.236	1.220	0.262	<0.2
Manganeso	mg/L	0.3222	1.081	0.253	0.030	0.025	0.021	0.012	0.008	0.010	0.003	0.005	0.004	0.004	0.004	0.009	<0.002	<0.002	<0.002	<0.002	0.002	0.003
Molibdeno	mg/L	0.2489	0.009	0.018	0.008	0.009	0.004	0.004	0.009	0.006	0.004	0.004	0.009	0.007	0.008	0.037	0.063	0.026	0.003	0.006	0.011	0.010
Sodio	mg/L	1.159	1.116	0.368	<0.2	<0.2	0.233	0.212	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.218	<0.2	4.721	4.610	0.472	4.221	0.683	0.502
Niquel	mg/L	0.1908	0.457	0.150	0.027	0.032	0.029	0.018	0.013	0.020	0.011	0.013	0.011	0.012	0.012	0.013	0.003	0.004	0.008	0.004	0.005	0.008
Plomo	mg/L	13.86	1.646	2.759	2.064	1.914	1.413	1.589	1.406	1.491	1.463	1.163	1.609	1.211	1.795	1.244	0.233	0.235	1.245	0.054	1.246	1.269
Antimonio (Sb)	mg/L	0.0642	0.004	0.017	0.008	0.011	0.009	0.007	0.010	0.007	0.005	0.006	0.006	0.006	0.007	0.006	0.013	0.008	0.006	0.004	0.006	0.007
Selenio	mg/L	0.04441	0.012	0.027	0.010	0.013	0.018	0.014	0.006	0.013	0.006	0.010	0.009	0.009	0.010	0.006	0.010	<0.005	0.006	0.006	0.008	0.030
Talio (Tl)	mg/L	0.6381	0.469	0.379	0.218	0.179	0.185	0.158	0.119	0.129	0.098	0.097	0.083	0.085	0.091	0.083	0.032	0.038	0.063	0.052	0.065	0.069
Vanadio (V)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cinc	mg/L	1.328	3.421	1.656	0.309	0.556	0.802	0.802	0.331	0.344	0.226	0.255	0.191	0.210	0.208	0.384	0.038	0.105	0.099	0.080	0.104	0.160
Cromo (VI)	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	0.071	0.088	0.037	0.952	0.041	0.113	0.184	0.106	0.117	0.103	0.135	0.115	<0.010	0.040	0.188	0.158	0.192	0.074	0.069	0.072	0.080
Sulfuros	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

PILA DE LIXIVIACION

ANEXO 3.4
INFORMES DE GEOQUÍMICA – GOLDER

INFORME

INVESTIGACION DE LA PERFORACION EN LA PILA DE LIXIVIACIÓN

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Golder Associates

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ACRÓNIMOS Y ABREVIACIONES‘

A	ácidico (clasificación NCV)
ABA	conteo ácido base
Ag	plata
AGP	potencial de generación de ácido
Al	aluminio
ANP	potencial neutralización de ácido
$ANP_{M.Sobek}$	potencial de neutralización de ácido –Método Sobek modificado
As	arsénico
ASTM	Sociedad Americana de Pruebas y Materiales
B	básico (clasificación NCV)
Be	berilio
bgs	debajo de la superficie del suelo
Bi	bismuto
$CaCO_3$	carbonato de calcio
CAI	carbono insoluble en ácido
CAP	carbono después de la pirolisis
Cd	cadmio
CIC	carbono-en-columna
cm	centímetro
CN^-	cianuro
Co	cobalto
CO_2	dióxido de carbono
C_{TOT}	carbón total
Cu	cobre
Cr	cromo
CVAA	absorción atómica de vapor frio
EWTP	planta de tratamiento de agua de exceso
Fe	hierro
g	gramo
Ga	galio
Golder	Golder Associates Inc.
HA	altamente ácido (clasificación NCV)
HB	altamente básico (clasificación NCV)
HCl	ácido clorhídrico
HCN	cianuro de hidrógeno / ácido cianhídrico
HLF	pila de lixiviación
ICP-MS	espectrometría de plasma de masa acoplado inductivamente
ICP-OES	espectrometría de emisión óptica de plasma acoplado inductivamente
L	litros
m	metros
m^2	metros cuadrados
MEND	Drenaje Neutro de Ambiente Minero
mg/L	miligramos por litro
Mn	manganeso
MYSRL	Minera Yanacocha S.R.L.
N	neutral (clasificación NCV)
NAF	no formador de ácido
NCV	Valor neto de carbonato
Ni	níquel
NMS	Servicios Metalúrgicos de Newmont
NNP	razón de potencial de neutralización neta
NPR	razón de potencial de neutralización

PAF	potencial formador de ácido
PLS	solución rica
SA	ligeramente ácido (clasificación NCV)
SAP	azufre después de pirolisis
SB	ligeramente básico (clasificación NCV)
Sc	escandio
Se	selenio
SGS	SGS Canada Inc.
S_{HCl}	Azufre residual después de la lixiviación con ácido clorhídrico
Sn	estaño
SPLP	Procedimiento de lixiviación por precipitación sintética
S_{py}	azufre como sulfuro
SO_4	sulfato
S_{SO4}	azufre como sulfato
S_{TOT}	azufre como sulfuro
SWS	Schlumberger Water Services S.A.
TIC	carbono total inorgánico
Tl	talio
USCS	Sistema Unificado de Clasificación de Suelos
USEPA	Agencia de los Estados Unidos para la Protección del Medio Ambiente
V	vanadio
WAD	disociable en ácido débil
WRF	instalación para material de desecho
Zn	zinc

1.0 INTRODUCCIÓN

La investigación de las instalaciones de mina tales como las pilas de lixiviación (HLFs) a través de perforación directa se está convirtiendo en una práctica regular estándar para ganar entendimiento sobre su estabilidad geoquímica durante las operaciones, ayudar con la identificación e implementación de medidas de cierre adecuadas y atender los posibles problemas relacionados con la seguridad y salud humana. Este informe presenta las observaciones de la investigación sobre una pila de lixiviación, realizada por Golder Associates Inc. (Golder), para evaluar el comportamiento de cianuro en el agua en poro en la pila de lixiviación bajo condiciones actuales y futuras en la Mina Yanacocha.

1.1 Objetivos del Estudio

El objetivo primario de la investigación de la pila de lixiviación fue evaluar el comportamiento de cianuro en agua en poro de la pila de lixiviación bajo condiciones actuales y futuras. Debido a que el destino y transporte de cianuro es fuertemente afectado por condiciones del pH, un componente clave de la investigación fue la evaluación de condiciones del pH del agua en poro actual y futura. Además de cianuro y pH, también se evaluó el potencial actual y futuro para lixiviación de metales del mineral procesado.

1.2 Antecedentes del Lugar de Operación

El enfoque de este estudio fueron las pilas de lixiviación de Carachugo y Yanacocha 6/7. La ubicación de estas instalaciones se muestra en la Figura 1-1. Se muestran fotografías de estas instalaciones en las imágenes 1-2 y 1-3 y sus características son como sigue:

- **HLF Carachugo** (Figuras 1-4 y 1-5): La HLF Carachugo fue construida en 12 etapas y está localizada dentro del ámbito de captación de la Quebrada Pampa Larga, hacia la límite noreste del distrito minero de Yanacocha. La topografía subyacente de las etapas 1 a 9 drena hacia el norte, en pozas de colección al lado norte del HLF. El subsuelo por debajo de las etapas 10 a 12 drena a las pozas de colección en el lado este del HLF en el drenaje de la Quebrada Ocuchomachay. Desde el 2003, este HLF ha recibido mineral silícico del tajo Carachugo.
- **HLF Yanacocha 6/7** (Figuras 1-6 y 1-7): La HLF de Yanacocha ha sido construida en siete etapas, las últimas dos (i.e. 6 y 7) siendo el enfoque de esta investigación. El subsuelo por debajo de las etapas 6 y 7 drenan a las pozas de colección del lado suroeste de la pila. Entre el 2004 y el 2010, esta instalación recibió mineral silícico del tajo Yanacocha. La colocación de mineral se detuvo en el 2010 debido al desarrollo de condiciones ácidas.

En la mina Yanacocha, el material de desecho y el mineral se clasifican operacionalmente basándose en el contenido total de azufre como sigue:

- Óxido azufre < 1.5 wt.%
- Transicional 1.5 < azufre < 10 wt.%
- Sulfuro azufre > 10 wt.%

El mineral de la HLF Carachugo se clasifica como material óxido mientras que el mineral de la HLF Yanacocha 6/7 se clasifica como material transicional.

Los elementos principales de las operaciones de la HLF se muestran en la Figura 1-8 e incluyen un sistema de irrigación que aplica una solución alcalina diluida de cianuro en la cima de la HLF y un sistema de sub-drenaje que recoge la solución rica (PLS) en la base de la HLF.

La solución de cianuro se riega en la HLFs para recuperación de oro. Las tasas de riego están típicamente en el orden de 10 litros por metro cuadrado por hora (L/m^2/hora) (SWS 2009), aunque pueden variar para cumplir con los requisitos operacionales. El tiempo de permanencia de la solución de cianuro dentro de la HLF está relacionada a la altura de la HLF y la conductividad hidráulica del mineral, y varía entre las instalaciones. Las HLFs de Yanacocha y Carachugo son altamente permeables y están compuestas de minerales con porcentaje relativamente alto de alteración silícica. En general, el tiempo de permanencia de la solución de cianuro en las HLFs se estima en un rango de días a semanas.

Para prevenir la degradación y volatilización del cianuro, lo que ocurre más rápidamente en un ambiente ácido, se añade alcalinidad a los sistemas de irrigación de la HLF en la forma de cal a granel o lechada de cal. Se usó lechada de cal hasta el 2010, después de lo cual la cal a granel fue gradualmente usada durante un período de dos años. Actualmente se aplica cal a granel en la solución para irrigación de todas las HLFs activas (MYSRL 2014). La irrigación con cal durante las operaciones de las HLF mantiene el pH de la PLS de neutral a alcalina (típicamente en el rango de 7 a 10).

Se recupera el oro de la PLS por medio de absorción en columnas de carbón (CIC) y plantas de Merrill Crowe. La solución estéril que queda después de este proceso de extracción o bien se recircula de nuevo a las HLFs para volver a irrigar, o es tratada para descarga en una de las dos plantas de tratamiento de agua excedente (EWTPs), las cuales están localizadas en Yanacocha y Carachugo. Los lodos producidos en las EWTPs también se retornan a las HLFs porque pudieran contener oro residual.

2.0 INVESTIGACIÓN EN LAS PILAS DE LIXIVIACIÓN

2.1 Investigación de Campo

Se iniciaron las actividades de investigación en las HLFs de Carachugo y Yanacocha en Junio del 2015. Un geoquímico de Golder visitó la mina Yanacocha entre el 22 de Junio y el 3 de Julio de 2015 para observar las actividades de perforación, el logueo de taladros y recolectar muestras para los análisis geoquímicos.

Los componentes de la investigación de campo y de laboratorio fueron descritos en un plan de muestra y análisis (Golder 2015). Los objetivos específicos del estudio se resumen a continuación:

1. Determinar las condiciones actuales del pH del agua de poro dentro de las HLFs de Carachugo y Yanacocha 6/7.
2. Determinar la calidad del agua de poro dentro de las HLFs, específicamente la presencia y concentración de cianuro total en el agua de poro.
3. Proveer información para predecir el comportamiento a largo plazo del cianuro residual presente en el agua de poro en las pilas de lixiviación.

Las secciones siguientes describen las actividades de campo realizadas para el proyecto. En algunos casos, las actividades de investigación de campo se desviaron del plan de muestra y análisis debido a las condiciones encontradas en terreno.

2.1.1 Perforación Sónica

Se llevó a cabo perforación sónica en 15 ubicaciones dentro de las HLFs de Carachugo y Yanacocha. Un agujero de 80 m de profundidad se perforó en cada pad. Los orificios restantes fueron perforados a una profundidad de 30 m.

La perforación se llevó a cabo 24 horas al día (dos turnos de 12-horas) desde el 23 de Junio al 1 de Julio de 2015; usando un equipo Terra Sonic TSi 150T, el cual es de propiedad y operado por Minera Yanacocha S.R.L (MYSRL) (Figura 2-1). Los agujeros se perforaron utilizando el método de doble carcasa sónica con una carcasa de diámetro exterior de 15.2 centímetros (cm) y el diámetro interior de la carcasa de 7.6 cm. La carcasa interior fue avanzada para recolectar muestras, mientras que la carcasa exterior fue avanzada al mismo tiempo para mantener la integridad del barreno y evitar el colapso durante la recuperación de la muestra. La perforación se realizó con agua para lubricar las brocas del taladro.

La ubicación de las perforaciones en las HLFs de Carachugo y Yanacocha 6/7 se muestran en las Figuras 1-3 a la 1-6. Las profundidades de las perforaciones fueron las siguientes:

- 30 m: CA-1, 4, 5, 6, 8, 9, 10A, 11, 12, 15B, 16, 17, y 18
- 80 m: CA-7 y YA-1

Las muestras fueron recolectadas por el personal de perforaciones en bolsas de muestreo de 10.2 cm y colocadas en cajas de cedro de 100 cm de largo por 10.2 cm de ancho. Los anchos de la muestras se expandieron y los largos se acortaron como resultado de ser transferidos de una diámetro más pequeño del barril a un diámetro más grande de la bolsa y caja de muestra. Las muestras de perforación consistieron en un intervalo inicial de 5 metros en la parte superior de cada muestra, seguida por taladros de seis metros hasta la profundidad total. Los perforistas numeraron las cajas secuencialmente desde la parte superior del intervalo y marcaron el comienzo y el final de cada muestra corrida; la profundidad aproximada de las muestras se estimó basadas en la longitud de la recuperación y la calidad de la muestra (es decir muestra recuperada). Se llevaron a cabo reuniones diarias entre los perforistas de campo y el geoquímico de Golder para recibir las actualizaciones de las actividades realizadas ese día, para atender cualesquier asunto de salud y seguridad, identificar problemas técnicos encontrados durante la perforación, hacer planes para logística (ej., entrega de muestras) y revisar los planes para el turno de noche y para el día siguiente.

Las cajas de muestras fueron trasladadas a pallets en cada sitio de perforación y se transportaron diariamente a la caseta central ubicada en el complejo de oficinas del KM 24. Las cajas de muestras fueron procesadas y catalogadas por el personal de muestreo y se tomaron fotografías para el archivo. Seguido del logueo de taladros y muestreo, las muestras de perforación fueron trasladadas al almacén de largo plazo de la Mina Yanacocha.

2.2 Logueo de Taladros

El logueo de taladros lo realizó un geoquímico de Golder en la caseta central ubicada en el complejo de oficinas del KM 24. Las muestras de perforación fueron registradas siguiendo el procedimiento de logueo estándar de Golder (Golder 2012) el cual se basa en el Sistema Unificado Modificado de Clasificación de Suelos (USCS). El mineral procesado se clasificó usando la clasificación USCS (ASTM D2488, ASTM 2009b), que se basa en las distribuciones de granulometría inferior a 7.6 cm. Otras actividades de logueo incluyeron:

- Un registro fotográfico de cada muestra de usando una cámara digital
- Documentación de la recuperación de la muestra por corrida
- Observación y registro de presencia de agua libre/detenida
- Descripción de la distribución del tamaño de las partículas (estimaciones de porcentajes de granos finos, arena, y gravas) y de formas, menores a 7.6 cm.
- Descripción de guijarros más grandes que 7.6 cm incluyendo las estimaciones de porcentaje
- Descripción del color, tipo de roca (si aplica), sulfuros visibles y contenido de humedad
- Observaciones de la meteorización, descomposición, cortezas, alteración, limo/productos de arcilla, plasticidad, y/o fragmentos de roca friables/degradadas.

Las muestras de núcleo se loguearon no más de un día después de la perforación, y las muestras se recolectaron para análisis geoquímico poco después de la finalización del registro. Todo el logueo (registro) se llevó a cabo por el mismo geoquímico para asegurar la consistencia en el procedimiento.

Los registros de muestras de núcleo se prepararon usando el software gINT. Los detalles adicionales del logueo de taladros se presentan a continuación:

- Los nombres de los taladros identifican la ubicación de la pila de lixiviación (i.e. *CA* para Carachugo y *YA* para Yanacocha).
- Las clasificaciones en mayúscula del mineral procesado identifican los componentes principales de la muestra. En algunos casos, un componente principal aparece dentro de la descripción del mineral procesado, lo que corresponde a ese componente en una cantidad mayor al 35 por ciento del volumen total.

  Por ejemplo: "*(GW-GM) GRAVA, de fino a grueso, bien allanada, de sub-angular a angular, y ARENA de fina a gruesa, sub-redondeada*", tiene grava como componente primario, con un porcentaje mayor al 35 por ciento de arena como el constituyente secundario.
- *CSP* es un punto de muestra compuesta, que corresponden a muestras compuestas recogidas para el análisis en los Servicios Metalúrgicos de Newmont (NMS) en Englewood, Colorado (detalles adicionales sobre la recolección y análisis de la muestra se presenta en las secciones 2.3 and 2.4).
- *FEOOH* identifica el manchado de oxi-hidróxido de hierro o recubrimientos en superficies.
- *Jarosita* fue usado como descripción genérica de campo para la presencia de minerales de sulfato de hierro hidratados; sin embargo, las especies minerales reales pueden ser diferentes de Jarosita.
- El color del suelo fue descrito después de humedecer ligeramente el suelo con agua.
- La identificación de tipos de rocas se llevó a cabo según el caso. La mayor parte de identificación de rocas fue general, es decir, *silicatos ligeros, brechas oscuras*, etc.

2.3 Recolección de Muestras de Perforación

La selección de muestras sólidas para el análisis geoquímico consideró variabilidad estratigráfica, así como la representación del perfil de profundidad completa. Color, tamaño de grano y observaciones texturales se aplicaron para separar la muestra de núcleo en "zonas" que representan las principales características del perfil de profundidad completo.

Se aplicó el siguiente criterio en la recolección de muestras:

- Para fines de archivo, por lo menos una mitad (1/2) de la muestra de núcleo permaneció en el proyecto. Por lo tanto, la recolección de muestras para el análisis geoquímico se limita a la mitad de la muestra de núcleo.
- La recolección de muestras tuvo como objetivo la representación de las "zonas" características descritas arriba y también representaron el perfil de profundidad completo.

La recolección de muestras y el análisis siguieron una estrategia por fases. Muestras del mineral procesado fueron recolectadas para determinar el pH de pasta y el valor neto de carbonato (NCV) por personal del laboratorio 'in situ' de MYSRL. A una frecuencia del 10 por ciento duplicados fueron enviados a SGS Canada, Inc. (SGS) en Lakefield, Ontario, Canada y a NMS ubicada en Englewood, Colorado. Se enviaron muestras adicionales a NMS para pruebas de lixiviación. Más detalles sobre la recolección y análisis de las muestras se presentan a continuación:

- **Ensayo de pH pasta y NCV 'in situ'** - Se obtuvieron las muestras para pH de pasta y NCV usando una pala plástica a intervalos de aproximadamente 10-m y consistieron en 500-grs (g) de muestras al azar. Se colocaron las muestras en bolsas de muestras plásticas herméticas con cierre deslizable y enviadas al laboratorio de MYSRL en el lugar. Se seleccionaron los intervalos para las muestras que sean representativos de "zonas características" identificadas durante el logueo de taladros y fueron tomadas generalmente del centro de las muestras de núcleo corridas para evitar muestras "lavadas". Las muestras de núcleo tenían diferentes grados de heterogeneidad con la profundidad; sin embargo, el mineral procesado dentro de cada intervalo de 10 m fue en general bastante similar tal que la frecuencia de muestreo parecía ser adecuada para caracterizar las características geoquímicas de cada agujero de sondeo. Duplicados de muestras para el análisis por el laboratorio in situ, NMS, y SGS se recogieron en una frecuencia de un duplicado por cada 10 muestras (es decir, 10%), y se homogeneizaron antes de ser divididas.
- **Muestras para NMS** – En la recolección de muestras para las pruebas de lixiviación estática se consideró los resultados de las mediciones del pH pasta in situ (para muestras de sondeos recogidos al comienzo de la campaña de campo), la homogeneidad / heterogeneidad de las muestras de núcleo (como se verá más adelante), y la representación de las muestras de núcleo en su conjunto. Como resultado, algunas muestras se recogieron como muestras conglomeradas (muestras de núcleo relativamente homogéneas) y otras fueron recogidas en intervalos específicos dentro del taladro (muestras de núcleo más heterogéneas). Para las muestras compuestas, se recogieron aproximadamente de 50 a 75 g de material del suelo en intervalos de aproximadamente 2 a 3 m y se homogeneizaron en una bolsa de muestra herméticas con cierre deslizable (el peso de la muestra total es de aproximadamente 2 kilogramos [kg]). Se hizo el esfuerzo para asegurar que la variabilidad del tamaño de grano en el agujero de sondeo estuviera representada en las muestras compuestas. Para las muestras de núcleo heterogéneas, las muestras recogidas a intervalos específicos fueron seleccionadas basadas en el intervalo homogéneo más grande de la muestra de núcleo y consistieron en aproximadamente 2 kg de material de suelo obtenidas en un lugar dentro de la muestra de núcleo. Para CA-7 y YA-1 (80 m de agujeros de sondeo), se recogieron varias muestras a intervalos específicos.

Todas las muestras de núcleo mostraron cierto grado de heterogeneidad con la profundidad como resultado de la perforación a través de diferentes sectores de las pilas, origen de los materiales y grados de meteorización. Como resultado, las zonas características se determinaron basándose en la similitud en tamaño de grano, la extensión de la meteorización, características de resistencia a la intemperie, contenido de arcilla, material originario, minerales secundarios, revestimientos, contenido de humedad, y pH de pasta (sólo para las muestras de testigo iniciales). Las muestras para la prueba de lixiviación fueron elegidas basadas en el grado de heterogeneidad de los testigos. Los testigos que tenían características bastante similares, como se indica anteriormente, se consideraron homogéneos y los

testigos que mostraron mayor variabilidad se consideraron heterogéneos. Las muestras representativas fueron conglomeradas para los testigos más homogéneos, que proporcionaron muestras para las pruebas de lixiviación que representaban el tipo de material principal observado en estos testigos. Las muestras zonales (i.e. muestras de profundidades específicas) para pruebas de lixiviación de testigos heterogéneos se seleccionaron basadas en las zonas características más grandes de los testigos para que las muestras recogidas capturarán la gama de características observadas.

Se presenta una lista de todas las muestras en la Tabla 2-1. Las muestras designadas para el envío a NMS y SGS se colocaron en bolsas triples y se sellaron para asegurar la integridad de la muestra durante el envío. Las muestras fueron enviadas bajo cadena de custodia (entregado por el geoquímico de Golder el 2 de julio de 2015) y enviado por el personal de MYSRL aproximadamente dos semanas después de la recolección.

2.4 Análisis de Muestras de Perforación

Los métodos de análisis se enumeran en la Tabla 2-2. El análisis químico incluye el ensayo de conteo ácido base (ABA) y las pruebas de lixiviación.

2.4.1 Ensayo de Conteo Ácido Base

El ensayo de conteo ácido base se lleva a cabo para pronosticar las características de generación de ácido de un material y se base en la diferencia relativa entre el potencial neto de generación de ácido del material y el potencial neto de neutralización de ácido. Los métodos comúnmente usados para el análisis ABA incluyen el método Sobek (Sobek et al. 1978) y el método E1915-09 (ASTM 2009a) de la Sociedad Americana de Pruebas y Materiales (ASTM). El Sobek Modificado es el término utilizado para describir una serie de adaptaciones a la metodología original de Sobek. Muy a menudo, las adaptaciones implican el procedimiento analítico para medir la capacidad completa de neutralización del material.

En los laboratorios de MYSRL ‘in situ’ y en los de NMS se llevó a cabo el ensayo de conteo ácido base usando el método ASTM. Los valores NCV para las muestras de mineral procesado se determinaron de la diferencia entre el potencial de neutralización de ácido (ANP) y el potencial de generación de ácido (AGP) del material, expresados en unidades de porcentaje de dióxido de carbono (% CO_2). Sobre la base del NCV calculado, uno de las siete clasificaciones, que van desde muy ácido (HA) hasta altamente básico (HB), fue asignado al material de la siguiente manera:

- Altamente Ácido (HA) NCV ≤ -5 %CO_2
- Ácido (A) -5 < NCV ≤ -1 %CO_2
- Ligeramente Ácido (SA) -1 < NCV ≤ -0.1 %CO_2
- Neutral (N) -0.1 < NCV < 0.1 %CO_2

- Ligeramente Básico (SB) $0.1 \leq NCV < 1\ \%CO_2$
- Básico (B) $1 \leq NCV < 5\ \%CO_2$
- Altamente Básico (HB) $NCV \geq 5\ \%CO_2$

Se pueden utilizar múltiples métodos para determinar la ANP del material. Como se muestra en la Tabla 2-2, se usaron dos métodos para calcular la ANP basado en el contenido de carbono total inorgánico (TIC) de la muestra: 1) carbono residual después de la pirolisis; y, 2) carbono residual después de reacción con ácido clorhídrico (HCl). También se usaron dos métodos para calcular el AGP basado en el contenido de sulfuro de la muestra: 1) sulfuro residual después de pirolisis; y, 2) sulfuro residual después de la reacción con HCl.

En resumen, se hicieron las siguientes determinaciones para calcular el NCV:

- Azufre Total (S_{TOT})
- Carbono Total (C_{TOT})
- Carbono y sulfuro residual después de pirolisis (CAP y SAP)
- Carbono residual insoluble en ácido (CAI)
- Sulfuro residual después de lixiviación con HCl (S_{HCl})

El ensayo de conteo ácido base hecho por SGS siguió el método Sobek Modificado (MEND 1991). El método Sobek Modificado hace la determinación del ANP por valoración, y el AGP se calcula del contenido de azufre en forma de sulfuro. Se realizó la determinación de los siguientes parámetros para el test ABA con el método Sobek Modificado:

- Azufre Total (S_{TOT})
- Azufre como Sulfato (S_{SO4} por lixiviación de ácido clorhídrico y carbonato de sodio)
- Carbono Total (C_{TOT})
- Carbono Inorgánico Total (TIC)
- Potencial de neutralización completo ($ANP_{M.Sobek}$)

Se han propuesto una serie de criterios para caracterizar una muestra como potencial formador de ácido (PAF) y como material no formador de ácido (NAF) usando los resultados del test ABA. Los enfoques más comunes son los basados en el uso de la razón del potencial de neutralización (NPR = ANP / AGP) y el potencial neto de neutralización (NNP = ANP - AGP). Por varias razones, ninguna relación única o valor NNP se ha identificado que tenga aplicabilidad universal en cuanto a pronosticar la generación de ácido. El umbral de valores actuales para un sólido en particular, son material-específico y dependen de muchos factores, incluyendo las cantidades y tipos de minerales generadores de ácido y neutralizantes, su morfología, su tamaño de grano, su cristalinidad, su composición química, su paragénesis, la textura del material y las condiciones de exposición específicas del sitio.

Las reglas generales para designar materiales como PAF presentados por MEND (2009) se resumen líneas abajo. Estas normas se aplicaron para la evaluación de los resultados ABA de SGS.

Potencial de la Muestra	Criterio	Comentarios
PAF	NPR<1	Material potencial formador de ácido, a no ser que los minerales de sulfuro sean no-reactivos, o el ANP está preferiblemente s expuesto en las superficies
Incierto	1<NPR<2	Posiblemente material PAF si el ANP es insuficientemente reactive o si se consume a un ritmo más rápido que los sulfuros
NAF	NPR>2	Material sin potencial de generación de ácido, a no ser que el ANP es insuficientemente reactivo, sulfuros extremadamente reactivos están presentes, o exista exposición preferencial de sulfuros en los materiales

2.4.2 pH Pasta

El ensayo de pH pasta es un corolario cualitativo del ABA, y refleja el balance de componentes generadores de ácido fácilmente soluble y componentes neutralizadores de ácido presentes en la superficie de la muestra. Se determina mezclando el sólido con una cantidad fija de agua destillada, y midiendo el pH del lodo resultante. Los análisis de pH en pasta se realizaron en muestras pulverizadas en una proporción 1:1 de solución a sólidos (es decir 5 gramos de muestra, 5 mililitros [ml] de agua des-ionizada) (Newmont Mining Company 2011).

2.4.3 Pruebas de Lixiviación de Corto Plazo

Un número de metodologías de pruebas estáticas se puede utilizar para evaluar el comportamiento de lixiviación de un material. Debido a que los resultados de estas pruebas de lixiviación a corto plazo tienden a ser sensibles a la metodología utilizada (ej., relación de sólido a solución, naturaleza de la lixiviante, la reducción de tamaño de grano), las pruebas de lixiviación proporcionan una estimación de qué componentes son más propensos a lixiviar desde un material en particular. Sin embargo, las concentraciones de constituyentes en el lixiviado mostraran variabilidad relacionada con la metodología de la prueba específica utilizada y pueden no ser representativas de las condiciones a escala de campo. Al utilizar los resultados para evaluar las condiciones a escala de campo, cómo afectarán a la movilidad de constituyentes las diferencias en las condiciones de campo y de laboratorio debe ser evaluado. Además, las pruebas de lixiviación estáticas no proporcionan una indicación del comportamiento a largo plazo y los procesos transientes.

Se llevó a cabo pruebas de lixiviación a corto plazo usando el Procedimiento de Lixiviación por Precipitación Sintética (SPLP) con algunas modificaciones. La prueba de lixiviación SPLP (USEPA Método 1312 [USEPA 1994]) fue diseñado para simular la interacción de corto plazo entre el agua meteórica y un material. El procedimiento estándar de 18 horas se realiza a una razón de 20:1 de solución a soólido, utilizando un lixiviante ligeramente ácido (pH 4.2 o 5.0). La proporción estándar de la

solución SPLP a sólidos de 20:1 fue modificada a 4:1 para este estudio, para representar más de cerca la relación de sólido a solución en los HFLs. En lugar de un lixiviante ligeramente ácido, se utilizó agua des-ionizada.

2.5 Muestreo de Agua de Poro en la Pila de Lixiviación

El ámbito de trabajo indicó que las aguas de poro serían muestreadas si hubiera suficiente agua de poro presente en los intervalos de testigos. Agua de poro en los núcleos se encontró con poca frecuencia e insuficiente para la toma de muestras.

3.0 RESULTADOS DE LA INVESTIGACIÓN DE CAMPO

Esta sección presenta un resumen basado en los resultados de la investigación de campo así como en el laboratorio. La interpretación de la información, lo que incluye una evaluación de las condiciones geoquímicas futuras de la HLF, se presentan en la sección 4.

3.1 Características Físicas del Mineral Procesado

3.1.1 Pila de Lixiviación de Carachugo

En términos generales, las muestras de perforación de la HLF de Carachugo fueron gravas o gravas arenosas con limo y algo de arcilla. Hubo presencia de lentes homogéneos de arena amarilla en algunas de las muestras de perforación. Los colores de estas muestras generalmente eran marrones, tostados y amarillos. Las muestras generalmente eran mayormente secas con lentes de material desde húmedos hasta mojados. El grado de meteorización no parecía ser una función de profundidad, ya que muchas de las muestras de perforación de la HFL de Carachugo contenían gravas y piedrecillas no meteorizadas a profundidad. Lentes de mineral procesado alterado coincidieron con cantidades significativas de limo y arcilla, generalmente estaban entre húmedas y mojadas, y mayormente se las encontró en zonas con silicatos blancos. Se observaron sulfuros en algunas de las muestras (ej., CA-8, CA-9, CA-10A and CA-15B). Mayormente se observó variabilidad dentro de las muestras a manera de diferencias en la distribución de tamaño de los granos, el color, el grado de meteorización y la humedad. En las zonas donde no había finos, hubo recuperaciones limitadas y por lo tanto se asumió que las partes finas se habían lavado cuando se perforó.

3.1.2 Pila de Lixiviación de Yanacocha 6/7

Se recolectó una muestra de perforación en la HLF de Yanacocha que alcanzó una profundidad total de 80 m. La muestra de la HLF de Yanacocha varió más con respecto a la profundidad comparada con las muestras de perforación de la HLF de Carachugo en lo que respecta a la distribución de tamaño de grano, recubrimientos de oxi-hidróxido de hierro, ocurrencia de jarosita, grado de meteorización y color. Las muestras HLF de Yanacocha HLF de manera general se clasificaron como gravas arenosas, arenas con gravilla o arenas. Se presentó arena amarilla homogénea a profundidad, así como arenas con gravilla color óxido a profundidades variadas en la muestra de perforación. Los colores variaron entre marrón claro, amarillo, gris, rojo-marrón oscuro, hasta un color óxido. Las muestras en general parecían estar más meteorizadas que las muestras HLF de Carachugo y tenían cortezas más gruesas, al mismo tiempo que hubo más presencia de oxihidróxidos de hierro y jarositas. Las arcillas y el limo no fueron tan prevalentes comparadas con las muestras HLF de Carachugo y la humedad estaba distribuida de manera más pareja en toda la muestra HLF de Yanacocha. Solo se observó la ocurrencia de piedrecillas a los 11 metros y a los 65 metros por debajo de la superficie del suelo (m bgs). Se observaron sulfuros en esta muestra de perforación.

3.2 Química del Mineral Procesado de la Pila de Lixiviación

3.2.1 Ensayo Conteo Ácido Base

Los resultados del ensayo ABA del laboratorio de MYSRL (se utilizó la metodología NCV) se muestran en la Tabla 3-1 y en las Figuras del 3-1 al 3-5. Los resultados se resumen a continuación:

- **Ensayo de pH pasta**: Los valores de pH pasta de las muestras de mineral procesado provenientes del HLF de Carachugo estaban dentro de un rango de ácido (4.1) a alcalino (9.0) (Figura 3-1). Aproximadamente el 60% de las muestras reportaron valores de pH en pasta cercanos a neutrales (ej., de 6 a 8). No se observaron tendencias consistentes de valores de pH pasta con la profundidad. Los valores de pH pasta más bajos (<5.5) se midieron en las ubicaciones de las perforación CA-8 y CA-18. Los valores de pH pasta de las muestras de mineral procesado de Yanacocha 6/7 fluctuaban desde ácido (2.7) hasta neutral (7.0) (Figura 3-4). Los valores de pH pasta más bajos se midieron a la mitad (aproximadamente de 25 a 35 m bgs) y al fondo (aproximadamente 75 m bgs) del hoyo de perforación.
- **Azufre**: Las concentraciones totales de azufre de las muestras de mineral procesado de HLF de Carachugo fueron variadas, fluctuando entre 0.07 a 4.4 wt.% (gráfico 3-2). La concentración promedio total medida de azufre fue de 0.9 wt.%, lo que es consistente con la colocación de material de óxido en este HLF. No se observaron tendencias consistentes en las concentraciones de azufre total de acuerdo a la profundidad o antigüedad del HLF. En la mayoría de las muestras (>90%), se determinó que el sulfato era la forma dominante de azufre presente (Gráfico 3-3).

  Las concentraciones de azufre total para las muestras de mineral procesado del HLF de Yanacocha 6/7 también fluctuaron desde 0.28 hasta 3.8 wt.% (Figura 3-4). La concentración promedio de azufre total fue de 1.1 wt.%, lo cual está por debajo del valor de rango más bajo para los minerales transicionales (Es decir, 1.5 wt.%). El sulfuro era la forma dominante de azufre en las muestras con las concentraciones más altas de azufre total. La concentración de sulfato de todas las muestras de Yanacocha 6/7 era similar y fluctuaban desde aproximadamente 0.2 hasta 0.4 wt.%.

  No se observó ninguna correlación entre la prueba de pH pasta y las concentraciones de especies de azufre (Figura 3-5).
- **Carbono**: Las concentraciones de TIC de las muestras procesadas de ambos HLFs estuvieron bajas. Las concentraciones que se reportaron eran iguales al límite de reporte usado en el método analítico (ej., 0.02 wt.%).
- **NCV**: La clasificación NCV para las muestras varió entre neutral (N) y ácida (A) (Figura 3-1).

Los resultados ABA para las muestras que analizaron SGS y NMS se muestran en las Tablas 3-2 y 3-3. Se observó en general que las mediciones de azufre total y pH en pasta provenientes de los tres laboratorios concuerdan (Figura 3-6). Para algunas muestras, los laboratorios SGS y NMS indicaron concentraciones más bajas de sulfato, y por lo tanto concentraciones más altas de sulfuro que MYSRL (Figura 3-6). Las clasificaciones NCV elaboradas por NMS en general fueron consistentes con las clasificaciones de MYSRL. Para dos de las muestras la clasificación de NMS se indicó un mayor potencial de generación de ácido que la que mostró la clasificación de MYSRL. Los valores de Razón de Potencial de Neutralización (NPR) se calcularon para las muestras analizadas por SGS. Todos los

valores NPR fueron menores a uno, y por lo tanto son clasificadas como posibles generadores de ácido bajo el criterio MEND (2009).

3.2.2 Pruebas de Lixiviación a Corto Plazo

Se llevaron a cabo pruebas de lixiviación a corto plazo en 23 muestras de la HLF de Carachugo (20 muestras) y de Yanacocha 6/7 (3 muestras), respectivamente. Los análisis de pH pasta y NCV también se llevaron a cabo en muestras de prueba de lixiviación.

Los resultados NCV se muestran en la Tabla 3-4. Los resultados de pH pasta y azufre se muestran en el gráfico 3-7. Esta figura también incluye una comparación de un resumen de estadísticas de las 47 muestras analizadas in-situ (discutido en la sección 3.2.1) y las 23 muestras de prueba de lixiviación. Los rangos de valores de las pruebas de pH pasta y de concentraciones totales de azufre para las muestras de pruebas de lixiviación son similares al conjunto de datos más extenso del sitio. Los resultados de especiación de azufre de las muestras de pruebas de lixiviación indican una fracción más alta de azufre como sulfuro cuando se compara con el conjunto de datos más extenso. Las concentraciones de sulfato de las muestras de prueba de lixiviación se determinaron siguiendo el método de lixiviación con ácido clorhídrico, mientras que los análisis de sulfato hechos en terreno se condujeron usando pirolisis. Las diferencias observadas en la especiación de azufre por lo tanto se pueden atribuir a los diferentes métodos analíticos utilizados. Consistente con los resultados del conjunto de datos más extenso, las concentraciones de TIC son bajas en todas las muestras de la prueba de lixiviación.

Las clasificaciones NCV para las muestras de prueba de lixiviación van desde neutrales (N) a altamente acídicas (HA). Comparadas a los análisis en terreno, una proporción más alta de muestras se clasifica como generadora de ácido. Esta diferencia se atribuye a las variaciones en la proporción estimada de azufre como sulfuro.

Los resultados del lixiviado SPLP se muestran en la Tabla 3-5 y se resume a continuación:

- **pH:** Los valores de pH del lixiviado de SPLP fluctuaban de altamente ácidos (2.2) a altamente alcalinos (11.3). Los resultados del lixiviado SPLP por lo tanto representan la lixiviavilidad de metales y cianuro dentro de un rango amplio de condiciones de pH. Se muestra la relación entre el pH del lixiviado SPLP y los valores de las pruebas de pH pasta en el gráfico 3-8. Por encima de un pH de 7, los valores de pH del lixiviado SPLP son consistentemente más altos que los valores del ensayo pH pasta; sin embargo, cuando el pH es menor a 7, se observa una tendencia opuesta.
- **Cianuro Total:** Las concentraciones de cianuro total estaban por debajo del límite de detección (<0.1 mg/L) en la mayoría de los lixiviados SPLP, con la excepción de dos muestras. Cuando se detectó, las mediciones de concentración de cianuro total medidas fueron bajas (0.11 mg/L). El cianuro total fue detectado en lixiviados de SPLP con lpos valores de pH más altos (es decir, pH > 10) (Figura 3-9)

- **Alcalinidad:** Las concentraciones de alcalinidad del lixiviado SPLP fluctuaron entre por bajo el límite de detección (<10 mg/L as $CaCO_3$) hasta los 155 mg/L como $CaCO_3$. El pH del lixiviado SPLP versus la alcalinidad se muestra en la figura 3-10. Una alcalinidad alta en asociación con un pH elevado se puede atribuir probablemente a la lixiviación de cal residual, que se añade durante las operaciones de pila de lixiviación con cianuro.
- **Sulfato:** Las concentraciones de sulfato del lixiviado SPLP variaron grandemente, fluctuando entre menor a 10 mg/L hasta mayor que 7,000 mg/L (Figura 3-11). Las concentraciones más altas de sulfato típicamente estuvieron asociadas con valores más bajos de pH.
- **Nutrientes:** El fosfato estuvo por debajo del límite de detección en todas los lixiviados (<0.2 mg/L). El nitrato también estuvo por debajo de los límites de detección en más de la mitad de los lixiviados SPLP. Cuando estuvieron presentes, las concentraciones de nitrato se encontraron entre 1 a 9 mg/L-N aproximadamente. Las concentraciones más altas de nitrato (> 3 mg/L-N) se encontraron en los lixiviados más alcalinas (valores de pH >10) de las muestras de SPLP. Se encontró amono en la mayoría de los lixiviados. La concentración máxima que se encontró fue de 2.8 mg/L-N.
- **Metales**: El análisis de metales en los lixiviados SPLP se llevó a cabo con espectrometría de emisión óptica de plasma acoplado inductivamente (ICP-OES) o con el de espectrometría de masa de plasma acoplado inductivamente (ICP-MS). Los análisis de mercurio se realizaron utilizando la absorción atómica por vapor frio (CVAA).
  - Los siguientes metales estuvieron por debajo de la detección en todos los lixiviados: berilio (Be); bismuto (Bi); galio (Ga); escandio (Sc); y estaño (Sn).
  - Las concentraciones en los lixiviados para aluminio (Al) y cobre (Cu) fueron altamente variables, oscilando desde bajo el límite de detección (<0.01 mg/L) hasta arriba de decenas de miligramos por litro. Como se muestra en la Figura 3-12, las concentraciones más altas fueron medidas en los lixiviados SPLP con los valores más bajos de pH. Esto es de esperarse ya que la movilidad del aluminio y del cobre aumenta a medida que disminuye el pH. Concentraciones de aluminio elevadas también se midieron en los lixiviados SPLP con valores de pH elevados. El gráfico del aluminio frente a pH muestra una curva en forma de "U", característico de un control de hidróxido de metal sobre la solubilidad de un metal anfótero tal como el aluminio.
  - Las concentraciones en lixiviados para hierro (Fe) también fueron altamente variables, oscilando desde bajo el límite de detección (<0.05 mg/L) hasta 2,800 mg/L. Las concentraciones de hierro aumentaron a medida que los valores de pH decrecieron (Figura 3-12).
  - Los siguientes metales, todos demostraron un aumento de sus concentraciones en los lixiviados de SPLP con una disminución en el pH de los lixiviados (Figuras 3-13 y 3-14): cadmio (Cd); cobalto (Co); manganeso (Mn); níquel (Ni); plomo (Pb); y, zinc (Zn). La muestra YA-1-1 con el pH más bajo produjo las más altas concentraciones de cadmio (0.32 mg/L), cobalto (1.7 mg/L); níquel (0.45 mg/L) y zinc (9.2 mg/L). Las más altas concentraciones de manganeso y plomo en los lixiviados se midieron en las muestras de Carachugo.
  - Las concentraciones de arsénico (As) en las muestras de lixiviado de la HLF de Carachugo oscilaron desde por bajo el límite de detección (<0.005 mg/L) hasta 1.5 mg/L. Como se muestra en la Figura 3-15, las concentraciones de arsénico fueron más altas en los lixiviados SPLP con valores de pH alcalinos. La lixiviación de arsénico fue generalizada en todas las muestras de Yanacocha 6/7. La máxima concentración de arsénico en los lixiviados fue de 61 mg/L.

- Las concentraciones de antimonio (Sb) y selenio (Se) frente a las tendencias de pH de los lixiviados fueron similares al del arsénico (Figura 3-15). En los lixiviados de Carachugo, las concentraciones de antimonio y selenio más altos se midieron típicamente en los lixiviados con valores de pH alcalino.
- Las concentraciones de molibdeno (Mo) en los lixiviados oscilaban desde por bajo el límite de detección (<0.001 mg/L) hasta 0.1 mg/L. La lixiviación de molibdeno aumentó con el aumento del pH en los lixiviados (Figura 3-16).
- Las concentraciones de uranio estuvieron por debajo de una parte por billón (i.e. <0.001 mg/L); en la mayor parte de los lixiviados. Las concentraciones de uranio fueron más altas (0.03 mg/L) en el lixiviado de pH bajo de la muestra YA-1-1.
- Las concentraciones de mercurio en los lixiviados de todas las muestras, con excepción de una, presentaron un rango entre bajo el límite de detección (<0.0001 mg/L) a 0.0015 mg/L. El mercurio estuvo elevado en una de las muestras de lixiviado de Carachugo (0.0156 mg/L).
- Los siguientes metales se midieron en algunos lixiviados (i.e de. 1 a 3 muestras): cromo (Cr); litio (Li); talio (Tl); y vanadio (V). Las concentraciones máximas de cromo (0.4 mg/L) y litio (0.02 mg/L) se midieron en el lixiviado de la muestra YA-1-1, la cual reportó el valor de pH más bajo (2.2).

Las concentraciones del lixiviado SPLP que excedieron los Límites Máximos Permisibles [LMP, El Peruano – Diario Oficial 2010] se identifican en la Tabla 3-5 en letra negrita y sombreado plomo. Los siguientes parámetros excedieron los límites LMP en uno o más de los lixiviados: pH, arsénico, cadmio, cobre, hierro, mercurio, y zinc.

4.0 GEOQUIMICA DEL MINERAL PROCESADO

4.1 Ocurrencia y Destino del Cianuro

El objetivo principal de la investigación de la HLF fue evaluar el comportamiento de cianuro en el agua de poro en las pilas de lixiviación bajo las condiciones actuales y futuras. Debido a que el agua de poro sólo se encontró en forma esporádica en las perforaciones y, cuando estuvo presente, era en cantidad insuficiente para el muestreo, la calidad directa del agua de poro de la HLF no fue determinada. Sin embargo, los resultados de las pruebas de lixiviación SPLP proveen una indicación de la calidad del agua de poro en la HLF tras la infiltración de agua meteórica a través de la HLF.

Las pruebas de lixiviación SPLP se llevaron a cabo en una proporción de 4:1 de solución a sólido. Como se discute en la Sección 3.2.2, el cianuro total estuvo por debajo del límite de detección en casi todos los lixiviados SPLP (<0.1 mg/L). Las concentraciones de cianuro total fueron más altas (i.e. 0.11 mg/L) en lixiviados con valores de pH alcalinos, como era de esperarse.

Los resultados de las pruebas de lixiviación SPLP indican que niveles bajos de cianuro residual están presentes en el mineral procesado. Hay una serie de procesos físico-químicos y biológicos que pueden afectar el destino y transporte de cianuro en el agua de poro en las pilas de lixiviación (Smith y Mudder 1999). Estos procesos incluyen:

- Volatilización
- Complejación
- Degradación biológica
- Adsorción y precipitación

Se proporciona un breve resumen de cada uno de estos mecanismos de degradación en los siguientes párrafos.

A un pH por debajo de aproximadamente 9, cualquier solución acuosa que contiene cianuro libre está dominada por el cianuro de hidrógeno disuelto (HCN), que es una especie volátil y se transfiere a la fase gaseosa. Las propiedades de las HLF que afectarán el grado de volatilización y escape del cianuro incluyen el contenido de humedad, características de sorción y difusión del mineral procesado, y las propiedades de masa tales como contenido de arcilla, porosidad y densidad. Los parámetros meteorológicos que afectan a la volatilización incluyen la velocidad de la corriente de aire sobre la superficie, la humedad y la temperatura. La volatilización puede ser un mecanismo de degradación muy eficaz, y una porción significativa de la masa de cianuro en el agua de poro de la HLF puede ser transferida a la fase gaseosa. La tasa de volatilización del cianuro aumenta con la disminución del pH, aumento de temperatura y el aumento de la agitación o la relación área de superficie a volumen de la solución.

Después de la interrupción del riego de cal, el pH del agua de poro en la HLF típicamente disminuirá debido a la absorción de dióxido de carbono desde la atmósfera y a la dilución por precipitación. En las HLFs de Carachugo y Yanacocha 6/7, la oxidación de sulfuro en ausencia de la presencia de minerales con potencial de neutralización (por ejemplo calcita y dolomita) también resultará en una disminución en el pH del agua de poro. El pH acídico en pasta y los valores del lixiviado SPLP de las muestras de mineral procesado demuestran que actualmente están presentes ambientes ácidos en segmentos de las HLFs, mientras que los resultados del ensayo ABA indican que permanece un potencial significativo para el desarrollo más generalizado de condiciones ácidas.

La complejación es un segundo mecanismo que puede reducir la concentración de cianuro libre. El cianuro formará complejos con una serie de metales, incluyendo el hierro (complejos fuertes) y cobre (complejos débiles). Aunque la complejación no reduce la concentración de cianuro total en la solución, la mayor parte de complejos ciano-metálicos son menos tóxicos que el cianuro libre (Johnson 2015).

La degradación bilógica del cianuro puede ocurrir bajo condiciones oxidantes en la HLF. Las bacterias oxidan el cianuro a cianato, que a su vez se hidroliza a amonio y dióxido de carbono (Smith and Mudder 1991). La presencia de amonio en el lixiviado SPLP indica que este proceso está en marcha en la HLF.

Adsorción y precipitación de cianuro son dos mecanismos que son difíciles de separar, pero son igualmente eficaces en condiciones saturadas e insaturadas. El cianuro se une fácilmente a una gama de absorbentes, incluyendo materia orgánica, minerales de óxido, arcillas, y otros minerales de silicato (ej., feldespatos). La formación de precipitados de metal-cianuro en presencia de hierro tiene un papel importante en el control de la movilidad de cianuro disuelto (Dzombak entre otros 2006).

La volatilización del cianuro bajo condiciones de pH de neutral a ácido probablemente será el mecanismo dominante para la degradación de cianuro dentro de las HLFs de Carachugo y Yanacocha. Como se ha notado líneas arriba, el mineral procesado es clasificado como material generador de ácido, basado en la presencia de mineralización de sulfuro y la ausencia de minerales con potencial de neutralización. Además, el pH pasta ácido y los valores del lixiviado SPLP para las muestras de mineral procesado indican la existencia de condiciones ácidas en porciones de las HLFs.

4.2 Ocurrencia y Destino de Metales

Los resultados de las pruebas de lixiviación SPLP indican un potencial para la lixiviación de metales, particularmente en condiciones de pH bajo. Las concentraciones de los lixiviados SPLP se comparan a infiltraciones desde los acopios de material de desecho (WRF) y a la calidad de agua en la poza de la HLF para parámetros seleccionados (es decir pH, Al, As, Cu, Fe, SO_4) en las Figuras 4-1 hasta 4-12.

Como se muestra en las Figuras 4-1 (Carachugo) y 4-7 (Yanacocha), el rango de los valores del pH de los lixiviados del SPLP generalmente se extiende a lo largo de los valores de pH de las infiltraciones del WRF (generalmente de 2 a 3) y hasta los valores de pH de la poza de agua de la HLF (generalmente de 7 a 10). Las concentraciones de metal en el SPLP (como Al, As, Cu y Fe) para las muestras de Carachugo son típicamente más similares a las concentraciones en la poza de agua de la HLF. Las concentraciones de metal en las infiltraciones del WRF de Carachugo son típicamente más altas que las concentraciones en los lixiviados SPLP y que en las concentraciones de la poza de agua de la HLF. Las concentraciones de metal de los lixiviados SPLP para las muestras de Yanacocha 6/7 fueron altamente variables. Come se muestra en las Figuras 4-9 a 4-11, las concentraciones máximas medidas del SPLP para arsénico, cobre y hierro fueron más altas que los máximos históricos en las infiltraciones desde el material de desecho.

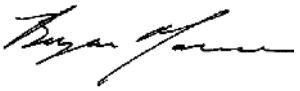
La medición de concentración máxima de sulfato medida en el lixiviado SPLP de Carachugo fue similar a la de las concentraciones actuales del agua de la poza de la HLF (Figura 4-6). Las concentraciones de sulfato del lixiviado SPLP de Yanacocha 6/7 estuvieron dentro de los rangos históricos del agua de la poza de la HLF y de las infiltraciones del WRF de Yanacocha.

4.3 Calidad de Agua de Poros en la Pila de Lixiviación

Después del término de haber añadido cal, se espera que el pH del agua de poro descienda a un nivel acídico similar al de los WRFs (el pH de las infiltraciones de WRF esta típicamente dentro de un rango de pH entre 2 a 3). Se espera que la transición de condiciones casi-neutrales a ácidas ocurra dentro de uno a diez años basándonos en las observaciones de la HLF de Maqui Maqui. Se espera que la calidad del agua de infiltraciones de la HLF a largo plazo sea similar a la actual calidad de las infiltraciones del WRF. En la medida que el pH disminuya, se espera una tendencia general de elevación en las concentraciones de metales. Basado en los resultados de SPLP, las concentraciones de cianuro residual en el mineral procesado se interpretan como bajas. La acidificación del agua de poro en la HLF mejorará la tasa de volatilización de cianuro libre y prácticamente elimina cualquier cianuro residual a largo plazo.

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TABLAS

Tabla 2-1: Lista de Muestras del Mineral Procesado

Identificación de Muestra	pH en Pasta			Conteo Ácido Base			SPLP Modificado
				NCV		Sobek Modificado	
	MYSRL *in situ*	NMS	SGS	MYSRL *in situ*	NMS	SGS	NMS
Muestras Discretas							
CA-1-1	x			x			
CA-1-2	x			x			
CA-1-3	x			x			
CA-4-1	x	x	x	x	x	x	
CA-4-2	x			x			
CA-4-3	x			x			
CA-5-1	x			x			
CA-5-2	x			x			
CA-5-3	x			x			
CA-6-1	x			x			
CA-6-2	x			x			
CA-6-3	x			x			
CA-7-1	x			x			
CA-7-2	x			x			
CA-7-3	x			x			
CA-7-4	x	x	x	x	x	x	
CA-7-5	x			x			
CA-7-6	x			x			
CA-7-7	x			x			
CA-7-8	x			x			
CA-8-1	x			x			
CA-8-2	x			x			
CA-8-3	x			x			
CA-9-1	x			x			
CA-9-2	x			x			
CA-9-3	x			x			
CA-10A-1	x	x	x	x	x	x	
CA-10A-2	x			x			
CA-10A-3	x			x			
CA-11-1	x			x			
CA-11-2	x			x			
CA-11-3	x			x			
CA-12-1	x			x			
CA-12-2	x	x	x	x	x	x	
CA-12-3	x			x			
CA-15B-1	x			x			
CA-15B-2	x			x			
CA-15B-3	x			x			
CA-16-1	x			x			
CA-16-2	x			x			
CA-16-3	x			x			
CA-17-1	x			x			
CA-17-2	x			x			
CA-17-3	x			x			
CA-18-1	x			x			
CA-18-2	x			x			
CA-18-3	x			x			
YA-1-1	x			x			
YA-1-2	x			x			
YA-1-3	x	x	x	x	x	x	
YA-1-4	x			x			
YA-1-5	x			x			
YA-1-6	x			x			
YA-1-7	x			x			
YA-1-8	x			x			
Muestras de Ensayo de Lixiviación							
CA-1-L		x			x		x
CA-4-1-L		x			x		x
CA-5-L		x			x		x
CA-6-L		x			x		x
CA-7-1-L		x			x		x
CA-7-2-L		x			x		x
CA-7-3-L		x			x		x
CA-8-1-L		x			x		x
CA-8-2-L		x			x		x
CA-9-1-L		x			x		x
CA-9-2-L		x			x		x

Tabla 2-1: Lista de Muestras del Mineral Procesado

Identificación de Muestra	pH en Pasta			Conteo Ácido Base			SPLP Modificado
				NCV		Sobek Modificado	
	MYSRL *in situ*	NMS	SGS	MYSRL *in situ*	NMS	SGS	NMS
CA-10A-1-L		x			x		x
CA-10A-2-L		x			x		x
CA-11-L		x			x		x
CA-12-1-L		x			x		x
CA-15B-L		x			x		x
CA-16-1-L		x			x		x
CA-16-2-L		x			x		x
CA-17-L		x			x		x
CA-18-L		x			x		x
YA-1-1-L		x			x		x
YA-1-2-L		x			x		x
YA-1-3-L		x			x		x

Notas:
Laboratorios:
MYSRL *in situ* - Mina Yanacocha
NMS - Servicios Metalúrgicos Newmont (Englewood, Colorado, USA)
SGS - SGS Canada Inc. (Lakefield, Ontario, Canada)
NCV - valor neto de carbonato
SPLP - Procedimiento de lixiviación por precipitación sintética

Tabla 2-2: Métodos Analíticos

Ensayo	Laboratorio	Método de referencia	Notas
pH en Pasta	Todos	Newmont Mining Corporation 2011	
S_{TOT}	Todos	ASTM 2009a	Método ASTM E1915-09 (S_{TOT} usando Horno Leco)
C_{TOT}	Todos	ASTM 2009a	Método ASTM E1915-09 (C_{TOT} usando Horno Leco)
CAP_{550}	MYSRL *in situ* NMS	ASTM 2009a	Método ASTM E1915-09
SAP_{550}	MYSRL *in situ* NMS	ASTM 2009a	Método ASTM E1915-09 ($S_{py} = S_{TOT} - SAP_{550}$)
CAI	NMS	NMS 1997	Carbono residual posterior a digestión ácida con ácido clorhídrico. $TIC = C_{TOT} - CAI$
S_{py} (S_{HCl})	NMS	ASTM 2009a	HCl remueve sulfatos, residual se asume igual a sulfuros
$ANC_{M.Sobek}$	SGS	MEND 1991	
TIC	SGS	ASTM 2009a	Método ASTM E1915-09 (C_{TOT} usando Horno Leco)
S_{SO4} (lixiviación HCl)	SGS	MEND 2009 (Sección 12.4.2.1)	
S_{SO4} (lixiviación Na_2CO_3)	SGS	MEND 2009 (Sección 12.4.3)	
SPLP	NMS	USEPA 1994	Método USEPA 1312 modificaciones a método estándar: agua desionizada como lixiviante 4:1 razón de solución a sólido filtrado de 0.45 µm previo a análisis de lixiviación

Notas:

Laboratorios:

MYSRL *in situ* - Mina Yanacocha

NMS - Servicios Metalúrgicos Newmont (Englewood, Colorado, USA)

SGS - SGS Canada Inc. (Lakefield, Ontario, Canada)

Tabla 3-1: Laboratorio de MYSRL Test de pH en Pasta y NCV

Perforación	Identificación de Muestra	Profundidad	pH en Pasta	C_{TOT}	TIC[a]	S_{TOT}	S_{SO4}[a]	S_{py}[b]	ANP	AGP	NCV	Clasificación NCV[a]
		mbns	u.e.	% peso	% peso	% peso	% peso	% peso	% CO_2	% CO_2	% CO_2	
CA-1	CA-1-1	5	6.4	0.03	0.02	0.13	0.08	0.05	0.07	-0.07	0.01	N
CA-1	CA-1-2	15.2	7.9	0.07	0.02	0.41	0.41	0.01	0.07	-0.01	0.07	N
CA-1	CA-1-3	25.7	7.1	0.03	0.02	0.09	0.05	0.04	0.07	-0.05	0.02	N
CA-4	CA-4-1	5	6.8	0.02	0.02	0.23	0.20	0.02	0.07	-0.03	0.04	N
CA-4	CA-4-2	17.5	7.2	0.02	0.02	1.06	1.02	0.05	0.07	-0.07	0.01	N
CA-4	CA-4-3	29.5	6.8	0.02	0.02	0.38	0.21	0.16	0.07	-0.22	-0.15	SA
CA-5	CA-5-1	5	6.0	0.05	0.02	0.93	0.81	0.12	0.07	-0.16	-0.09	N
CA-5	CA-5-2	16.5	6.4	0.04	0.02	2.64	2.38	0.26	0.07	-0.35	-0.28	SA
CA-5	CA-5-3	25	9.0	0.03	0.02	0.74	0.65	0.09	0.07	-0.12	-0.05	N
CA-6	CA-6-1	5.5	5.9	0.02	0.02	0.48	0.41	0.07	0.07	-0.09	-0.02	N
CA-6	CA-6-2	16	6.3	0.02	0.02	1.66	1.46	0.20	0.07	-0.28	-0.20	SA
CA-6	CA-6-3	28	8.0	0.02	0.02	0.14	0.11	0.03	0.07	-0.04	0.04	N
CA-7	CA-7-1	8	6.4	0.02	0.02	0.14	0.10	0.03	0.07	-0.05	0.03	N
CA-7	CA-7-2	19	5.9	0.02	0.02	0.07	0.04	0.03	0.07	-0.04	0.03	N
CA-7	CA-7-3	28.8	6.1	0.02	0.02	0.28	0.12	0.16	0.07	-0.22	-0.14	SA
CA-7	CA-7-4	40	7.5	0.05	0.02	3.09	2.95	0.15	0.07	-0.20	-0.13	SA
CA-7	CA-7-5	49	5.5	0.02	0.02	0.59	0.42	0.17	0.07	-0.23	-0.16	SA
CA-7	CA-7-6	56.9	5.7	0.02	0.02	3.42	3.00	0.42	0.07	-0.58	-0.50	SA
CA-7	CA-7-7	69.4	7.2	0.03	0.02	2.67	2.30	0.37	0.07	-0.50	-0.43	SA
CA-7	CA-7-8	77	6.5	0.02	0.02	0.44	0.29	0.15	0.07	-0.21	-0.13	SA
CA-8	CA-8-1	5	5.7	0.02	0.02	0.16	0.09	0.07	0.07	-0.09	-0.02	N
CA-8	CA-8-2	14.5	5.9	0.02	0.02	0.16	0.12	0.04	0.07	-0.06	0.01	N
CA-8	CA-8-3	26.5	4.7	0.05	0.02	0.59	0.52	0.07	0.07	-0.10	-0.02	N
CA-9	CA-9-1	4.8	5.9	0.04	0.02	0.14	0.09	0.04	0.07	-0.06	0.01	N
CA-9	CA-9-2	15	5.9	0.02	0.02	0.86	0.86	0.00	0.07	0.00	0.07	N
CA-9	CA-9-3	25	6.8	0.03	0.02	1.19	1.09	0.09	0.07	-0.13	-0.06	N
CA-10A	CA-10A-1	5	5.7	0.02	0.02	0.14	0.08	0.06	0.07	-0.09	-0.01	N
CA-10A	CA-10A-2	14.9	5.8	0.03	0.02	0.09	0.07	0.02	0.07	-0.03	0.04	N
CA-10A	CA-10A-3	26.5	7.0	0.05	0.02	2.48	2.03	0.45	0.07	-0.61	-0.54	SA
CA-11	CA-11-1	5	7.8	0.02	0.02	0.36	0.30	0.06	0.07	-0.08	-0.01	N
CA-11	CA-11-2	16.5	5.9	0.02	0.02	0.16	0.13	0.03	0.07	-0.03	0.04	N
CA-11	CA-11-3	29.5	7.9	0.03	0.02	3.36	3.00	0.36	0.07	-0.49	-0.41	SA
CA-12	CA-12-1	4.8	8.5	0.07	0.02	0.11	0.08	0.03	0.07	-0.04	0.04	N
CA-12	CA-12-2	15	7.0	0.02	0.02	0.12	0.10	0.03	0.07	-0.03	0.04	N
CA-12	CA-12-3	25	6.2	0.02	0.02	0.11	0.04	0.07	0.07	-0.09	-0.02	N

Tabla 3-1: Laboratorio de MYSRL Test de pH en Pasta y NCV

Perforación	Identificación de Muestra	Profundidad	pH en Pasta	C_{TOT}	TIC[a]	S_{TOT}	S_{SO4}[a]	S_{py}[b]	ANP	AGP	NCV	Clasificación NCV[a]
		mbns	u.e.	% peso	% peso	% peso	% peso	% peso	% CO_2	% CO_2	% CO_2	
CA-15B	CA-15B-1	6.5	8.6	0.03	0.02	0.67	0.59	0.07	0.07	-0.10	-0.03	N
CA-15B	CA-15B-2	16.7	7.9	0.18	0.04	4.44	4.22	0.22	0.14	-0.30	-0.16	SA
CA-15B	CA-15B-3	27	7.1	0.02	0.02	0.07	0.05	0.02	0.07	-0.03	0.05	N
CA-16	CA-16-1	5.5	6.3	0.02	0.02	0.07	0.03	0.05	0.07	-0.06	0.01	N
CA-16	CA-16-2	17.5	7.4	0.02	0.02	0.29	0.22	0.07	0.07	-0.10	-0.02	N
CA-16	CA-16-3	24	6.0	0.02	0.02	0.61	0.46	0.15	0.07	-0.21	-0.14	SA
CA-17	CA-17-1	5	8.8	0.02	0.02	0.13	0.11	0.02	0.07	-0.03	0.04	N
CA-17	CA-17-2	15.5	7.3	0.02	0.02	0.54	0.53	0.01	0.07	-0.01	0.06	N
CA-17	CA-17-3	28	6.2	0.02	0.02	0.35	0.22	0.13	0.07	-0.18	-0.11	SA
CA-18	CA-18-1	7.2	5.4	0.03	0.02	3.51	3.31	0.20	0.07	-0.27	-0.20	SA
CA-18	CA-18-2	16.6	6.2	0.02	0.02	0.13	0.03	0.10	0.07	-0.14	-0.06	N
CA-18	CA-18-3	26	4.1	0.03	0.02	0.23	0.19	0.05	0.07	-0.06	0.01	N
YA-1	YA-1-1	4.5	4.6	0.02	0.02	0.32	0.27	0.05	0.07	-0.07	0.01	N
YA-1	YA-1-2	12.5	5.7	0.02	0.02	0.94	0.28	0.66	0.07	-0.91	-0.83	SA
YA-1	YA-1-3	26	2.9	0.02	0.02	1.50	0.39	1.11	0.07	-1.52	-1.45	A
YA-1	YA-1-4	34.5	2.7	0.02	0.02	0.61	0.28	0.34	0.07	-0.46	-0.39	SA
YA-1	YA-1-5	44	5.6	0.02	0.02	0.43	0.30	0.13	0.07	-0.18	-0.11	SA
YA-1	YA-1-6	58	7.0	0.02	0.02	0.56	0.44	0.11	0.07	-0.15	-0.08	N
YA-1	YA-1-7	64.5	6.0	0.03	0.02	0.28	0.21	0.06	0.07	-0.09	-0.01	N
YA-1	YA-1-8	74.5	3.8	0.02	0.02	3.79	0.24	3.55	0.07	-4.86	-4.79	A

Notas:
C_{TOT} - carbono total
S_{TOT} - azufre total
S_{SO4} - azufre como sulfato
S_{py} - azufre como sulfuro
ANP - potencial neutralización de ácido
AGP - potencial de generación de ácido
NCV - valor neto de carbonato
Clasificación NCV: N (neutral); SA (ligeramente ácido); A (ácido)
[a] CAP_{550} y SAP_{550}
[b] $S_{py} = S_{TOT} - SAP_{550}$

Tabla 3-2: Resultados del Conteo Ácido Base del Laboratorio de SGS - Muestras Duplicadas

Identificación de Muestra	pH en pasta	Grado de Efervescencia	$ANP_{M.Sobek}$	S_{TOT}	S_{SO4} [d]	S_{SO4} [e]	S_{py} [a]	C_{TOT}	TIC	AGP [b]	NPR [c]
	u.e.		kg $CaCO_3$/t	% peso	% peso	% peso	% peso	% peso	% peso	kg $CaCO_3$/t	razón
CA-4-1	7.13	1	0	0.21	0.02	0.07	0.19	0.019	< 0.01	5.8	<0.01
CA-7-4	8.23	1	3.6	3.3	< 0.01	0.33	3.3	0.056	0.02	102	0.04
CA-10A-1	4.78	1	-0.4	0.11	0.03	<0.03	0.08	0.016	< 0.01	2.5	<0.01
CA-12-2	6.84	1	-0.1	0.10	0.04	<0.03	0.06	0.022	< 0.01	1.8	<0.01
CA-16-3	5.87	1	0.4	0.65	0.02	0.23	0.63	0.016	< 0.01	20	0.02
YA-1-3	2.76	1	-9.5	1.6	0.5	0.43	1.1	0.024	< 0.01	34	<0.01

Notas:
ANP - potencial neutralización de ácido
S_{TOT} - azufre total
S_{SO4} - azufre como sulfato
S_{py} - azufre como sulfuro
C_{TOT} - carbono total
TIC - carbono total inorgánico
NPR - razón de potencial de neutralización
AGP - potencial de generación de ácido
[a] $S_{py} = S_{TOT} - S_{SO4}$ (lixiviación HCl)
[b] Calculado en base a azufre como sulfuro (S_{py})
[c] $NPR = ANP_{M.Sobek}/AGP$
[d] Método de lixiviación de ácido clorhídrico
[e] Método de lixiviación de carbonato de sodio

Tabla 3-3: Resultados del Laboratorio NMS Para Test de pH en Pasta y NCV - Muestras Duplicadas

Identificación de Muestra	pH en Pasta	CAP_{550}	SAP_{550}	C_{TOT}	S_{TOT}	CAI	S_{py} (S_{HCL})	AGP	ANP	NCV	Clasificación NCV[(a)]
	u.e.	% peso	% peso	% peso	% peso	% peso	% peso	% CO_2	% CO_2	% CO_2	
CA-4-1	7.04	<0.01	0.23	<0.01	0.19	0.02	0.12	-0.2	0.00	-0.2	SA
CA-7-4	7.64	<0.01	2.80	0.04	3.22	0.03	3.7	-5.1	0.04	-5.0	HA
CA-10A-1	4.31	<0.01	0.11	<0.01	0.10	<0.01	0.04	-0.1	0.00	-0.1	N
CA-12-2	6.35	<0.01	0.10	0.01	0.06	<0.01	0.03	0.0	0.00	0.0	N
CA-16-3	5.26	<0.01	0.59	<0.01	0.63	0.01	0.56	-0.8	0.00	-0.8	SA
YA-1-3	2.52	<0.01	0.45	0.01	1.49	0.02	1.1	-1.4	0.00	-1.4	A

Notas:

CAP_{550} = carbono después de la pirolisis (resultados pendientes)

SAP_{550} = azufre después de pirolisis (resultados pendientes)

C_{TOT} - carbono total

S_{TOT} - azufre total

CAI - carbono insoluble en ácido

S_{py} - azufre como sulfuro

ANP - potencial neutralización de ácido

AGP - potencial de generación de ácido

NCV - valor neto de carbonato

[(a)] Clasificación NCV: N (neutral); SA (ligeramente ácido); A (ácido); HA (altamente ácido)

Tabla 3-4: Resultados del Laboratorio NMS Para Test de pH en Pasta y NCV - Muestras de Prueba de Lixiviación

Identificación de Muestra	pH en Pasta	CAP_{550}	SAP_{550}	C_{TOT}	S_{TOT}	CAI	S_{py} (S_{HCL})	AGP	ANP	NCV	Clasificación NCV[(a)]
	u.e.	% peso	% peso	% peso	% peso	% peso	% peso	% CO_2	% CO_2	% CO_2	
CA-1-L	7.86	<0.01	0.16	0.02	0.22	0.01	0.14	-0.2	0.04	-0.2	SA
CA-4-L	7.46	<0.01	0.77	<0.01	0.83	<0.01	0.73	-1.0	0.00	-1.0	A
CA-5-L	9.87	<0.01	0.84	0.05	0.78	<0.01	0.65	-0.9	0.15	-0.7	SA
CA-6-L	7.00	<0.01	1.43	<0.01	1.82	<0.01	1.7	-2.3	0.00	-2.3	A
CA-7-1-L	6.23	<0.01	0.33	<0.01	0.39	-	-	-	-	-	-
CA-7-2-L	7.51	<0.01	3.74	0.04	3.93	<0.01	3.93	-5.4	0.11	-5.3	HA
CA-7-3-L	7.39	<0.01	1.88	0.03	2.12	<0.01	2.08	-2.8	0.07	-2.8	A
CA-8-1-L	5.90	<0.01	0.11	<0.01	0.18	0.01	0.12	-0.2	0.00	-0.2	SA
CA-8-2-L	7.56	<0.01	0.47	0.48	1.26	0.13	1.28	-1.8	1.28	-0.5	SA
CA-9-1-L	4.89	<0.01	0.27	<0.01	0.28	0.02	0.17	-0.2	0.00	-0.2	SA
CA-9-2-L	6.81	<0.01	0.47	<0.01	0.50	<0.01	0.36	-0.5	0.00	-0.5	SA
CA-10A-1-L	6.29	<0.01	0.05	<0.01	0.09	<0.01	0.04	-0.1	0.00	-0.1	N
CA-10A-2-L	5.74	<0.01	0.76	<0.01	0.82	<0.01	0.56	-0.8	0.00	-0.8	SA
CA-11-L	7.36	<0.01	0.72	<0.01	0.66	0.01	0.53	-0.7	0.00	-0.7	SA
CA-12-L	7.31	<0.01	0.50	0.01	0.56	<0.01	0.45	-0.6	0.00	-0.6	SA
CA-15B-L	8.20	<0.01	1.73	0.01	1.93	<0.01	1.91	-2.6	0.00	-2.6	A
CA-16-1-L	7.28	<0.01	0.04	<0.01	0.03	0.02	0.03	0.0	0.00	0.0	N
CA-16-2-L	6.81	<0.01	0.33	<0.01	0.39	<0.01	0.27	-0.4	0.00	-0.4	SA
CA-17-L	7.56	<0.01	0.27	<0.01	0.30	<0.01	0.20	-0.3	0.00	-0.3	SA
CA-18-L	5.13	<0.01	0.36	<0.01	0.48	<0.01	0.34	-0.5	0.00	-0.5	SA
YA-1-1-L	2.74	<0.01	0.43	<0.01	1.00	<0.01	0.27	-0.4	0.00	-0.4	SA
YA-1-2-L	9.00	<0.01	2.48	0.03	2.75	<0.01	2.86	-3.9	0.07	-3.8	A
YA-1-3-L	5.68	<0.01	0.17	<0.01	0.31	<0.01	0.16	-0.2	0.00	-0.2	SA

Notas:

CAP_{550} = carbono después de la pirolisis (resultados pendientes)

SAP_{550} = azufre después de pirolisis (resultados pendientes)

C_{TOT} - carbono total

S_{TOT} - azufre total

CAI - carbono insoluble en ácido

S_{py} - azufre como sulfuro

ANP - potencial neutralización de ácido

AGP - potencial de generación de ácido

NCV - valor neto de carbonato

[(a)] Clasificación NCV: N (neutral); SA (ligeramente ácido); A (ácido); HA (altamente ácido)

Tabla 3-5: Laboratorio NMS - Resultados de Ensayo SPLP

Parámetro		Unidad	LMP		CA-1	CA-4	CA-5	CA-6	CA-7-1	CA-7-2	CA-7-3	CA-8-1	CA-8-2	CA-9-1	CA-9-2	CA-10A-1	CA-10A-2	CA-11	CA-12	CA-15B	CA-16-1	CA-16-2	CA-17	CA-18	YA-1-1	YA-1-2	YA-1-3
			Momento específico	Promedio Anual																							
pH		-	6.0 - 9.0	6.0 - 9.0	8.20	8.40	**11.3**	8.10	**4.60**	**9.40**	8.10	**4.80**	7.70	**4.30**	8.10	**5.40**	**5.80**	8.10	8.10	**10.5**	7.80	7.80	8.90	**3.70**	**2.20**	**10.2**	**2.50**
Conductividad		µS/cm			316	217	737	437	140	759	323	62.5	441	189	119	73.0	2,230	506	295	818	30.6	108	137	189	5,318	1,037	1,715
Dureza		mg/L como $CaCO_3$			138	69.97	253	212	42.9	419	125	4.89	179	24.5	39.6	8.88	1543	231	126	332	12.0	33.8	38.8	17.7	189	548	217
Aniones																											
Alcalinidad Total		mg/L como $CaCO_3$			39.0	41.0	155	54.0	13.0	41.0	32.0	13.0	45.0	<10	30.0	12.0	16.0	40.0	35.0	86.0	19.0	36.0	40.0	<10	<10	71.0	<10
Cloruro		mg/L			<0.10	<0.10	2.20	<0.10	<0.10	<0.10	<0.10	<0.10	6.9	<0.10	<0.10	<0.10	<0.10	1.5	<0.10	9.9	<0.10	<0.10	<0.10	<0.10	17.6	2.20	3.90
Fluoruro		mg/L			<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Sulfato		mg/L			132	55.7	168	180	48.7	405	126	15.9	160	60	26.2	13.8	1,555	219	109	327	5.70	18.2	22.2	52.4	7,270	572	783
Nutrientes																											
NH_3-N		mg/L-N			0.02	0.04	0.25	0.10	0.12	0.04	0.11	1.59	0.27	2.76	0.02	2.74	0.38	0.03	0.02	0.08	0.04	0.04	0.04	0.19	<0.01	0.28	<0.01
NO_2-N		mg/L-N			<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N		mg/L-N			<0.20	0.90	3.00	<0.20	<0.20	<0.20	<0.20	<0.20	0.8	<0.20	<0.20	2.10	<0.20	0.70	<0.20	8.60	<0.20	<0.20	<0.20	<0.20	<0.20	6.80	0.60
PO_4-P		mg/L-P			<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Cianuro Total																											
Cianuro Total		mg/L	1	0.8	<0.10	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	<0.10
Metales y Metaloides																											
Ag	ICP-MS	mg/L			<0.0002	<0.0002	0.011	0.0004	0.0024	0.0002	0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	0.0002	<0.0002	0.0008	<0.0002	0.0007
Al	ICP-OES / ICP-MS	mg/L			0.17	0.12	6.58	0.017	0.32	3.90	0.028	0.013	<0.01	0.31	0.024	<0.01	<0.01	0.043	0.031	14.3	0.22	0.13	0.13	3.35	44.8	11.6	14.1
As	ICP-OES / ICP-MS	mg/L	0.1	0.08	**0.120**	0.034	0.046	0.009	<0.005	<0.005	0.041	<0.005	<0.005	<0.005	0.015	<0.005	<0.005	0.015	0.035	0.041	0.045	0.078	**1.47**	<0.005	**61.1**	**0.120**	**0.321**
B	ICP-MS	mg/L			0.061	0.015	0.003	0.042	<0.002	0.073	0.013	<0.002	0.029	0.005	0.034	<0.002	0.071	0.021	0.334	0.014	0.004	0.037	0.004	<0.002	<0.002	<0.002	<0.002
Ba	ICP-MS	mg/L			0.083	0.065	0.080	0.035	0.063	0.028	0.059	0.131	0.052	0.058	0.149	0.152	0.024	0.034	0.093	0.027	0.033	0.093	0.403	0.064	0.025	0.040	0.024
Be	ICP-MS	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Bi	ICP-OES	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ca	ICP-OES	mg/L			54.9	27.8	101	83.4	15.7	168	50.1	1.6	65.1	8.91	15.6	3.35	595	84.1	46.4	133	4.67	13.4	15.4	6.79	69.0	219	85.7
Cd	ICP-MS	mg/L	0.05	0.04	<0.0002	<0.0002	<0.0002	<0.0002	0.0009	<0.0002	<0.0002	0.0003	<0.0002	0.0002	<0.0002	0.0002	**0.204**	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0009	**0.320**	<0.0002	0.007
Co	ICP-MS / ICP-OES	mg/L			<0.005	<0.005	0.010	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	0.012	<0.005	<0.005	0.341	<0.005	<0.005	0.015	<0.005	<0.005	<0.005	0.008	1.67	<0.005	0.089
Cr	ICP-MS	mg/L			<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0024	0.383	<0.002	0.283
Cu	ICP-MS / ICP-OES	mg/L	0.5	0.4	<0.01	<0.01	0.047	<0.01	0.074	<0.01	<0.01	0.014	<0.01	0.041	<0.01	<0.01	**10.1**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.195	**156**	0.024	**13.4**
Fe	ICP-OES	mg/L	2	1.6	<0.05	<0.05	<0.05	<0.05	0.78	<0.05	<0.05	0.76	<0.05	**7.45**	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	1.56	<0.05	0.24	1.38	**2.828**	0.06	**88.6**
Ga	ICP-OES	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Hg	CVAA	mg/L	0.002	0.0016	0.0001	<0.0001	0.0004	0.0001	**0.0156**	<0.0001	0.0015	0.0006	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0001	0.0002	<0.0001	0.0003	<0.0001	0.0006	0.0001	0.0001	<0.0001	0.0004
K	ICP-OES	mg/L			1.98	3.93	21.88	3.67	1.98	6.98	7.37	3.24	5.15	3.80	2.77	0.93	2.37	4.81	2.22	9.20	0.56	2.05	1.44	1.36	0.61	6.22	0.76
Li	ICP-MS	mg/L			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	<0.01	<0.01
Mg	ICP-OES	mg/L			0.19	0.10	<0.05	0.79	0.87	<0.05	<0.05	0.22	3.95	0.55	0.15	0.12	13.5	4.99	2.42	<0.05	0.09	0.06	0.08	0.18	4.16	<0.05	0.71
Mn	ICP-MS / ICP-OES	mg/L			0.003	<0.002	<0.002	<0.002	0.202	<0.002	<0.002	0.619	0.259	2.02	<0.002	0.139	3.49	0.006	0.006	<0.002	0.005	<0.002	<0.002	0.193	0.500	<0.002	0.517
Mo	ICP-MS	mg/L			0.041	0.026	0.134	0.019	<0.001	0.016	0.052	<0.001	0.002	<0.001	0.037	<0.001	<0.001	0.076	0.033	0.052	0.012	0.029	0.031	<0.001	0.004	0.038	<0.001
Na	ICP-OES	mg/L			1.19	3.25	8.98	1.67	0.79	2.14	3.56	0.98	7.87	1.00	0.78	1.46	1.49	2.85	2.02	24.6	0.64	2.15	4.5	0.71	0.45	14.48	0.46
Ni	ICP-MS	mg/L			0.0028	0.0008	0.0035	0.0042	0.0090	0.0076	0.0019	0.039	0.0056	0.076	0.0007	0.011	0.183	0.0035	0.0025	0.0059	<0.0005	<0.0005	<0.0005	0.010	0.448	0.007	0.049
Pb	ICP-MS	mg/L	0.2	0.16	<0.004	<0.004	<0.004	<0.004	0.054	<0.004	<0.004	0.012	<0.004	0.005	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.005	0.012	<0.004	0.134	0.011	<0.004	0.009
S	ICP-OES	mg/L			38.6	17.2	52.8	55.2	15.3	132	38.9	5.51	61.1	18.2	7.97	4.49	486	67.5	34.2	107	1.85	6.02	7.51	15.9	2127	172	222
Sb	ICP-MS	mg/L			0.109	0.017	0.024	0.013	0.122	0.016	0.310	0.005	<0.003	<0.003	0.017	0.085	<0.003	0.010	0.121	0.069	0.055	0.021	0.201	0.005	0.006	0.086	0.004
Sc	ICP-OES	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Se	ICP-MS	mg/L			0.0053	<0.004	0.0067	<0.004	<0.004	0.0119	0.0051	<0.004	0.0041	<0.004	0.0045	<0.004	<0.004	<0.004	<0.004	0.0111	<0.004	<0.004	0.0087	<0.004	0.0264	0.0348	<0.004
Si	ICP-OES	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sn	ICP-OES	mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sr	ICP-MS	mg/L			0.088	0.059	0.220	0.066	0.082	0.084	0.097	0.024	1.51	0.209	0.091	0.013	0.249	0.075	0.064	0.187	0.013	0.051	0.038	0.107	0.023	0.117	0.066
Ti	ICP-MS	mg/L			0.024	0.006	0.027	0.026	0.006	0.065	0.018	<0.005	0.027	0.005	<0.005	<0.005	0.316	0.030	0.016	0.043	0.109	<0.005	0.007	0.005	0.287	0.071	0.055
Tl	ICP-MS	mg/L			<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.019	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
U	ICP-MS	mg/L			0.0003	<0.0001	<0.0001	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0007	<0.0001	<0.0001	0.0006	0.029	<0.0001	0.0059
V	ICP-MS	mg/L			<0.002	<0.002	0.009	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.006	<0.002	<0.002
Zn	ICP-MS / ICP-OES	mg/L	1.5	1.2	<0.02	<0.02	<0.02	<0.02	0.099	<0.02	<0.02	<0.02	<0.02	0.033	0.027	<0.02	**3.37**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.203	**9.23**	<0.02	**2.14**

Nota:
Sombreado gris y texto en negritas identifica parámetros que exceden el LMP más exigente.

FIGURAS

Project Name



Imagen aérea:

Google earth

Fuente: CNES/Astrium 2015

Golder Associates

Título	Mina Yanacocha - Pilas de Lixiviación Carachugo y Yanacocha		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015

FIGURA **1-1**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx

011119



Golder Associates	Título: Fotografía de la Pila de Lixiviación de Carachugo (Abril 2015)		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA **1-2**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx

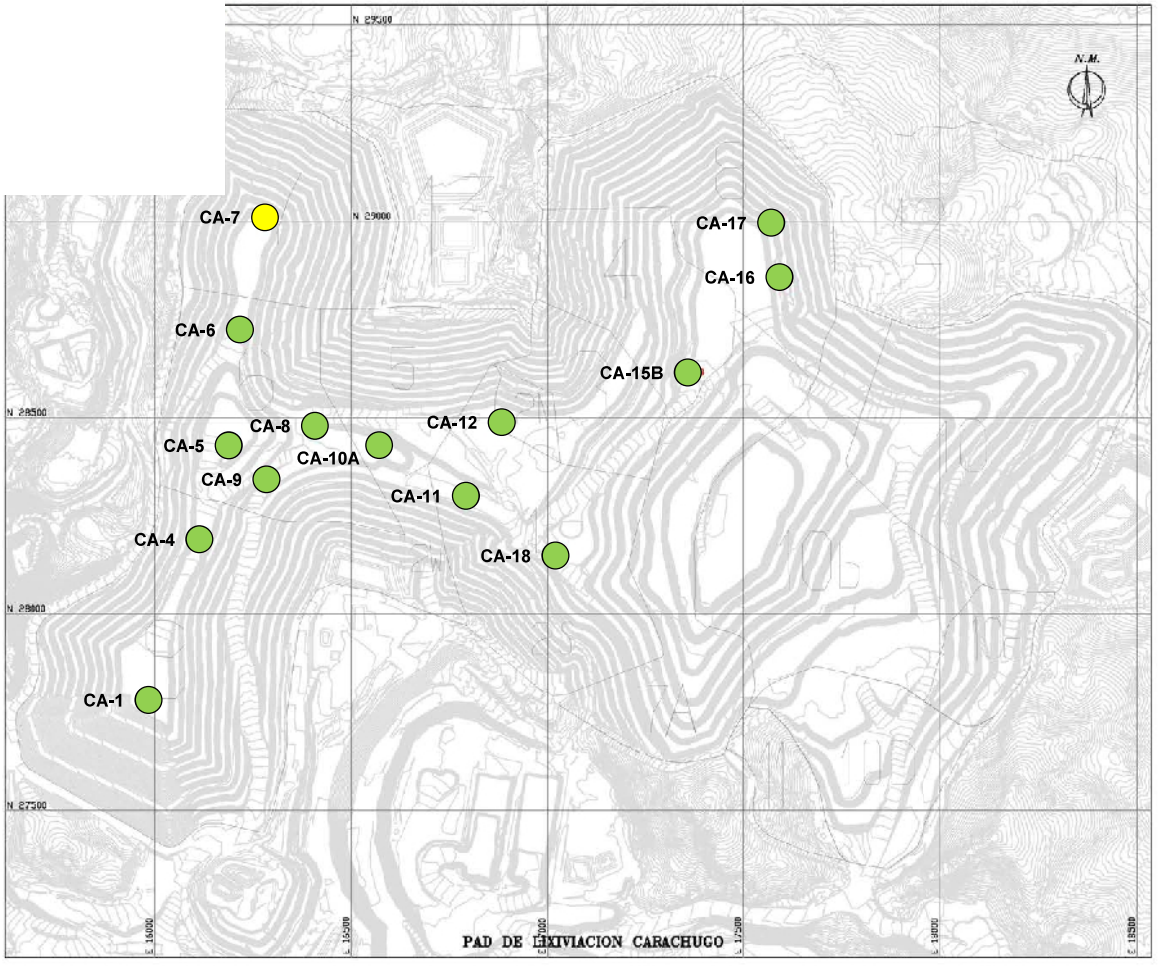
011120



Golder Associates	Título: Fotografía de la Pila de Lixiviación de Yanacocha 6/7 (Abril 2015)		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA **1-3**

011121

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx



LEYENDA

- Ubicación de Perforaciones (30-m de profundidad)
- Ubicación de Perforaciones (80-m de profundidad)

Golder Associates

Título	Pila de Lixiviación de Carachugo - Etapas y Ubicación de Perforaciones		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	1-4

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx

011122



Golder Associates

Título	Pila de Lixiviación de Carachugo - Imagen Aérea		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	**1-5**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx

011123



LEYENDA

Ubicación de Perforaciones (80-m profundidad)

Golder Associates

Título: Pila de Lixiviación de Yanacocha 6/7 - Etapas y Ubicación de Perforaciones

Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015

FIGURA **1-6**

011124

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx



LEYENDA

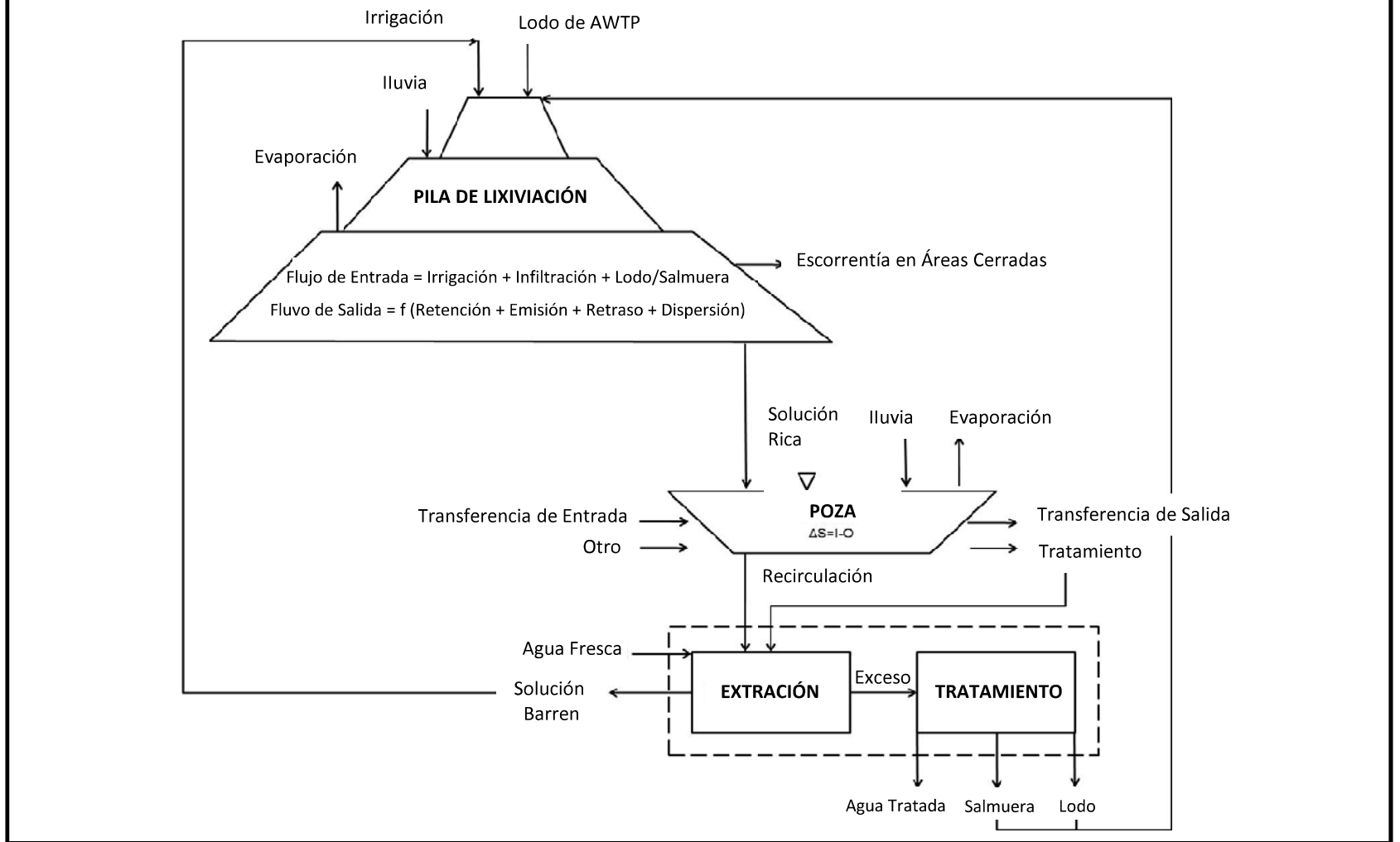
Ubicación de Perforaciones (80-m profundidad)

Golder Associates

Título	Pila de Lixiviación de Yanacocha 6/7 - Imagen Aérea		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	**1-7**

011125

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx



Golder Associates	Título: Esquema del Sistema de la Pila de Lixiviación (HLF) Durante la Operación		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 1-8

011126

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx



Golder Associates	Título: Plataforma de Perforación Sonica		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA **2-1**

011127

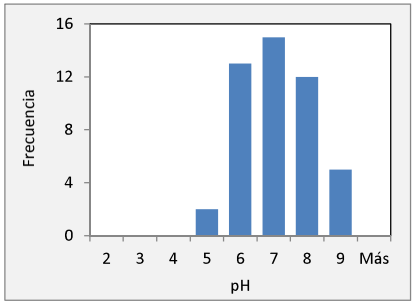
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Valores de pH en Pasta (u.e.)

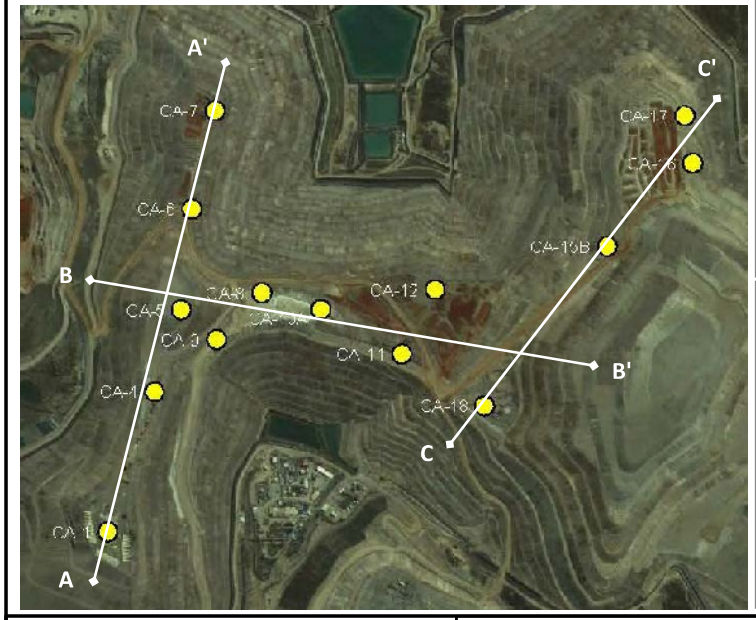
Estadistica:

Min	4.1
Max	9.0
Promedio	6.6
Media	6.4
Conteo	47

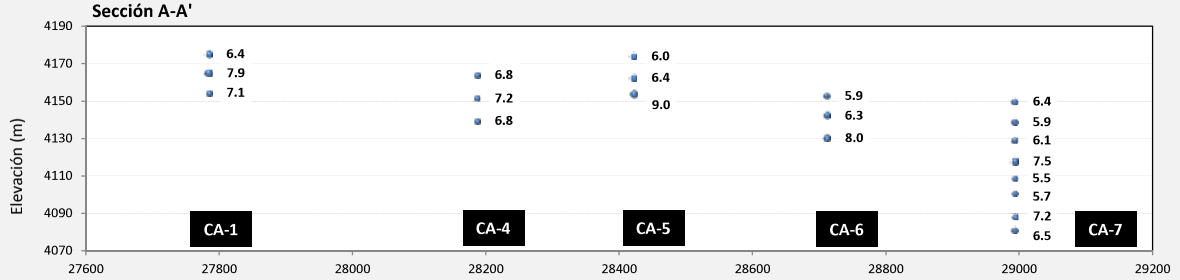
Histograma:



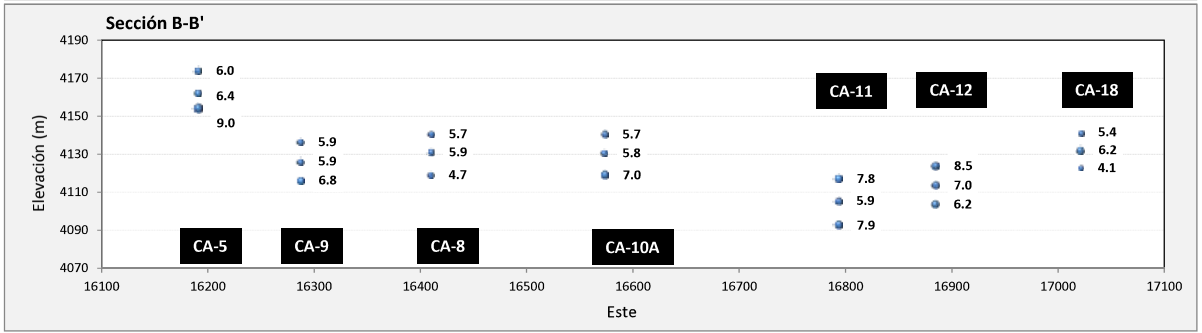
Localización de Secciones:



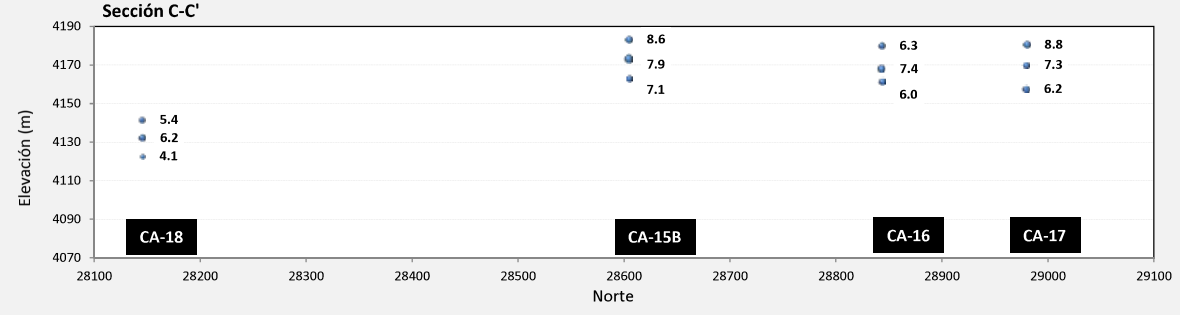
Sección A-A'



Sección B-B'



Sección C-C'



Golder Associates

Título	Pila de Lixiviación de Carachugo - Resultados del Laboratorio de MYSRL de pH en Pasta		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	3-1

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx

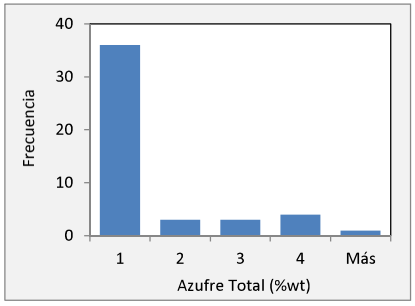
011128

Azufre Total (%wt)

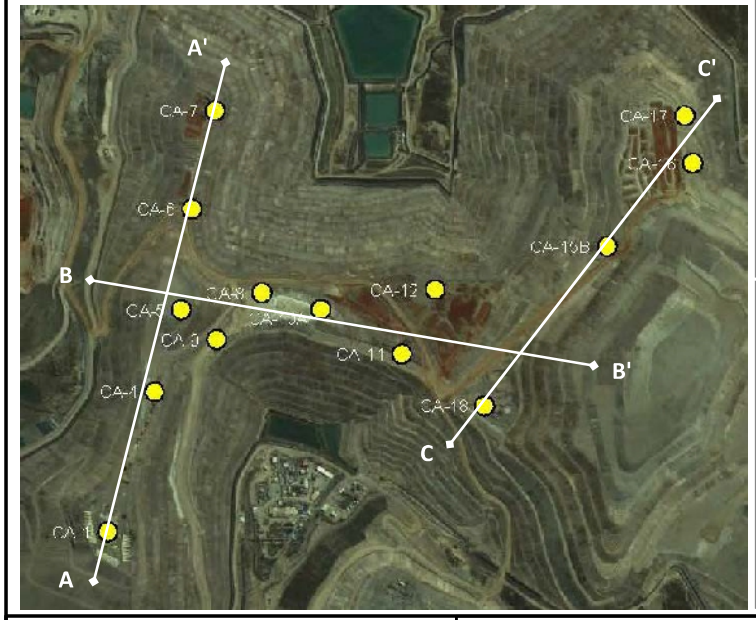
Estadistica:

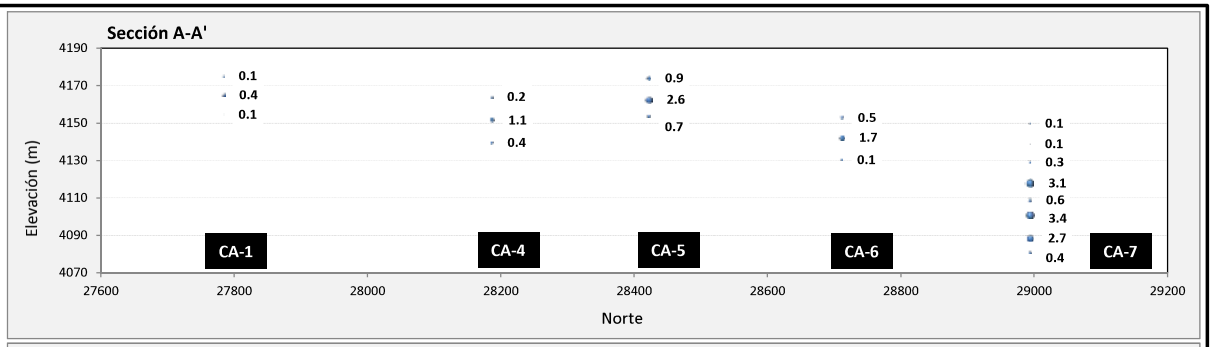
Min	0.07
Max	4.4
Promedio	0.86
Media	0.36
Conteo	47

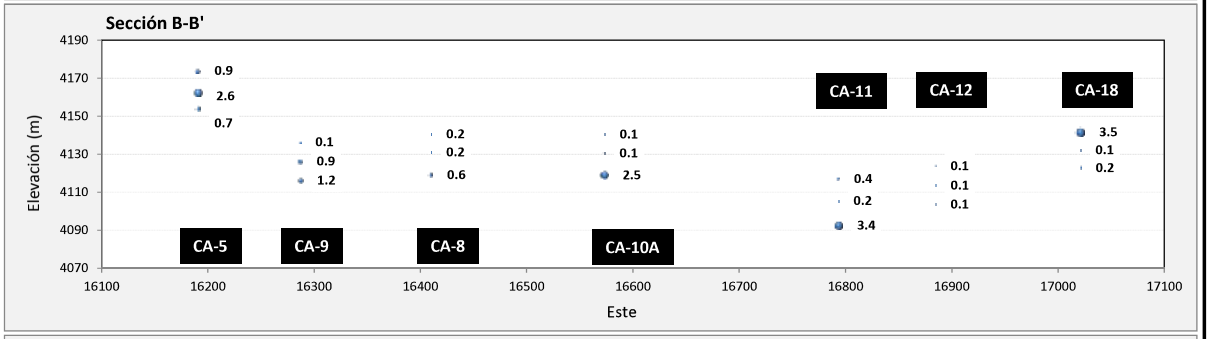
Histograma:

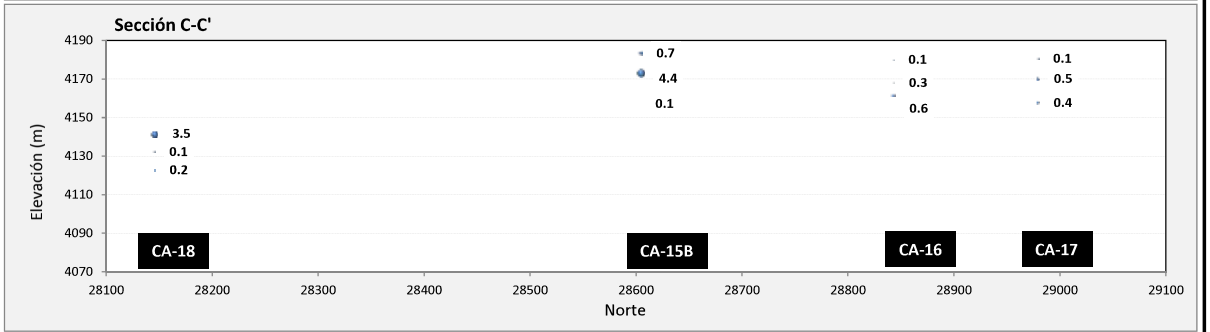


Localización de Secciones:







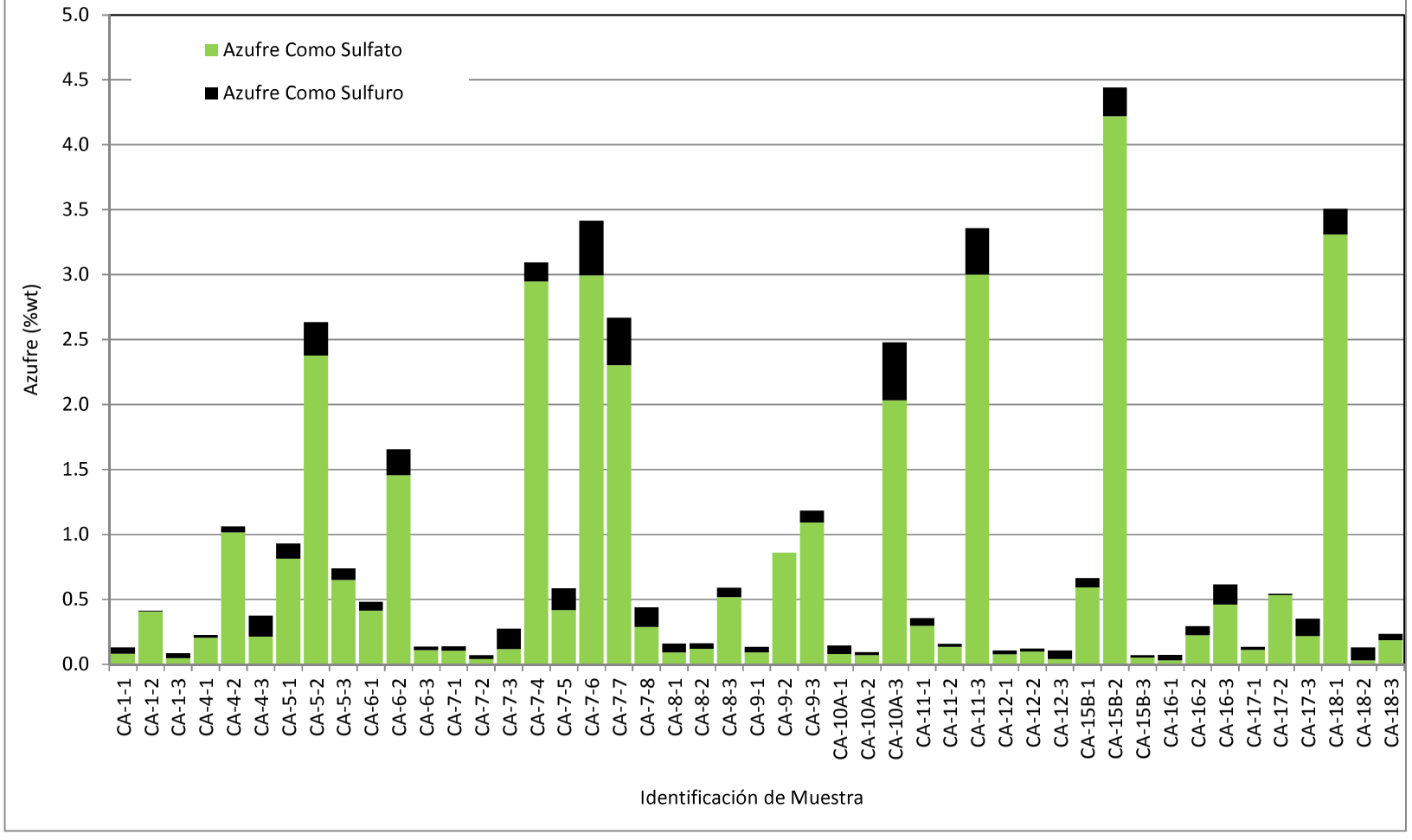


Golder Associates

Título	Pila de Lixiviación de Carachugo - Resultados de Azufre Total del Laboratorio de MYSRL		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	3-2

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx

011129



Golder Associates

Título	Pila de Lixiviación de Carachugo - Resultados de Especiación Azufre Total del Laboratorio de MYSRL		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	**3-3**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx

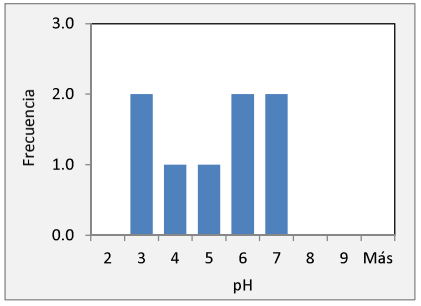
011130

Valores de pH en Pasta (u.e.)

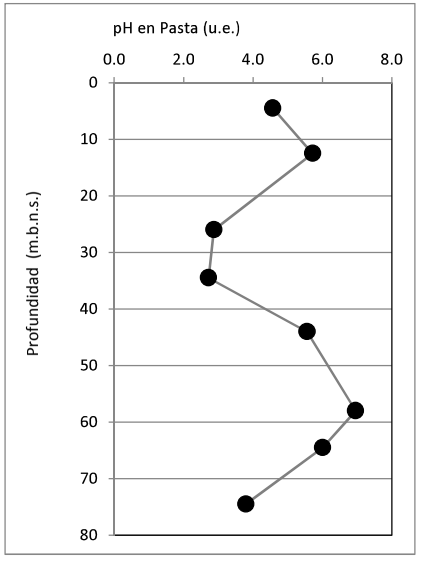
Estadistica:

Min	2.7
Max	7.0
Promedio	4.8
Media	5.1
Conteo	8

Histograma:



Perfil de Profundidad:

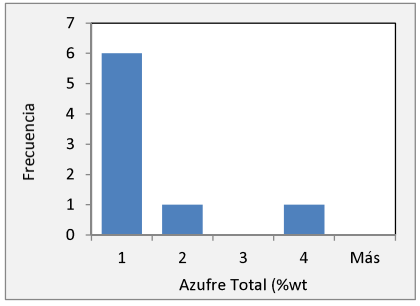


Azufre Total (%wt)

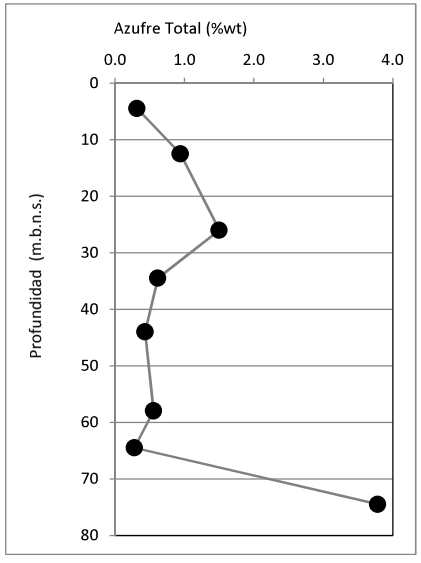
Estadistica:

Min	0.28
Max	3.8
Promedio	1.1
Media	0.58
Conteo	8

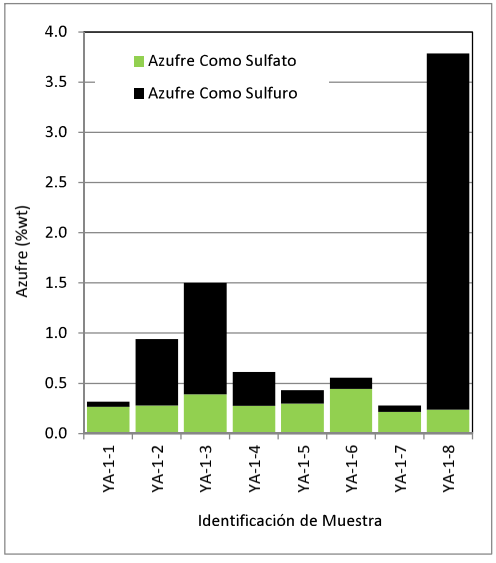
Histograma:



Perfil de Profundidad:



Especiación de Azufre:

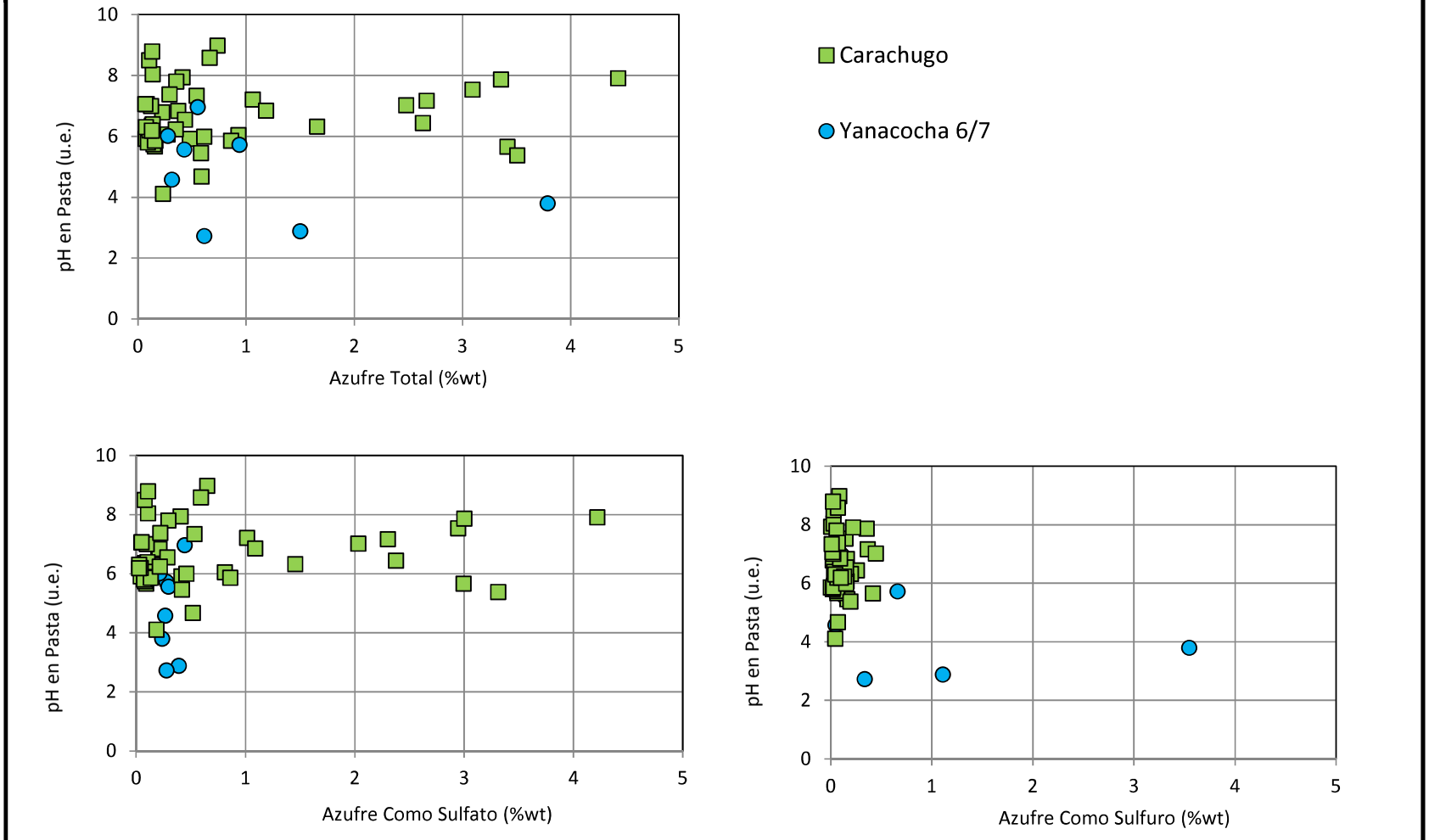


Golder Associates

Título	Pila de Lixiviación de Yanacocha 6/7 - Resultados del Test de pH en Pasta y Azufre del Laboratorio de MYSRL		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	3-4

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx

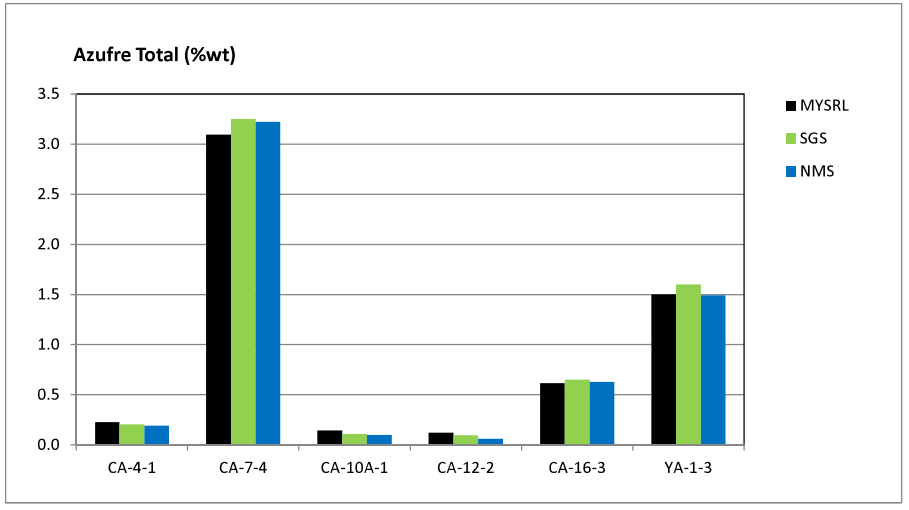
011131

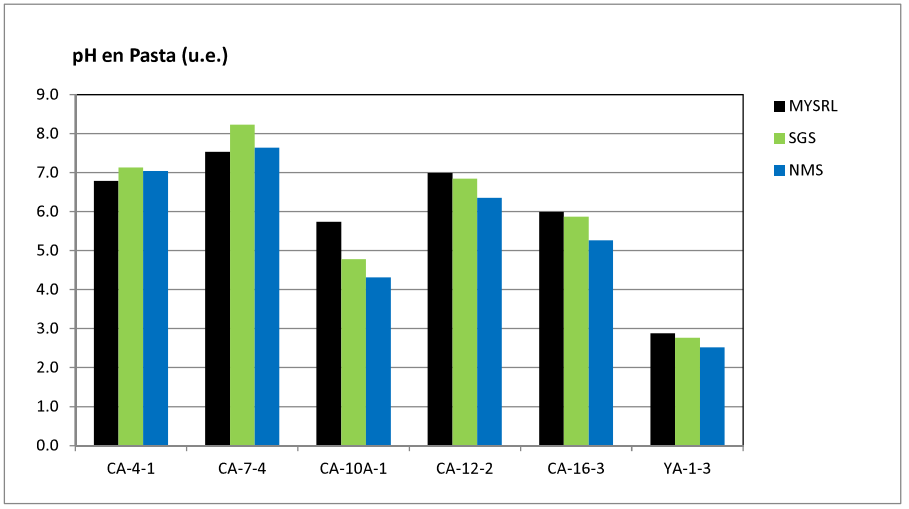


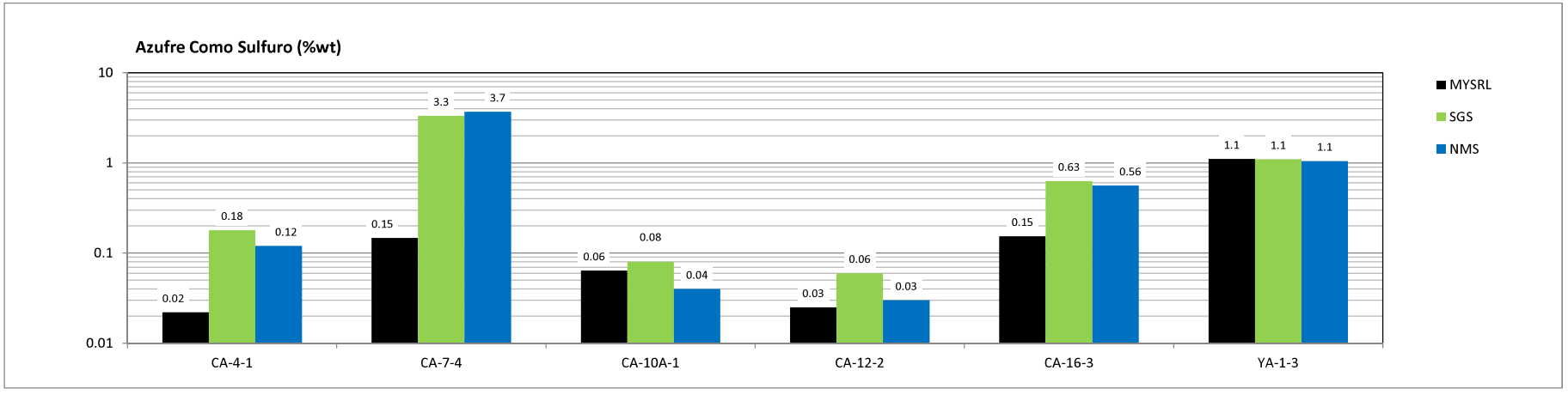
Golder Associates	Título: Pilas de Lixiviación de Yanacocha 6/7 y Carachugo - Test de pH en Pasta vs. Especies de Azufre		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 3-5

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_Heap Leach Report Figures (Rev 1)_Spanish.xlsx

011132







Título	Resultados de pH en Pasta y Azufre de Muestras Divididas		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	3-6

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_NMS Data (Rev 1)_Spanish.xlsx

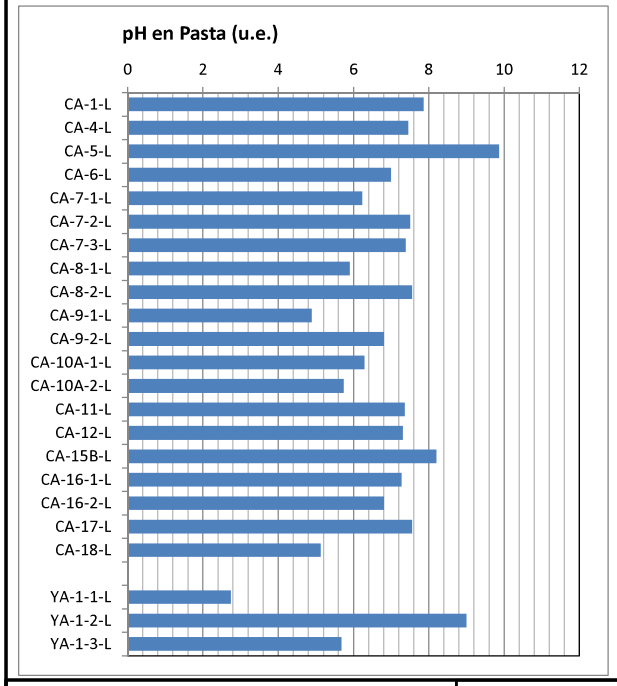
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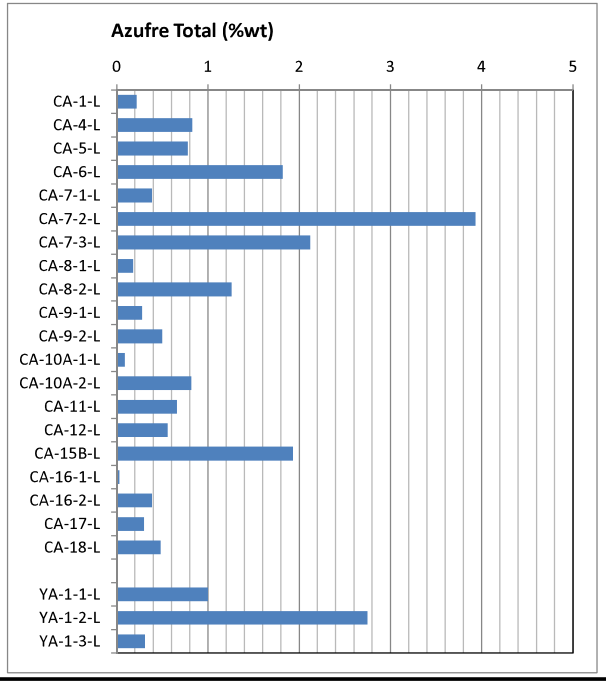
Carachugo pH en Pasta	In-Situ	Meustras de Lixiviación
Min	4.1	4.9
Max	9.0	9.9
Average	6.6	7.0
Median	6.4	7.3
Count	47	20

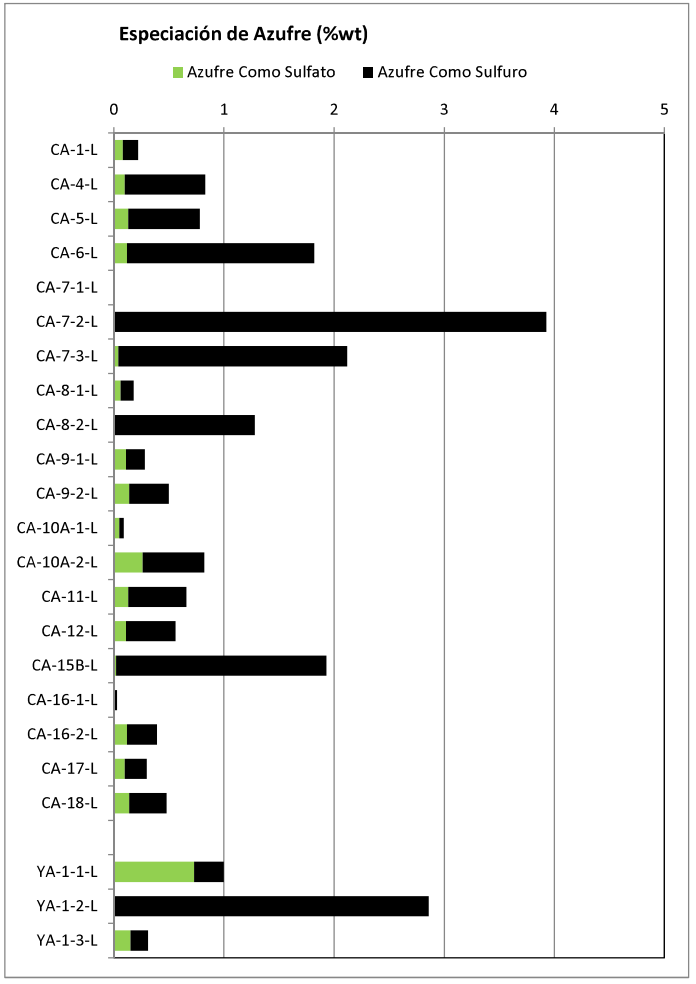
Carachugo Azufre Total	In-Situ	Meustras de Lixiviación
Min	0.07	0.03
Max	4.4	3.9
Average	0.86	0.88
Median	0.36	0.53
Count	47	20

Yanacocha 6/7 pH en Pasta	In-Situ	Meustras de Lixiviación
Min	2.7	2.7
Max	7.0	9.0
Average	4.8	5.8
Median	5.1	5.7
Count	8	3

Yanacocha 6/7 Azufre Total	In-Situ	Meustras de Lixiviación
Min	0.28	0.31
Max	3.8	2.8
Average	1.1	1.4
Median	0.58	1.0
Count	8	3



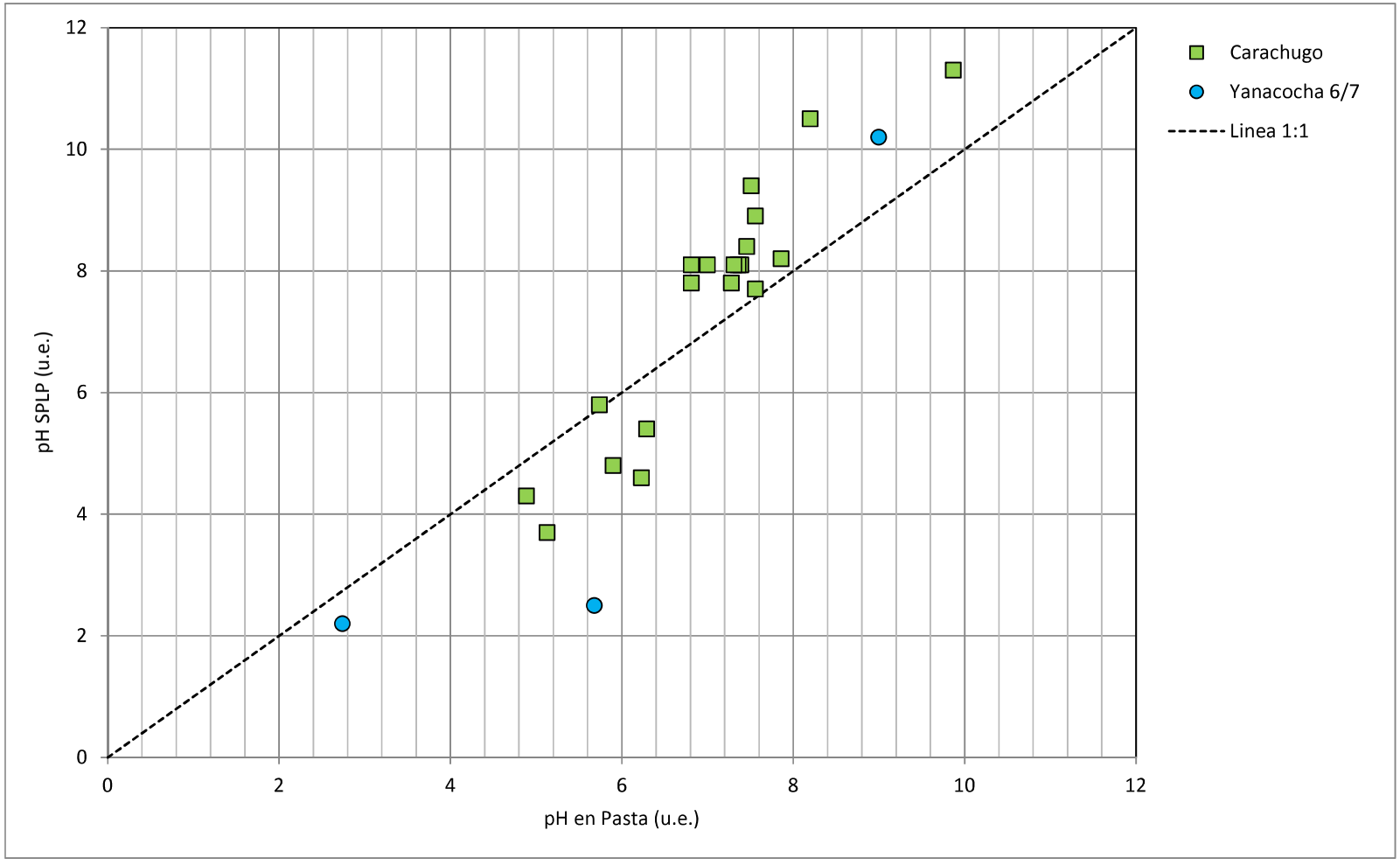




Golder Associates

Título	Resultados de Lixiviación de Muestras de pH en Pasta y NCV		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	3-7

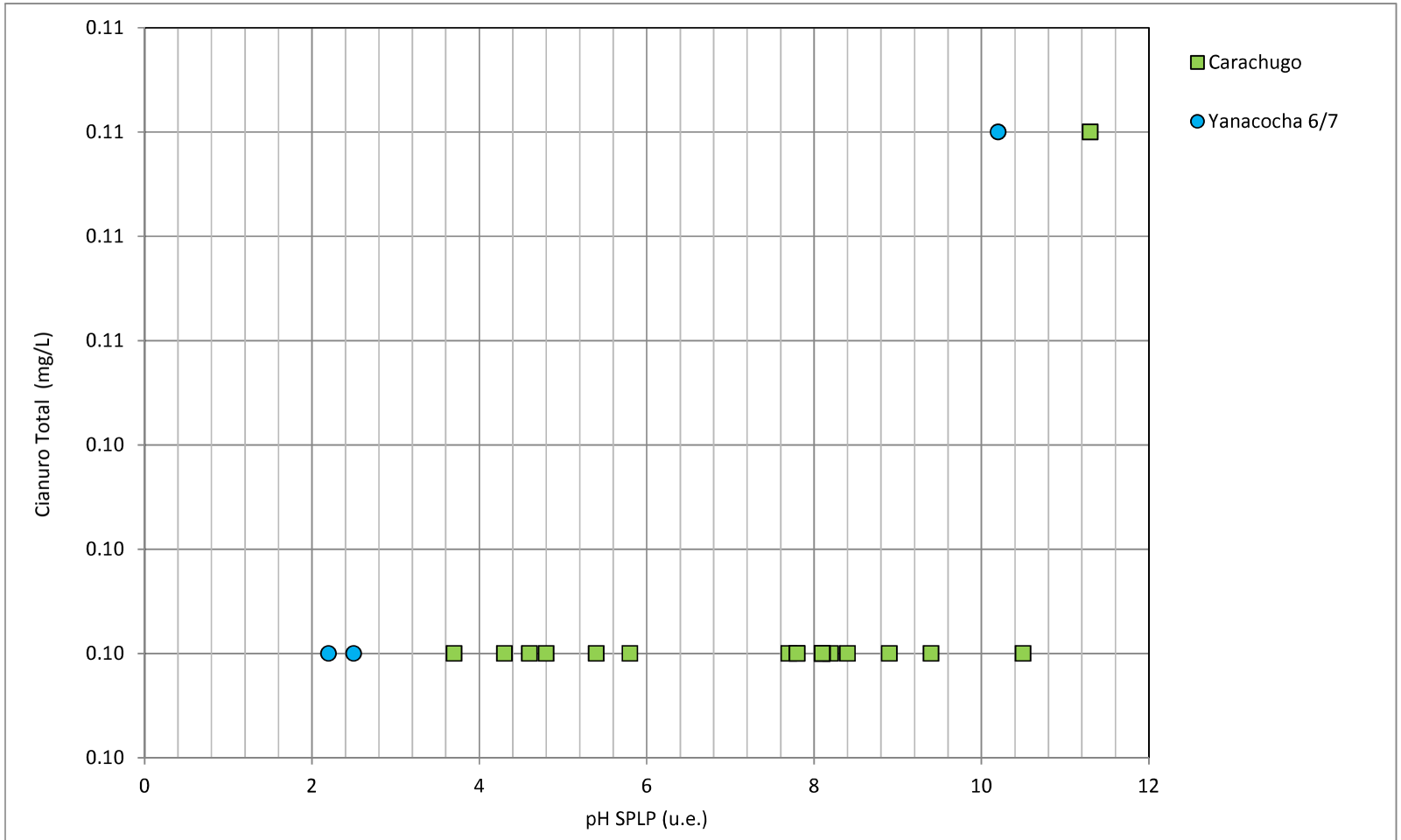
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Golder Associates	Título: pH en Pasta vs. pH SPLP		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA **3-8**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_NMS Data (Rev 1)_Spanish.xlsx

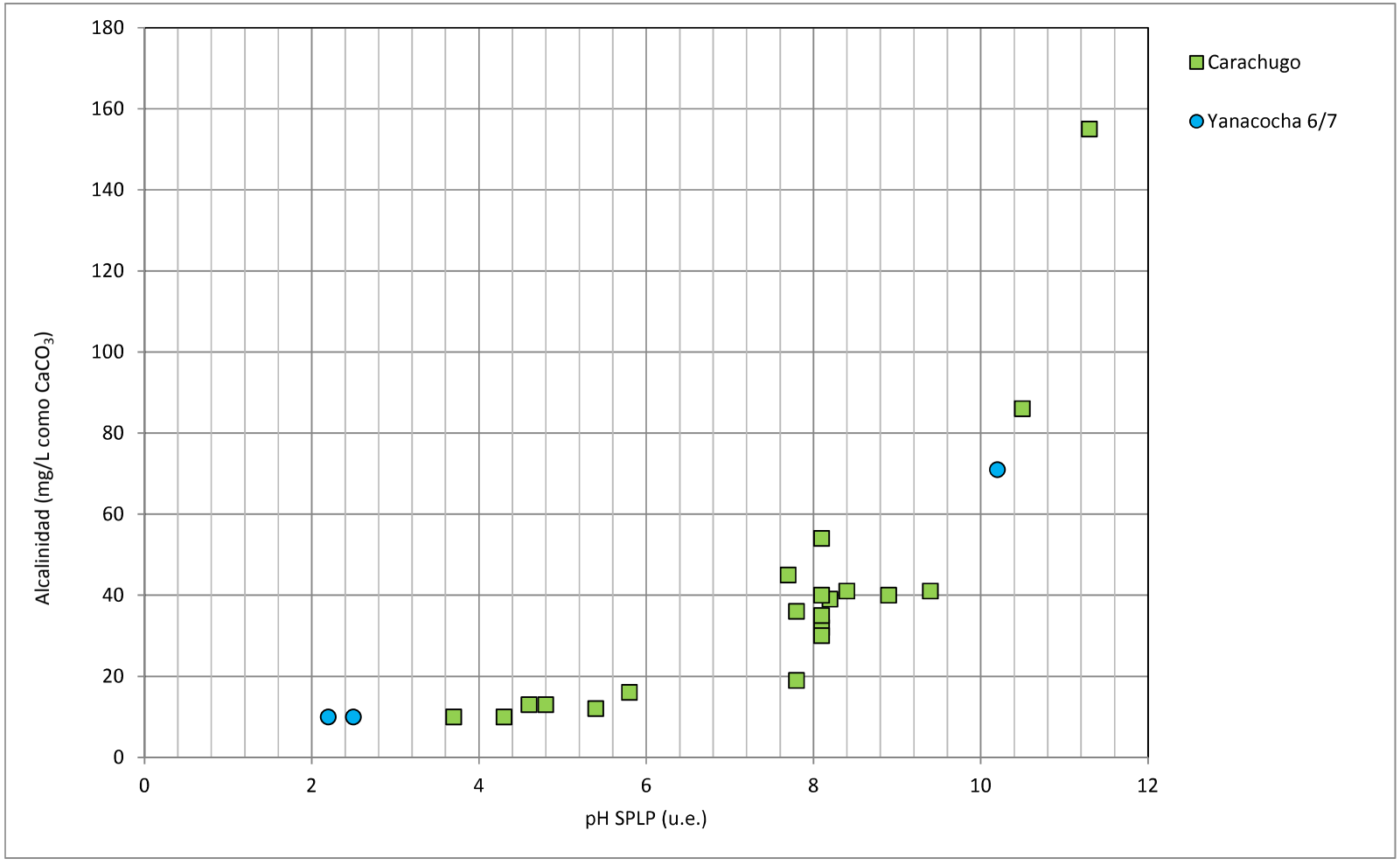
011135



Golder Associates	Título: pH de Lixiviado SPLP vs. Cianuro Total		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA **3-9**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_NMS Data (Rev 1)_Spanish.xlsx

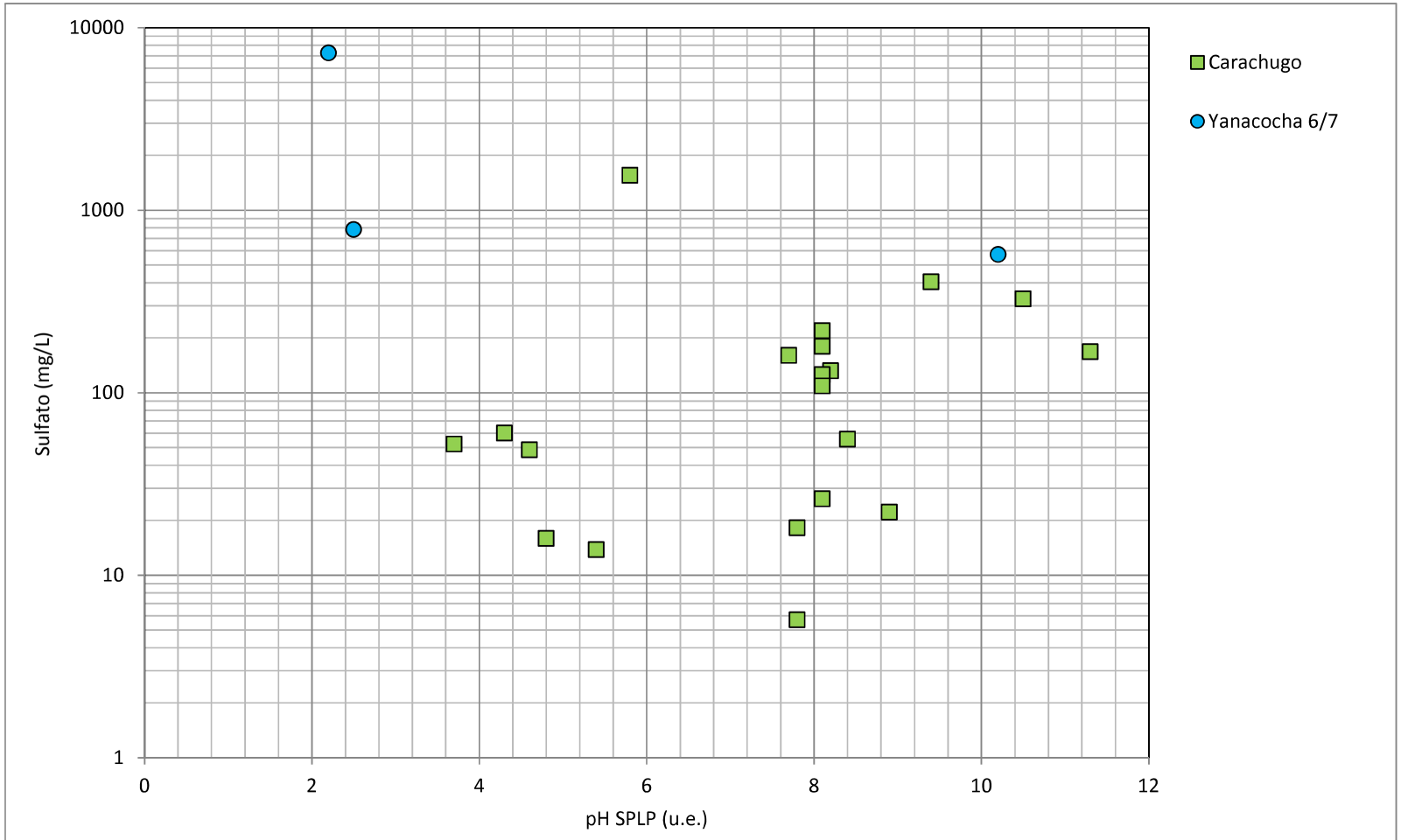
011136



Golder Associates	Título: pH de Lixiviado SPLP vs. Alcalinidad		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA **3-10**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_NMS Data (Rev 1)_Spanish.xlsx

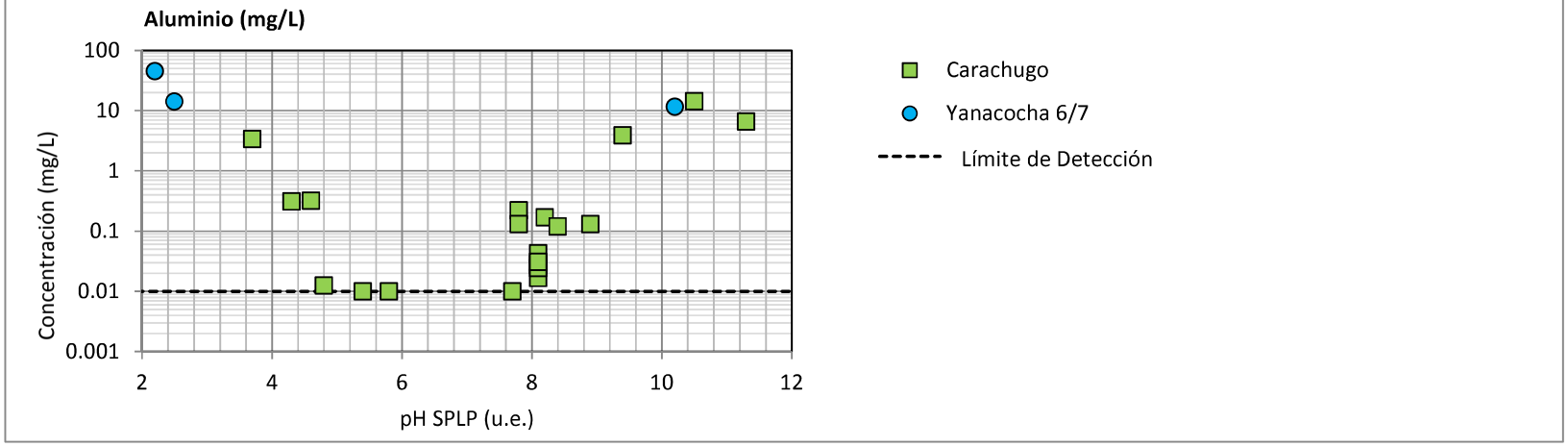
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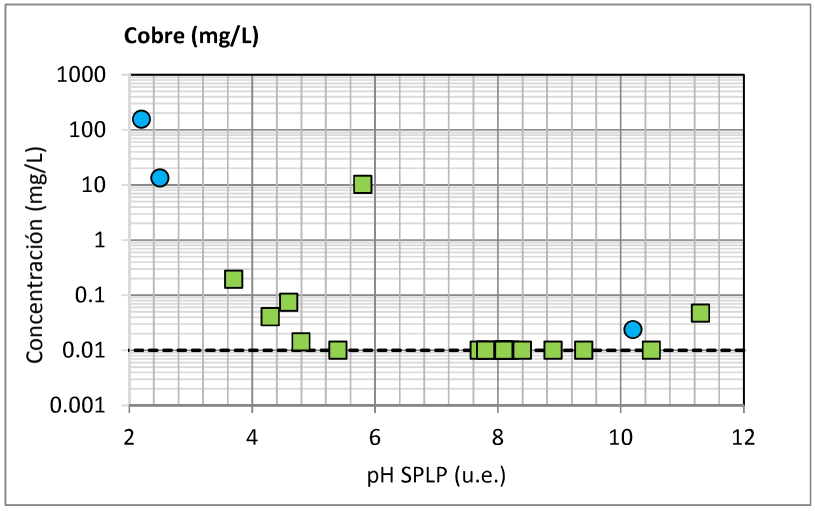


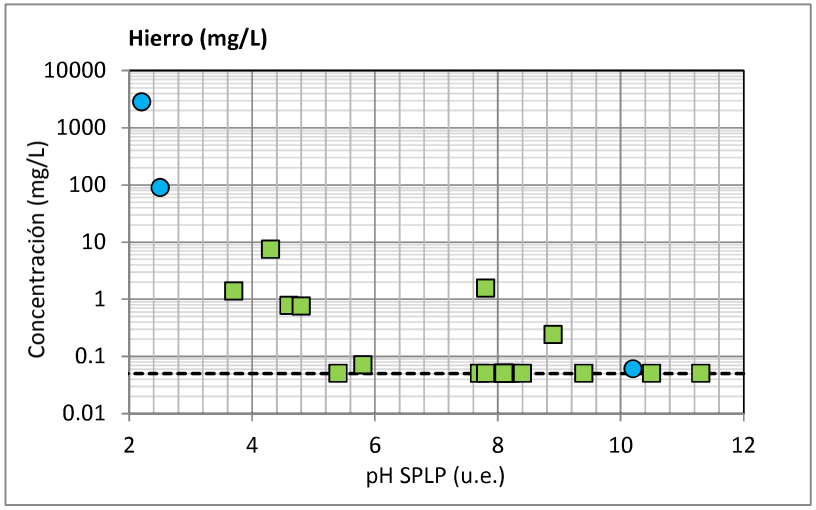
Golder Associates	Título: pH de Lixiviado SPLP vs. Sulfato		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA **3-11**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_NMS Data (Rev 1)_Spanish.xlsx

011138





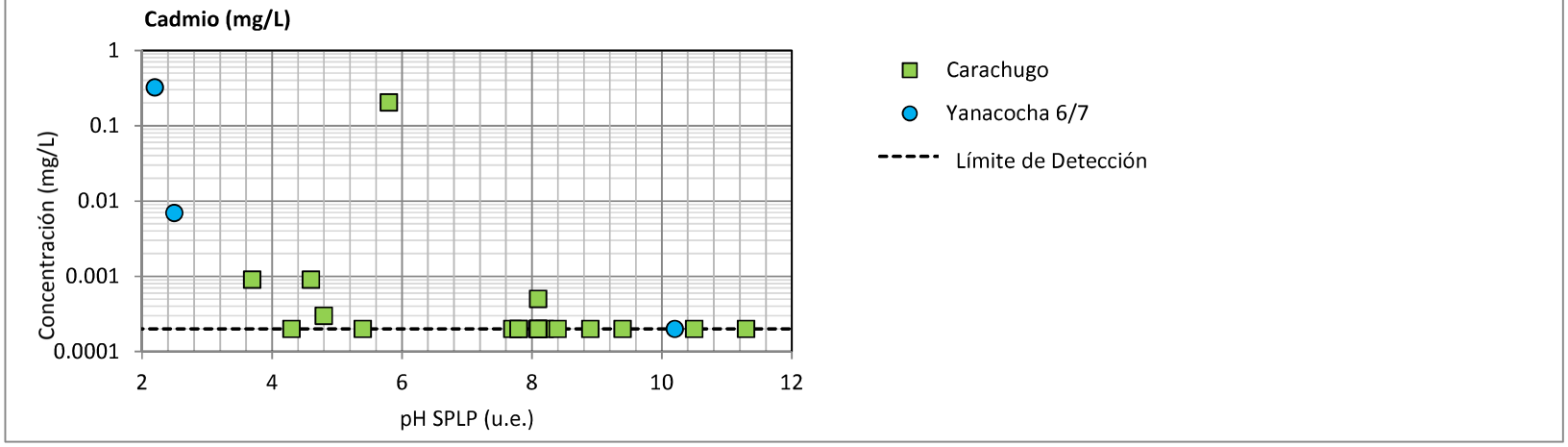


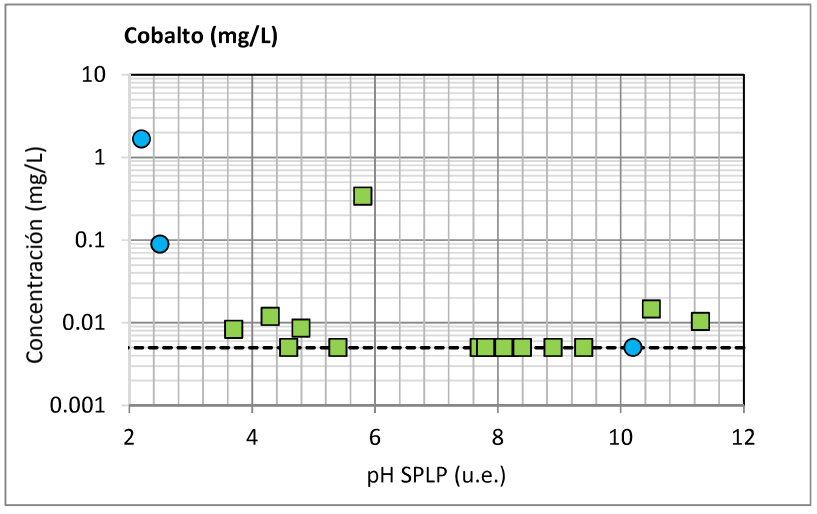
Golder Associates

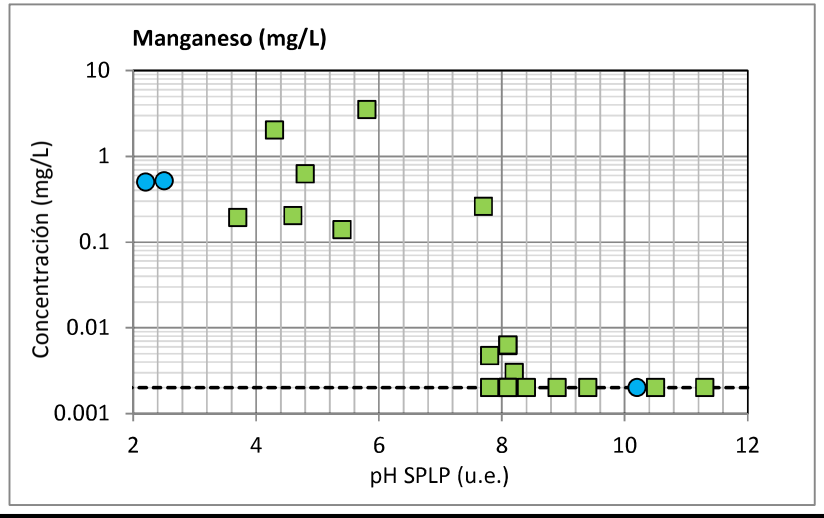
Título	pH de Lixiviado SPLP vs. Concentraciones de Metales (Al, Cu y Fe)		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	**3-12**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_NMS Data (Rev 1)_Spanish.xlsx

011139





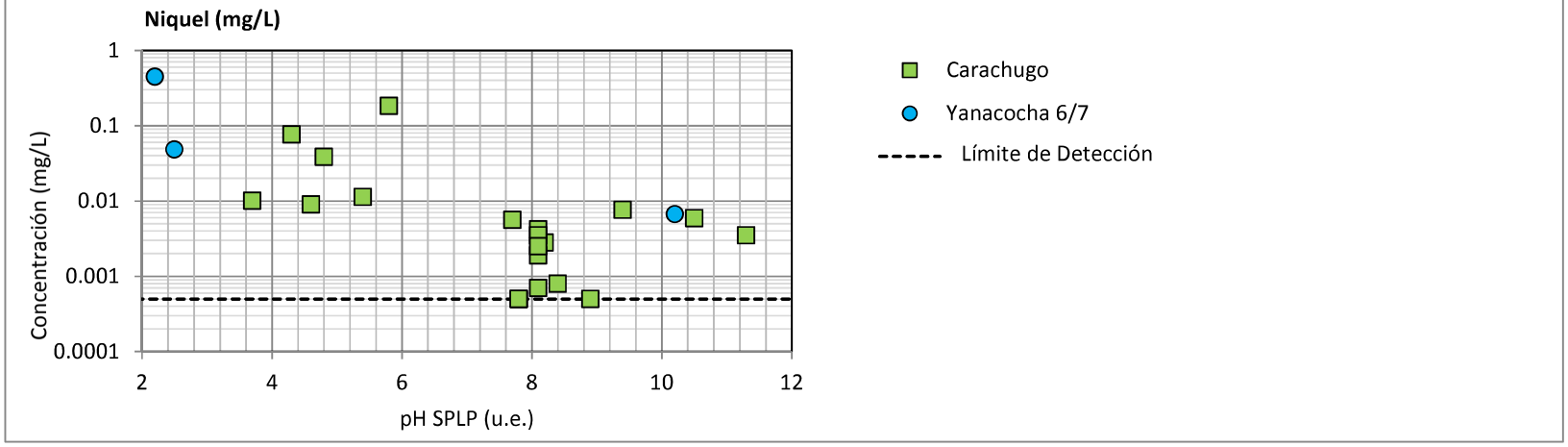


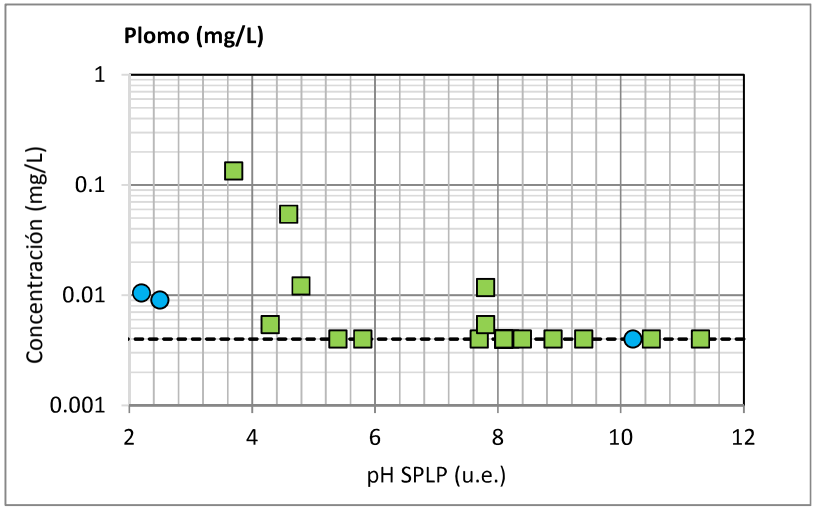
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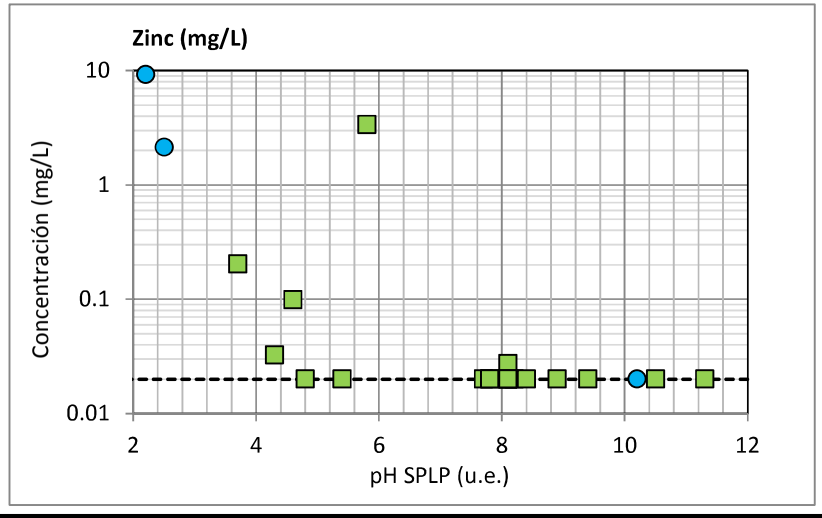
Título	pH de Lixiviado SPLP vs. Concentraciones de Metales (Cd, Co y Mn)		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	**3-13**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_NMS Data (Rev 1)_Spanish.xlsx

011140





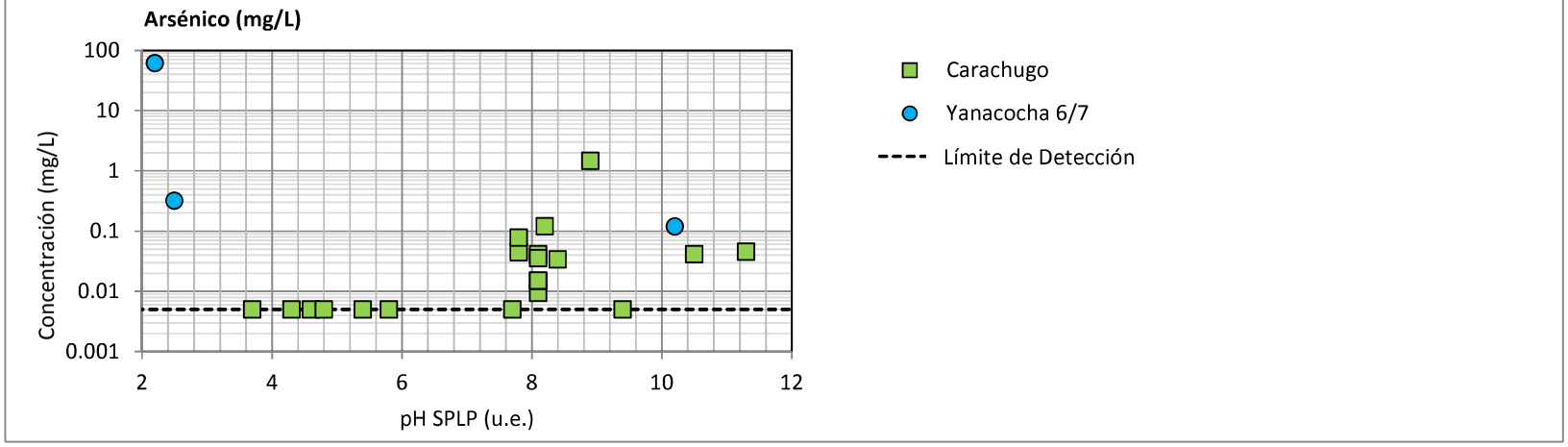


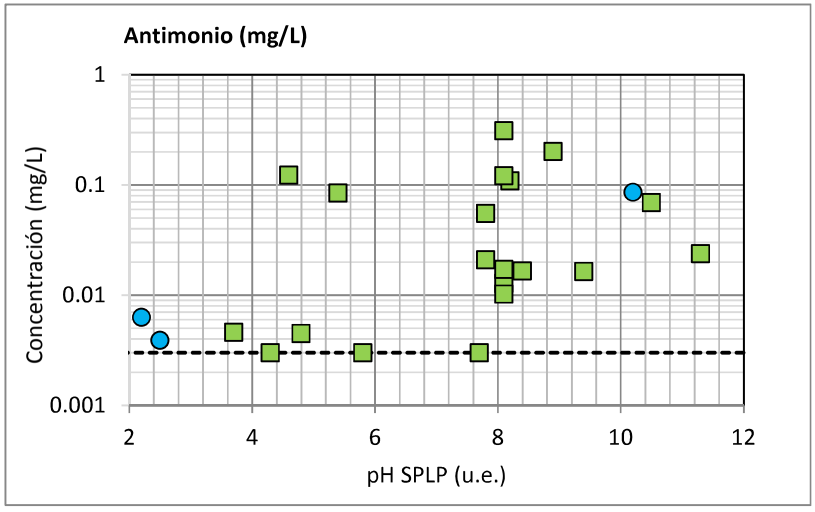
Golder Associates

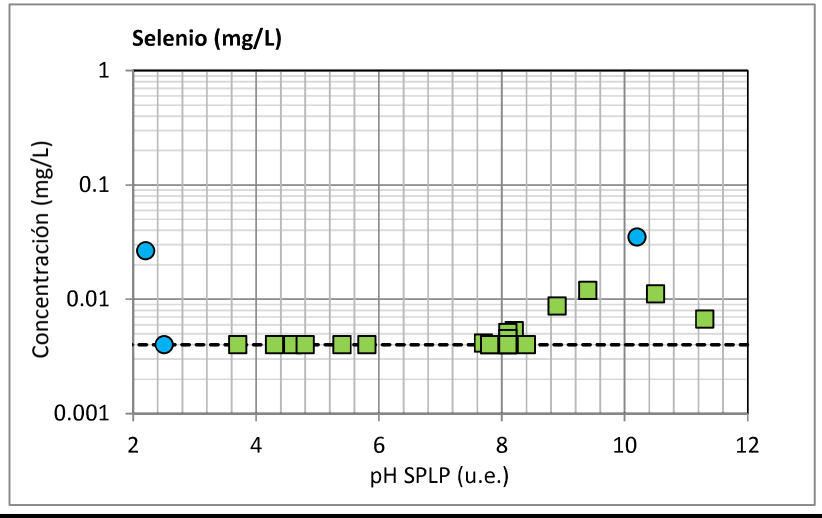
Título	pH de Lixiviado SPLP vs. Concentraciones de Metales (Ni, Pb y Zn)		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	**3-14**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_NMS Data (Rev 1)_Spanish.xlsx

011141





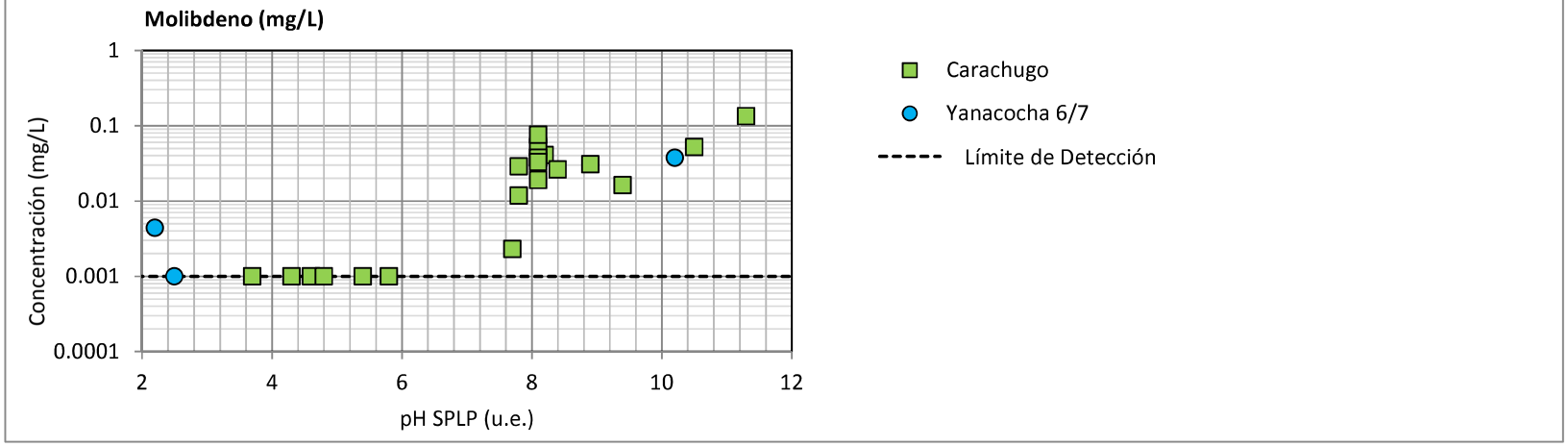


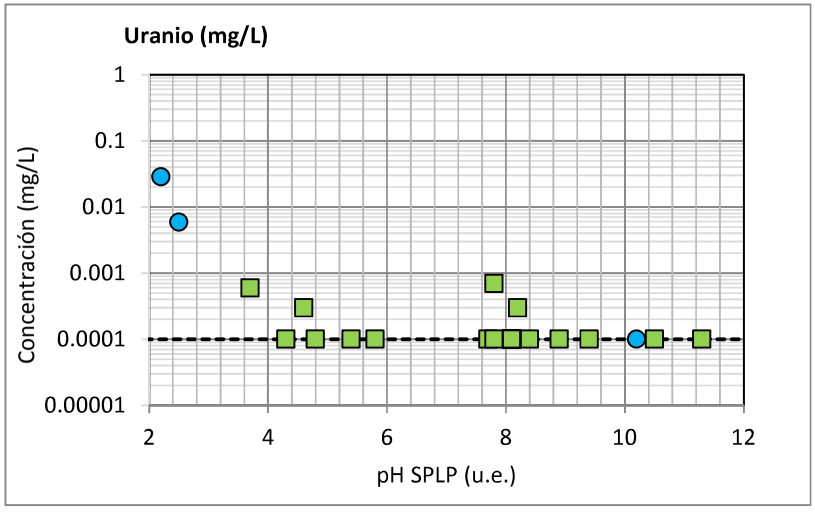
Golder Associates

Título	pH de Lixiviado SPLP vs. Concentraciones de Metales (As, Sb y Se)		
Proyecto	Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.	1526621A
Cliente	Minera Yanacocha S.R.L.	Fecha	Noviembre 2015
		FIGURA	**3-15**

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_NMS Data (Rev 1)_Spanish.xlsx

011142

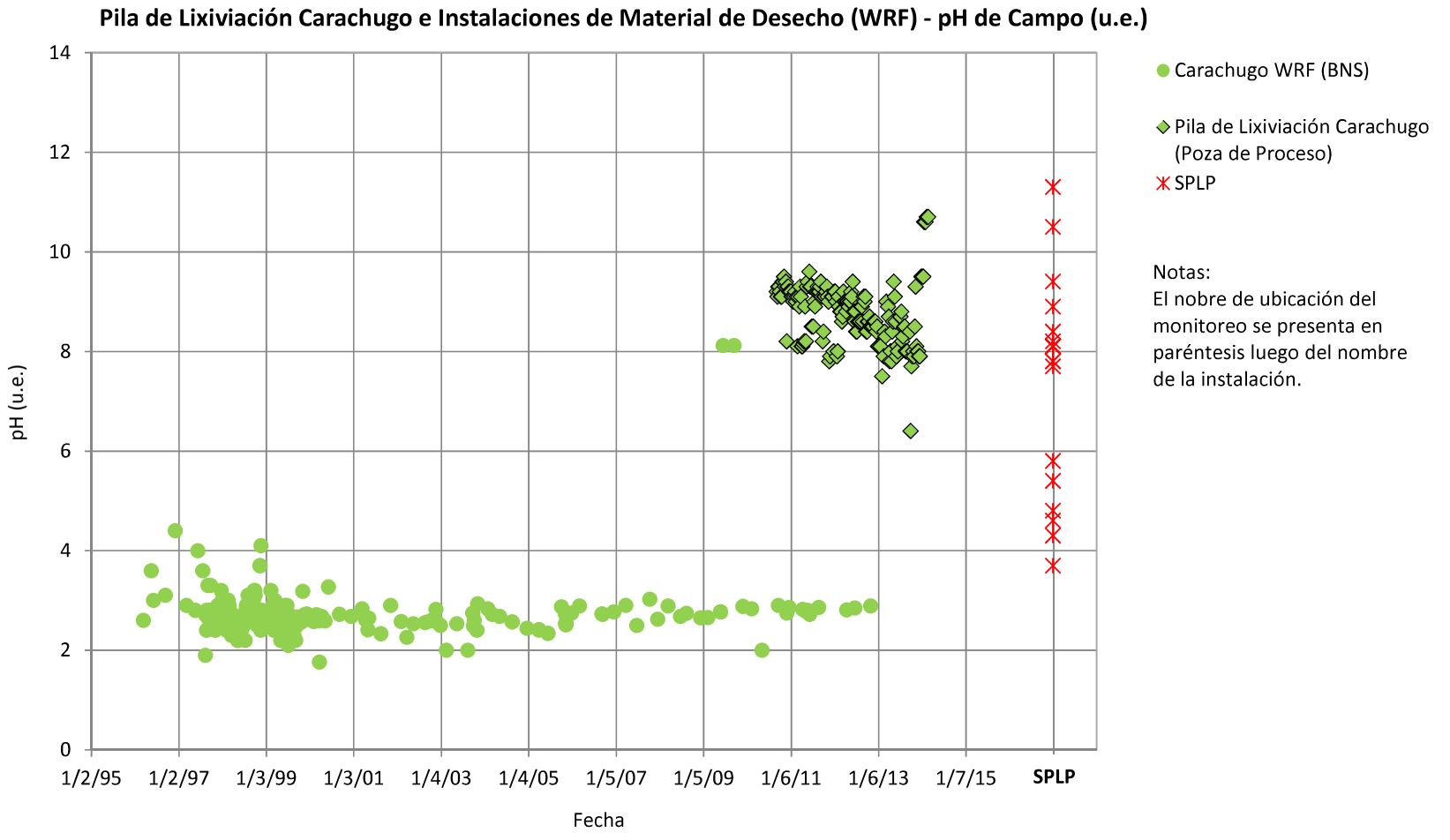




Golder Associates	Título: pH de Lixiviado SPLP vs. Concentraciones de Metales (Mo y U)		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA **3-16**

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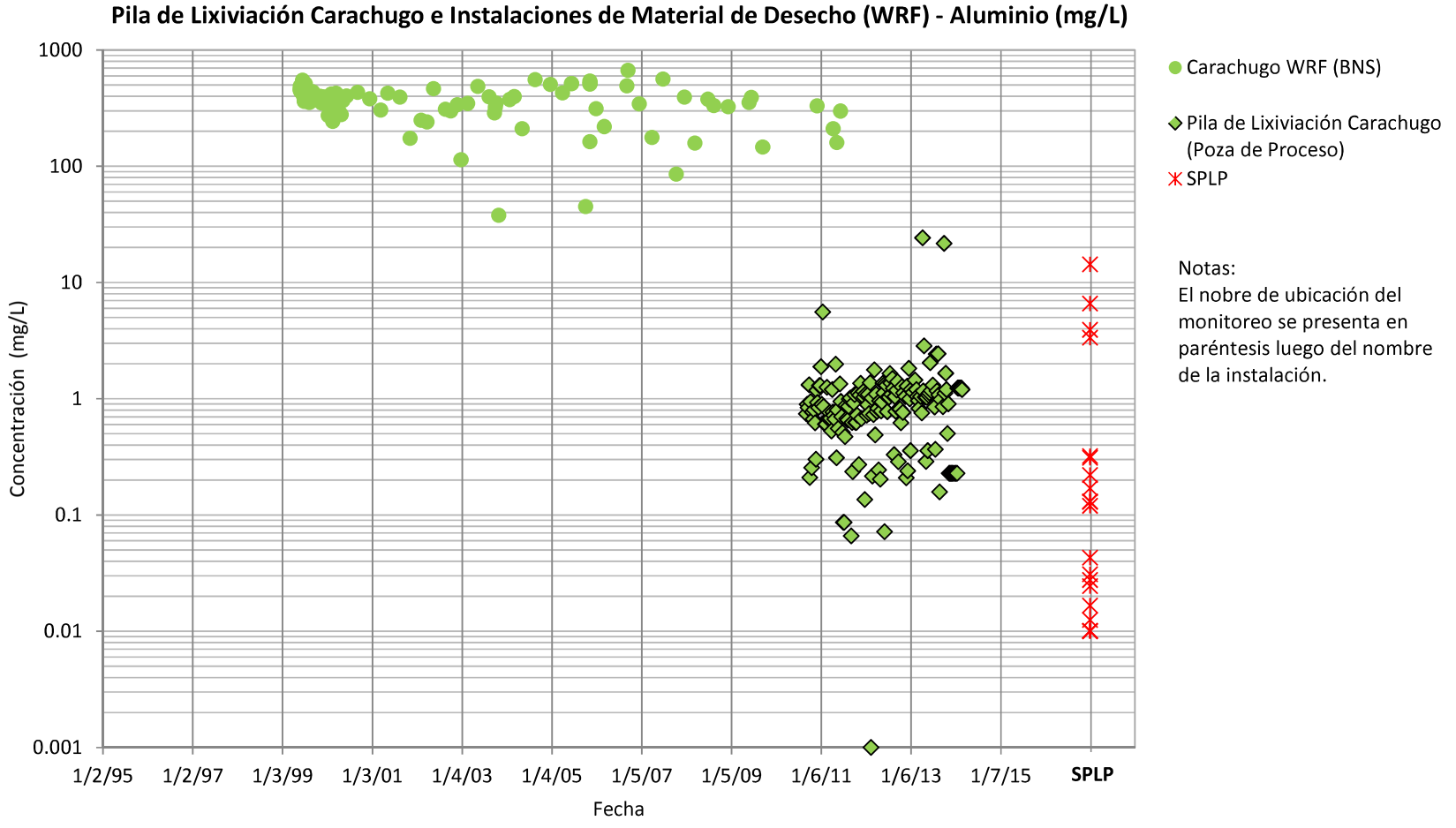
011143



Golder Associates	Título: Poza de Pila de Lixiviación Carachugo y WRF - pH de Campo		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-1

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

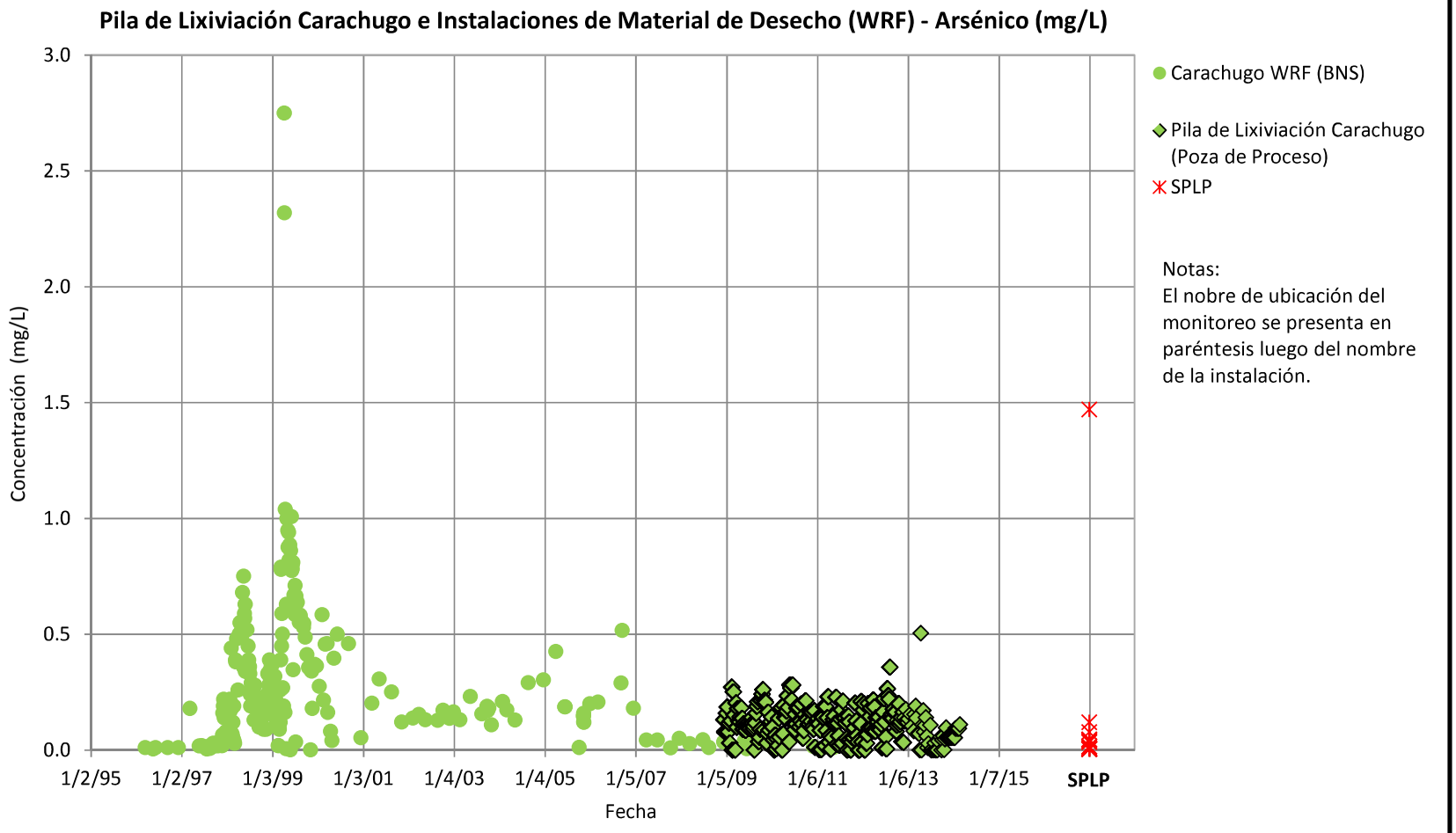
011144



Golder Associates	Título: Poza de Pila de Lixiviación Carachugo y WRF - Aluminio		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-2

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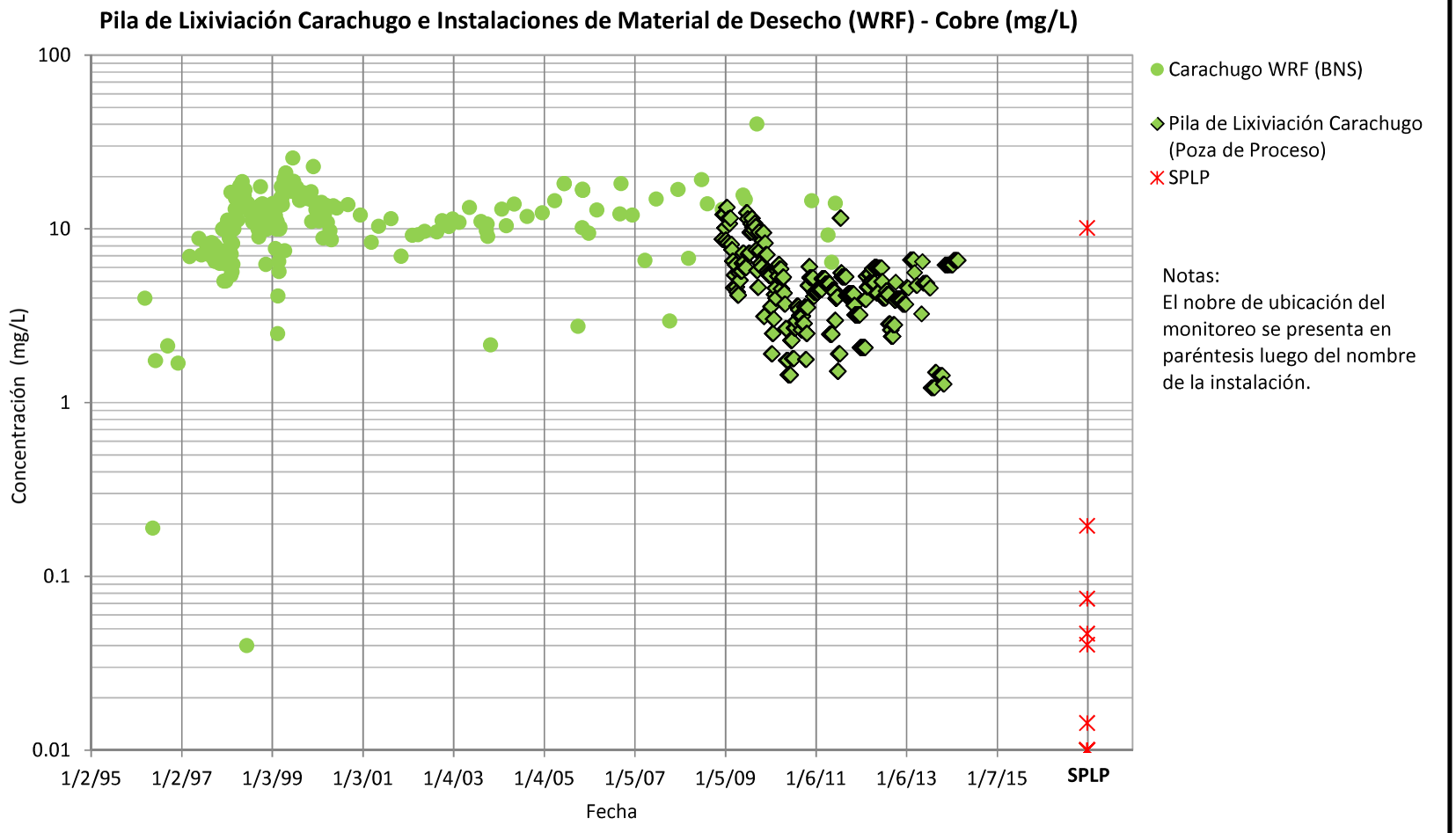
011145



Golder Associates	Título: Poza de Pila de Lixiviación Carachugo y WRF - Arsénico		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-3

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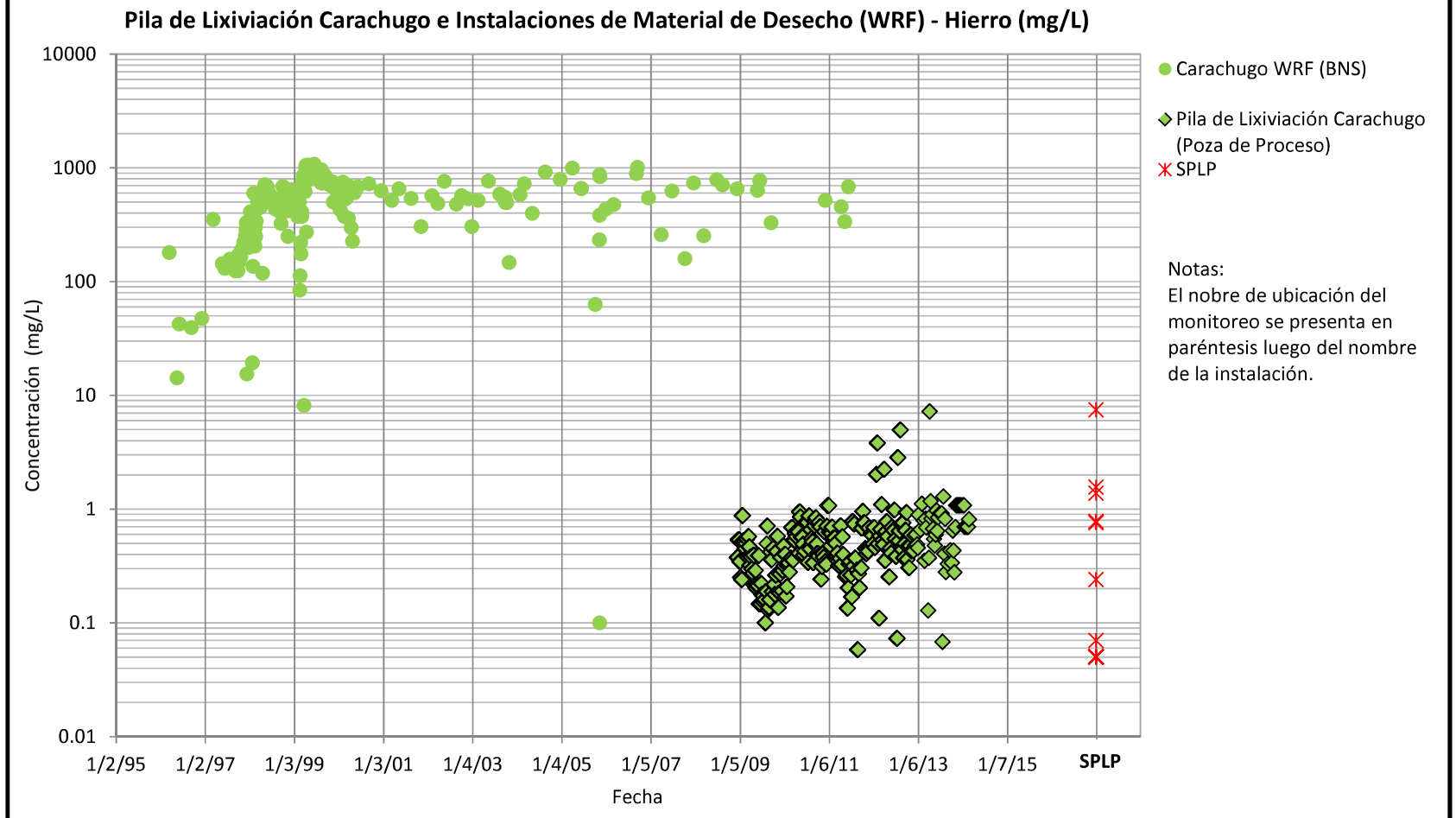
011146



Golder Associates	Título: Poza de Pila de Lixiviación Carachugo y WRF - Cobre		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-4

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

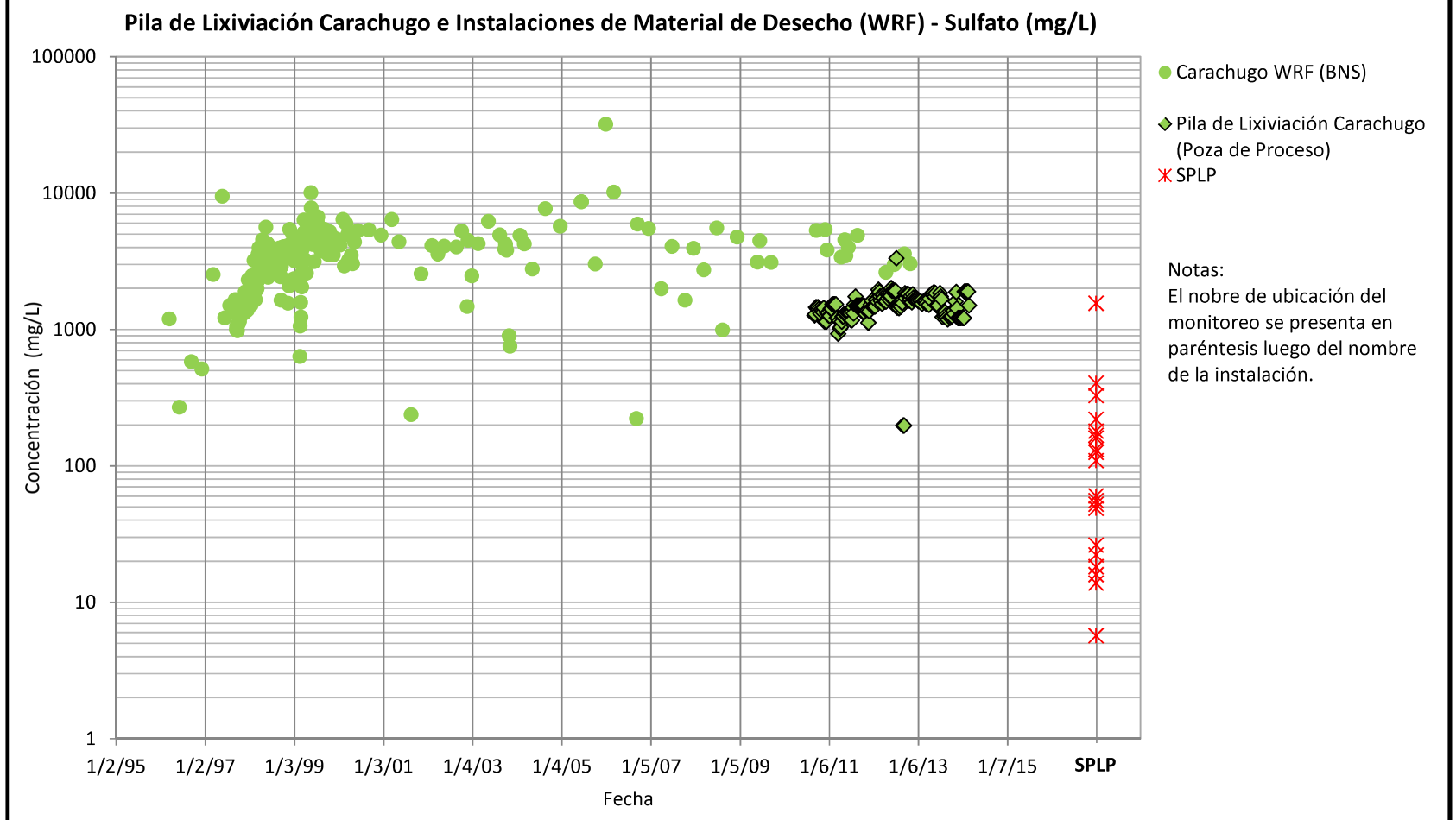
011147



Golder Associates	Título: Poza de Pila de Lixiviación Carachugo y WRF - Hierro		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-5

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

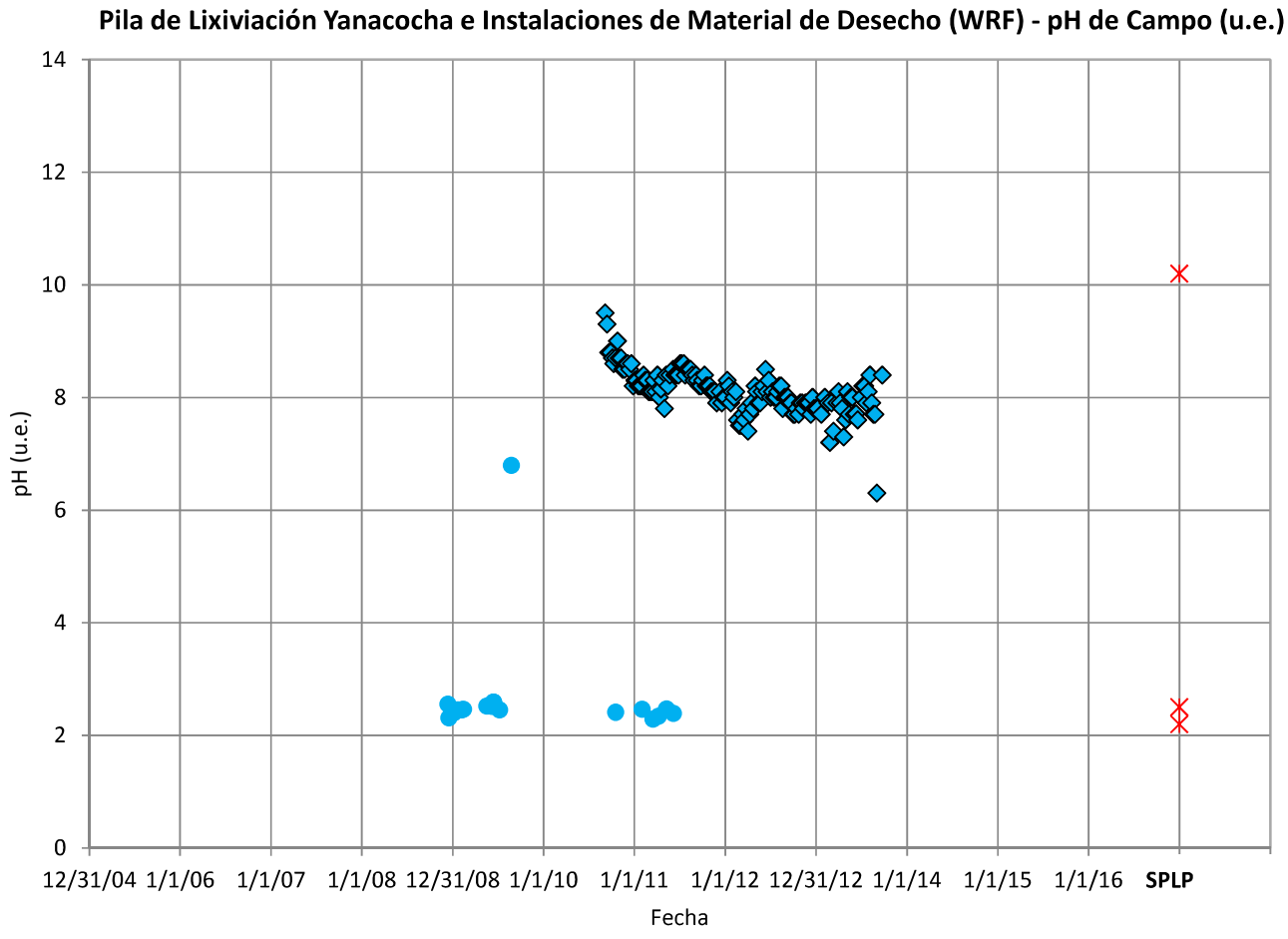
011148



Golder Associates	Título: Poza de Pila de Lixiviación Carachugo y WRF - Sulfato		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-6

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

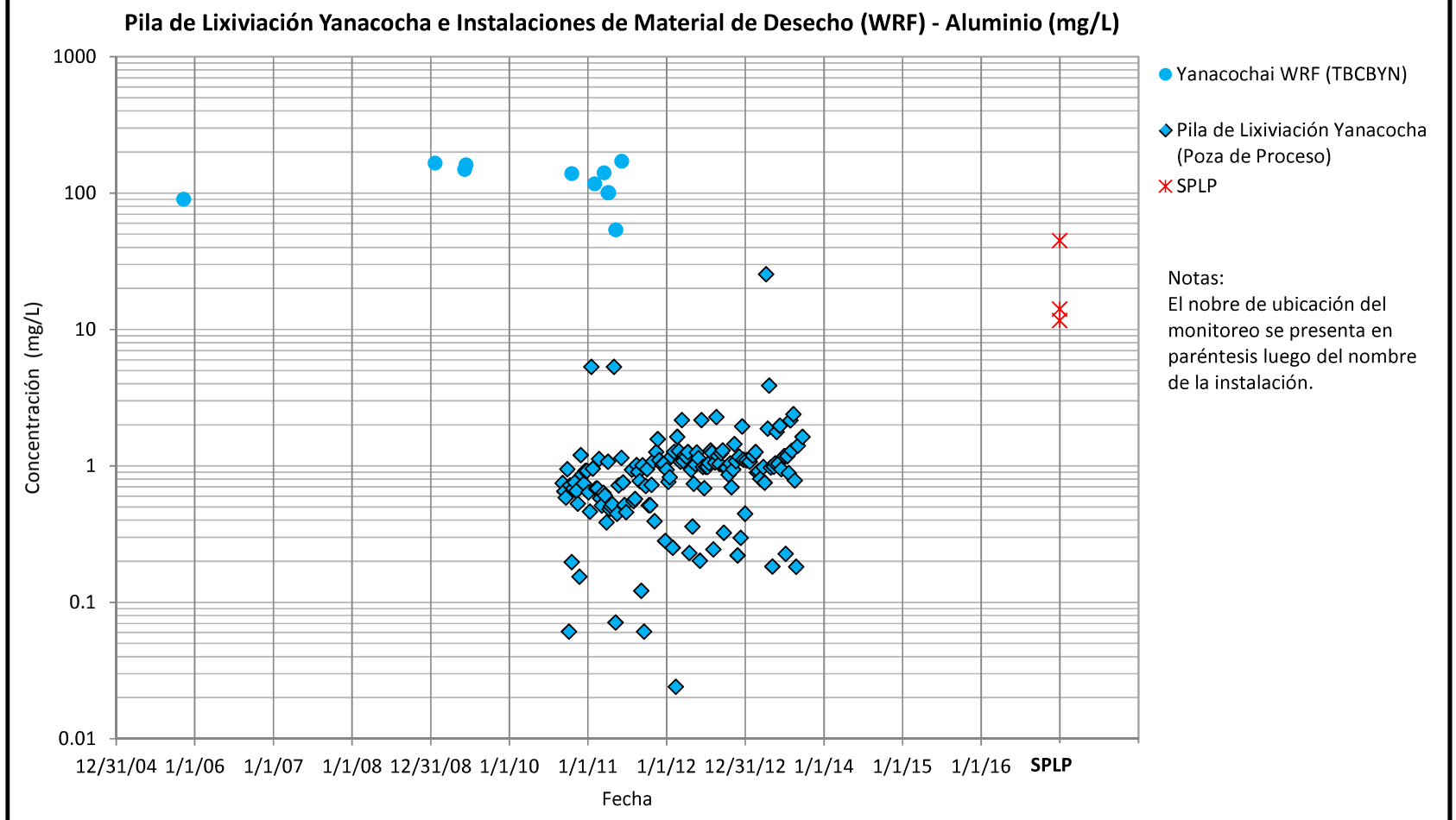
011149



Golder Associates	Título: Poza de Pila de Lixiviación Yanacocha y WRF - pH de Campo		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-7

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

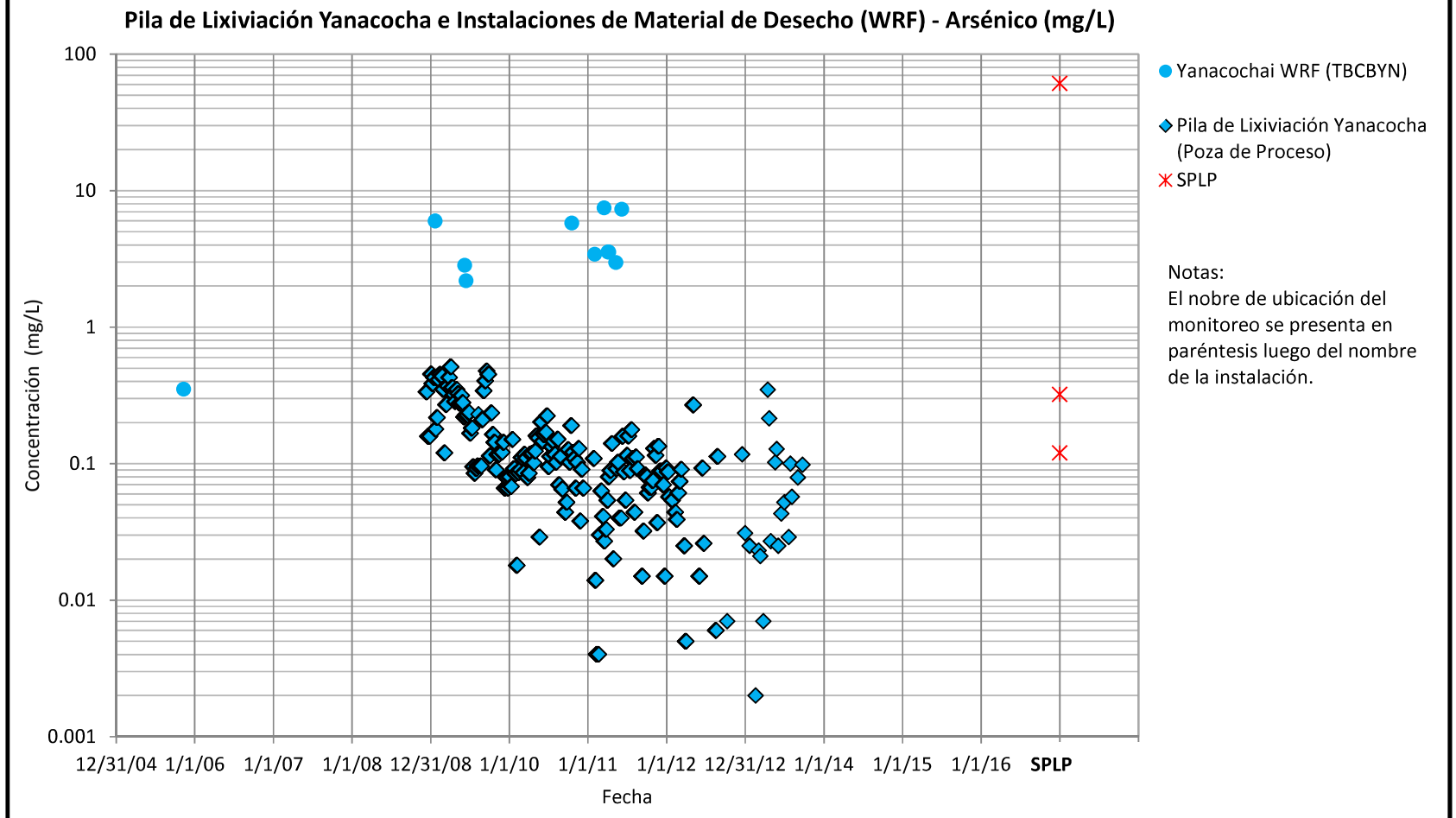
011150



Golder Associates	Título: Poza de Pila de Lixiviación Yanacocha y WRF - Aluminio		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-8

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

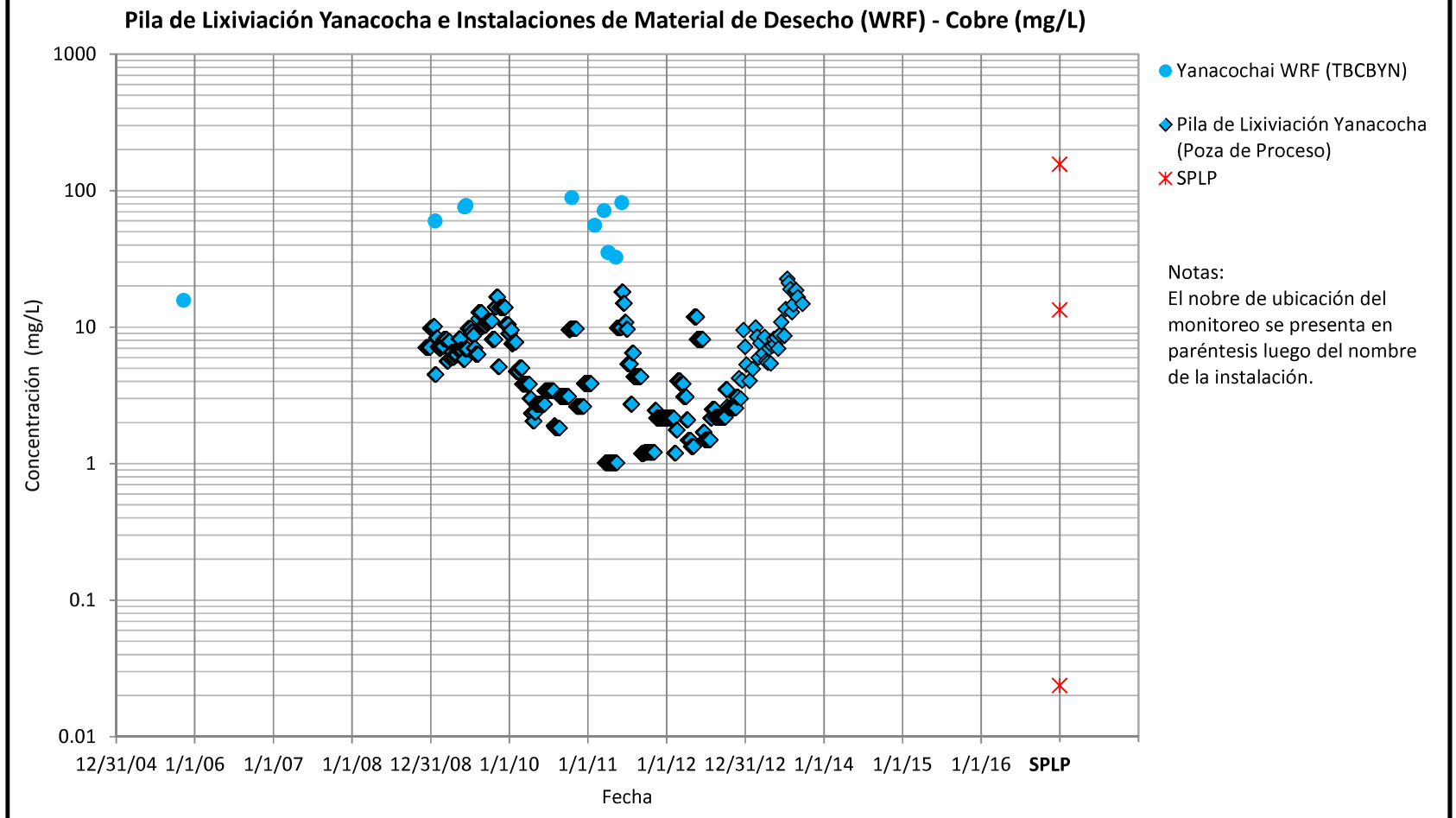
011151



Golder Associates	Título: Poza de Pila de Lixiviación Yanacocha y WRF - Arsénico		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-9

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

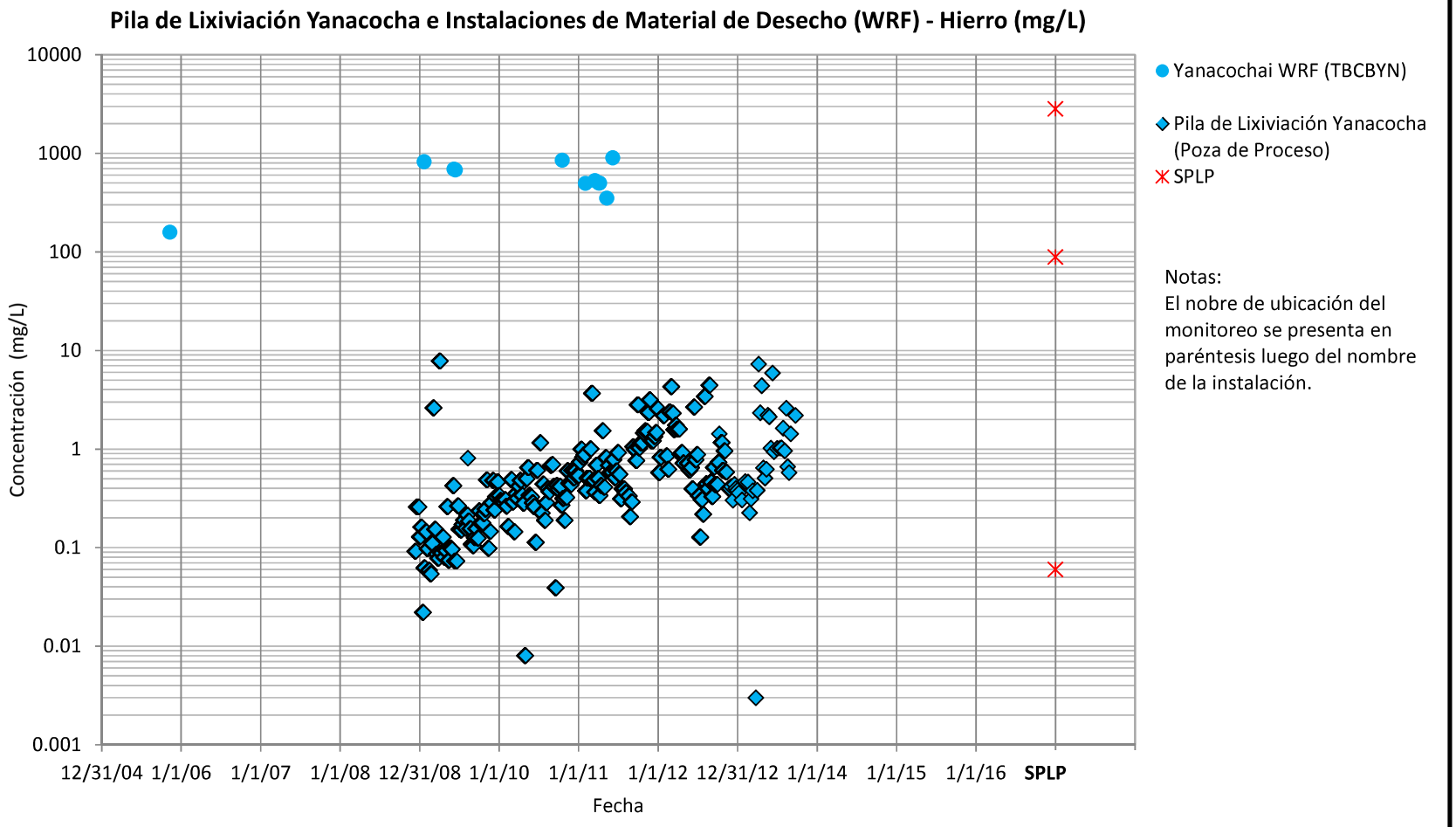
011152



Golder Associates	Título: Poza de Pila de Lixiviación Yanacocha y WRF - Cobre		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-10

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

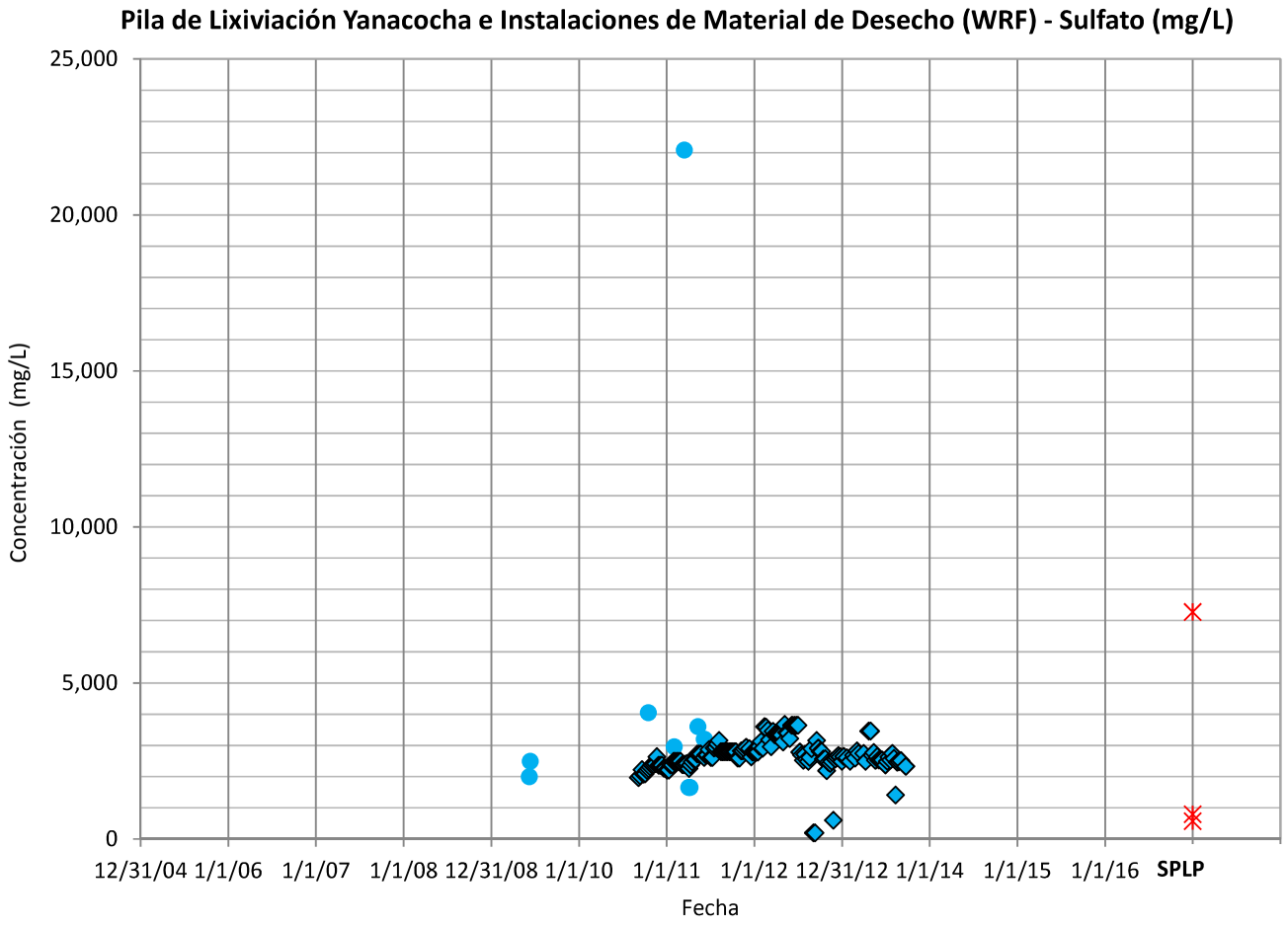
011153



Golder Associates	Título: Poza de Pila de Lixiviación Yanacocha y WRF - Hierro		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-11

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

011154



Golder Associates	Título: Poza de Pila de Lixiviación Yanacocha y WRF - Sulfato		
	Proyecto: Investigación Sobre Perforación de la Pila de Lixviación	Proyecto No.: 1526621A	
	Cliente: Minera Yanacocha S.R.L.	Fecha: Noviembre 2015	FIGURA 4-12

V:\PROJECTS_2015 PROJECTS\1526621A_MYSRL Heap Leach_Verburg\Deliverables\20151013_Heap Leach Report\20151130_Revised Final\Spanish\20151130_WRF and HLF (Rev 1)_Spanish.xlsx

011155

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TAJO YANACOCHA VERDE

Compósitos preparados para columnas a la intemperie. Tamaño de grano y proporción

				Malla-Peso										
N°	Codigo Met	Codigo Geol		3/4 "	1/2"	1/4"	+8M	+14M	+30M	+50M	+100M	`-100M	Total
1	13022	YV9S-W8	Peso (g)	8262,2	45597,5	20738	12655	2598,2	2771,3	1475,1	1132,4	3592,4	98822,1
			%	8,4	46,1	21	12,8	2,6	2,8	1,5	1,1	3,6	100
2	13023	YV9S-W10	Peso (g)	2248,2	14643	7293	4741,8	1193,9	1418,5	766,6	628	2253,5	35186,5
			%	6,4	41,6	20,7	13,5	3,4	4	2,2	1,8	6,4	100
3	13024	YV9S-W12	Peso (g)	12331	62263	23636	14208	2887,8	3079,6	1649,2	1281	3937	125272
			%	9,8	49,7	18,9	11,3	2,3	2,5	1,3	1	3,1	100
4	13025	YV9S-W13	Peso (g)	1824,8	12462,2	9724,4	8650,8	2543,4	3036,5	1579,2	1238	3201,3	44260,6
			%	4,1	28,2	22	19,5	5,7	6,9	3,6	2,8	7,2	100
5	13026	YV9S-W18	Peso (g)	3124,6	18252,5	8083,2	4948,2	1020,1	985,5	451,5	306,7	756,1	37928,3
			%	8,2	48,1	21,3	13	2,7	2,6	1,2	0,8	2	100
6	13027	YV9S-W19	Peso (g)	657,2	7565,7	6219,5	5059	1350,4	1624,5	875,9	744,6	2163,3	26260,1
			%	2,5	28,8	23,7	19,3	5,1	6,2	3,3	2,8	8,2	100
7	13028	YV9S-W20	Peso (g)	12338	64316,5	25444	11693	1329,9	1424,9	721,2	505,6	1176,2	118950
			%	10,4	54,1	21,4	9,8	1,1	1,2	0,6	0,4	1	100
8	13029	YV9C-W33	Peso (g)	6982,5	39149,7	15711	9794	2455,9	2791,3	1423,8	1172,8	2964,4	82445,6
			%	8,5	47,5	19,1	11,9	3	3,4	1,7	1,4	3,6	100
9	13030	YV9C-W43	Peso (g)	7054,1	41553,7	19620	13298	2956,4	3102,6	1735,5	1500,1	5333,8	96153,5
			%	7,3	43,2	20,4	13,8	3,1	3,2	1,8	1,6	5,5	100
10	13031	YV9C-W49	Peso (g)	16005	82656,5	36517	26717	6429,6	6954,9	3721	3026	7203,9	189230
			%	8,5	43,7	19,3	14,1	3,4	3,7	2	1,6	3,8	100
11	13032	YV9C-W51	Peso (g)	5735,3	26868	12376	10350	2766,2	2851,8	1361,5	869,9	2453,9	65632,1
			%	8,7	40,9	18,9	15,8	4,2	4,3	2,1	1,3	3,7	100
12	13033	YV9C-W52	Peso (g)	4392,6	24639	10878	7620	2185,6	2423,6	1109,5	840	1971,7	56060,4
			%	7,8	44	19,4	13,6	3,9	4,3	2	1,5	3,5	100
13	13034	YV9C-W 53	Peso (g)	4415,6	30932	14282	9543,4	2465,8	2536,2	1180,6	989,8	2085,2	68430,2
			%	6,5	45,2	20,9	13,9	3,6	3,7	1,7	1,4	3	100
14	13035	YV9W-W52	Peso (g)	9770	55617,5	27801	19320	4321,1	4448,8	2398	1874,5	4950,7	130501
			%	7,5	42,6	21,3	14,8	3,3	3,4	1,8	1,4	3,8	100
15	13036	YV9W-W57	Peso (g)	7845	41642	15065	9539,4	2312	2811,3	1638,6	1560,5	4443,5	86857,6
			%	9	47,9	17,3	11	2,7	3,2	1,9	1,8	5,1	100
16	13037	YV9W-W58	Peso (g)	5373,6	28075,5	11057	6559,9	1684,1	2088,9	1290,5	1043,5	3168,6	60341,6
			%	8,9	46,5	18,3	10,9	2,8	3,5	2,1	1,7	5,3	100
17	13038	YV9W-W61	Peso (g)	7263,2	37863,5	16117	10027	2393,9	2837,6	1743,4	2001,8	5422,5	85669,7
			%	8,5	44,2	18,8	11,7	2,8	3,3	2	2,3	6,3	100
18	13039	YV9W-W64	Peso (g)	7768,6	17912	7802,9	3599,8	805,4	846,7	400,8	257,8	817	40211,1
			%	19,3	44,5	19,4	9	2	2,1	1	0,6	2	100
19	13040	YV9S-W21	Peso (g)	9459	24311	10757	5028,7	1193,1	1357,3	699,4	578,2	1479,5	54863,1
			%	17,2	44,3	19,6	9,2	2,2	2,5	1,3	1,1	2,7	100
20	13041	YV9S-W 22	Peso (g)	7493,3	29831	10122	6723	1529,9	1750,1	966,7	678,7	1793,7	60887,9
			%	12,3	49	16,6	11	2,5	2,9	1,6	1,1	2,9	100
21	13042	YV9N-W4	Peso (g)	4938,7	15170,4	11753	8748	2808,5	4064,8	2796,6	2317,3	5117,3	57715
			%	8,6	26,3	20,4	15,2	4,9	7	4,8	4	8,9	100
22	13043	YV9N-W5	Peso (g)	2372,5	8982	5313,2	5321	1887,7	2373,4	1305,1	1054,4	2148,9	30758,3
			%	7,7	29,2	17,3	17,3	6,1	7,7	4,2	3,4	7	100
23	13044	YV9C-W22	Peso (g)	11845	33729,7	12577	7409,4	1461,7	1186,1	431,4	267,7	828,6	69736,2
			%	17	48,4	18	10,6	2,1	1,7	0,6	0,4	1,2	100
24	13045	YV9C-W24	Peso (g)	10235	21651,5	11098	4480,1	866,9	837,6	372,4	268	875	50684,6
			%	20,2	42,7	21,9	8,8	1,7	1,7	0,7	0,5	1,7	100
25	13046	YV9C-W32	Peso (g)	14333	23086	9325,8	5062,7	1398	1714,4	908,7	666,6	1551,8	58047,5
			%	24,7	39,8	16,1	8,7	2,4	3	1,6	1,1	2,7	100

14 Columna de desmonte de sulfuros
3 Columna de desmonte de óxidos
17 Total desmontes en columnas
Fuente: MYSLR

Yanacocha | Laboratorio Metalúrgico

CENTRO DE INVESTIGACIONES METALÚRGICAS
"DON ALBERTO BENAVIDES"
MINERA YANACOCHA S.R.L

M E M O R A N D U M

PARA: M. Jeffrey / H. Arevalo

DE: I. Morales / F. Loyola / MYSRL

FECHA: 05 de Enero del 2016

COPIA: F. Roberto/ NMS
G. Guzmán / MYSRL
S. Vicuña / MYSRL

SUBJECT: **LM-R-01-16 – Reporte de material de desmonte expuesto en columnas a la intemperie del Proyecto Yanacoha Verde.**

INTRODUCIÓN

La caracterización de las rocas de desmonte está definida como un proceso de selección y prueba de las muestras, para determinar la generación de acidez, neutralización y potencial lixiviación de los metales contenidos en la roca de desmonte, así como también las características químicas de los sólidos y posibles impactos de la solución de escorrentía, filtraciones y agua subterránea de las rocas almacenadas en el depósito de desmonte en la ingeniería de instalación de desmonte o en la superficie de las paredes de un pit. La caracterización de las rocas de desmonte es clave para la predicción, prevención y manejo de drenajes ácidos de roca y lixiviación de metales, que da lugar a posibles impactos ambientales en los sitios mineros.

Este reporte contiene los resultados de la prueba en columna de exposición a la intemperie de muestras de rocas de desmonte del depósito de Verde del Proyecto de Yanacocha Sulfuros. Las pruebas de caracterización del desmonte identificarán las características químicas del material de desmonte y ayudarán a determinar las características químicas de las escorrentías de los depósitos de desmonte. Comprender la química de solución de escorrentía permitirá una evaluación de la tecnología, estimará los costos de capital y operativos para el tratamiento del agua y de esta forma garantizar que las descargas de agua cumplan con los estándares para proteger la salud humana y el medio ambiente.

RESULTADOS DE LAS COLUMNAS EXPUESTAS A LA INTEMPERIE

Las columnas expuestas a la intemperie son diseñadas bajo condiciones naturales con el objetivo de determinar la química del drenaje. Diecisiete de veinticinco muestras tuvieron

suficiente material para realizar pruebas en columna con un peso de 42 Kg. El análisis granulométrico de las 25 muestras es mostrado en el Apéndice 2. Las Columnas han sido establecidas en los exteriores del Laboratorio Metalúrgico de MYSRL y han sido monitoreadas mensualmente bajo el procedimiento “Waste Rock Columns” establecido por Karen Tempel.
Las siguientes tablas resumen si hay un potencial de exceder o no los LMPs establecido por el D. S N° 010-2010-MINAM.

Análisis Químico

El análisis químico evalúa los constituyentes que están en la muestra sólida. Los resultados de ICP realizado a la cabeza de las 25 muestras se resumen en el Apéndice 5 y los ensayos de ICP realizado a la cola son mostrados en el Apéndice 6. Todos los análisis fueron realizados por el Laboratorio Analítico de MYSRL.
Los análisis químicos de las muestras sólidas no proporcionan indicadores de los impactos ambientales. Los impactos ambientales se basan en la movilidad de los metales en la solución de las pruebas cinéticas y estáticas. Los mineralogistas y geoquímicos utilizan los ensayos de sólidos para interpretar la mineralogía, la contabilidad del ácido/base y la movilidad del metal.
Un análisis mineralógico semi-cuantitativo fue realizado a cada muestra para la identificación del contenido de mineral por XRD. El informe que contiene los resultados de los análisis se puede encontrar en el Apéndice 3 con su respectiva leyenda mostrada en el Apéndice 4.

Las tablas 1 y 2 muestran el resumen de los principales metales de interés analizados en la cabeza y en la cola de las columnas expuestas a la intemperie.

Tabla 1. Análisis de Cabeza

Met Lab Code	Drill Hole	Hg	CTotal	CResidual	STotal	SSulfato	SSulfuro	Al	As	Cd	Fe	Sb	Ti	Zn	Cu
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
13022	YV9S-W8	2.25	0.04	0.02	11.58	0.54	11.04	228.4	339.8	122.0	85926	18.3	22.5	198.4	1566
13024	YV9S-W12	10.36	0.14	0.02	19.46	0.40	19.07	45.9	603.7	66.7	143056	10.7	25.7	377.9	1306
13028	YV9S-W20	3.93	0.03	0.02	6.88	0.28	6.60	57.6	589.9	112.8	54787	16.7	14.1	55.2	1402
13029	YV9C-W33	0.87	0.03	0.02	2.46	0.39	2.07	2771.0	195.4	3.1	20451	8.4	5.1	666.6	1689
13030	YV9C-W43	0.66	0.03	0.02	5.61	0.62	4.99	771.1	795.8	0.0	44460	18.7	34.1	23.4	1930
13031	YV9C-W49	0.50	0.02	0.02	5.76	0.39	5.37	2798.3	283.9	0.0	42851	8.7	23.4	24.1	1164
13032	YV9C-W51	1.79	0.03	0.02	2.06	0.25	1.81	243.5	1013.2	27.4	34057	27.4	16.5	42.3	1335
13033	YV9C-W52	0.58	0.06	0.02	2.27	0.35	1.93	4550.3	59.1	12.9	20815	0.5	4.1	3231.0	248
13034	YV9C-W53	0.43	0.02	0.02	2.89	0.37	2.52	3062.3	53.0	2.3	25070	0.4	4.8	545.8	1201
13035	YV9W-W52	1.00	0.02	0.02	6.32	0.85	5.47	1089.5	348.0	0.0	47523	8.2	7.6	43.4	2265
13036	YV9W-W57	1.05	0.03	0.02	3.71	0.67	3.04	1361.3	141.3	0.0	45552	5.8	10.1	27.5	811
13037	YV9W-W58	2.24	0.02	0.02	5.86	0.73	5.12	1190.3	157.2	0.0	51456	4.6	8.1	47.2	1515
13038	YV9W-W61	2.93	0.02	0.02	4.67	0.77	3.90	870.9	322.8	0.0	53716	7.9	6.6	30.4	1402
13041	YV9SW22	4.94	0.02	0.02	9.91	0.44	9.47	161.9	676.0	106.2	65797	9.4	20.2	201.7	1776
13042	YV9N-W4	0.19	0.05	0.02	0.09	0.08	0.01	5850.8	44.9	2.1	14744	0.2	321.8	325.8	198
13044	YV9C-W22	0.23	0.10	0.02	0.05	0.03	0.02	178.9	175.8	0.0	7776	7.2	7.6	87.1	121
13046	YV9C-W32	3.76	0.33	0.06	2.63	0.59	2.04	6508.5	91.4	5.8	25021	0.5	6.6	1393.9	722

Table 2. Análisis de Cola

Met Lab Code	Drill Hole	Hg	CTotal	CResidual	STotal	SSulfato	SSulfuro	Al	As	Cd	Fe	Sb	Ti	Zn	Cu
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
13022	YV9S-W8	3.18	0.02	0.02	11.90	0.68	11.22	256.8	291.1	1.0	93727	14.6	31.8	106.9	1113
13024	YV9S-W12	12.35	0.02	0.02	20.58	0.78	19.80	90.8	604.1	0.0	133587	10.6	26.6	246.1	1315
13028	YV9S-W20	4.90	0.02	0.02	6.54	0.30	6.24	63.8	517.9	0.0	44993	18.3	12.4	26.3	1251
13029	YV9C-W33	0.91	0.02	0.02	1.56	0.36	1.20	1549.6	224.3	0.0	14250	12.3	4.4	353.3	921
13030	YV9C-W43	1.06	0.02	0.02	4.66	0.56	4.10	395.4	732.7	0.0	30540	23.3	4.8	13.7	1878
13031	YV9C-W49	1.23	0.02	0.02	5.21	0.75	4.46	474.7	346.8	0.0	33637	12.5	3.1	14.2	1112
13032	YV9C-W51	1.79	0.02	0.02	1.10	0.21	0.89	220.6	921.6	0.0	23984	29.9	9.8	17.1	1012
13033	YV9C-W52	0.71	0.02	0.02	1.55	0.29	1.26	2289.5	59.0	3.9	10666	0.0	3.9	1494.2	202
13034	YV9C-W53	0.62	0.02	0.02	2.05	0.34	1.71	1208.6	72.2	0.0	14590	1.7	3.6	195.2	946
13035	YV9W-W52	0.96	0.02	0.02	4.99	0.38	4.61	954.6	371.4	0.0	32515	12.8	5.7	13.2	2214
13036	YV9W-W57	1.17	0.02	0.02	2.79	0.57	2.22	682.1	123.4	0.0	31100	6.1	6.1	15.3	552
13037	YV9W-W58	2.50	0.02	0.02	5.30	0.69	4.61	483.3	110.4	0.0	32689	7.2	3.8	24.5	1076
13038	YV9W-W61	3.36	0.02	0.02	3.75	0.71	3.04	541.0	267.4	0.0	35249	12.3	4.0	15.3	720
13041	YV9SW22	4.96	0.02	0.02	8.96	0.38	8.58	125.8	600.4	0.0	63379	9.2	19.7	56.2	1616
13042	YV9N-W4	0.11	0.02	0.02	0.03	0.03	0.00	6800.3	61.8	0.9	16159	0.0	449.0	324.5	175
13044	YV9C-W22	0.15	0.02	0.02	0.02	0.02	0.00	235.1	219.3	0.0	8122	19.0	20.6	86.5	249
13046	YV9C-W32	0.31	0.08	0.04	1.49	0.31	1.18	3513.7	73.2	0.3	15321	0.0	7.2	437.9	188
13789	Blanco (cuarzo)	0.06	0.03	0.02	0.02	0.02	0.00	141.1	2.4	0.0	2605	0.0	3.1	0.4	12

Soluciones

En total se han realizado 17 pruebas en columna a la intemperie, de las cuales 15 han sido lixiviadas por 68 meses y dos columnas continuaron lixiviando hasta llegar a 88 meses. La siguiente tabla contiene un resumen de las muestras de los metales lixiviados y pH que exceden los Límites Máximos Permisibles (LMPs) para la descarga de efluentes líquidos de Actividades Minero-Metalúrgicas señaladas con "+" y el símbolo "-" cuando las muestran están por debajo de los LMPs. Las tablas completas de cada columna pueden ser encontradas en el Apéndice 7.

Table 3. Summary of the leached samples

Met Lab Code	Customer_ Code	pH	As	Cd	Cu	Fe	Pb	Hg	Zn
		LMP=6-9	LMP=0.1	LMP=0.05	LMP=0.5	LMP=2	LMP=0.2	LMP=0.002	LMP=1.5
13022	YV9S-W8	+	+	+	+	+	+	+	+
13024	YV9S-W12	+	+	+	+	+	+	+	+
13028	YV9S-W20	+	+	+	+	+	+	+	+
13029	YV9C-W33	+	+	+	+	+	+	+	+
13030	YV9C-W43	+	+	+	+	+	+	+	+
13031	YV9C-W49	+	+	+	+	+	+	+	+
13032	YV9C-W51	+	+	+	+	+	+	+	+
13033	YV9C-W52	+	+	+	+	+	+	+	+
13034	YV9C-W53	+	+	+	+	+	+	+	+
13035	YV9W-W52	+	+	-	+	+	+	+	+
13036	YV9W-W57	+	+	-	+	+	+	+	+
13037	YV9W-W58	+	+	+	+	+	+	+	+
13038	YV9W-W61	+	+	+	+	+	+	+	+
13041	YV9SW22	+	+	+	+	+	+	-	+
13042	YV9N-W4	+	+	+	+	+	-	-	+
13044	YV9C-W22	-	-	-	+	+	+	+	+
13046	YV9C-W32	+	-	+	+	+	+	-	+

Límites Máximos Permisibles (LMPs) para la descarga de efluentes líquidos de Actividades Minero - Metalúrgicas

DECRETO SUPREMO Nº 010-2010-MINAM

+: Sobre el LMP

-: Bajo el LMP

La tabla N° 3 muestra que a excepción de la muestra 13044 (YV9C-W22) todas las demás muestras no cumplen los LMPs para las descarga de efluentes líquidos Minero-Metalúrgicas debido a que están por debajo del pH (6-9), esto significa que tienen un pH ácido por lo que la solución debería ser neutralizado antes de ser descargada al medio ambiente.

Las curvas de cinética de los principales parámetros y elementos de los LMPs se presentan en el Apéndice 1. Con respecto al comportamiento del pH en el tiempo se observó que a medida que pasa el tiempo de exposición de la roca de desmonte el pH va disminuyendo lo que significa que se va acidificando más, en cambio se observó que el Eh aumentó su valor paulatinamente durante los 24 primeros meses, esto significa que la solución aumenta su capacidad de oxidación durante los primeros dos años para luego mantenerse casi estable durante todo el tiempo. El comportamiento del Fe y de los sulfatos fue de incrementarse durante el segundo y tercer año de lixiviación con agua de lluvia, para luego ir disminuyendo en el tiempo; en cambio los demás metales tuvieron una tendencia a ir bajando su concentración en el tiempo.

Procedimiento

Procedure for Waste Rock Column

Yanacocha

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Urb. Los Rosales
Cajamarca, Perú
Telephone (51-76) 58-4000
Facsimile(51-76)36-9503
www.yanacocha.com

Memorandum

Date: 13 May 2009

Subject: Yanacocha Sulfides Project Waste Rock Columns – Test Protocol

To: Rene Fernandez, Delmer Fernandez, Carlos Olivares, Isabel Morales, Roger Alfonso, Charles Bucknam

From: Karen Tempel, Metallurgist

This document provides sample prep and analysis procedures for testing Yanacocha Sulfide Project waste rock using outdoor columns leached with meteoric water. Effluents from the columns will be analyzed for a variety of geochemical parameters to enable prediction of both short and long-term geochemical impacts of mining on surface waters as well as development of appropriate water treatment methods

Splits of composite samples will be sent to Newmont Metallurgical Services (NMS) in Colorado. At NMS, the samples will be characterized by acid-base accounting, metals, mineralogy, and other specialized testing.

The following tables contain a summary of the twenty-five (25) waste composites. Twenty of the composites are sulfide waste composites and five of the composites are oxide waste composites.

Composite Name	Drill Hole	From (m)	To (m)	Approx Sample Weight (kg)	SAMPLE PREP			
					250 grams of each screen fraction to NSM	8-kg composite to NMS	250-g of each screen fraction to Yanacocha Lab	Outdoor Leach Column
YV9S-W8	YS-869	111.6	140	101.7	Y	Y	Y	Y
YV9S-W10	YS-869	140	150	34.1	Y	Y	Y	N
YV9S-W12	YS-874	130.2	164	112.8	Y	Y	Y	Y
YV9S-W13	YS-874	164	177.3	45.0	Y	Y	Y	N
YV9S-W18	YS-900	72	87.6	38.0	Y	Y	Y	N
YV9S-W19	YS-900	87.6	96	26.5	Y	Y	Y	N
YV9S-W20	YS-900	96	122.6	94.0	Y	Y	Y	Y
YV9C-W33	YS-893	80	105	83.4	Y	Y	Y	Y
YV9C-W43	YS-894	51.5	80.15	96.5	Y	Y	Y	Y
YV9C-W49	YS-861	401.8	452.9	191.0	Y	Y	Y	Y
YV9C-W51	YS-863	89.95	117	91.0	Y	Y	Y	Y
YV9C-W52	YS-863	250.3	268	56.8	Y	Y	Y	Y
YV9C-W53	YS-863	268	288	68.5	Y	Y	Y	Y
YV9W-W52	YS-906	284	320	127.1	Y	Y	Y	Y
YV9W-W57	YS-858	86	112	84.5	Y	Y	Y	Y
YV9W-W58	YS-858	112	130	58.1	Y	Y	Y	Y
YV9W-W61	YS-858	202.0	226.95	86.0	Y	Y	Y	Y
YV9W-W64	YS-907	340	350	41.2	Y	Y	Y	N
YV9S-W21	YS-900	122.6	137.8	51.4	Y	Y	Y	N
YV9S-W22	YS-900	137.8	155.4	61.4	Y	Y	Y	Y

TABLE 1: Yanacocha Sulfides Project – Sulfide Waste Composites

Composite Name	Drill Hole	From (m)	To (m)	Approx Sample Weight (kg)	SAMPLE PREP			
					250 grams of each screen fraction to NSM	250 grams of each screen fraction to NSM	250 grams of each screen fraction to NSM	250 grams of each screen fraction to NSM
YV9N-W4	YS-876	0	20	58.7	Y	Y	Y	Y
YV9N-W5	YS-876	20	30	31.0	Y	Y	Y	N
YV9C-W22	YS-860	0	42	71.8	Y	Y	Y	Y
YV9C-W24	YS-860	130	161.8	51.1	Y	Y	Y	N
YV9C-W32	YS-893	45	80	60.9	Y	Y	Y	Y

TABLE 2: Yanacocha Sulfides Project – Oxide Waste Composites

Crushing the Core Composites

Each sample will be crushed to 100% minus 1 inch. The crusher must be set to obtain the largest grain size possible and still ensure that all material passing is less than 1 inch. The crushed sample will be placed into a plastic bag labeled with the composite name. The jaw crusher must be cleaned with silica sand after crushing each sample.

Drying and Splitting the Crushed Composites

Each sample must be dried at a temperature not to exceed 50 C. The dried sample must be screened at the following size fractions.

3/4-inch, 1/2-inch, 1/4-inch, and 8 mesh

The dry weight of each size fraction must be recorded. After screening, each size fraction must be placed in a separate plastic bag labelled with the composite name and the size fraction. Prepare a spreadsheet that summarizes the name of each composite and the weight retained for each size fraction. Charles Bucknam at NMS will evaluate the screen results and determine if screening at finer size fractions is required. Do not continue with preparation of the samples until confirmation from Charles Bucknam whether the composites need to be screened finer.

Preparation of samples to Send to NMS

The samples for NMS need to be prepared and shipped to the attention of Charles Bucknam at the following shipping address. All samples must be double-bagged and labelled with "Yanacocha Sulfides Project", the Composite Name, and a brief description of the contents of the bag. For example, "+3/4-inch size fraction". Double-bagging each sample is important to prevent contamination and both bags must be labelled.

Newmont Metallurgical Services
Attention: Charles Bucknam
10101 East Dry Creek Road
Englewood, Colorado 80112 U.S.A.
1-303-708-4430

1. Using a splitter, split a 250 gram sample from each size fraction for each composite. Label and double-bag each size fraction. The individual size fractions are sent to NMS for mineralogy and chemical characterization.
2. Prepare an 8-kg composite at the same weight proportion indicated by the screen analysis. Label and double-bag the composite. The composites are sent to NMS for specialized testing.

Preparation of samples for on-site Chemical Characterization

Using a splitter, split a 250 gram sample from each size fraction for each composite. Label each sample bag with the Composite Name and the Size Fraction. Submit each sample to the Analytical Lab for the following analyses:

AuFA, AgAD, CuAD, Ctot, Stot, C and S after roast, Hg, ICP Metals

Preparation of Waste Rock Columns

Table 1 and Table 2 identify which composites will be prepared as columns for outdoor leaching with rain water. The target is to fill the 6-inch ID PVC column to a height in the column of 5-feet (approximately 40-kg).

Prepare a representative 40-kg sample in a sample bag from the individual size fractions and maintain the correct weight proportion of each size fraction. The rock will be transferred from the composite sample bag to the outdoor column using a transfer container. The empty transfer container will be placed onto a scale and the scale will be tared. The transfer container will be filled with a representative portion of the composite sample material and weighed. The rock from the transfer container will be loaded into the top of the column and the process will be repeated until the appropriate column height is reached. The mass of each transfer will be recorded in a logbook and summed to determine the total mass of rock in the column.

After loading the column, measure the height of rock in the column and record the height on the log sheet.

In addition to the seventeen (17) waste rock columns, one column of clean silica sand must be set up to quantify atmospheric loadings of metals to the columns.

Initial Loading of Columns with pH Adjusted Distilled Water

The outdoor columns will be leached with rain under natural environmental conditions. In order to minimize the lag time involved in naturally loading the outdoor columns to field capacity moisture, the columns will be pre-loaded with distilled water that has been pH adjusted to that of local meteoric water. Contact the Environmental Department for the pH of Yanacocha meteoric water. Each column may need approximately 3.5 liters of pH adjusted distilled water to "wet" the columns.

Using a dispenser with perforations that will ensure an even distribution of the pH adjusted distilled water over the entire area of the top of the column, add incremental 50-100 milliliters of pH adjusted distilled water to the top of each column until a drop of discharge water is observed at the bottom of the column outlet. Allow enough time in between the incremental additions for the water to fully absorb into the rock matrix. The total volume of solution added to each column must be recorded on the log sheet.

Outdoor Column Sampling

Outdoor columns will be sampled for field parameters on a monthly basis and samples will be collected based on the discharge volume generated from infiltrating rain water. The volume of column discharge will be checked on a weekly basis or immediately after a significant rain event. The initial schedule calls for sample collection for assay purposes once each month. The sampling schedule may change based on column flow characteristics, field measurement data and/or analytical results. A sampling event must be scheduled whenever storm events cause the bucket to approach full.

A log sheet for field sampling is included in the Appendix. Field measurements are taken by the technician and recorded on the log sheet.

Table 3 identifies the amount of sample to be taken for the different tests performed by the Yanacocha analytical laboratory. Each sample has a priority in case there is not enough leachate for all of the samples. The samples are not intended to be stored and must be analyzed within 3 days. Ensure that the leachate is thoroughly mixed before taking each sample.

Retaining Excess Leachate

Each column needs to have a separate container (55 liter drum preferred) to store excess leachate after sampling. The excess leachate will be reserved for future water treatment test work. The excess leachate containers must be labeled with the composite name and must protect the leachate from exposure to sunlight. After a container is opened to add leachate, the lid on the container must be secured tightly to prevent evaporation of the leachate.

TABLE 3 Outdoor Waste Rock Columns Sample Priority						
Sample Priority	Bottle Type	Laboratory to Analyze Sample	Sample Volume (minimum)	Sample Volume (desired)	Sample Holding Time (maximum)	Analysis Group
Field	NA	Metallurgical	NA	NA	ASAP	pH, Conductivity, Temperature, Eh, and Dissolved Oxygen
1	250 ml polyethylene bottle	Metallurgical	100 ml	220 ml	3 days	HACH Sulfate
						HACH Total Iron
						TDS
2	250 ml polyethylene bottle	Analytical	100 ml	200 ml	3 days	ICP Metals & Cations (Total and Dissolved)
						Mercury (Total and Dissolved)
3	1,000 ml polyethylene bottle	Environmental	400 ml	825 ml	3 days	ICP-MS Metals (Total and Dissolved)
						General Parameters and Anions
						Nitrate + Nitrite
						Ammonia-Nitrogen

pH – record pH of the solution in the leachate bucket.
Conductivity – sample solution in the leachate bucket and record conductivity in Siemens/centimeter.
Temperature – record temperature of the solution in the leachate bucket in degrees Centigrade to the nearest 0.5 degrees.
Eh – sample solution in the leachate bucket and record oxidation reduction potential (ORP) in mV.
Dissolved Oxygen – sample solution in the leachate collection bucket and record in mg/L.
Total Dissolved Solids – TDS is measured by the OAKLON CON 510 and reported in ppm.
HACH Sulfate (SulfaVer4) – If the sample is unfiltered and contains significant turbidity the test may provide inaccurate results because of particulate interferences. If needed, filter the sample through a 0.45-um filter. Record the result in mg/L.
HACH Total Iron (Ferrover) – If the sample is unfiltered and contains significant turbidity the test may provide inaccurate results because of particulate interferences. If needed, filter the sample through a 0.45-um filter. Record the result in mg/L.
ICP Metals & Cations - Analyses must be performed as Total and Dissolved. Filter the portion of the sample for dissolved analyses with a 0.45 micrometer cellulose acetate membrane filter. Include aluminium, calcium, iron, magnesium, potassium, sodium, and tin.
Mercury - Analyses must be performed as Total and Dissolved. Filter the portion of the sample for dissolved analyses with a 0.45 micrometer cellulose acetate membrane filter.
ICP-MS Metals - Analyses must be performed as Total and Dissolved. Filter the portion of the sample for dissolved analyses with a 0.45 micrometer cellulose acetate membrane filter. Include antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.
General Parameters and Anions - Includes Acidity, Alkalinity; total Carbonate, Bicarbonate, and Hydroxide; and Anions Chloride, Fluoride, and Sulfate.

Quality Assurance and Quality Control

- **Field Quality Control Procedures** – Field quality control will consist of collecting quality control samples, decontaminating field equipment, operating/maintaining/calibrating field equipment in accordance with manufacturer's instructions, using disposable equipment when possible, following standard operating procedures, using field log sheets, and using skilled personnel for sampling. All samples must be analysed within 3 days of the time of taking the sample.
- **Field Duplicate Samples** – At least once per month, a field duplicate will be collected from a random leachate bucket to submit to the metallurgical laboratory, the analytical laboratory, and the environmental laboratory. Information regarding the collection of field duplicates will be recorded in the Field Duplicate Log Sheet included in the Appendix. The name of the field duplicate sample will be YV9F-W00. Do not disclose the identity of the field duplicate to the laboratories. Maintain a separate spreadsheet for the field duplicates analysed by the Metallurgical Laboratory, Analytical Laboratory, and Environmental Laboratory. In the spreadsheet, report the assay results of the duplicate sample and the original field samples so that the data can be analysed in the future for validity.
- **Database and Data Validation** – Record all field data and analytical results into a separate spreadsheet for each waste rock column. This data will be analysed in the future by a consultant. Record all field comments. If there is any question about the validity of the data, make a notation in the spreadsheet.

Waste Rock Column Log Sheet **Sheet _____ of _____**

Composite Name: _____

Dry weight of Rock in Column (kg): _____ Initial Height of Rock in Column (mm): _____ Initial Water to "Wet" Rock (L): _____

Date (D-M-Y)	Time (24:00)	Leachate Volume (L)	pH	Cond. (Siemens /cm)	Temp (°C)	Eh (mV)	D.O. (mg/L)	Rock Height in Column (mm)	HACH Sulfate (mg/L) Met Lab	HACH Total Fe (mg/L) Met Lab	TDS (ppm) Met Lab	Field Technician (Name)	Samples Collected (Yes or No)		
													Met Lab	Anal Lab	Env Lab

NOTES (always include the date the note is recorded):

_____

_____

_____

_____

Field Duplicate Log Sheet **Sheet _____ of _____**

Composite Name: WV9F-W00

This is a sample name reserved for the Field Duplicate samples for Quality Assurance

Date (D-M-Y)	Time (24:00)	Met Field Duplicate (leachate from which column)	Analytical Field Duplicate (leachate from which column)	Environmental Field Duplicate (leachate from which column)	Field Technician

APÉNDICE 1

Curvas de Cinética

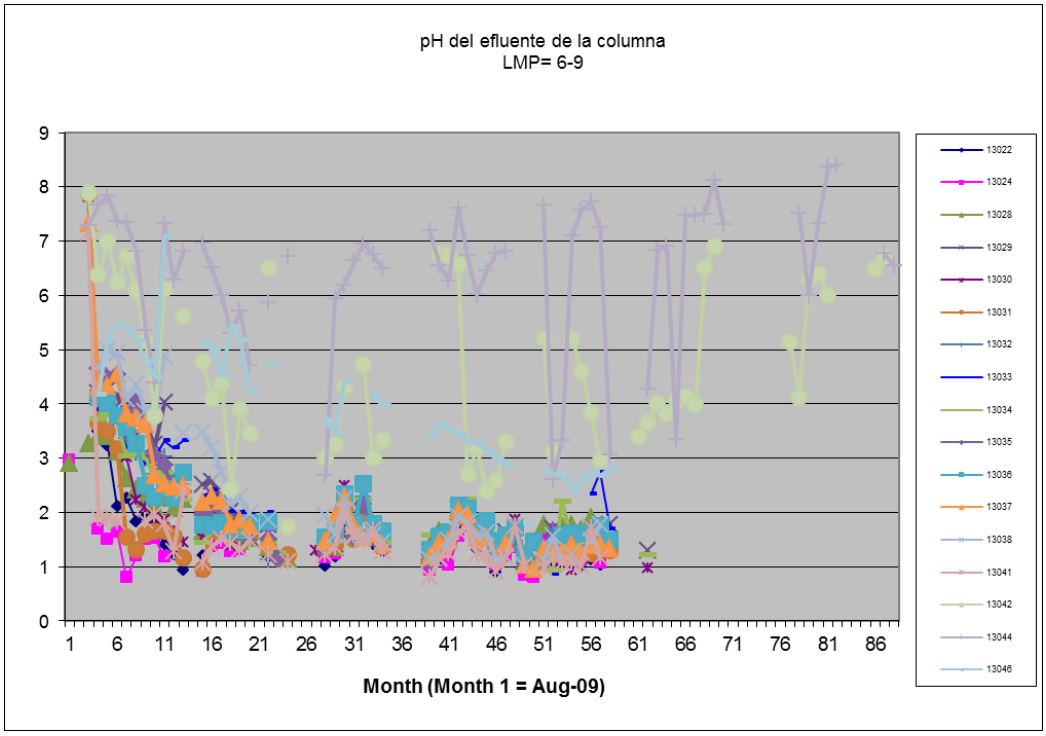


Figure 1. Column Effluent pH

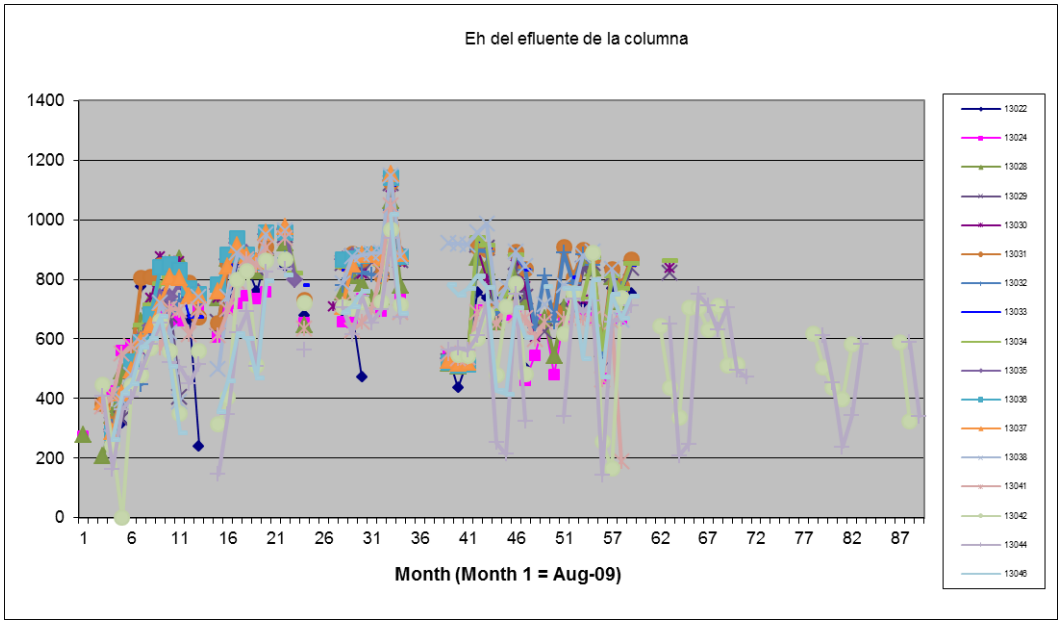


Figure 2. Column Effluent Eh

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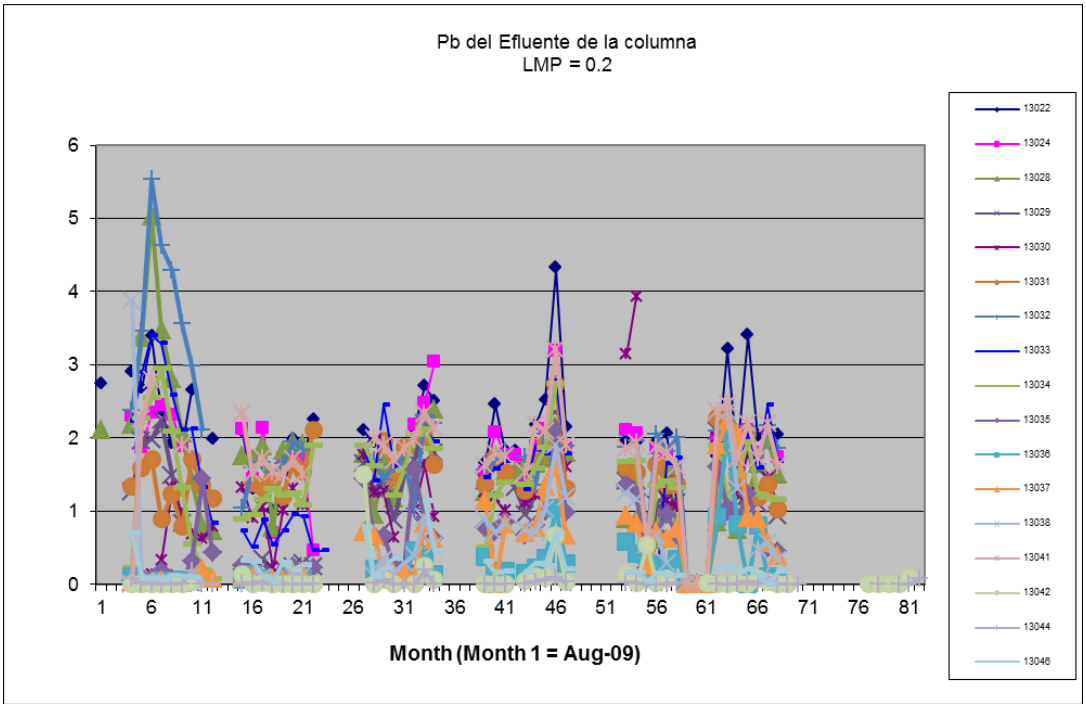


Figure 3. Column Effluent Pb

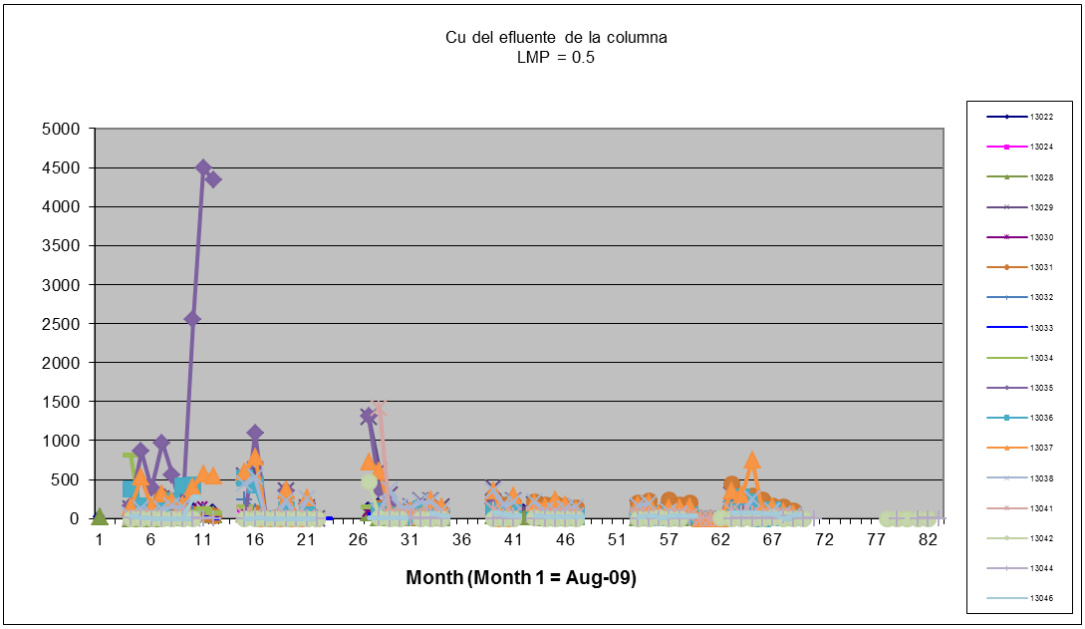


Figure 4. Column Effluent Cu

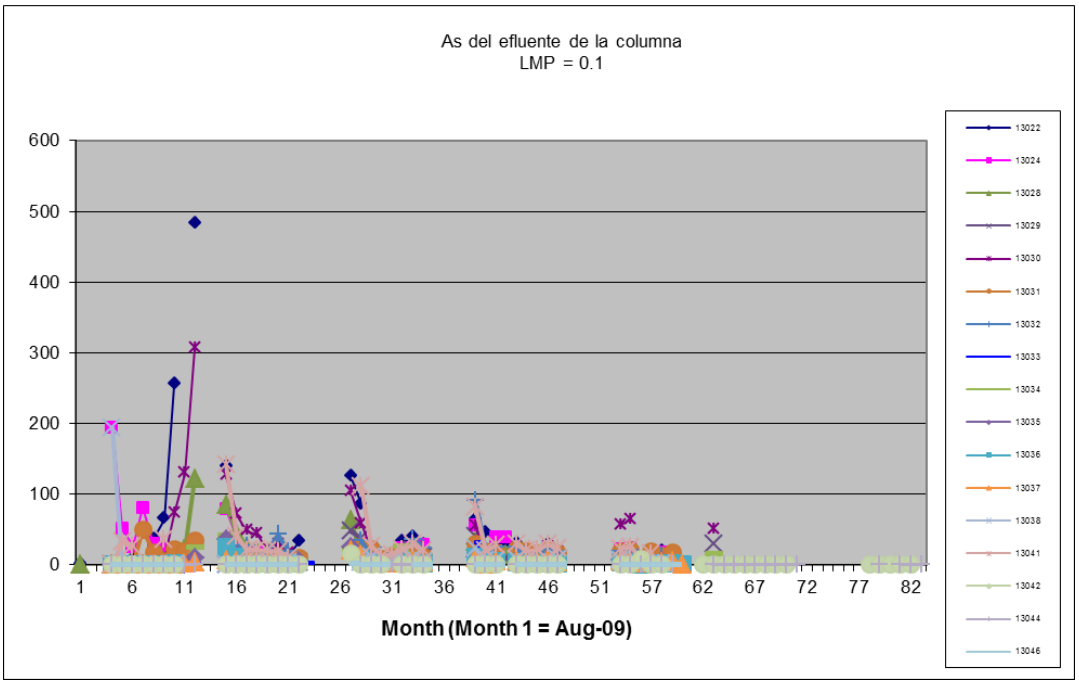


Figure 5. Column Effluent As

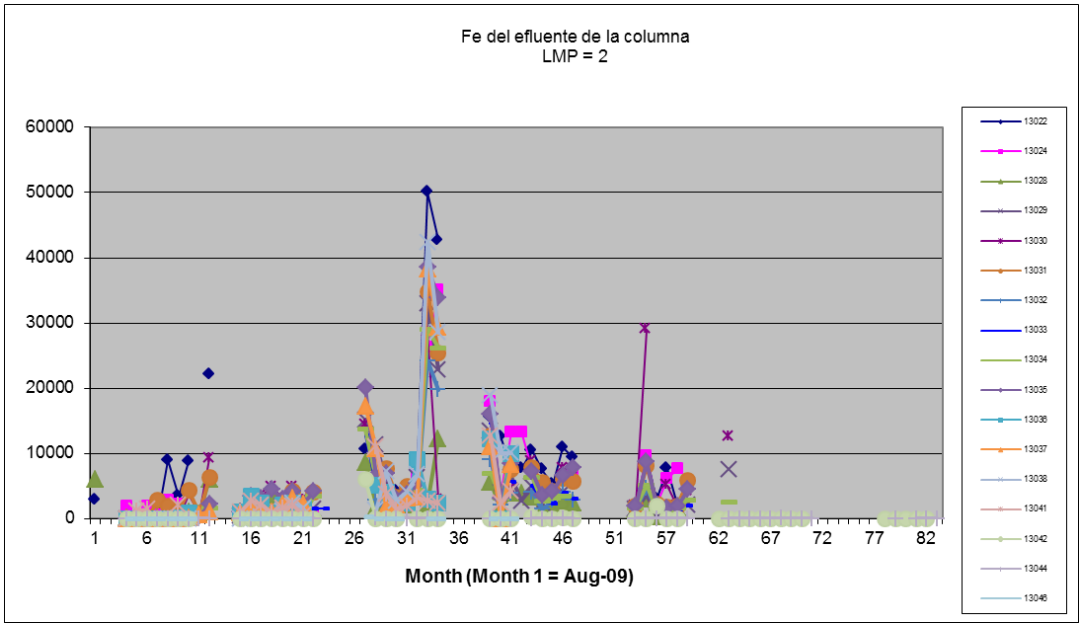


Figure 6. Column Effluent Fe

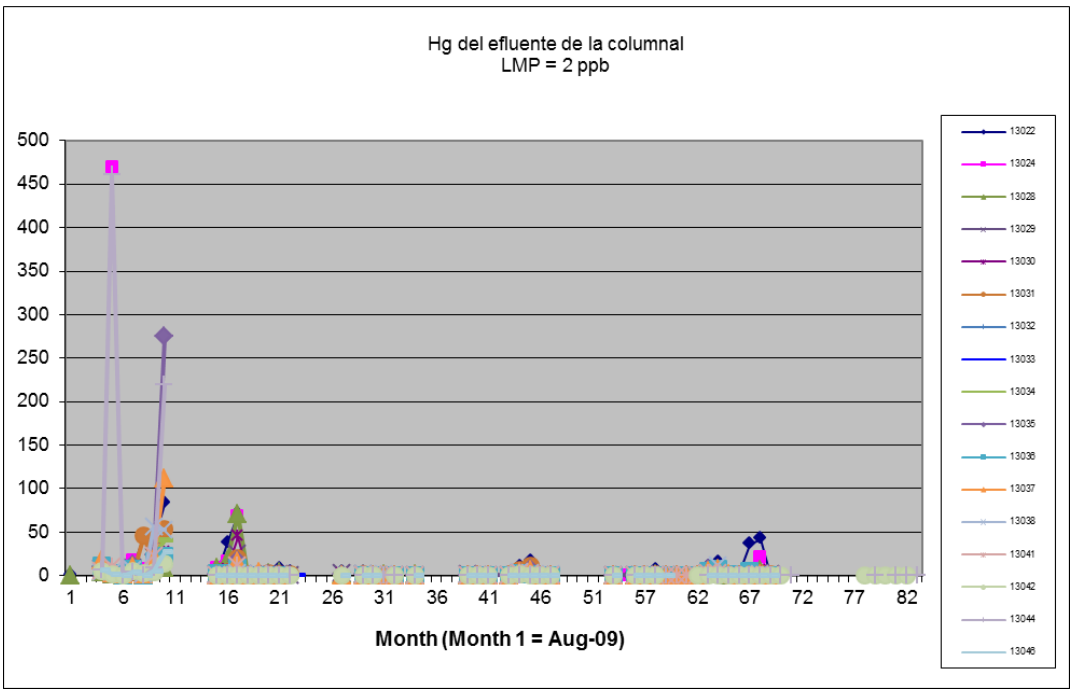


Figure 7. Column Effluent Hg, ppb

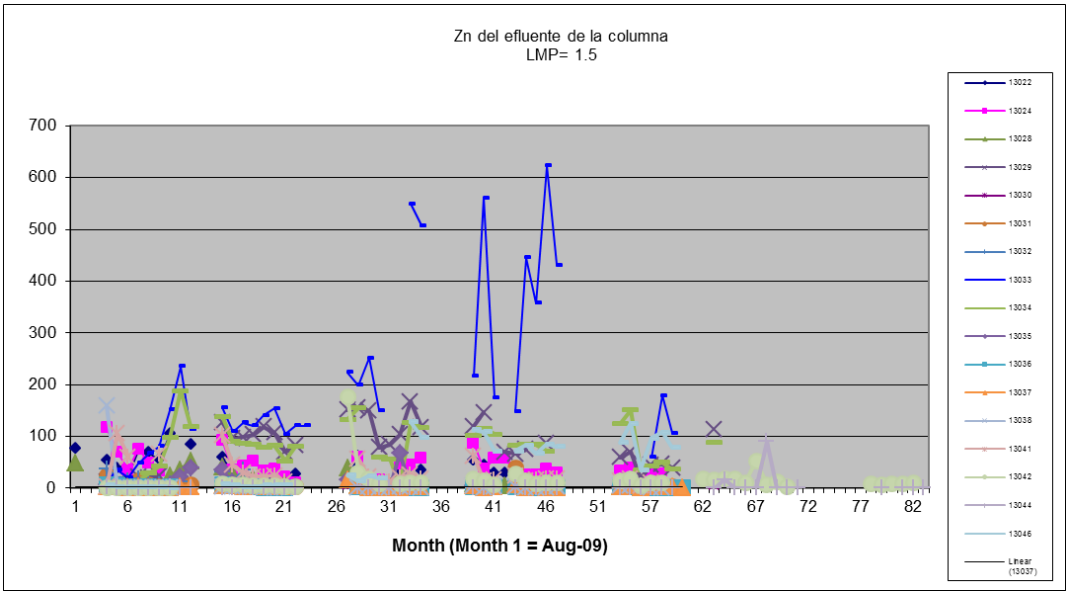


Figure 8. Column Effluent Zn

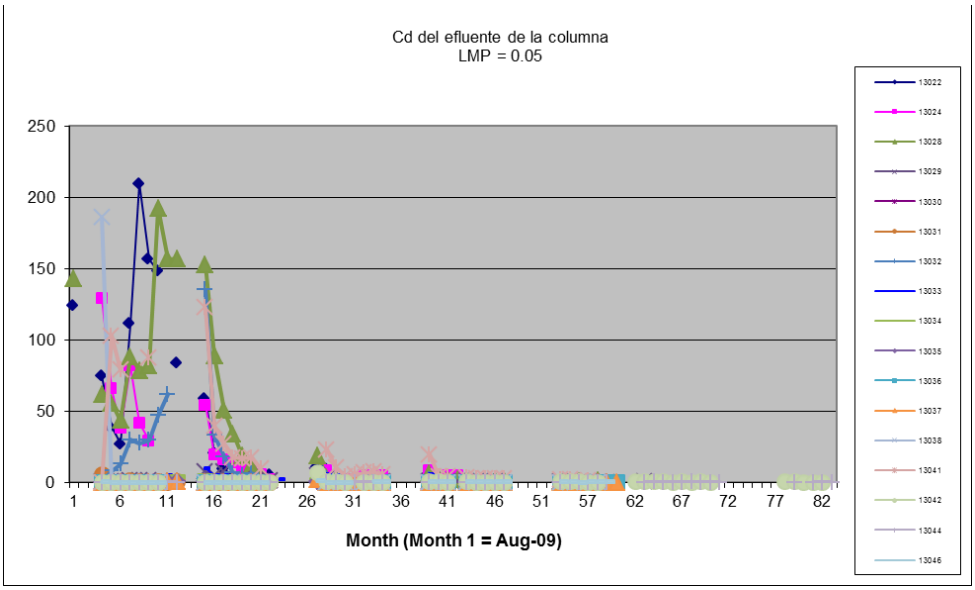


Figure 9. Column Effluent Cd

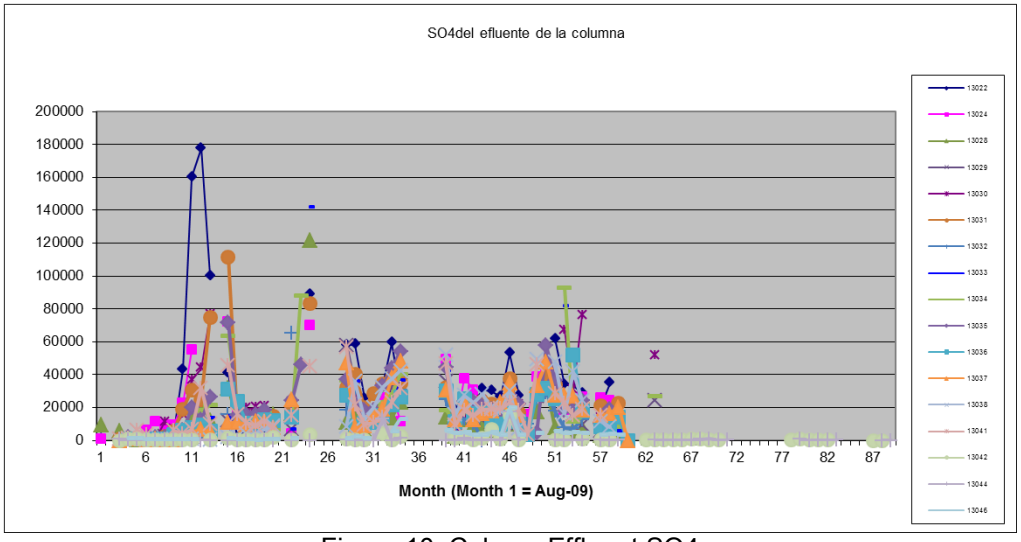


Figure 10. Column Effluent SO4

APÉNDICE 2

Size Fraction

N°	Met Code	Geol Code		MESH - WEIGHT RETAINED									Total
				3/4 "	1/2"	1/4"	+8M	+14M	+30M	+50M	+100M	-100M	
1	13022	YV9S-W8	Peso (g)	8262.2	45597.5	20738.0	12655.0	2598.2	2771.3	1475.1	1132.4	3592.4	98822.1
			%	8.4	46.1	21.0	12.8	2.6	2.8	1.5	1.1	3.6	100.0
2	13023	YV9S-W10	Peso (g)	2248.2	14643.0	7293.0	4741.8	1193.9	1418.5	766.6	628.0	2253.5	35186.5
			%	6.4	41.6	20.7	13.5	3.4	4.0	2.2	1.8	6.4	100.0
3	13024	YV9S-W12	Peso (g)	12330.6	62263.0	23635.5	14208.2	2887.8	3079.6	1649.2	1281.0	3937.0	125271.9
			%	9.8	49.7	18.9	11.3	2.3	2.5	1.3	1.0	3.1	100.0
4	13025	YV9S-W13	Peso (g)	1824.8	12462.2	9724.4	8650.8	2543.4	3036.5	1579.2	1238.0	3201.3	44260.6
			%	4.1	28.2	22.0	19.5	5.7	6.9	3.6	2.8	7.2	100.0
5	13026	YV9S-W18	Peso (g)	3124.6	18252.5	8083.2	4948.2	1020.1	985.5	451.5	306.7	756.1	37928.3
			%	8.2	48.1	21.3	13.0	2.7	2.6	1.2	0.8	2.0	100.0
6	13027	YV9S-W19	Peso (g)	657.2	7565.7	6219.5	5059.0	1350.4	1624.5	875.9	744.6	2163.3	26260.1
			%	2.5	28.8	23.7	19.3	5.1	6.2	3.3	2.8	8.2	100.0
7	13028	YV9S-W20	Peso (g)	12337.8	64316.5	25444.0	11693.4	1329.9	1424.9	721.2	505.6	1176.2	118949.5
			%	10.4	54.1	21.4	9.8	1.1	1.2	0.6	0.4	1.0	100.0
8	13029	YV9C-W33	Peso (g)	6982.5	39149.7	15711.2	9794.0	2455.9	2791.3	1423.8	1172.8	2964.4	82445.6
			%	8.5	47.5	19.1	11.9	3.0	3.4	1.7	1.4	3.6	100.0
9	13030	YV9C-W43	Peso (g)	7054.1	41553.7	19619.5	13297.8	2956.4	3102.6	1735.5	1500.1	5333.8	96153.5
			%	7.3	43.2	20.4	13.8	3.1	3.2	1.8	1.6	5.5	100.0
10	13031	YV9C-W49	Peso (g)	16004.5	82656.5	36517.4	26716.5	6429.6	6954.9	3721.0	3026.0	7203.9	189230.4
			%	8.5	43.7	19.3	14.1	3.4	3.7	2.0	1.6	3.8	100.0
11	13032	YV9C-W51	Peso (g)	5735.3	26868.0	12376.0	10349.6	2766.2	2851.8	1361.5	869.9	2453.9	65632.1
			%	8.7	40.9	18.9	15.8	4.2	4.3	2.1	1.3	3.7	100.0
12	13033	YV9C-W52	Peso (g)	4392.6	24639.0	10878.4	7620.0	2185.6	2423.6	1109.5	840.0	1971.7	56060.4
			%	7.8	44.0	19.4	13.6	3.9	4.3	2.0	1.5	3.5	100.0
13	13034	YV9C-W53	Peso (g)	4415.6	30932.0	14281.6	9543.4	2465.8	2536.2	1180.6	989.8	2085.2	68430.2
			%	6.5	45.2	20.9	13.9	3.6	3.7	1.7	1.4	3.0	100.0
14	13035	YV9W-W52	Peso (g)	9770.0	55617.5	27800.5	19319.5	4321.1	4448.8	2398.0	1874.5	4950.7	130500.5
			%	7.5	42.6	21.3	14.8	3.3	3.4	1.8	1.4	3.8	100.0
15	13036	YV9W-W57	Peso (g)	7845.0	41642.0	15065.2	9539.4	2312.0	2811.3	1638.6	1560.5	4443.5	86857.6
			%	9.0	47.9	17.3	11.0	2.7	3.2	1.9	1.8	5.1	100.0
16	13037	YV9W-W58	Peso (g)	5373.6	28075.5	11057.0	6559.9	1684.1	2088.9	1290.5	1043.5	3168.6	60341.6
			%	8.9	46.5	18.3	10.9	2.8	3.5	2.1	1.7	5.3	100.0
17	13038	YV9W-W61	Peso (g)	7263.2	37863.5	16117.0	10026.8	2393.9	2837.6	1743.4	2001.8	5422.5	85669.7
			%	8.5	44.2	18.8	11.7	2.8	3.3	2.0	2.3	6.3	100.0
18	13039	YV9W-W64	Peso (g)	7768.6	17912.0	7802.9	3599.8	805.4	846.7	400.8	257.8	817.0	40211.1
			%	19.3	44.5	19.4	9.0	2.0	2.1	1.0	0.6	2.0	100.0
19	13040	YV9S-W21	Peso (g)	9459.0	24311.0	10757.0	5028.7	1193.1	1357.3	699.4	578.2	1479.5	54863.1
			%	17.2	44.3	19.6	9.2	2.2	2.5	1.3	1.1	2.7	100.0
20	13041	YV9S-W22	Peso (g)	7493.3	29831.0	10121.6	6723.0	1529.9	1750.1	966.7	678.7	1793.7	60887.9
			%	12.3	49.0	16.6	11.0	2.5	2.9	1.6	1.1	2.9	100.0
21	13042	YV9N-W4	Peso (g)	4938.7	15170.4	11753.4	8748.0	2808.5	4064.8	2796.6	2317.3	5117.3	57715.0
			%	8.6	26.3	20.4	15.2	4.9	7.0	4.8	4.0	8.9	100.0
22	13043	YV9N-W5	Peso (g)	2372.5	8982.0	5313.2	5321.0	1887.7	2373.4	1305.1	1054.4	2148.9	30758.3
			%	7.7	29.2	17.3	17.3	6.1	7.7	4.2	3.4	7.0	100.0
23	13044	YV9C-W22	Peso (g)	11844.6	33729.7	12577.0	7409.4	1461.7	1186.1	431.4	267.7	828.6	69736.2
			%	17.0	48.4	18.0	10.6	2.1	1.7	0.6	0.4	1.2	100.0
24	13045	YV9C-W24	Peso (g)	10235.4	21651.5	11097.6	4480.1	866.9	837.6	372.4	268.0	875.0	50684.6
			%	20.2	42.7	21.9	8.8	1.7	1.7	0.7	0.5	1.7	100.0
25	13046	YV9C-W32	Peso (g)	14333.4	23086.0	9325.8	5062.7	1398.0	1714.4	908.7	666.6	1551.8	58047.5
			%	24.7	39.8	16.1	8.7	2.4	3.0	1.6	1.1	2.7	100.0

14	Sulfide Waste Rock Column
3	Oxide Waste Rock Column
17	**Total Waste Rock Column**

APÉNDICE 3

Semicuantitative XRD Data (Wt %) of Twenty-five Yanacocha Sulfides Head Samples

Sample ID	QTZ	PY	ALU	RUT	PYRO	DIA	MUS	GAL	S	KAO	KSPAR	OTHER
YS Sur LA SM HA #01	79	17	2	<1				<1	<1			
YS Sur LA SM HA #02	52	8	13		17	4				6		
YS Sur Teut SM HA #03	65	33		1				<1				
YS Sur LA SM HA #04	66	9	4		6		14					
YS Sur LA SM HA #05	85	9	2	<1	<1			<1	2			
YS Sur BXFM AA-PYR HA #06 HCT-01	55	11	5	<1	25	4						
YS Sur Teut SM HA #07	86	11		<1	<1			<1	1			
YS Cent Ypq AA-Pyr A #08	70	3	2		6	1	12			5		
YS Cent YpqBX AA-Pyr HA #09	78	7	3	1	8	2						enar<1
YS Cent Yp AA-Pyr HA #10	56	6	2	1	7	4	23					
YS Cent Teut SM A #11	94	3	1	1	1							
YS Cent Ypq AA-Pyr A #12	69	4	2				24					sph<1
YS Cent Ypq AA-Pyr A #13	66	4	2		13	3	12					
YS Oeste YpqBx AA-Pyr HA #14	58	7	3	1	15	14						svan=2
YS Oeste Yp2 AA-Pyr A #15 HCT-02	66	4	3	1	4	12	8					goe=2
YS Oeste Yp2 AA-Pyr HA #16	55	6	4	1	13	12	7			2		
YS Oeste Yp2 AA-Pyr HA #17	62	5	3	1	12	13						svan=2 goe=2
YS Oeste Ypq-E AA-Aln HA #18	64	9	1		7	18						svan=1
YS Sur Teut SM HA #19	75	20	1	<1	<1			<1	2			
YS Sur Teut AA-Aln HA #20	85	12		<1				<1	2			
YS Norte Yp ARG I #21	36						10				15	plag=39 amph<1
YS Norte Ypq ARG A #22 HCT-04	60	3					20				17	sph<1
YS Cent Teut SM I #23 HCT-03	99			1	<1							
YS Cent Teut SM SA #24	98	<1		1		<1						
YS Cent Ypq ARG A #25	57	3					19				21	

APÉNDICE 4

Mineral Key

Mineral	Formula	Mineral	Formula
Quartz (QTZ)	SiO_2	Kaolinite (KAO)	$Al_2Si_2O_5(OH)_4$
Pyrite (PY)	FeS_2	K-Feldspar (KSPAR)	$KAlSi_3O_8$
Alunite (ALU)	$KAl_3(SO_4)_2(OH)_6$	Enargite (ENAR)	Cu_3AsS_4
Rutile (RUT)	TiO_2	Sphalerite (SPH)	ZnS
Pyrophyllite (PYRO)	$AlSi_2O_5(OH)$	Svanbergite (SVAN)	$SrAl_3(PO_4)(SO_4)(OH)_6$
Diaspore (DIA)	AlO(OH)	Goethite (GOE)	FeO(OH)
Muscovite/Sericite (MUS)	$KAl_2(AlSi_3O_{10})(OH)_2$	Plagioclase (PLAG)	$(Na,Ca)(Si,Al)AlSi_2O_8$
Galena (GAL)	PbS	Amphibole (AMPH)	$NaCa_2(Fe,Mg,Al)_5(Si,Al)_8O_{22}(OH)_2$
Sulfur (S)	S		

APÉNDICE 5

Size Fraction and Head Assay

APÉNDICE 6

Tail Assay

Met Lab Code	Drill Hole	Tail Assays of 18 Samples									ICP								
		Au	Ag	Cu	CTotal	CResidual	STotal	SSulfato	SSulfuro	Hg	Al	As	B	Ba	Be	Bi	Ca	Cd	Co
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
13022	YV9S-W8	0.72	7.61	1113.10	0.02	0.02	11.90	0.68	11.22	3.18	256.83	291.13	0.00	38.19	0.00	4.64	61.45	0.95	15.43
13024	YV9S-W12	1.00	6.67	1315.44	0.02	0.02	20.58	0.78	19.80	12.35	90.81	604.07	0.00	51.63	0.00	10.25	16.30	0.00	26.86
13028	YV9S-W20	0.42	6.15	1250.57	0.02	0.02	6.54	0.30	6.24	4.90	63.75	517.91	0.00	134.26	0.00	5.33	21.55	0.02	21.22
13029	YV9C-W33	0.12	15.85	920.79	0.02	0.02	1.56	0.36	1.20	0.91	1549.57	224.31	8.37	397.78	0.04	9.71	8.99	0.00	1.24
13030	YV9C-W43	0.34	6.79	1877.99	0.02	0.02	4.66	0.56	4.10	1.06	395.44	732.65	0.00	65.73	0.01	11.28	7.29	0.00	4.39
13031	YV9C-W49	0.12	1.86	1111.65	0.02	0.02	5.21	0.75	4.46	1.23	474.67	346.81	0.00	24.14	0.02	1.12	14.42	0.00	4.86
13032	YV9C-W51	0.35	18.94	1012.34	0.02	0.02	1.10	0.21	0.89	1.79	220.64	921.57	0.00	580.61	0.01	5.44	19.56	0.00	1.21
13033	YV9C-W52	0.05	3.37	202.42	0.02	0.02	1.55	0.29	1.26	0.71	2289.47	59.02	11.34	315.73	0.06	2.38	8.47	3.87	1.77
13034	YV9C-W53	0.16	3.62	945.55	0.02	0.02	2.05	0.34	1.71	0.62	1208.56	72.24	6.68	233.40	0.02	1.19	4.02	0.00	3.12
13035	YV9W-W52	0.19	2.64	2214.11	0.02	0.02	4.99	0.38	4.61	0.96	954.62	371.40	0.00	19.25	0.01	3.01	7.29	0.00	7.38
13036	YV9W-W57	0.07	24.15	551.87	0.02	0.02	2.79	0.57	2.22	1.17	682.06	123.41	0.00	278.49	0.00	2.32	26.90	0.00	3.46
13037	YV9W-W58	0.09	15.01	1075.64	0.02	0.02	5.30	0.69	4.61	2.50	483.28	110.42	0.00	77.57	0.00	7.30	14.72	0.00	6.86
13038	YV9W-W61	0.18	10.50	719.80	0.02	0.02	3.75	0.71	3.04	3.36	540.95	267.44	0.00	248.26	0.00	4.97	31.09	0.00	3.76
13041	YV9SW22	0.55	2.65	1615.88	0.02	0.02	8.96	0.38	8.58	4.96	125.79	600.38	0.00	41.17	0.02	6.16	18.93	0.00	15.58
13042	YV9N-W4	N/A	6.16	175.12	0.02	0.02	0.03	0.03	0.00	0.11	6800.32	61.81	6.52	134.45	0.00	5.02	1166.16	0.92	1.73
13044	YV9C-W22	N/A	1.08	248.93	0.02	0.02	0.02	0.02	0.00	0.15	235.06	219.26	0.00	60.22	0.00	0.00	118.36	0.00	1.23
13046	YV9C-W32	0.04	1.98	188.25	0.08	0.04	1.49	0.31	1.18	0.31	3513.66	73.24	8.84	199.63	0.62	1.10	1906.73	0.25	2.88
13789	Blanco (cuarzo)	N/A	0.05	11.83	0.03	0.02	0.02	0.02	0.00	0.06	141.06	2.45	10.32	13.10	0.00	0.00	487.20	0.00	0.14

Met Lab Code	Drill Hole																					
		Cr	Fe	Ga	Li	Mg	Mn	Mo	Na	Nb	Ni	Pb	Sb	Sc	Se	Sn	Sr	Te	Ti	Tl	V	W	Zn
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
13022	YV9S-W8	129.30	93726.71	8.10	0.19	18.17	66.26	1.81	38.91	0.00	13.11	3921.84	14.61	0.00	0.00	3.58	13.43	90.59	31.84	3.12	6.66	0.00	106.89
13024	YV9S-W12	137.70	133587.29	13.56	0.24	18.56	106.86	0.81	31.94	0.00	24.24	3578.54	10.58	0.00	0.00	2.90	4.20	148.25	26.55	16.06	8.40	0.00	246.14
13028	YV9S-W20	148.08	44993.34	6.02	0.11	7.41	43.71	25.03	32.39	1.18	15.43	3129.55	18.26	0.00	0.00	2.53	2.62	53.45	12.39	4.12	2.53	0.00	26.31
13029	YV9C-W33	65.90	14249.56	4.17	0.33	39.88	24.11	44.14	39.87	1.55	3.57	268.34	12.29	0.20	0.55	2.47	7.54	18.03	4.42	0.98	4.96	1.50	353.31
13030	YV9C-W43	111.63	30539.79	3.09	0.09	5.08	31.69	41.84	36.80	1.09	7.43	54.06	23.32	0.00	0.36	4.86	10.72	35.77	4.82	0.97	5.80	0.00	13.68
13031	YV9C-W49	48.89	33637.30	4.29	0.14	3.98	25.17	42.48	2137.88	0.69	5.73	75.35	12.52	0.00	0.00	2.46	16.83	37.07	3.09	0.82	6.00	0.00	14.24
13032	YV9C-W51	130.80	23984.35	4.03	0.26	6.35	30.63	29.04	35.31	0.52	6.96	1261.81	29.94	0.00	0.41	3.93	10.81	30.07	9.80	0.94	2.20	0.00	17.14
13033	YV9C-W52	72.46	10665.77	4.79	0.16	64.71	26.07	1.71	46.23	0.16	3.73	1203.26	0.00	0.15	0.00	0.38	5.55	13.38	3.87	1.46	2.50	0.00	1494.23
13034	YV9C-W53	55.30	14590.09	4.12	0.33	21.89	18.77	42.46	47.02	0.78	3.84	153.00	1.66	0.12	0.03	1.08	6.85	17.51	3.57	1.12	5.42	0.00	195.17
13035	YV9W-W52	41.01	32515.27	6.09	0.11	6.36	23.58	45.89	41.60	0.54	4.88	217.23	12.84	0.14	0.00	3.01	7.92	36.62	5.72	1.77	8.29	0.00	13.23
13036	YV9W-W57	62.93	31099.63	5.01	0.10	14.55	28.23	16.21	2418.05	1.39	4.73	55.08	6.07	0.05	0.00	1.07	13.28	38.08	6.10	0.60	13.51	0.00	15.34
13037	YV9W-W58	76.26	32688.56	4.29	0.00	11.24	29.44	8.23	47.40	2.44	6.06	33.19	7.24	0.00	0.00	1.97	9.13	35.79	3.77	0.63	18.51	0.00	24.53
13038	YV9W-W61	60.13	35248.94	5.59	0.12	9.69	27.53	15.59	202.88	1.49	4.64	100.37	12.29	0.00	0.00	2.01	15.83	39.76	4.04	0.21	11.96	0.00	15.31
13041	YV9SW22	143.12	63379.25	5.51	0.14	11.13	50.58	4.03	33.20	0.00	16.33	2489.31	9.16	0.00	0.00	2.95	3.23	63.68	19.65	6.26	3.28	0.00	56.21
13042	YV9N-W4	21.95	16159.40	2.07	2.18	1628.60	273.18	1.26	458.86	5.90	1.66	571.53	0.00	268.77	0.00	0.00	27.50	3.03	449.02	0.91	19.81	0.00	324.53
13044	YV9C-W22	123.29	8122.07	1.28	0.63	22.82	38.60	36.22	11.83	0.64	120.58	100.08	18.97	55.35	3.61	7.21	4.50	1.79	20.57	0.26	1.46	213.44	86.48
13046	YV9C-W32	56.22	15321.10	0.00	0.15	175.60	2172.72	2.57	310.43	1.91	3.41	271.28	0.00	0.28	0.00	0.00	26.03	17.28	7.20	3.31	3.16	0.00	437.86
13789	Blanco (cuarzo)	189.88	2605.38	0.00	0.12	54.39	34.97	3.26	53.16	4.26	11.34	0.82	0.00	4.62	0.00	0.11	1.04	1.51	3.13	0.14	0.41	0.00	0.44

APÉNDICE 7

Muestra 13022

Geoloy Name:	YV9S-W8
Met Code:	13022
Composite ID	YS Sur LA SM HA #01
Tara (kg)	0.9473
Initial Height of Rock in Column:	1.39 m

Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.296	0.000	0.000	3.769	1.788	1.479	0.569	2.493	3.542	0.5288	0.0939	0.482	0.049	0.0346	2.1217	3.2164	5.6151	5.0228	5.560	3.8261	4.2223	1.5248	
pH		2.97			3.50	3.23	2.11	2.27	1.83	1.93	1.8	1.41	1.22	0.93		1.2	1.42	1.8	1.7	1.71	1.46		1.19	
Electrical Conductivity	ms/cm	9.56			1.268	9.85	4.47	2.45	2.64	7.73	16.34	2.83	42.3	59.5		33.7	21.9	10.95	6.59	10.2				
Temperature	°C	15.7			17.5	18.6	18.8	17.9	15.5	16	17.1	16.9	12.6	13.9		16	14.5	15.6	17.2	7.1	13.7		15.6	
Eh	mV	272.3			294.7	318.4	580	775.2	812.3	863.1	828.8	794	667.6	240.8		623.7	709.6	861.4	843.5	759.4	888.2		843.1	
D.O	mg/L	3.87			3.78	3.65	3.86	3.59	3.88	3.86	3.4	3.96	6.14	5.13		4.76	5.55	4.78	6.53	6.6	5.16		4.55	
Rock Height in Column	mm	1382			1376	1372	1368	1365	1363	1360	1365	1365	1364	1361.6	1351.6	1349.2	1400.2	1329.7	1329.5	1237.0	1310.0			
HACH, Sulfate	mg/L	690			900	800	1750	2500	3200	2700	43000	160000	177500	100000		40833.3	1350	7500	5000	7333.3	8250		18437.5	
HACH, Total Fe	mg/L	2020.0			292.0	95.0	342.0	466.5			204000.0	19500.0	25250.0	39250.0		8642.9	3850.0	1800.0	731.3	933.3	2425.0		5375.0	
TDS	ppt	4.77			0.363	1.93	2.21	1.29	1.4	3.75	8.01	14.1	20.7	29.7		16.9	11	2.6	3.3	5.07				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb	0.082			12.669	4.851	1.727	9.954	46.704	38.54	83.091					1.184	37.133	70.606	2.537	0.953	3.048	7.24	4.051	
Ag	mg/L	0.035			0.029	1.798	0.015	0	0.021	0.012	0.056		0			0	0	N/A	N/A	N/A	N/A	0	N/A	
Al	mg/L	32.51			3.044	2.008	1.193	9.498	11.810	8.072	14.732		25.257			15.794	7.068	3.696	2.592	1.643	2.095	1.645	2.861	
As	mg/L	0.721			0.184	0.153	6.632	0.35	36.553	64.907	254.812		482.632			138.93	41.365	11.269	13.441	14.603	21.369	13.402	32.631	
B	mg/L	0			0.349	1.934	0.028	0	0.000	0	0		0			0	0	0	0	0	0	0	0	
Ba	mg/L	0.086			0.025	0	0.009	0	0.004	0	0.051		0.203			0.111	0.056	0.029	0.045	0.023	0.033	0.037	0.07	
Be	mg/L	0.01			0.003	0.003	0.001	0.002	0.001	0	0		0			0	0	0	0	0	0	0	0	
Bi	mg/L	0			0	0.012	0	0	0.000	0	0.391		0.22			0.501	0.091	0.057	0.027	0.033	0.017	0	0.02	
Ca	mg/L	371.152			118.259	46.857	18.721	28.383	15.295	12.356	10.927		34.414			27.57	23.917	12.858	13.549	7.371	9.326	6.265	9.259	
Cd	mg/L	124.016			74.697	39.005	27.204	111.487	209.881	156.736	148.22		83.889			58.795	20.43	9.591	3.082	2.705	4.056	2.541	5.306	
Co	mg/L	140.087			46.479	13.6	4.906	4.365	2.029	1.281	2.34		3.493			2.451	0.962	0.418	0.191	0.2	0.324	0.231	0.541	
Cr	mg/L	3.329			0.704	0.435	0.469	5.557	19.546	10.276	17.026		13.268			5.557	1.518	0.749	0.205	0.149	0.17	0.108	0.223	
Cu	mg/L	19.917			23.976	31.931	16.72	90.538	155.056	85.843	148.819		106.883			100.723	44.53	N/A	N/A	22.836	N/A	27.881	N/A	
Fe	mg/L	2820			82.473	89.424	376.637	511.5	8943.000	3432	8767		22130			1050.402	2374	705.165	601.999	1072.249	2201	1525	3479	
Ga	mg/L	0.339			0	0.031	0.106	0.162	0.527	0.444	1.094		2.091			0.903	0.291	0.142	0.17	0.066	0.198	0.196	0.413	
K	mg/L	4.158			0.516	0.616	0.233	0.1	0.067	0.111	0		0.469			5.655	2.463	1.754	1.253	0.564	0.621	0.381	0.172	
Li	mg/L	4.726			2.087	0.473	0.093	0.251	0.152	0.113	0.304		0.438			0.072	0.02	0.014	0.009	0.002	0.006	0.008	0.006	
Mg	mg/L	38.922			13.038	4.109	1.049	1.323	0.561	0.203	0.315		1.547			2.117	1.164	0.652	0.718	0.209	0.179	0.124	0.064	
Mn	mg/L	55.511			30.183	8.92	2.182	2.538	2.080	2.347	6.992		7.76			4.154	1.675	1.011	0.579	0.74	1.019	0.784	1.809	
Mo	mg/L	0			0.002	0.003	0	0	0.064	0.118	0.578		2.898			0.864	0.182	0.153	0.105	0.167	0.302	0.189	0.454	
Na	mg/L	59.662			24.756	7.668	1.593	1.387	0.599	0.82	0.988		6.405			12.128	3.47	2.005	1.815	0.089	0.677	1.007	0.244	
Nb	mg/L	0			0	0.014	0	0	0.000	0	0		0			0	0	0	0	0	0	0	0	
Ni	mg/L	53.415			20.089	6.53	2.415	3.235	1.931	1.224	2.148		2.256			1.422	0.636	0.247	0.113	0.113	0.173	0.126	0.286	
Pb	mg/L	2.727			2.889	2.679	3.38	2.369	1.917	1.867	2.648		1.984			2.075	1.291	1.307	0.999	1.157	1.975	1.746	2.237	
Sb	mg/L	0.044			0.079	0.018	0.05	0	0.166	0.621	5.132		18.348			5.788	1.601	1.162	0.781	1.012	1.56	1.03	1.674	
Sc	mg/L	0.021			0.003	0.002	0.001	0.017	0.009	0	0		0			0	0	0	0	0	0	0	0	
Se	mg/L	0			0.004	0.026	0	0	0.000	0	0		0			0	0	0	0	0	0	0	0	
Sn	mg/L	0.022			0	0.014	0.018	0.005	0.011	0.017	0.026		0.498			0.118	0	0	0.007	0	0	0	0	
Sr	mg/L	0.096			0.041	0.006	0.013	0.019	0.039	0.033	0.041		0.058			0.024	0.018	0.013	0.023	0.006	0.011	0.007	0.012	
Te	mg/L	0.579			0.247	0.233	0.112	0.207	4.789	1.11	2.464		4.272			1.361	0.632	0.395	0.204	0.181	0.425	0.324	8.892	
Ti	mg/L	0.038			0.002	0.002	0.013	0	0.022	0.043	0.204		1.103			0.41	0.113	0.052	0.031	0.041	0.059	0.038	0.089	
Tl	mg/L	1.87			1.592	1.419	4.756	1.535	0.193	0.179	0.395		3.314			11.835	5.543	2.676	1.231	1.131	1.286	0.681	1.04	
V	mg/L	0.207			0	0	0.032	0.055	0.229	0.293	0.989		2.296			0.752	0.259	0.157	0.115	0.107	0.206	0.171	0.344	
W	mg/L	0			0	0.028	0	0	0.000	0	0		0			0	0	0	0	0	0	0	0	
Zn	mg/L	74.266			51.932	36.087	25.157	72.554	68.002	53.36	103.307		82.669			58.237	31.238	15.257	8.353	10.402	10.73	12.791	26.032	

Geoloy Name:	YV9S-W8
Met Code:	13022
Composite ID	YS Sur LA SM HA #01
Tara (kg)	0.9473
Initial Height of Rock in Column:	1.39 m

Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L	0.3583			1.1264	1.0347	1.0525	1.4948		0.3873	1.111	1.6069					0.524	0.55	0.55	1.8494	0.8979	1.436	1.2645	1.0858
pH		1.23				1.01	1.19	1.66		2.01	1.41	1.28					0.98	1.13	1.34	1.76	1.73	1.32	1.47	0.9
Electrical Conductivity	ms/cm										0.0352	48.9					108.4	39.5	25.59	31.2	17.88	11.63	13.01	47.9
Temperature	°C	13					13	14.2		13	13	13					17.9	18.5	19.9	15.8	20.4	18.6	19.9	18.9
Eh	mV	678.3				691.2	688	471.5		707	921.2	719.1					545.1	436.2	529.7	756	737.1	723.4	727.4	735.7
D.O	mg/L	5.73									4.41	4.54					4.33	4.27	4.65	2.5	5.06	4.1	3.62	5.48
Rock Height in Column	mm				1307.6	1306.9	1306.8	1306.5		1306.2	1306	1306					1306	1306.1	1306.1	1306.1	1306.1	1306.1	1306.1	1306.1
HACH, Sulfate	mg/L	88750				58000	58333	25500		34166.6667	59167	28333.3333					43299.8	18250	25200	22800	31200	30000	26600	52750
HACH, Total Fe	mg/L	14550.0				9529.6	8640.0	4919.5		8008.2	8776.5	7537.2					14400.0	4.4	7839.6	7231.0	9301.0	7098.4	7922.0	10330.3
TDS	ppt																5.5915	19.671	12.539	15.291	8.76	4.43	7.5	31.7
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	ppb				4.052			0.215		0.451		1.898					1.17	1.313	1.1		0.214	9.942	16.869	0.882
Ag	mg/L				0	0		0		0	0	0					0	0	0	0	0	0	0.02	0
Al	mg/L				19.011	19.1		4.558		8.167	9.482	8.415					15.459	14.479	21.045	21.045	8.669	8.084	7.559	26.662
As	mg/L				125.476	84.952		2.112		32.149	38.292	28.666					63.855	44.425	30.663	30.663	30.394	19.474	16.17	27.437
B	mg/L				0	0		0		0	0	0					0	0	0	0	0	0	0	17.761
Ba	mg/L				0.13	0.09		0.05		0.11	0.123	0.102					0.172	0.105	0.082	0.082	0.111	0.152	0	0.357
Be	mg/L				0	0		0		0	0	0					0	0	0	0	0	0	0.001	0
Bi	mg/L				0.021	0.759		0		0.234	0.732	0.224					1.098	0.031	0.166	0.166	0.416	0.165	0.665	1.01
Ca	mg/L				55.039	66.456		9.372		96.081	48.451	46.224					57.212	74.77	46.685	46.685	24.604	22.194	16.193	26.195
Cd	mg/L				11.232	9.865		0		2.636	3.63	2.887					5.802	3.744	2.744	2.744	1.809	1.324	1.109	1.799
Co	mg/L				2.705	1.265		0.361		0.922	1.177	0.989					1.474	1.172	0.892	0.892	0.898	0.828	0.923	1.384
Cr	mg/L				8.757	0.985		0.062		0.345	0.327	0.301					0.736	0.508	0.515	0.515	0.322	0.218	0.229	0.318
Cu	mg/L				141.232	187.73		30.598		96.784	110.03	83.593					202.682	133.269	105.387	105.387	125.694	83.026	89.311	112.877
Fe	mg/L				10530	10697.086		4162.951		9062	50012.214	42670.586					15530.752	12561.45	7649.282	7649.282	10443.54	7520	5176.527	10885.192
Ga	mg/L				0.714	0		0.141		0.382	0.303	1.019					0.678	0.523	0.874	0.874	0.457	0.269	0.041	2.055
K	mg/L				1.001	6.626		0.696		2.402	2.039	1.95					5.758	3.31	1.753	1.753	1.968	1.536	1.493	15.384
Li	mg/L				0.011	0.014		0.002		0.005	0	0.005					0.009	0.011	0.008	0.008	0.006	0.016	0.004	0.033
Mg	mg/L				2.777	3.279		0.228		2.087	1.901	0.911					1.188	1.467	8.916	8.916	0.058	0	0.668	0.603
Mn	mg/L				6.027	4.34		3.196		4.041	7.799	4.409					5.396	4.455	6.136	6.136	3.611	4.229	4.05	6.401
Mo	mg/L				0.172	0.606		0		0.377	0.402	0.26					0.203	0.19	0.409	0.409	0.155	0.067	0.157	0.171
Na	mg/L				3.244	7.756		0.909		1.786	7.252	10.262					4.827	11.251	3.041	3.041	2.493	9.591	9.661	88.891
Nb	mg/L				0	0		0		0	0	0					0	0	0	0	0	0	0	0
Ni	mg/L				1.264	0.614		0.213		0.438	0.536	0.463					0.655	0.445	0.554	0.554	0.403	0.487	0.497	0.487
Pb	mg/L				2.093	1.93		0.081		2.117	2.704	2.502					1.65	2.456	1.816	1.816	1.628	2.163	2.515	4.313
Sb	mg/L				0.163	4.196		0		1.301	1.981	1.62					1.949	1.541	0.895	0.895	0.863	0.832	1.059	0.986
Sc	mg/L				0	0		0		0	0	0					0	0	0	0	0	0	0	0
Se	mg/L				0	0		0		0	0	0					0	0	0	0	0	0	0.856	0
Sn	mg/L				0.079	0.071		0		0	0.011	0					0	0	0	0	0	0	0.054	0
Sr	mg/L				0.065	0.025		0.071		0.124	0.028	0.026					0.02	0.018	0.057	0.057	0.019	0.024	0.022	0.076
Te	mg/L				1.472	3.039		0.331		18.038	20.718	1.651					3.446	3.102	1.574	1.574	2.212	1.821	1.597	3.612
Ti	mg/L				0.154	0.442		0.009		0.277	0.266	0.204					0.466	0.294	0.268	0.268	0.204	0.152	0.138	0.256
Tl	mg/L				0.429	4.236		0.012		1.135	1.313	1.299					2.062	2.033	1.264	1.264	0.986	1.071	0.895	1.417
V	mg/L				0.558	0.944		0.256		0.623	0.735	0.589					1.085	0.947	0.581	0.581	0.741	0.58	0.468	1.094
W	mg/L				0	0		0		0	0	0					0	0.309	0	0	0	0	0	0
Zn	mg/L				18.759	60.055		0.905		32.488	40.615	32.869					53.038	43.191	27.305	27.305	27.842	21.89	20.258	32.922

Geoloy Name:	YV9S-W8																						
Met Code:	13022																						
Composite ID	YS Sur LA SM HA #01																						
Tara (kg)	0.9473																						
Initial Height of Rock in Column:	1.39 m																						
Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.9472				0.06	0.08	1.1947	1.4859	0.7215	1.603	1.2	1.08				0.320	0.440	0.5584	1.1446	2.1581	0.8934	3.1798
pH		1.18				1.55	0.99	1.08	1.21	1.01	1.13	1.04	1.48				0.98	1.65	0.77	0.82	1.01	1.11	1.22
Electrical Conductivity	ms/cm	40.7				77.8	27.85	44	35.8	0.805		42.1	20.26				71.1	89.4	41.8	36.8	38.4	20.49	28.59
Temperature	°C	17.5				17.7	16.3	17	15	15.8	17	18	18.5				20.6	20.1	20.4	20.1	17.1	20.2	18.7
Eh	mV	500.1				707.9	714.3	720.3	711.3	519	770.4	718.4	754.2				719.1	714	716.2	726	720	730.9	760.3
D.O	mg/L	5.2				5.5	4.17	5.41	5.56	5.75			5.56				-	-	-	-	-	-	-
Rock Height in Column	mm	1306.1				1306.1	1306.1	1306.1	1306.1	1306.1	1306.1	1306.1					1306.1	1306.1	1306.1	1306.1	1306.1	1306.1	1306.1
HACH, Sulfate	mg/L	26800				61700	33800	33500	28300		20400	34800	11900				51700	73500	71400	58100	30300.0	28600.0	23300.0
HACH, Total Fe	mg/L	7202.5				19912.9	11743.9	11537.8	9833.8	18770.0	8937.2	13839.1	4260.4				11180.7	24068.0	22142.6	18773.0	10282.4	8886.3	6122.5
TDS	ppt	25.8				50.15	37.5	33.69	21.1	0.394		27.1	12				33.4	28.6	26.5	20.9	24.2	12.1	17.4
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.631						0.585		0.345	0.073	7.123	N/A				10.841	15.037	3.353	2.257	35.657	41.962	1.196
Ag	mg/L	0						0.015	0	0	0	0	0				0	0.025	0	0.023	0	0	0
Al	mg/L	5.581						12.036	13.235	3.849	10.523	9.526	3.115				35.141	24.078	20.216	25.529	11.718	5.394	5.088
As	mg/L	15.768						18.096	19.698	6.263	16.633	18.258	6.423				30.316	47.561	33.288	33.497	16.749	10.304	9.41
B	mg/L	0						0	0	0	0	0	0				0	0	0	0	0	0	0
Ba	mg/L	0.135						0	0.114	0.048	0.132	0.141	0.07				0.295	0	0.308	0	0.115	0.126	0.106
Be	mg/L	0						0	0	0	0	0	0				0	0	0	0	0	0	0.001
Bi	mg/L	0.411						0.493	0.964	0.139	0.392	0.473	0.122				0.49	1.544	1.679	0.712	0.789	0.403	0.446
Ca	mg/L	14.69						40.909	48.577	5.996	18.949	17.314	11.676				224.758	54.579	38.978	53.884	31.71	5.787	5.488
Cd	mg/L	1.087						1.114	1.325	0.407	1.049	1.034	0.371				2.365	2.733	2.094	1.608	0.884	0.429	0.414
Co	mg/L	0.973						1.001	1.051	0.37	0.948	1.084	0.427				1.77	2.62	1.651	2.243	1.149	0.761	0.691
Cr	mg/L	0.255						0.424	0.474	0.085	0.255	0.25	0.081				0.812	0.662	0.465	0.541	0.298	0.163	0.161
Cu	mg/L	78.189						102.331	116.752	41.68	103.07	116.835	38.121				194.906	261.966	231.269	213.156	112.88	63.643	60.351
Fe	mg/L	9323.983						1943.005	9421.523	2932	7635.5	2129.369	3535				2690.496	2829.161	7100.606	3299.874	8601.268	2371.596	2283.667
Ga	mg/L	0.326						0.792	0.452	0.195	0.485	0.597	0.218				0.932	1.901	0.852	0.124	0.427	0.323	0.277
K	mg/L	2.058						2.32	2.156	0.606	2.988	2.614	1.082				3.679	14.055	6.18	4.596	7.236	1.868	1.782
Li	mg/L	0.004						0.007	0.007	0.001	0.002	0	0.002				0.014	0.01	0.009	0.008	0.004	0.004	0.003
Mg	mg/L	0						1.931	0.598	0	0	0	0				11.818	3.054	0.815	3.292	0	0	0
Mn	mg/L	3.951						3.809	4.598	1.178	3.631	4.098	2.058				13.701	8.105	5.985	7.475	4.95	2.363	2.255
Mo	mg/L	0.045						0.069	0.059	0	0.001	0.018	0				0.048	0.112	0	0.123	0.022	0	0
Na	mg/L	7.885						5.579	5.621	1.369	3.4	4.445	1.197				6.503	8.194	4.941	6.81	3.263	4.426	4.296
Nb	mg/L	0						0	0	0	0	0	0				0	0	0	0	0	0	0
Ni	mg/L	0.442						0.536	0.621	0.182	0.503	0.546	0.236				1.13	1.211	0.777	1.094	0.633	0.389	0.376
Pb	mg/L	2.14						1.948	1.935	0.616	1.932	2.046	1.065				1.744	3.203	1.761	3.392	2.017	2.052	2.031
Sb	mg/L	0.545						1.045	0.259	0.004	0	0	0.096				0	2.008	0	1.605	0.026	0	0.027
Sc	mg/L	0						0	0	0	0	0	0				0	0	0	0	0	0	0
Se	mg/L	0						0.277	0	0	0	0	0				0	0.651	0	0.363	0	0	0
Sn	mg/L	0						0.083	0.113	0.019	0.093	0.135	0.053				0.185	0.233	0.175	0.198	0	0	0
Sr	mg/L	0.016						0.063	0.068	0.007	0.019	0	0.018				0.303	0.045	0.034	0.042	0.03	0.011	0.01
Te	mg/L	1.773						1.966	1.766	0.664	1.521	1.852	0.621				2.37	5.152	2.928	3.64	1.27	0.844	0.873
Ti	mg/L	0.157						0.174	0.183	0.073	0.155	0.175	0.059				0.589	0.601	0.411	0.441	0.196	0.092	0.087
Tl	mg/L	0.846						0.589	0.669	0.21	0.559	0.596	0.254				0.828	1.347	0.965	0.991	0.646	0.385	0.411
V	mg/L	0.579						0.695	0.588	0.254	0.69	0.824	0.31				1.408	1.882	1.542	1.761	0.802	0.56	0.524
W	mg/L	0						0	0	0	0	0	0				0	0	0	0	0	0	0
Zn	mg/L	20.443						20.51	23.953	7.35	17.909	20.661	7.138				38.585	46.966	30.563	32.809	15.531	10.027	9.608

Muestra 13024

Geoloy Name:	YV9S-W12																							
Met Code:	13024																							
Composite ID	YS Sur Teut SM HA #03																							
Tara (kg)	0.941																							
Initial Height of Rock in Column:	1.3 m																							
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.296	0.000	0.000	3.970	2.109	2.922	0.3534	2.193	1.232	0.3758	0.0275	0.01	0.007	0.2479	1.2	2.5007	3.4441	2.0614	3.8011	3.6146	3.9246		
pH		2.97			1.69	1.51	1.64	0.8	1.2	1.5	1.52	1.18		2.25		0.92	1.38	1.44	1.28	1.32	1.52		1.76	
Electrical Conductivity	ms/cm	9.56			24.4	17.76	12.21	39.2	36.4	21.1	45.8	57.3		1.104		59.9	24.2	22.9	17.84	21.1				
Temperature	°C	15.7			17.3	18.6	19.1	17.9	15.5	16	17.1	17.1		13.8		15.6	14.5	15.7	17.2	8	13.7		15.5	
Eh	mV	272.3			423.4	559.3	580.3	652.3	686	703.1	694.7	660.2		703.2		604.9	701.9	719.3	743.2	734.8	755.2		915.1	
D.O	mg/L	3.87			3.89	3.54	3.82	3.95	3.69	3.67	3.27	2.23				4.1	5.52	5.58	7.15	6.69	5.65		5.39	
Rock Height in Column	mm	1291			1288	1285	1279	1271	1264	1255	1257	1256	1255.1	1250.6	1250.6	1245.1	1243.4	1242.9	1242.5	1241	1240			
HACH, Sulfate	mg/L	690			400	1400	6100	11600	9500	9375	22500	55000		3000		72000	15250	12500	14000	15357.1429	10000		4000	
HACH, Total Fe	mg/L	2020			94	3020	1400	1350			84500	10250		1170		11642.86	4850	3950	2575	2466.66667	2350		980	
TDS	ppt	4.77			12.3	8.97	6.14	20.4	18.3	10.3	22.2	29.2		0.688		30.3	12.1	11.4	8.95	10.6				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				4.92	468.838	2.493	18.254	7.799	17.594						9.48	16.006	68.001	0.976	1.028	1.395	2.757	0.401	
Ag	mg/L				0.023	1.666	0.015	0	0.012	0.01						0	0	N/A	N/A	0	N/A	0	N/A	
Al	mg/L				53.129	8.816	3.645	11.104	2.727	1.941						16.114	7.178	3.781	0	2.462	2.186	1.201	0.917	
As	mg/L				193.981	51.708	25.759	80.327	28.979	22.241						78.001	38.282	12.61	16.125	17.014	17.059	10.121	4.719	
B	mg/L				0	0.774	0	0	0.000	0						0	0	0	37.412	0	0	0	0	
Ba	mg/L				0.231	0	0.009	0	0.018	0						0.239	0.057	0.05	0	0.038	0.051	0.038	0.06	
Be	mg/L				0.003	0.001	0.001	0	0.000	0						0	0.001	0	0	0	0	0	0	
Bi	mg/L				0	0	0	0	0.000	0						0.399	0.099	0.086	0.212	0.071	0.094	0.038	0.037	
Ca	mg/L				539.839	24.647	17.821	42.471	13.967	16.608						98.438	23.564	17.313	20.103	11.534	17.426	5.36	21.148	
Cd	mg/L				129.309	65.688	37.782	81.732	41.694	29.254						54.225	19.193	15.84	13.997	8.855	9.464	5.643	2.089	
Co	mg/L				205.685	30.209	11.81	8.926	2.602	1.204						3.974	1.068	1.064	1.167	0.72	0.764	0.431	0.187	
Cr	mg/L				24.422	3.312	1.224	1.526	0.504	0.755						1.629	1.188	0.329	0.098	0.214	0.225	0.116	0.066	
Cu	mg/L				42.913	20.326	12.534	36.892	20.693	16.06						48.159	42.92	N/A	N/A	18.602	N/A	12.893	N/A	
Fe	mg/L				1890		1990	606.2	2802.000	2270						1018.345	2528	2447	3260.908	2555.285	2983	1542	747.5	
Ga	mg/L				2.343	0.667	0.338	1.203	0.206	0.151						1.071	0.292	0.302	0	0.145	0.281	0.179	0.079	
K	mg/L				4.832	1.41	0.501	3.517	1.089	0.842						5.618	2.148	0.75	9.75	0.321	0.318	0.3	0	
Li	mg/L				0.628	0.05	0.025	0.011	0.003	0.01						0.015	0.018	0.002	0.031	0	0.001	0.003	0.001	
Mg	mg/L				18.162	2.238	1.048	2.099	0.282	0.406						4.409	1.131	0.582	0	0.288	0.286	0.03	0.383	
Mn	mg/L				22.526	3.369	1.686	3.143	1.461	1.469						5.178	1.726	1.467	1.306	1.293	1.68	1.075	0.469	
Mo	mg/L				0.025	0.022	0.006	0.101	0.023	0.048						0.126	0.12	0	0	0.003	0.007	0.002	0.018	
Na	mg/L				85.707	11.143	3.019	4.374	1.713	1.629						4.87	3.057	1.023	67.822	0	0.569	0.984	0.182	
Nb	mg/L				0	0	0	0	0.000	0						0	0	0	0.058	0	0	0	0	
Ni	mg/L				58.954	9.792	4.147	4.52	1.532	0.818						2.885	0.73	0.758	0.831	0.538	0.574	0.332	0.156	
Pb	mg/L				2.297	1.871	2.342	2.455	2.312	1.889						2.131	1.447	2.147	0.7	1.724	1.752	1.722	0.47	
Sb	mg/L				0	0.095	0.111	0.066	0.167	0.197						0	0.99	0	1.306	0	0	0	0	
Sc	mg/L				0.049	0.007	0.002	0.001	0.000	0						0	0	0	0	0	0	0	0	
Se	mg/L				0	0	0	0	0.000	0						0	0	0	0.122	0	0	0	0	
Sn	mg/L				0.269	0.025	0.032	0.026	0.048	0.022						0.017	0	0	0	0	0	0.021	0	
Sr	mg/L				0.532	0.008	0.014	0.035	0.021	0.028						0.097	0.018	0.011	0.029	0.008	0.01	0.003	0.032	
Te	mg/L				3.201	0.824	0.451	1.886	0.737	0.395						2.204	0.82	0.771	1.581	0.522	0.703	0.345	2.055	
Ti	mg/L				0.64	0.104	0.058	0.299	0.081	0.051						0.484	0.11	0.055	0	0.054	0.049	0.023	0.018	
Tl	mg/L				42.992	19.121	13.505	24.151	11.761	6.002						23.702	6.873	7.328	6.691	4.461	4.6	3.023	0.904	
V	mg/L				0.919	0.175	0.131	0.47	0.134	0.093						0.794	0.266	0.243	0.544	0.17	0.19	0.126	0.049	
W	mg/L				0	0	0	0	0.000	0						0	0	0	0	0	0	0	0	
Zn	mg/L				116.543	68.625	35.719	75.797	48.616	32.514						91.517	35.574	42.074	51.992	32.385	36.655	21.177	11.076	

Geoloy Name:	YV9S-W12																							
Met Code:	13024																							
Composite ID	YS Sur Teut SM HA #03																							
Tara (kg)	0.941																							
Initial Height of Rock in Column:	1.3 m																							
Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L	0.1724			0.0419	0.19478	0.2652	0.6795		0.48996	0.2529	0.7952					0.756	0.654	0.5	0.68	1.8742	1.9845	1.0256	0.9845
pH		**1.19**				**1.16**	**1.24**	**2.17**		**2.07**	**1.55**	**1.34**					**0.94**	**1.37**	**1.04**	**1.56**	**1.78**	**1.45**	**1.5**	**1.03**
Electrical Conductivity	ms/cm										0.0195	39.8					114.1	23.49	50.24	82.75	15.1	8.69	10.79	36.3
Temperature	°C	13					13	14.2		13	13	13					17.6	18.4	19.5	16.1	20.3	18.7	19.9	18.7
Eh	mV	652				655.8	652.6	735.3		691.4	921.2	747.7					544.6	522.6	543.6	696.3	682.9	678.9	679.7	682.6
D.O	mg/L	5.51									4.41	4.19					4.49	4.21	4.65	5.14	1.7	3.16	3.44	3.25
Rock Height in Column	mm				1238.4	1237.5	1236.2	1235.1		1234.6	1234.6	1234.6					1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5
HACH, Sulfate	mg/L	70000				29000	19500	12000		25833.3333	29167	11538.4615					49297.8	7750	37800	30900	20800	16000	16100	32500
HACH, Total Fe	mg/L	12600				6108.403	3740	2232.96		5692.12	4492.01	5978.128					15650	5.36	14159.6	10184	6617	4633.09	5134.1	5891.19
TDS	ppt																55.915	14.494	24.622	40.36	7.4	4.18	6.2	23.1
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	**ppb**							0.347		0.783		0.673					0.501	0.249	0.237		0.091	**4.78**	**9.204**	0.195
Ag	**mg/L**					0		0		0	0.005	0					0	0	0	0	0	0	0.007	0
Al	**mg/L**					**10.813**		1.372		3.688	4.575	**5.349**					**24.7**	**8.866**	**9.767**	**9.767**	3.368	3.521	3.612	**20.756**
As	**mg/L**					**30.321**		**8.484**		**24.17**	**21.689**	**27.618**					**56.466**	**16.608**	**38.25**	**38.25**	**19.677**	**12.493**	**13.593**	**22.696**
B	**mg/L**					0		0		0	0	0					0	0	0	0	0	0	0	**26.449**
Ba	**mg/L**					0.084		0.042		0.093	0.076	0.126					0.201	0.042	0.156	0.156	0.09	0.11	0	0.173
Be	**mg/L**					0		0		0	0	0					0	0	0	0	0	0	0.001	0
Bi	mg/L					0.26		0.001		0.135	0.364	0.259					0.602	0	0.381	0.381	0.186	0.219	0.375	0.602
Ca	mg/L					49.294		7.897		43.347	30.46	40.027					164.134	40.477	47.533	47.533	21.975	10.288	5.515	16.965
Cd	**mg/L**					**7.952**		**2.132**		**4.804**	**3.83**	**4.853**					**7.881**	**2.296**	**4.635**	**4.635**	**1.451**	**1.028**	**1.033**	**1.299**
Co	**mg/L**					**0.921**		**0.275**		**0.849**	**0.696**	**1.009**					**1.495**	**0.504**	**1.196**	**1.196**	**0.621**	**0.453**	**0.56**	**0.623**
Cr	**mg/L**					**0.428**		0.094		**0.339**	**0.245**	**0.345**					**0.979**	**0.189**	**0.602**	**0.602**	**0.342**	**0.195**	**0.231**	**0.274**
Cu	**mg/L**					**40.629**		**12.228**		**37.208**	**28.166**	**33.843**					**90.575**	**27.252**	**70.689**	**70.689**	**38.201**	**23.974**	**29.756**	**33.611**
Fe	**mg/L**					**4789.245**		**1871.375**		**6663**	**26244.863**	**35043.915**					**17923.146**	**3635.207**	**13350.365**	**13350.365**	**7603.461**	**3084.428**	**3594.807**	**6166.318**
Ga	mg/L					0		0.126		0.328	0.115	0.798					0.8	0.272	1.443	1.443	0.339	0.247	0.03	1.116
K	mg/L					1.688		0.236		0.657	1.309	0.96					3.514	0.861	0.931	0.931	0.698	0.757	0.769	13.589
Li	mg/L					0.005		0.001		0.001	0	0.005					0.007	0.006	0.004	0.004	0.003	0.015	0.002	0.024
Mg	mg/L					1.832		0		0.698	0.935	0.787					5.075	0.609	0.964	0.964	0	0	0.2	1.073
Mn	**mg/L**					**4.196**		**1.611**		**3.426**	**3.982**	**5.236**					**8.272**	**3.592**	**12.94**	**12.94**	**5.285**	**2.641**	**2.278**	**4.199**
Mo	**mg/L**					0.022		0		0	0	0.017					0.108	0	0.011	0.011	0	0	0.022	0.074
Na	mg/L					6.985		0.979		0.471	6.726	10.363					3.305	7.795	1.676	1.676	1.487	9.144	8.581	84.437
Nb	mg/L					0		0		0	0	0					0	0	0	0	0	0	0	0
Ni	**mg/L**					**0.783**		**0.255**		**0.718**	**0.676**	**0.948**					**1.357**	**0.398**	**1.596**	**1.596**	**0.694**	**0.476**	**0.474**	**0.497**
Pb	**mg/L**					**1.621**		**1.587**		**2.191**	**2.484**	**3.039**					**1.536**	**2.084**	**1.762**	**1.762**	**1.418**	**1.894**	**2.127**	**3.192**
Sb	**mg/L**					0		0		0	0	0					0	0	0	0	0	0	**0.089**	**0.366**
Sc	mg/L					0		0		0	0	0					0	0	0	0	0	0	0	0
Se	**mg/L**					0		0		0	0	0					0	0	0	0	0	0	**0.536**	0
Sn	mg/L					0		0		0	0.016	0					0	0	0	0	0	0	0.082	0.038
Sr	mg/L					0.047		0.014		0.046	0.027	0.031					0.136	0.034	0.069	0.069	0.033	0.02	0.011	0.041
Te	mg/L					1.324		0.411		12.11	6.812	1.389					2.742	1.674	1.983	1.983	1.172	0.901	1.055	2.145
Ti	mg/L					0.183		0.028		0.122	0.103	0.165					0.44	0.092	0.284	0.284	0.1	0.058	0.062	0.129
Tl	**mg/L**					**6.691**		**1.957**		**4.155**	**3.939**	**5.523**					**6.88**	**3.06**	**4.802**	**4.802**	**2.743**	**2.446**	**2.277**	**2.694**
V	**mg/L**					**0.356**		**0.144**		**0.339**	**0.238**	**0.395**					**0.872**	**0.358**	**0.632**	**0.632**	**0.396**	**0.193**	**0.145**	**0.486**
W	mg/L					0		0		0	0	0					0	0	0	0	0	0	0	0
Zn	**mg/L**					**59.941**		**16.812**		**46.565**	**44.846**	**58.377**					**86.809**	**36.3**	**57.383**	**57.383**	**34.497**	**25.757**	**24.677**	**36.555**

Geoloy Name:	YV9S-W12																						
Met Code:	13024																						
Composite ID	YS Sur Teut SM HA #03																						
Tara (kg)	0.941																						
Initial Height of Rock in Column:	1.3 m																						
Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	1.045	0.002	0.0025	0.0018	0.00264	0.00187	1.3596	0.9856	1.6458	0.053	2.5	1.8	-	-	-	3.2664	1.8195	2.391	4.9819	4.059	3.0461	5.4679
pH		**1.21**	**1.35**	**0.84**	**0.81**	**1.59**	**1.67**	**1.14**	**1.17**	**1.11**	**1.3**	**1.08**	**1.32**	-	-	-	0.83	0.79	1.04	1.07	1.19	1.23	1.36
Electrical Conductivity	ms/cm	38.2	24.55	22.12	9.26	56.84	0.398	39.7	42.4	42.2		40.8	29.8	-	-	-	112.9	85.55	44.9	43.9	30	16.74	22.08
Temperature	°C	17.7	16	15	16.3	17.8	16.31	18.4	15	15.5	17	17	18	-	-	-	20.6	20.1	20.5	20.1	17.5	20.2	18.7
Eh	mV	460.2	544.2	663.5	478.8	667.5	714.3	682.7	668.7	464.4	824.6	666.2	708.2	-	-	-	666.1	676.1	676.7	683.2	679	668.6	676.4
D.O	mg/L	4.2	5.3	5.36	6.28	4.87	5.8	5.43	5.42	5.58			5.39	-	-	-	-	-	-	-	-	-	-
Rock Height in Column	mm	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5		-	-	-	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5	1234.5
HACH, Sulfate	mg/L	20100	15700	38600	44400	31100	18200	21900	26200		25900	24100	16600	-	-	-	44400	43100	26100	23400	16300	16600	12300
HACH, Total Fe	mg/L	5452.67	4569.75	11766.37	0	10914.7	6255.17	7234.71	9009.73	12330	7011.168	9145.84	5701.542	-	-	-	8249.922	13478.08	8604.31	7822.1	6739.04	55296.23	35801.15
IDS	ppt	24.1	14.6	15.2	4.11	15.3	24.7	33.69	26.7	26.74		26	18.2	-	-	-	13.5	10	28.7	25.5	18.3	9.7	13.1
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	**ppb**	0.176						0.085	0.082	0.086	0.062	**2.476**	**N/A**	-	-	-	**5.017**	**5.212**	**0.717**	**0.452**	1.825	21.203	0.696
Ag	**mg/L**	0						0.013	0	0	0	0	0	-	-	-	0	0.002	0	0.005	0	0	0
Al	**mg/L**	3.508						**5.202**	**5.53**	1.411	**5.117**	3.549	2.017	-	-	-	**11.298**	**4.118**	**7.672**	**7.006**	2.177	2.116	1.655
As	**mg/L**	**16.671**						**21.668**	**23.376**	**5.047**	**13.849**	**17.333**	**11.33**	-	-	-	34.451	9.205	17.898	19.705	11.572	13.597	7.123
B	**mg/L**	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ba	**mg/L**	0.096						0	0.099	0.031	0.112	0.095	0.083	-	-	-	0.233	0	0.137	0	0.062	0.105	0.065
Be	**mg/L**	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0.001	0	0.001
Bi	mg/L	0.28						0.414	0.907	0.091	0.179	0.383	0.208	-	-	-	0.718	0.086	0.711	0.389	0.452	0.358	0.26
Ca	mg/L	11.777						9.601	11.456	3.751	24.203	9.348	13.091	-	-	-	**39.091**	**62.889**	**40.545**	**31.382**	6.69	4.893	1.227
Cd	**mg/L**	**0.948**						**0.86**	**1.081**	**0.225**	**0.689**	**0.637**	**0.446**	-	-	-	1.89	1.292	0.911	0.647	0.372	0.383	0.199
Co	**mg/L**	**0.636**						**0.828**	**0.818**	**0.205**	**0.624**	**0.68**	**0.491**	-	-	-	**1.304**	**1.314**	**0.697**	**0.94**	0.539	0.588	0.329
Cr	**mg/L**	**0.331**						**0.31**	**0.347**	0.08	**0.297**	**0.25**	**0.178**	-	-	-	**0.596**	**0.218**	**0.281**	**0.301**	0.196	0.189	0.13
Cu	**mg/L**	**30.49**						**40.643**	**45.905**	**11.164**	**32.94**	**37.653**	**23.329**	-	-	-	**65.415**	**14.944**	**39.802**	**39.639**	26.039	23.867	14.384
Fe	**mg/L**	**6849.604**						**1897.554**	**9651.293**	**2114**	**6143.2**	**7617.399**	**4499**	-	-	-	2677.633	1576.67	4522.922	2887.861	4591.244	2282.047	1785.149
Ga	mg/L	0.24						0.732	0.433	0.127	0.385	0.436	0.286	-	-	-	0.767	0.248	0.38	0.074	0.221	0.282	0.171
K	mg/L	1.371						0.893	0.956	0.163	5.578	1.156	0.595	-	-	-	2.193	2.207	3.613	1.518	9.102	0.943	0.794
Li	mg/L	0.003						0.004	0.004	0.001	0.001	0	0.001	-	-	-	0.005	0.005	0.003	0.002	0.001	0.004	0.002
Mg	mg/L	0						0.427	0	0	0	0	0	-	-	-	0.03	**1.782**	0.503	**1.022**	0	0	0
Mn	**mg/L**	**2.929**						**2.881**	**3.498**	**0.865**	**3.332**	**2.86**	**2.055**	-	-	-	**5.367**	**3.741**	**2.824**	**3.245**	2.164	2.109	1.305
Mo	**mg/L**	0.017						0.03	0	0	0	0	0	-	-	-	0	0.03	0	0	0	0	0
Na	mg/L	8.726						3.772	4.087	1.067	3.032	3.508	1.069	-	-	-	**4.067**	**3.667**	**1.944**	**5.036**	2.268	4.243	3.661
Nb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ni	**mg/L**	**0.57**						**0.669**	**0.737**	0.196	**0.625**	**0.637**	**0.435**	-	-	-	1.226	0.746	0.623	0.789	0.515	0.54	0.317
Pb	**mg/L**	**1.865**						**2.115**	**2.068**	**0.523**	**1.856**	**1.811**	**1.408**	-	-	-	2.003	0.947	1.295	2.114	1.798	2.052	1.733
Sb	**mg/L**	0						**0.053**	0	0	0	0	0	-	-	-	0	0	0	0.171	0	0	0
Sc	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Se	**mg/L**	0						**0.088**	0	0	0	0	0	-	-	-	0	0	0	0.235	0	0	0
Sn	mg/L	0						0.054	0.022	0.006	0.076	0.087	0.031	-	-	-	0.129	0.054	0.062	0.135	0.002	0	0
Sr	mg/L	0.016						0.013	0.014	0.004	0.035	0	0.02	-	-	-	0.036	0.064	0.032	0.028	0.011	0.015	0.004
Te	mg/L	1.239						1.648	1.355	0.376	0.923	1.236	0.713	-	-	-	2.04	0.435	1.068	1.649	0.603	0.727	0.469
Ti	mg/L	0.088						0.109	0.115	0.032	0.109	0.129	0.055	-	-	-	0.34	0.048	0.13	0.121	0.055	0.056	0.031
Tl	**mg/L**	**2.869**						**3.007**	**3.133**	**0.717**	**2.099**	**2.136**	**1.52**	-	-	-	4.327	0.543	2.078	2.722	1.701	1.535	0.956
V	**mg/L**	**0.293**						**0.485**	**0.37**	**0.114**	**0.386**	**0.428**	**0.297**	-	-	-	0.891	0.181	0.512	0.604	0.268	0.34	0.179
W	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Zn	**mg/L**	**29.953**						**33.473**	**39.022**	**8.989**	**26.808**	**27.03**	**16.874**	-	-	-	56.882	2.358	29.011	32.622	16.126	18.4	10.848

Muestra 13028

Geoloy Name:	YV9S-W20
Met Code:	13028
Composite ID	VS Sur Tour SM HA #07
Tara (kg)	0.9377
Initial Height of Rock in Column:	1.48 m

Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.138	0.000	0.167	3.057	2.022	3.190	0.4628	3.214	2.9603	0.8311	0.199	0.03	0.04	0.1192	1.6957	2.0205	3.486	2.1558	3.7671	3.9703	3.4417	0.02	
pH		2.90		3.27	3.40	3.40	3.12	2.62	2.41	2.25	2.13	2.27	2.07	2.24		1.65	1.67	1.66	1.99	1.47	1.53		1.36	
Electrical Conductivity	ms/cm	6.400		5.160	0.810	0.841	0.708	1.181	1.1976	2.12	3.97	4.07	6.78	5.13		9.54	11.5	12.25	11.57	13.38				
Temperature	°C	16.0		17.7	17.3	18.4	18.3	17.9	15.6	16	17.1	16.8	12.6	14		16.9	14.5	15	17.2	7	14		15.5	
Eh	mV	280.0		207.3	341.8	493.2	519.5	658.6	726	843.4	854	867.9	758.9	754.9		737.7	870.5	885.8	852.8	829.1	904.2		922.3	
D.O	mg/L	3.88		3.64	3.77	3.79	3.90	3.91	3.86	3.87	3.41		7.01			5.78	6.44	5.93	7.74	6.41	4.9		5.71	
Rock Height in Column	mm	1477.0		1476.0	1470.0	1466.0	1461.0	1454	1450	1445	1443	1442	1436.6	1430.2	1428.6	1415.3	1414.2	1429.7	1428.5	1315	1308			
HACH, Sulfate	mg/L	9600.0		5500.0	700.0	500.0	300.0	800	900	1000	5750	14000	24500	12000		32000	12500	17000	15750	17142.8571	15750		16500	
HACH, Total Fe	mg/L	3500.0		776.0	286.0	55.0	44.0	209			13875	3000	3075	7100		4982.1	6950	5550	2800	2533.33333	3100		4450	
TDS	ppt	3.160		2.510	0.401	0.363	0.356	0.606	0.622	1.06	1.99	2.04	3.33	2.56		4.8	5.75	6.11	5.8	6.6				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb	0.137			3.653	1.848	0.153	3.757	0.551	8.731	9.012					8.478	18.157	70.731	0.785	1.777	3.035	3.713		
Ag	mg/L	0.059			0.01	1.529	0.015	0	0.007	0.009	0.08	0.013	0.028			0	0	N/A	N/A	0	N/A	0		
Al	mg/L	23.507			0.451	1.192	0.324	0.967	1.440	2.216	5.219	8.039	11.072			5.636	3.615	2.466	19.948	1.696	1.313	1.068		
As	mg/L	0.491			0.182	0.18	0.124	0.176	0.154	0.249	4.931	21.916	121.88			84.969	44.555	24.783	19.353	18.841	16.051	9.642		
B	mg/L	0			0.282	2.102	0.143	0.058	0.520	0.176	0	0	0			0	0	0	41.766	0	0	0		
Ba	mg/L	0.049			0.013	0	0.01	0	0.004	0.002	0.016	0	0.068			0.075	0.06	0.049	0.017	0.037	0.046	0.044		
Be	mg/L	0.003			0.001	0.002	0	0	0.000	0	0	0.001	0			0	0	0	0	0	0	0		
Bi	mg/L	0			0	0.019	0	0	0.000	0	0.023	0.071	0.01			0.097	0	0.039	0	0.046	0.03	0.016		
Ca	mg/L	243.445			47.973	21.103	9.897	12.339	7.363	4.885	7.232	15.337	39.799			27.207	23.893	18.148	20.182	14.093	12.846	5.603		
Cd	mg/L	142.619			61.522	55.421	43.398	88.117	78.588	81.899	192.219	156.517	157.016			152.545	88.407	50.384	34.108	18.596	11.335	5.229		
Co	mg/L	233.013			37.08	11.405	4.274	5.34	2.508	1.553	3.76	6.141	8.154			6.033	3.832	2.663	2.378	1.866	1.751	1.303		
Cr	mg/L	2.86			0.085	0.054	0.052	0.429	0.564	1.455	7.326	11.013	13.424			5.585	2.594	1.294	0.974	0.599	403	0.2		
Cu	mg/L	16.088			1.874	1.059	1.196	9.078	12.299	16.669	50.444	88.104	52.862			65.761	59.552	N/A	N/A	25.274	N/A	15.711		
Fe	mg/L	5959			39.78	50.305	42.696	162.906	160.328	386.2	952.739	734.451	6038			1041.551	3130	2873	3553.029	2818.521	2786	1818		
Ga	mg/L	0.613			0	0.011	0.01	0.03	0.018	0.031	0.057	0.168	0.585			0.533	0.339	0.256	0	0.146	0.198	0.189		
K	mg/L	7.256			0.342	0.592	0.109	0.095	0.113	0.101	0.045	0.093	0.233			0.26	0.243	0.092	11.504	0	0	0.139		
Li	mg/L	1.678			0.225	0.055	0.013	0.009	0.006	0.004	0.015	0.016	0.024			0.017	0.015	0.005	0.029	0	0.003	0.004		
Mg	mg/L	25.101			4.615	1.197	0.415	0.486	0.325	0.204	0.424	1.03	1.596			0.944	0.963	0.802	0	0.319	0.124	0		
Mn	mg/L	29.419			6.583	2.009	0.733	0.756	0.435	0.406	1.191	1.64	2.612			2.478	1.917	1.511	1.45	1.274	1.281	1.027		
Mo	mg/L	0			0.004	0.003	0	0	0.000	0.001	0	0	0			0.013	0.003	0	0	0.002	0.003	0.001		
Na	mg/L	113.296			14.595	6.998	1.244	0.922	1.075	1.961	1.031	0.967	1.069			1.191	1.061	0.747	77.06	0	0.381	1.017		
Nb	mg/L	0			0.005	0.002	0	0	0.000	0	0	0	0			0	0	0	0	0	0	0		
Ni	mg/L	56.922			9.003	2.959	1.218	1.571	0.756	0.527	1.272	1.985	2.685			2.049	1.353	0.948	0.993	0.681	0.633	0.495		
Pb	mg/L	2.113			2.189	3.377	5.024	3.471	2.801	2.061	1.42	0.803	0.739			1.755	1.707	1.888	0.779	1.827	1.954	1.912		
Sb	mg/L	0			0	0	0.008	0	0.000	0	0	0	0			0	0	0	0.074	0	0	0		
Sc	mg/L	0.013			0	0	0	0.001	0.001	0.002	0	0.009	0			0	0	0	0	0	0	0		
Se	mg/L	0			0.012	0.073	0	0	0.000	0.008	0.031	0.128	0			0	0	0	1.616	0	0	0		
Sn	mg/L	0.028			0.002	0.011	0.013	0	0.000	0.003	0	0.013	0			0	0	0.001	0	0	0	0		
Sr	mg/L	0.104			0.127	0.002	0.005	0.005	0.004	0.004	0.014	0.022	0.043			0.02	0.015	0.011	0.022	0.007	0.009	0.004		
Te	mg/L	1.022			0.037	0.124	0.006	0.19	0.190	1.186	0.291	0.632	2.091			1.728	1.133	0.846	1.69	0.442	0.599	0.402		
Ti	mg/L	0.003			0	0.001	0.002	0	0.001	0.002	0.008	0.018	0.079			0.075	0.063	0.048	0	0.051	0.037	0.026		
Tl	mg/L	8.024			1.683	1.945	2.405	3.269	2.578	1.639	0.592	0.127	0.112			1.146	1.483	1.766	4.201	1.658	1.773	1.26		
V	mg/L	0.369			0	0	0	0.02	0.001	0.013	0.093	0.14	0.55			0.43	0.325	0.27	0.754	0.193	0.177	0.155		
W	mg/L	0			0	0.052	0	0	0.000	0	0	0	0			0	0	0	0	0	0	0		
Zn	mg/L	48.532			13.88	8.537	5.238	16.313	10.857	9.446	23.561	35.674	51.409			40.752	27.379	18.515	18.813	12.951	11.918	7.476		

Geoloy Name:	YV9S-W20
Met Code:	13028
Composite ID	YS Sur Teut SM HA #07
Tara (kg)	0.9377
Initial Height of Rock in Column:	1.48 m

Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	41062	41091	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L	0.0448			2.3554	4.56839	3.0379	9.6249	4.3598	0.3826	2.2877	2.6405				0	0.85	0.95	0.524	2.05	2.0779	2.5215	1.8617	1.0256
pH		1.14				1.5	1.35	2.24	1.74	2.17	1.67	1.54					1.37	1.65	1.51	2.02	1.97	1.72	1.67	1.36
Electrical Conductivity	ms/cm										0.0141	22.14					29.1	11.46	14.09	17.65	8.49	0.04	5.09	15.93
Temperature	°C	13.1					13	14.2	14.2	13	13	13					17.8	18.5	19.5	16	20.3	18.4	20	18.7
Eh	mV	645.4				755.6	810.3	785.1	736.8	740	1064.8	780.3					517.7	506.6	520.6	872.6	841.6	657.5	750	838.3
D.O	mg/L	5.82									4.68	3.99					4.58	4.18	4.17	6.3	5.07	4.86	4.72	3.36
Rock Height in Column	mm				1306.8	1305.7	1305.2	1304.4		1304.2	1304.2	1304.2					1304.2	1304.2	1304.2	1304.2	1304.2	1304.2	1304.2	1304.2
HACH, Sulfate	mg/L	121666.7				11000	13500	7000	11250	19166.6667	13750	23333.3333					14247	2750	12600	8800	9900	6000	8000	30000
HACH, Total Fe	mg/L	54166.7				1993.8	2260	1151.37	2105.03	3757.36	2991.97	2561.468					4900	1270	4311.5	2530	2820	1805.1	2734.7	2715.38
TDS	ppt																14.247	6.951	6.903	8.648	4.16	2.09	2.7	9.3
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	ppb				2.102		1.853	0.106	1.122	0		1.241					0.223	0.218	0.138		0.107	1.197	2.665	0.091
Ag	mg/L				0	0	0	0	0	0	0.002	0.051					0	0	0	0	0	0	0.008	0.032
Al	mg/L				17.805	2.423	0.98	0.558	0.732	2.071	2.931	2.702					8.3	5.42	6.68	6.68	4.282	2.816	3.524	18.955
As	mg/L				64.153	13.939	10.662	3.444	6.917	14.404	11.296	8.154					32.325	9.977	14.41	14.41	10.586	4.394	5.89	9.254
B	mg/L				0	0	0	0	0	0	0	0.382					0	1.528	0	0	0	0	1.89	33.097
Ba	mg/L				0.122	0.038	0.037	0.04	0.036	0.056	0.053	0.047					0.076	0	0.065	0.065	0.045	0.057	0	0.117
Be	mg/L				0	0	0	0	0	0	0	0					0	0	0	0	0	0	0.002	0
Bi	mg/L				0.082	0.036	0.068	0	0	0	0.145	0					0.156	0	0.084	0.084	0.07	0.063	0.139	0
Ca	mg/L				83.966	17.802	8.476	6.565	7.326	27.227	22.827	26.736					97.174	43.356	73.401	73.401	62.235	16.055	12.269	17.008
Cd	mg/L				18.894	3.375	1.931	0.635	1.21	2.414	1.975	1.428					6.015	2.244	2.156	2.156	1.361	0.614	0.647	1.071
Co	mg/L				3.932	1.025	1.356	0.537	1.167	2.18	1.663	1.451					2.367	0.879	1.556	1.556	1.291	0.77	1.196	1.582
Cr	mg/L				1.483	0.196	0.123	0.037	0.078	0.184	0.112	0.087					0.711	0.1	0.205	0.205	0.203	0.059	0.103	0.046
Cu	mg/L				71.623	14.885	16.05	7.183	13.612	26.321	18.56	13.664					33.89	11.805	24.776	24.776	21.731	9.253	15.006	14.806
Fe	mg/L				8587	1543.531	2297.738	923.113	2093	4439	2227.207	12259.288					5563.223	1558.276	3845.91	3845.91	3213.549	1220.587	2027.388	2723.508
Ga	mg/L				0.551	0	0.286	0.05	0.053	0.143	0.055	0.264					0.166	0.104	0.394	0.394	0.11	0.087	0.042	1.017
K	mg/L				1.316	0.698	0.327	0.114	1.008	0.27	0.801	0.515					2.71	0.731	0.803	0.803	0.883	0.547	0.847	13.156
Li	mg/L				0.007	0.002	0.001	0.001	0.001	0.001	0	0.004					0.005	0.005	0.004	0.004	0.003	0.011	0.002	0.022
Mg	mg/L				2.748	0.512	0	0.024	0	0.483	0.758	0.566					3.021	0.933	2.143	2.143	0.624	0.182	0.412	1.715
Mn	mg/L				6.243	1.045	1.427	0.531	1.28	2.586	2.085	1.874					4.418	1.995	7.856	7.856	2.71	1.22	2.65	3.275
Mo	mg/L				0.115	0.037	0.009	0	0.001	0.013	0.007	0.029					0.072	0.024	0.062	0.062	0.046	0	0.018	0.035
Na	mg/L				4.138	2.553	0.849	0.809	0.778	0.364	6.703	9.691					4.003	7.429	1.529	1.529	1.571	7.681	8.958	77.924
Nb	mg/L				0	0	0	0	0	0	0	0					0	0	0	0	0	0	0.005	0
Ni	mg/L				1.601	0.448	0.54	0.213	0.461	0.865	0.675	0.601					1.141	0.413	1.085	1.085	0.601	0.378	0.572	0.588
Pb	mg/L				1.784	0.958	1.654	1.176	1.86	1.906	2.275	2.391					1.269	1.79	1.553	1.553	1.634	1.648	1.728	2.151
Sb	mg/L				0	0.005	0	0	0	0	0	0					0	0	0	0	0	0	0.199	0.051
Sc	mg/L				0	0	0	0	0	0	0	0					0	0	0	0	0	0	0	0
Se	mg/L				0	0	0	0	0	0	0	0					0	0	0	0	0	0	0.168	0
Sn	mg/L				0.04	0.012	0	0	0	0	0.009	0.008					0.013	0	0	0	0	0	0.088	0
Sr	mg/L				0.09	0.012	0.009	0.01	0.011	0.023	0.011	0.019					0.08	0.027	0.095	0.095	0.046	0.018	0.021	0.034
Te	mg/L				1.605	0.423	5.211	0.204	3.706	8.544	4.8	0.383					1.117	1.184	0.637	0.637	0.566	0.183	0.33	0.952
Ti	mg/L				0.179	0.057	0.042	0.019	0.028	0.058	0.042	0.038					0.114	0.028	0.161	0.161	0.075	0.024	0.037	0.071
Tl	mg/L				5.09	2.538	2.934	0.959	1.309	1.842	1.509	1.395					5.504	3.653	3.137	3.137	1.754	1.009	0.744	0.127
V	mg/L				0.465	0.103	0.116	0.064	0.115	0.217	0.106	0.116					0.297	0.177	0.208	0.208	0.192	0.011	0.006	0.309
W	mg/L				0	0	0	0	0	0	0	0					0	0.107	0	0	0	0	0	0
Zn	mg/L				38.149	5.484	4.744	1.809	3.719	7.237	6.228	4.455					8.303	2.335	3.985	3.985	4.281	1.645	2.219	1.808

Geoloy Name:	YV9S-W20
Met Code:	13028
Composite ID	YS Sur Teut SM HA #07
Tara (kg)	0.9377
Initial Height of Rock in Column:	1.48 m

Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.9377	0	0.0026	0.0018	0.0017	0	2.1678	4.2562	2.7215	7.053	2.07	0.86	-	-	-	5.284	2.4018	2.1413	4.8932	2.5991	2.4979	5.1182
pH		1.44		1.11	1.45	1.78		1.74	1.77	1.68	1.91	1.32	1.82	-	-	-	1.54	1.64	1.67	1.71	1.43	1.43	1.61
Electrical Conductivity	ms/cm	19.54		24.35	7.45	13.26		8.7	9.73			23.47	9.9	-	-	-	16.54	8.63	11.93	11.57	16.51	10.25	11.41
Temperature	°C	17.5		15	15.7	17.8		18.2	15	16.2	17	18	17.9	-	-	-	20.1	20.1	20.5	20.1	18.2	20.2	18.7
Eh	mV	722.9		669.1	543.1	706.4		856.2	837.8	565.1	809.5	725.3	746.1	-	-	-	763.5	766.4	752.1	852.8	767.3	762.7	765.3
D.O	mg/L	5.7		6.21	6.33	5.94		5.49	6.7	5.8			6.16	-	-	-	-	-	-	-	-	-	-
Rock Height in Column	mm	1304.2		1304.2	1304.2	1304.2		1304.2	1304.2	1304.2	1304.2	1304.2		-	-	-	1304.2	1304.2	1304.2	1304.2	1304.2	1304.2	1304.2
HACH, Sulfate	mg/L	9700		17300	33400	7600		5600	7100		2800	13800	4400	-	-	-	11000	0.759	11500	8900	9500	11500	7300
HACH, Total Fe	mg/L	2916.3		6140.48	6154.812	3188.016		1961.4	2484.19	3310	8937.184	4933.94	1877.337	-	-	-	3631.428	3369.52	5174.62	3911.05	4211.9	33394.35	21601.03
TDS	ppt	11.7		14.5	2.58	7.08		8.6	5.4	4.81		14	4.9	-	-	-	9.6	4.7	6.7	11.9	9.6	5.7	6.4
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.193						0.02		0.227	0	1.378	N/A	-	-	-	1.237	1.339	0.331	0.34	0.698	7.138	0.43
Ag	mg/L	0						0.008	0	0	0	0	0	-	-	-	0	0.039	0	0.009	0	0	0
Al	mg/L	3.999						3.016	3.371	0.613	1.242	3.089	1.015	-	-	-	7.478	61.182	4.161	4.753	2.546	2.142	1.831
As	mg/L	9.286						6.528	7.112	1.371	2.312	11.592	3.461	-	-	-	17.562	28.393	9.125	8.44	7.794	9.646	3.92
B	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ba	mg/L	0.059						0	0.051	0.011	0.024	0.045	0.039	-	-	-	0.091	0	0.081	0	0.038	0.079	0.042
Be	mg/L	0						0	0	0	0.001	0	0	-	-	-	0	0.001	0	0	0.001	0	0.002
Bi	mg/L	0						0.042	0.205	0	0.038	0.158	0.044	-	-	-	0.167	0.036	0.231	0.093	0.211	0.209	0.095
Ca	mg/L	18.376						40.277	47.471	3.948	4.806	11	10.388	-	-	-	107.576	22.86	30.367	30.355	8.093	14.835	3.637
Cd	mg/L	1.3						0.6	0.708	0.156	0.246	0.98	0.316	-	-	-	2.196	0.21	1.289	0.955	0.589	0.598	0.267
Co	mg/L	1.633						1.132	1.24	0.249	0.516	2.013	0.687	-	-	-	2.122	0.83	1.622	1.749	1.617	1.94	0.96
Cr	mg/L	0.188						0.165	0.192	0.029	0.047	0.176	0.053	-	-	-	0.8	0.167	0.342	0.333	0.132	0.084	0.049
Cu	mg/L	20.859						14.687	16.301	3.089	5.292	26.916	9.024	-	-	-	29.557	248.355	19.073	18.79	19.875	21.896	10.333
Fe	mg/L	2303.145						1278.343	2990.34	319.67	731.69	1682.077	1722	-	-	-	2025.415	2513.383	2996.019	2116.01	1383.752	1943.687	1276.559
Ga	mg/L	0.1						0.231	0.102	0.027	0.053	0.208	0.083	-	-	-	0.203	0.807	0.168	0.002	0.107	0.162	0.067
K	mg/L	1.195						0.714	0.714	0.034	0.712	1.183	0.301	-	-	-	0.859	14.478	5.489	5.677	8.651	0.967	0.761
Li	mg/L	0.003						0.003	0.004	0	0	0	0.001	-	-	-	0.004	0.006	0.002	0.001	0.001	0.004	0.002
Mg	mg/L	0.179						1.259	0.914	0.042	0.081	0	0.093	-	-	-	2.863	1.559	0.693	1.001	0	0	0
Mn	mg/L	2.665						4.527	5.167	0.628	1.299	1.945	1.866	-	-	-	5.894	3.574	5.674	5.846	2.472	1.483	1.485
Mo	mg/L	0.013						0.02	0.014	0	0	0.026	0	-	-	-	0.071	2.849	0	0.052	0.035	0	0
Na	mg/L	8.223						3.492	3.744	0.953	2.55	3.374	0.847	-	-	-	3.381	3.837	1.491	4.659	2.059	7.196	3.827
Nb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ni	mg/L	0.897						0.802	0.901	0.141	0.258	0.844	0.366	-	-	-	1.354	0.385	0.916	1.168	0.798	0.839	0.485
Pb	mg/L	1.799						0.897	0.886	0.241	0.618	1.619	0.699	-	-	-	0.849	2.305	0.753	1.207	1.649	1.98	1.508
Sb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0.009	0	0	0
Sc	mg/L	0						0	0	0	0	0	0	-	-	-	0	0.013	0	0	0	0	0
Se	mg/L	0						0.036	0	0	0	0	0	-	-	-	0	0.203	0	0.216	0	0	0
Sn	mg/L	0						0.025	0.023	0.005	0.017	0.074	0.014	-	-	-	0.137	0.063	0.049	0.032	0.024	0	0
Sr	mg/L	0.026						0.046	0.049	0.005	0.005	0	0.017	-	-	-	0.116	0.059	0.033	0.036	0.013	0.041	0.006
Te	mg/L	0.678						0.413	0.339	0.071	0.137	0.607	0.193	-	-	-	0.654	1.199	0.474	0.65	0.325	0.406	0.311
Ti	mg/L	0.064						0.063	0.066	0.01	0.009	0.054	0.031	-	-	-	0.144	0.014	0.044	0.045	0.034	0.031	0.014
Tl	mg/L	1.036						0.518	0.556	0.124	0.257	0.822	0.317	-	-	-	0.856	0	0.588	0.46	0.661	0.652	0.372
V	mg/L	0.128						0.117	0.107	0.021	0.041	0.226	0.08	-	-	-	0.295	1.183	0.267	0.288	0.159	0.222	0.082
W	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Zn	mg/L	3.472						2.414	2.643	0.473	0.877	3.734	1.539	-	-	-	4.472	108.365	3.072	2.828	2.443	3.07	1.425

Muestra 13029

Geoloy Name:	YV9C-W33																						
Met Code:	13029																						
Composite ID	YS Cent Yyq AA Pyr A #08																						
Tara (kg)	0.9372																						
Initial Height of Rock in Column:	1.52 m	3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L				2.137	1.711	3.817	0.475	2.603	2.825	0.1828	0.0268	0.013	0		0.501	1.609	5.592	2.2525	3.0201	4.378	4.5623	1.064	
pH					**4.20**	**4.25**	**4.16**	**3.63**	**3.46**	**3.61**	**3.25**	**4.02**				**2.52**	**2.57**	**2.23**	**2.01**	**1.96**	**1.53**		**1.78**	
Electrical Conductivity	ms/cm				1.332	0.925	0.783	1.554	1.586	1.858	2.48	1.67				6.2	4.64	5.2	4.6	6.3				
Temperature	°C				17.4	18.5	18.4	17.8	15.6	16	17.1	16.9				16.8	14.6	15.8	17.2	7.8	13.7		15.6	
Eh	mV				310.5	331.7	492.3	585.6	673.1	753.1	679.9	404.6				655.2	841.3	910.6	864.4	836.4	908.2		948.2	
D.O	mg/L				3.63	3.75	3.82	3.58	3.77	3.74	3.19	2.35				6.34	6.75	5.68	6.6	7	5.19		5.75	
Rock Height in Column	mm				1490	1471	1458	1432	1400	1395	1401	1398.6	1396.8	1396		1382.1	1380.1	1372.3	1369.1	1372	1313			
HACH, Sulfate	mg/L				900	1000	550	1800	2300	2125	2600	2125				12083.3	9750	9500	9265	11600	5294.11765		6617.64706	
HACH, Total Fe	mg/L				7	7	5	10			10200					442.5	1433	1925	1362.5	1750	1300		1925	
TDS	ppt				0.667	0.385	0.392	0.8	0.793	0.927	1.23	0.838				3.11	2.32	2.6	2.3	3.18				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	**ppb**				**7.281**	**2.005**	0.306	**9.43**	0.856	**21.236**						1.093	**3.407**	**25.107**	0.153	0.997	1.769	1.214	0.471	
Ag	**mg/L**				0.022	**1.453**	0.016	0.01	0.015	0.016						0.046	0.042	**N/A**	**N/A**	0.015	**N/A**	0.008	**N/A**	
Al	**mg/L**				**38.469**	**28.615**	**16.64**	**85.865**	**105.054**	**116.262**						0	**654**	**338.119**	**222.993**	**204.393**	**123.022**	**60.394**	**77.238**	
As	**mg/L**				**0.036**	0	0.005	0	**0.013**	**0.018**						**0.283**	**1.158**	**8.723**	**4.021**	**5.287**	**3.978**	**2.03**	**3.913**	
B	**mg/L**				**0.525**	**2.02**	0.218	0.184	0.255	0.283						0	0	0	0	0	0	0	0	
Ba	**mg/L**				0.045	0	0.027	0	0.011	0.017						0.016	0.02	0.03	0.047	0.026	0.035	0.037	0.038	
Be	**mg/L**				0.001	0.001	0.001	0.002	0.002	0.003						**0.019**	**0.013**	**0.007**	**0.04**	0.004	0.002	0.001	**0.015**	
Bi	mg/L				0	0	0	0.01	0.000	0						0	0	0	0	0	0	0	0	
Ca	mg/L				91.546	35.26	36.871	76.449	57.478	60.711						73.06	28.358	23.652	19.08	17.815	18.472	12.494	16.928	
Cd	**mg/L**				**0.323**	**0.21**	**0.28**	**0.994**	**1.022**	**1.015**						**7.117**	**4.348**	**7.272**	**2.199**	**1.935**	**1.37**	**0.74**	**0.859**	
Co	**mg/L**				**1.093**	**0.637**	**0.571**	**1.398**	**1.077**	**0.87**						**1.225**	**0.583**	**0.581**	**0.342**	**0.377**	**0.29**	**0.199**	**0.287**	
Cr	**mg/L**				0.029	0	0.008	0.024	0.037	0.032						**4.757**	**3.808**	**3.82**	**1.61**	**1.339**	**0.721**	**0.319**	**0.407**	
Cu	**mg/L**				**117.692**	**132.293**	**82.349**	**256.71**	**281.497**	**301.762**						**546.913**	**626.9**	**N/A**	**N/A**	**355.319**	**N/A**	**138.264**	**N/A**	
Fe	**mg/L**				**5.29**	**3.075**	**2.749**	**5.658**	**4.841**	**2.536**						**382.883**	**839.3**	**731.426**	**800.149**	**1863.716**	**1765**	**541.657**	**1512**	
Ga	mg/L				0.004	0.006	0.005	0	0.000	0.001						0.102	0.284	0.369	0.436	0.399	0.35	0.231	0.334	
K	mg/L				75.118	53.513	38.005	76.743	46.401	39.982						7.04	1.793	0.845	0.86	0.772	0.489	0.766	0.54	
Li	mg/L				0.299	0.137	0.056	0.035	0.018	0.012						0.05	0.025	0.011	0.008	0.002	0.003	0.005	0.003	
Mg	mg/L				8.376	4.38	3.256	8.172	6.944	5.973						5.917	2.226	1.522	1.233	0.932	0.697	0.424	1.057	
Mn	**mg/L**				**8.847**	**5.566**	**4.681**	**12.06**	**9.422**	**7.392**						**7.316**	**3.003**	**2.153**	**1.669**	**1.915**	**1.721**	**0.898**	**1.63**	
Mo	**mg/L**				0.014	0	0	0	0.000	0						0.003	0	0.008	0.008	0.021	0.022	0.016	0.045	
Na	mg/L				80.93	29.62	8.141	3.441	1.370	2.7						2.156	1.249	0.915	1.235	0.111	0.474	1.219	0.219	
Nb	mg/L				0	0	0	0	0.000	0						0	0	0	0	0	0	0	0	
Ni	**mg/L**				**0.602**	**0.351**	**0.321**	**0.862**	**0.676**	**0.548**						**1.051**	**0.43**	**0.344**	**0.202**	**0.218**	0.171	0.109	0.167	
Pb	**mg/L**				**1.258**	**1.963**	**1.977**	**2.239**	**1.492**	**0.838**						**0.097**	**0.14**	**0.348**	**0.134**	**0.206**	**0.242**	**0.28**	**0.246**	
Sb	**mg/L**				0	0	0	0	0.000	0						0	0	0	0	0	0	0	0	
Sc	mg/L				0.002	0.002	0.001	0.005	0.006	0.007						0.725	0.605	0.411	0.293	0.246	0.117	0.048	0.063	
Se	**mg/L**				**0.096**	**0.038**	**0.018**	**0.026**	**0.019**	**0.025**						0	0	0	0	0	0	0	0	
Sn	mg/L				0.003	0.006	0.009	0.005	0.012	0						0.022	0	0.002	0	0	0	0	0	
Sr	mg/L				0.59	0.308	0.254	0.515	0.427	0.36						0.458	0.237	0.147	0.116	0.098	0.079	0.055	0.069	
Te	mg/L				0	0.068	0	0	0.027	0.019						0	0.267	0.458	0.431	0.286	0.339	0.179	2.8	
Ti	mg/L				0.002	0.001	0.004	0	0.000	0						0	0	0.005	0.002	0.003	0.003	0.003	0.014	
Tl	**mg/L**				**0.017**	0	**0.03**	**0.022**	**0.050**	**0.023**						0	**0.01**	0	**0.005**	0	0	**0.027**	**0.005**	
V	**mg/L**				0	0	0	0.01	0.000	0						0.038	**0.158**	**0.545**	**0.549**	**0.646**	**0.454**	**0.28**	**0.384**	
W	mg/L				0.007	0.198	0.009	0.03	0.016	0.033						0	0	0	0	0	0	0	0	
Zn	**mg/L**				**11.371**	**7.762**	**6.242**	**20.992**	**20.622**	**23.487**						**127.262**	**95.618**	**98.499**	**103.576**	**119.028**	**107.588**	**70.364**	**82.649**	

Geoloy Name:	YV9C-W33																							
Met Code:	13029																							
Composite ID	YS Cent Ypq AA Pyr A #08																							
Tara (kg)	0.9372																							
Initial Height of Rock in Column:	1.52 m	3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				0.6707	1.82741	1.785	4.3019	2.0943	1.0779	1.4471	2.095					0.563	0.568	0.524	1.66	1.9215	1.4563		0.826
pH						**1.33**	**1.42**	**1.7**	**1.67**	**1.62**	**1.65**	**1.5**					**1.26**	**1.51**	**1.57**	**2.05**	**2.1**	**1.75**		**1.55**
Electrical Conductivity	ms/cm										0.0163	25.17					36.7	16.91	16.24	14.69	6.11	0.0428		12.11
Temperature	°C						13	14.2	14.2	14.2	13	13					18	18.4	19.5	16	20.3	18.7		18.8
Eh	mV					852.8	876.9	824.1	860	844.1	1121.1	861.7					523.6	514.8	516.6	915.6	904.6	678.9		855.1
D.O	mg/L										4.93	4.35					4.53	4.28	4.81	6.27	5.76	5.83		5.63
Rock Height in Column	mm				1312.5	1311.5	1311.1	1310.6		1309.1	1309.1	1309.1					1309.1	1308.5	1308.5	1308.5	1308.5	1308.5		1308.5
HACH, Sulfate	mg/L					58000	32500	14500	19000	16500	34375	33333.33					35981.60	10250.00	19600.00	13500.00	12700.00	10800.00		27500.00
HACH, Total Fe	mg/L					9963.0	4090	2477.19	3680.895	3880.9	5960.06	3763.214					11150	4275	6178.6	4527	4388	4693.26		3978.62
TDS	ppt																17.966	10.564	7.957	7.2	2.99	1.97		7
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	**ppb**				**2.902**		**2.212**	0.118	0.592	0.31		0.591					1.002	0.364	0.236	0.216	0.22	**3.215**		0.143
Ag	**mg/L**				0.035	0.029	0	0	0	0	0.001	0.007					0	0	0	0	0	0		0.023
Al	**mg/L**				**558.1**	**259.642**	**104.049**	**41.108**	**50.72**	**75.346**	**81.579**	**52.722**					**129.234**	**57.28**	**56.34**	**29.035**	**33.276**	**28.796**		**52.629**
As	**mg/L**				**47.979**	**37.903**	**13.189**	**4.83**	**6.781**	**14.904**	**19.736**	**11.86**					**39.897**	**14.872**	**14.07**	**9.461**	**10.681**	**7.075**		**10.38**
B	**mg/L**				0	0	0	0	0	0	0	0					0	0	0	0	0	0		**39.488**
Ba	**mg/L**				0.19	0.1	0.068	0.048	0.052	0.081	0.082	0.068					0.145	0.045	0.068	0.069	0.066	0.088		0.157
Be	**mg/L**				**0.005**	0.004	**0.019**	0.001	**0.007**	**0.009**	**0.008**	0.001					0.002	0	0.001	0	0.001	0		0
Bi	mg/L				0	0.165	0	0	0	0	0.097	0.035					0.367	0	0	0	0	0		0.068
Ca	mg/L				31.646	40.301	38.506	20.183	24.209	31.639	37.492	25.54					55.762	34.47	42.531	36.816	35.146	23.059		33.909
Cd	**mg/L**				**4.75**	**2.36**	**1.105**	**0.42**	**0.448**	**0.526**	**0.606**	**0.397**					**0.825**	**0.47**	**0.419**	**0.207**	**0.27**	**0.245**		**0.259**
Co	**mg/L**				**1.589**	**1.173**	**0.801**	**0.356**	**0.513**	**0.708**	**0.833**	**0.603**					**1.147**	**0.691**	**0.697**	**0.472**	**0.483**	**0.406**		**0.546**
Cr	**mg/L**				**1.97**	**0.92**	**0.402**	**0.134**	**0.167**	**0.237**	**0.208**	**0.142**					**0.411**	**0.147**	**0.185**	**0.165**	**0.182**	0.095		**0.239**
Cu	**mg/L**				**1305**	**613.62**	**297.478**	**139.781**	**155.335**	**228.491**	**231.393**	**144.817**					**390.767**	**212.019**	**221.263**	**127.574**	**169.454**	**124.296**		**128.519**
Fe	**mg/L**				**15110**	**11243.314**	**5878.038**	**2063.471**	**3424**	**6255**	**32931.464**	**22858.809**					**13370.927**	**3980.485**	**6321.678**	**2703.429**	**4975.471**	**2320.498**		**4029.44**
Ga	mg/L				2.366	0.497	0.986	0.21	0.258	0.475	0.473	0.617					0.971	0.428	0.809	0.238	0.302	0.198		1.247
K	mg/L				4.27	3.196	2.7	1.761	2.707	2.529	2.872	2.6					4.824	2.731	3.343	2.226	1.754	1.733		15.89
Li	mg/L				0.015	0.011	0.005	0.002	0.003	0.003	0	0.004					0.008	0.007	0.005	0.005	0.005	0.013		0.025
Mg	mg/L				3.814	2.06	1.15	0.554	0.558	0.764	1.358	0.883					2.172	0.854	1.551	0.743	0.694	0.569		2.499
Mn	**mg/L**				**9.138**	**6.285**	**5.323**	**1.834**	**2.489**	**3.573**	**4.681**	**2.996**					**6.434**	**3.864**	**4.794**	**3.726**	**4.616**	**2.579**		**5.665**
Mo	**mg/L**				**0.581**	**0.533**	**0.268**	0.16	**0.283**	**0.585**	**0.784**	**0.618**					**1.542**	**0.776**	**0.713**	**0.746**	**0.49**	**0.43**		**0.609**
Na	mg/L				2.561	1.955	1.173	1.012	0.878	0.18	7.057	9.747					1.567	7.985	1.158	9.114	1.362	9.694		82.06
Nb	mg/L				0	0	0	0	0	0	0	0					0	0	0	0	0	0		0
Ni	**mg/L**				**0.796**	**0.556**	**0.431**	0.179	**0.251**	**0.344**	**0.393**	**0.321**					**0.57**	**0.272**	**0.426**	**0.327**	**0.366**	**0.245**		0.137
Pb	**mg/L**				**1.645**	**1.307**	**1.361**	**0.883**	**1.5**	**1.689**	**2.196**	**1.796**					**1.42**	**1.681**	**1.477**	**1.329**	**0.958**	**1.233**		**2.346**
Sb	**mg/L**				0	0	0	0	0	0	0	0					0	0	0	0	0	0		0
Sc	mg/L				0.345	0.184	0.047	0.011	0.006	0.008	0	0.005					0.046	0.02	0.013	0.003	0.008	0.003		0
Se	**mg/L**				0	0	0	0	0	0	0	0					0	0	0	0	0	0		0
Sn	mg/L				0	0	0	0	0	0	0.018	0					0	0	0	0.003	0	0		0.047
Sr	mg/L				0.207	0.142	0.097	0.051	0.065	0.077	0.078	0.055					0.112	0.067	0.083	0.066	0.071	0.049		0.079
Te	mg/L				2.327	1.826	10.236	0.403	4.545	9.204	7.681	0.497					1.702	1.553	0.785	0.646	0.695	0.421		1.716
Ti	mg/L				0.094	0.012	0.008	0.003	0.012	0.021	0.031	0.012					0.04	0.026	0.087	0.15	0.021	0.016		0.062
Tl	**mg/L**				0	0	**0.021**	**0.012**	0	0	0	0					**0.022**	**0.016**	0.002	**0.095**	0.001	**0.148**		0
V	**mg/L**				**2.435**	**1.966**	**0.981**	**0.455**	**0.528**	**0.828**	**0.943**	**0.639**					**1.722**	**1.001**	**0.81**	**0.507**	**0.724**	**0.411**		**0.773**
W	mg/L				0	0	0	0	0	0	0	0					0	0	0	0	0	0		0
Zn	**mg/L**				**150.922**	**156.122**	**149.343**	**78.244**	**84.612**	**103.717**	**167.162**	**118.132**					**119.353**	**146.55**		**70.162**	**66.179**	**74.552**		**86.157**

Geoloy Name:	YV9C-W33																						
Met Code:	13029																						
Composite ID	YS Cent Ypq A A Pyr A #08																						
Tara (kg)	0.9372																						
Initial Height of Rock in Column:	1.52 m	3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-2014	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.002		0.002			0.0024	2.3846	3.006	1.8977	2.003	2.73	1.39				2.3456	1.8214	1.4052	3.5411	4.1667	2.56987	5.6687
pH		1.64		1.1			1.7	1.52	1.57	1.57	1.72	1.71	1.78				1.3	1.22	1.29	1.35	1.62	1.64	1.77
Electrical Conductivity	ms/cm	14.22		12.01			23.42	16.99	14.05	13.62		10.77	10.05				26.55	23.59	25.09	22.12	11.83	6.4	7.51
Temperature	°C	17.6		15			16.2	18.1	15	16	17	18	18				20.1	20.1	20.4	20.1	18.5	20.3	18.7
Eh	mV	739.2		623.4			688.8	834.1	852.5	563.9	815.8	752.3	836.5				820.2	808.2	809.9	886.8	738.2	791.8	790.10.
D.O	mg/L	5.15		5.48			5.55	5.3	6.8	5.53			6.05				-	-	-	-	-	-	-
Rock Height in Column	mm	1308.5		1308.5			1308.5	1308.5	1308.5	1308.5	1308.5	1308.5					1308.5	1308.5	1308.5	1308.5	1308.5	1308.5	1308.5
HACH, Sulfate	mg/L	10200.00		27200.00			23200.00	15500.00	9200.00		5600.00	6600.00	6200				24300	22800	20000	8900	6600	7400	4500
HACH, Total Fe	mg/L	3392.53		10002.86			8999.54	5165.51	3544.52	5740	4744.58	3189.01	2326.128				5276.538	7.88227	6799.21	4873.77	3309.35	21420.52	12034
TDS	ppt	8.2		6.7			13.8	15.78	8	6.673		5.3	5.6				16.1	14	15	11.9	6.7	3.5	4.1
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb							0.055	0.058	0.1	0.283	0.644	N/A				2.682	5.355	0.565	0.34	0.531	3.397	1.703
Ag	mg/L							0.013	0	0	0	0	0				0	0.015	0	0.009	0	0	0
Al	mg/L							25.719	28.669	8.093	16.569	21.914	16.199				65.482	14.093	48.694	4.753	19.119	18.505	10.257
As	mg/L							7.471	8.087	2.255	3.472	5.335	4.054				30.17	41.808	17.575	8.44	4.798	4.732	1.826
B	mg/L							0	0	0	0	0	0				0	0	0	0	0	0	1.041
Ba	mg/L							0	0.048	0.016	0.023	0.011	0.043				0.138	0	0.098	0	0.036	0.05	0.027
Be	mg/L							0.001	0.001	0	0.001	0.001	0.001				0.002	0	0.001	0	0.001	0.001	0.002
Bi	mg/L							0.052	0.238	0	0	0.046	0				0	2.872	0.241	0.093	0.073	0.065	0
Ca	mg/L							23.635	27.727	5.644	16.138	19.8	18.931				22.621	49.222	19.286	30.355	24.904	16.442	8.035
Cd	mg/L							0.168	0.246	0.065	0.155	0.136	0.144				0.458	0	0.278	0.955	0.112	0.112	0.058
Co	mg/L							0.441	0.444	0.122	0.319	0.287	0.293				0.822	1.261	0.59	1.749	0.324	0.335	0.182
Cr	mg/L							0.084	0.098	0.027	0.073	0.033	0.05				0.232	0.249	0.121	0.333	0.064	0.055	0.017
Cu	mg/L							136.917	155.312	45.215	96.262	111.462	93.116				303.84	60.071	205.805	18.79	90.605	88.147	52.024
Fe	mg/L							1407.187	3720.85	449.438	1259.7	1286.778	2115				7474.237	2791.681	3738.81	2116.01	1157.761	1430.068	839.537
Ga	mg/L							0.351	0.219	0.071	0.14	0.149	0.143				0.594	0.955	0.417	0.002	0.122	0.147	0.061
K	mg/L							2.042	2.498	0.419	1.753	1.675	1.59				3.603	18.888	11.856	5.677	9.664	2.226	1.544
Li	mg/L							0.004	0.005	0.001	0.001	0	0.002				0.014	0.006	0.005	0.001	0.002	0.004	0.002
Mg	mg/L							1.218	0.788	0.123	0.462	0.575	0.728				0.74	1.953	0.799	1.001	0.814	0.653	0.439
Mn	mg/L							2.321	2.701	0.864	2.855	2.014	1.794				4.143	4.453	2.707	5.846	1.831	1.584	0.855
Mo	mg/L							0.723	0.783	0.209	0.342	0.601	0.483				2.762	0.634	2.372	0.052	1.163	1.1	0.51
Na	mg/L							3.152	4.503	0.952	2.465	3.56	1.049				3.442	4.681	1.57	4.659	2.249	4.065	3.917
Nb	mg/L							0	0	0	0	0	0				0	0	0	0	0	0	0
Ni	mg/L							0.25	0.29	0.087	0.198	0.174	0.17				0.457	0.584	0.285	1.168	0.172	0.176	0.089
Pb	mg/L							1.419	1.41	0.336	1.082	1.045	1.112				2.092	2.041	1.602	1.207	1.1	1.441	0.944
Sb	mg/L							0	0	0	0	0	0				0	0	0	0.009	0	0	0
Sc	mg/L							0.005	0.001	0	0	0	0				0	0	0.001	0	0.001	0	0
Se	mg/L							0.122	0	0	0	0	0				0	0.377	0	0.216	0	0	0
Sn	mg/L							0.024	0.015	0.002	0.02	0.015	0.016				0.064	0.095	0.046	0.032	0.034	0	0
Sr	mg/L							0.058	0.062	0.013	0.033	0.019	0.042				0.073	0.082	0.048	0.036	0.039	0.035	0.018
Te	mg/L							0.442	0.369	0.13	0.303	0.279	0.224				0.874	1.585	0.641	0.65	0.214	0.192	0.129
Ti	mg/L							0.009	0.007	0.004	0.001	0	0.004				0.015	0.05	0	0.045	0.002	0.004	0.004
Tl	mg/L							0	0.012	0.009	0	0.019	0				0	0	0.015	0.46	0.007	0	0.038
V	mg/L							0.479	0.504	0.153	0.313	0.357	0.342				1.281	1.03	0.917	0.288	0.347	0.359	0.159
W	mg/L							0	0	0	0	0	0				0	0	0	0	0	0	0
Zn	mg/L							59.799	70.234	18.185	45.285	45.724	39.096				113.814	3.1	63.836	2.828	30.9	34.948	20.794

Muestra 13030

Geoloy Name:	YV9C-W43
Met Code:	13030
Composite ID	YS Cent YppRX AA-Pyr HA #09
Tara (kg)	0.9379
Initial Height of Rock in Column:	1.42 m

Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.000	0.000	0.403	4.279	2.255	3.691	0.5901	3.362	3.148	0.769	0.259	0.456	0.035	0.2626	1.813	2.4263	3.6962	2.2397	3.9576	2.9659	2.7203	0.09	
pH				7.82	4.11	4.05	3.69	3.03	2.22	2.09	1.9	1.87	1.65	1.45		1.53	1.67	1.66	1.39	1.51	1.89		1.78	
Electrical Conductivity	ms/cm			0.365	1.043	0.769	0.62	0.941	2.61	4.23	8.71	9.33	13.62	18.97		13.36	11.1	12.37	12.03	131.13				
Temperature	°C			17.1	17.4	18.5	18.4	17.8	15.6	16	17.1	17	12.6	14		16.8	14.5	14.1	17.2	7.4	13.7		15.5	
Eh	mV			372	305.1	401.9	501.4	563.2	738.3	875	859.8	858.3	770.3	734		735.7	864.3	908.6	875.2	845.5	924.9		950.4	
D.O	mg/L			3.83	3.81	3.7	3.82	3.85	3.86	3.82	3	3.74	6.48			5.75	6.07	5.43	6.5	5.8	5.14		5.66	
Rock Height in Column	mm			1395	1390	1382	1376	1368	1362	1360	1349	1348	1348	1348	1338.6	1335.7	1336.2	1329.7	1329	1318	1310			
HACH, Sulfate	mg/L			800	800	700	400	1000	11000	7000	16000	36667	43750	76250		32000	22500	19500	20000	20500	12500		23214.3	
HACH, Total Fe	mg/L			31	14	17	21.5	62			42600	6900	8531	21000		6725	7500	6650	4350	2888.88889	4700		8100	
TDS	ppt			0.182	0.522	0.385	0.311	0.493	1.3	2.13	4.29	4.66	6.67	9.41		6.68	5.55	6.17	6.01	6.55				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				7.389	1.56	0.279	6.224	2.923	8.266	26.638					4.374	7.074	44.867	0.421	1.713	3.204	2.617		
Ag	mg/L				0.017	1.265	0.013	0	0.009	0.011	0.046	0.017	0.015			0	0	N/A	N/A	0	N/A	0		
Al	mg/L				13.351	21.379	16.145	42.601	94.302	55.372	63.419	78.203	76.763			52.25	28.843	17.359	35.717	6.24	8.32	5.146		
As	mg/L				0.016	0.027	0.024	0.021	1.246	7.461	72.376	129.119	306.463			125.62	70.543	47.993	43.121	21.074	28.276	15.856		
B	mg/L				0.426	2.228	0.168	0.136	0.074	0	0	0	0			0	0	0	39.583	0	0	0		
Ba	mg/L				0.03	0	0.025	0	0.011	0.004	0.026	0	0.101			0.096	0.07	0.069	0.034	0.048	0.095	0.077		
Be	mg/L				0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001			0.001	0.001	0	0	0	0	0		
Bi	mg/L				0	0.002	0	0	0.000	0	0.029	0.316	0.324			0.59	0.222	0.335	0.921	0.261	0.4	0.243		
Ca	mg/L				89.556	48.04	26.854	23.512	18.382	11.681	11.968	18.931	26.23			35.643	22.776	13.005	15.592	15.681	18.962	11.696		
Cd	mg/L				0.033	0.039	0.042	0.132	0.364	0.391	1.923	0	0.818			0.464	0.287	0.084	0	0	0	0		
Co	mg/L				1.97	1.075	0.575	0.392	0.354	0.311	0.624	0.884	0.995			0.959	0.606	0.535	0.59	0.406	0.598	0.402		
Cr	mg/L				0.146	0.188	0.224	0.742	7.246	8.204	13.406	14.35	10.818			4.378	2.673	1.52	1.375	0.489	0.854	0.399		
Cu	mg/L				82.356	113.08	63.024	93.708	138.819	84.105	117.467	149.061	59.611			78.803	70.855	N/A	N/A	23.536	N/A	19.957		
Fe	mg/L				8.268	15.097	20.67	66.14		4.679	3627	770.486	9191			1047.625	3227	3496	4848.261	3089.902	4819	2777		
Ga	mg/L				0	0.005	0.007	0.011	0.275	0.339	0.862	0.847	1.297			0.929	0.483	0.418	0	0.158	0.426	0.322		
K	mg/L				5.659	3.677	1.978	2.403	1.319	0.427	0	0.133	0.336			0.778	0.223	0.292	11.485	0.234	0.385	0.442		
Li	mg/L				1.44	0.667	0.146	0.071	0.073	0.072	0.281	0.263	0.184			0.091	0.038	0.019	0.018	0	0.003	0.005		
Mg	mg/L				10.042	4.768	2.11	1.262	0.997	0.495	0.62	1.451	0.848			1.413	0.857	0.397	0	0.086	0.1	0.012		
Mn	mg/L				12.228	6.61	3.458	2.037	1.581	1.394	3.496	3.611	4.573			4.081	2.361	1.918	2.095	1.385	4.256	2.368		
Mo	mg/L				0.003	0.003	0	0.002	0.004	0.013	0.057	0.156	0.358			0.204	0.113	0.076	0	0.067	0.07	0.036		
Na	mg/L				50.669	20.223	4.855	1.816	1.381	1.021	1.366	1.078	1.21			1.173	1.028	0.566	75.638	0	0.801	1.268		
Nb	mg/L				0	0	0	0	0.000	0	0	0	0			0	0	0	0	0	0	0		
Ni	mg/L				1.404	0.774	0.436	0.32	0.262	0.2	0.382	0.43	0.489			0.451	0.281	0.257	0.188	0.191	0.346	0.193		
Pb	mg/L				0.056	0.054	0.129	0.315	1.305	0.957	0.672	0.611	0.772			1.316	0.902	1.041	0.215	0.999	1.294	1.069		
Sb	mg/L				0	0	0	0	0.000	0	0	0	0			0	0	0	1.175	0	0	0		
Sc	mg/L				0.003	0.006	0.005	0.014	0.162	0.102	0.099	0.163	0.216			0.073	0.04	0.015	0	0	0	0		
Se	mg/L				0.13	0.077	0.09	0.131	0.127	0.066	0.153	0.431	0			0	0	0	0	0	0	0		
Sn	mg/L				0.004	0.007	0.003	0.003	0.007	0.004	0	0.043	0			0	0	0	0	0	0	0		
Sr	mg/L				0.571	0.399	0.311	0.35	0.282	0.15	0.162	0.179	0.265			0.288	0.204	0.159	0.198	0.112	0.129	0.1		
Te	mg/L				0	0.079	0.005	0.006	0.113	0.181	0.616	0.781	1.387			0.943	0.75	0.655	0.836	0.403	0.837	0.508		
Ti	mg/L				0.002	0.002	0.002	0	0.003	0.013	0.016	0.043	0.062			0.023	0.015	0.011	0	0.013	0.017	0.012		
Tl	mg/L				0	0	0.017	0	0.012	0.008	0.007	0	0			0.017	0	0	0	0	0	0		
V	mg/L				0	0	0	0.013	0.029	0.087	0.426	0.577	1.216			0.655	0.433	0.378	1.114	0.239	0.386	0.266		
W	mg/L				0	0.151	0	0	0.000	0	0	0	0			0	0	0	0	0	0	0		
Zn	mg/L				4.83	3.021	1.65	1.546	1.550	1.256	2.244	3.31	4.055			5.922	2.284	1.297	1.514	1.33	1.404	0.963		

Geoloy Name:	YV9C-W43																								
Met Code:	13030																								
Composite ID	YS Cent YpqRX AA-PyrHA #09																								
Tara (kg)	0.9379																								
Initial Height of Rock in Column:	1.42 m																								
Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				0.8709	2.13254	1.7105	1.7244		0.3483	1.0185	0.7417					0.5	0.524	0.526	1.7078	1.1426	1.2563		0.8563
pH					**1.3**	**1.3**	**1.56**	**2.49**		**2.18**	**1.68**	**1.64**					**1.147**	**1.58**	**1.6**	**2.08**	**1.91**	**1.55**		**1.12**
Electrical Conductivity	ms/cm										0.0154	18.44					60.1	14.32	14.26	12.89	10.24	0.0605		28.98
Temperature	°C						13	14.2		13	13	13					18	18.4	19.5	16.1	20.2	18.9		18.9
Eh	mV				708.6	708.6	845.1	816.7		845.9	1109.2	857.4					530.1	510.7	515.1	910.5	800.7	697		876.4
D.O	mg/L										4.76	4.36					4.76	4.4	4.24	6.13	2.17	5.81		6.04
Rock Height in Column	mm				1308.6	1307.8	1307.5	1307.1		1306.5	1306.5	1306.5					1306.5	1305.2	1305.2	1305.2	1305.2	1305.2		1305.2
HACH, Sulfate	mg/L					31000	25000	10500		17500	28125	35833					30871	8000	12900	10800	24100	17000		25000
HACH, Total Fe	mg/L					6957.9	4050	2267.85		3605.944	5303.14	3323.138					9900	3420	4417.5	4198	7878	5535.64		7567.65
TDS	ppt																29.915	9.123	6.986	6.314	5.02	3.29		17.7
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	**ppb**				1.523		1.291	0.089		0.047		0.274					0.441	0.205	0.087		0.117	**4.102**		0.233
Ag	**mg/L**				0	0	0	0		0	0	0					0	0	0		0	0		0
Al	**mg/L**				**25.368**	**17.913**	**6.305**	1.722		3.053	**6.551**	**5.352**					**17.882**	**9.68**	**5.034**		**9.374**	**5.56**		**27.156**
As	**mg/L**				**103.372**	**57.532**	**22.806**	**7.098**		**11.402**	**20.919**	**13.452**					**54.377**	**15.553**	**14.495**		**21.855**	**10.96**		**24.531**
B	**mg/L**				0	0	0	0		0	0	0					0	0	0		0	0		**31.169**
Ba	**mg/L**				0.181	0.079	0.061	0.048		0.068	0.084	0.061					0.143	0.045	0.056		0.102	0.095		0.218
Be	**mg/L**				0	0	0.002	0		0	0	0.001					0	0	0		0	0		0
Bi	mg/L				3.401	1.242	0.356	0.089		0.313	0.461	0.42					2.948	0.011	0.41		0.82	0.539		1.233
Ca	mg/L				47.776	49.754	25.513	7.872		31.652	37.978	30.433					95.267	62.476	27.114		59.434	20.039		25.106
Cd	**mg/L**				**0.616**	0	0	0		0	0	0					0	0	0		0	0		0
Co	**mg/L**				**1.376**	**0.75**	**0.486**	**0.178**		**0.453**	**0.677**	**0.407**					**1.063**	**0.471**	**0.47**		**0.745**	**0.442**		**0.983**
Cr	**mg/L**				**1.881**	**0.885**	**0.332**	**0.196**		**0.203**	**0.186**	**0.205**					**0.764**	**0.207**	**0.159**		**0.289**	0.083		**0.19**
Cu	**mg/L**				**88.371**	**53.884**	**28.98**	**12.475**		**20.443**	**26.334**	**19.387**					**68.466**	**25.535**	**25.888**		**48.619**	**19.762**		**35.362**
Fe	**mg/L**				**14370**	**5495.554**	**4483.366**	**1893.081**		**4438**	**28609.777**	**2836.628**					**12162.605**	**3471.837**	**4509.824**		**8681.435**	**3068.211**		**7644.984**
Ga	mg/L				1.114	0	0.571	0.1		0.164	0.126	0.427					0.52	0.233	0.495		0.352	0.173		1.215
K	mg/L				3.679	2.243	0.744	0.161		0.246	1.003	0.58					2.33	0.423	0.089		1.237	0.782		15.448
Li	mg/L				0.009	0.006	0.002	0.001		0.001	0	0.004					0.006	0.006	0.002		0.005	0.003		0.031
Mg	mg/L				2.313	1.808	0.252	0		0.41	1.384	0.978					2.615	1.32	0.549		0.332	0		1.091
Mn	**mg/L**				**7.962**	**3.873**	**2.668**	**2.452**		**3.052**	**4.306**	**3.712**					**5.101**	**3.724**	**3.357**		**5.95**	**2.405**		**5.701**
Mo	**mg/L**				**0.279**	0.119	0.011	0		0.009	0.036	0.053					0.137	0.012	0.002		0.147	0.022		0
Na	mg/L				2.572	1.865	1.028	0.895		0.234	8.225	10.631					1.863	7.863	0.917		1.718	9.07		96.183
Nb	mg/L				0	0	0	0		0	0	0					0	0	0		0	0		0
Ni	**mg/L**				**0.817**	**0.405**	**0.308**	0.157		**0.252**	**0.367**	**0.625**					**0.54**	**0.227**	**0.35**		**0.573**	**0.232**		**0.57**
Pb	**mg/L**				**1.759**	**1.241**	**1.262**	**0.625**		**0.995**	**1.622**	**0.905**					**1.244**	**1.172**	**0.997**		**1.099**	**1.211**		**2.718**
Sb	**mg/L**				0	0	0	0		0	0	0					0	0	0		0	0		0
Sc	mg/L				0	0	0	0		0	0	0					0	0	0		0	0		0
Se	**mg/L**				0	0	0	0		0	0	0					0	0	0		0	0		0
Sn	mg/L				0.046	0	0	0		0	0.005	0					0	0	0		0	0		0
Sr	mg/L				0.272	0.203	0.155	0.068		0.088	0.095	0.074					0.162	0.117	0.087		0.16	0.064		0.115
Te	mg/L				1.623	1.004	6.485	0.297		5.457	5.682	0.262					1.314	1.384	0.494		1.071	0.372		1.317
Ti	mg/L				0.097	0.027	0.016	0.014		0.037	0.034	0.055					0.067	0.05	0.017		0.109	0.029		0.099
Tl	**mg/L**				**0.171**	**0.006**	**0.022**	**0.003**		**0.02**	0	**0.035**					**0.046**	0	**0.025**		**0.035**	0		0
V	**mg/L**				**0.912**	**0.599**	**0.269**	**0.162**		**0.239**	**0.324**	**0.189**					**0.775**	**0.434**	**0.26**		**0.574**	**0.279**		**0.721**
W	mg/L				0	0	0	0		0	0	0					0	0	0		0	0		0
Zn	**mg/L**				**4.895**	**3.318**	**1.467**	0.949		**1.313**	**2.118**	**1.696**					**2.481**	0.681	0.888		**2.23**	0.779		0.32

Geoloy Name:	YV9C-W43
Met Code:	13030
Composite ID	YS Cent YpqBX AA-Pyr HA #09
Tara (kg)	0.9379
Initial Height of Rock in Column:	1.42 m

Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.3562	0.003	0	0	0	0.004	2.0896	2.3625	0	1.503	1.503	1.07				2.0299	1.5848	1.2027	2.9182	3.0734	2.1797	5390.4621
pH		1.33	1.87				1.14	1.19	0.93		1.42	1.32	1.47				0.97	1.07	1.16	1.23	1.36	1.38	1.48
Electrical Conductivity	ms/cm	28.23	6.47				77.3	34.5	10.2			23.05	21.5				24.45	32.8	32.9	28.88	20.45	11.73	16.16
Temperature	°C	17.7	16				16.3	17.9	15		17	18	18.2				20.2	20.1	20.5	20.1	20.45	20.3	18.7
Eh	mV	776.3	605.2				708.4	731.2	719.3		822.8	780.8	855.4				835.9	825.5	830.1	899.4	847.5	812.2	820.15
D.O	mg/L	3.71	5.35				4.15	5.04	5.52				6.88				-	-	-	-	-	-	-
Rock Height in Column	mm	1305.2	1305.2				1305.2	1305.2	1305.2		1305.2	1305.2		-	-	1305.2	1305.2	1305.2	1305.2	1305.2	1305.2	1305.2	1305.2
HACH, Sulfate	mg/L	21600	4700				66700	30800	76000		13800	17700	15200				51300	34200	34300	15600	18900	18000	12900
HACH, Total Fe	mg/L	6373.04	0				27616.71	10861.05	26762.6		3576.0	6739.04	5189.541				9529.452	12034	11913.66	9506.86	7701.76	63720.03	44285.12
TDS	ppt	17.3	3.4				15.2	27.93	7.2			13.7	12.7				33.2	20.2	20.3	15.9	12.1	6.7	9.3
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.228						0.644			0.007	1.307	N/A				3.986	7.637	0.622	0.406	1.562	5.546	2.052
Ag	mg/L	0						0.033	0		0	0	0				0	0.015	0	0.021	0	0	0
Al	mg/L	7.54						25.763	27.43		5.717	5.804	3.61				15.039	36.694	16.439	14.409	8.34	7.593	5.418
As	mg/L	17.883						56.235	63.71		12.553	14.318	10.406				49.553	25.685	32.023	35.071	23.516	25.569	14.254
B	mg/L	0						0	0		0	0	0				0	0	0	0	0	0	0
Ba	mg/L	0.117						0	0.268		0.081	0.071	0.084				0.248	0	0.173	0	0.083	0.14	0.088
Be	mg/L	0						0	0		0.001	0	0				0	0	0	0	0	0.001	0.002
Bi	mg/L	1.17						3.466	4.632		0.494	1.047	0.559				4.877	0.001	2.15	1.66	1.123	1.108	0.677
Ca	mg/L	28.524						78.409	94.733		10.184	15.495	8.238				49.511	36.402	41.544	36.09	18.777	12.846	7.361
Cd	mg/L	0						0	0.079		0.003	0	0.006				0.023	0	0.045	0	0.022	0.018	0.008
Co	mg/L	0.795						2.367	2.354		0.598	0.606	0.487				1.565	2.253	0.932	1.12	0.667	0.748	0.474
Cr	mg/L	0.27						0.943	1.027		0.125	0.058	0.063				0.304	0.053	0.239	0.256	0.144	0.143	0.067
Cu	mg/L	30.609						134.809	152.716		28.731	33.703	23.58				83.607	293.26	69.568	56.394	38.144	38.468	23.817
Fe	mg/L	7571.683						1994.253	28963.701		5061.3	1872.569	4265				12528.051	2753.511	5487.173	3013.816	5429.662	2417.13	1991.362
Ga	mg/L	0.266						2.03	1.147		0.305	0.32	0.258				0.798	1.404	0.517	0.04	0.288	0.348	0.213
K	mg/L	1.655						2.762	2.749		0.518	1.106	0.685				2.27	7.737	6.021	1.451	13.533	1.348	1.071
Li	mg/L	0.005						0.012	0.012		0.001	0	0.002				0.008	0.004	0.007	0.005	0.003	0.005	0.003
Mg	mg/L	0						3.394	0		0	0	0				0.507	1.223	2.041	2.13	0	0	0
Mn	mg/L	3.512						13.134	15.241		3.198	2.415	1.646				5.859	3.464	4.382	4.443	3.031	2.713	1.761
Mo	mg/L	0.084						0.302	0.252		0.03	0.449	0.262				1.09	0.627	0.431	0.473	0.285	0.361	0.163
Na	mg/L	8.043						6.339	6.215		2.596	3.699	0.906				4.104	4.229	2.332	4.581	2.566	4.483	4.096
Nb	mg/L	0						0	0		0	0	0				0	0	0	0	0	0	0
Ni	mg/L	0.414						1.545	1.704		0.3	0.304	0.223				0.79	0.77	0.498	0.55	0.355	0.382	0.234
Pb	mg/L	1.592						3.13	3.922		1.313	1.137	1.054				1.995	2.061	1.201	1.805	1.23	1.446	1.095
Sb	mg/L	0						0	0		0	0	0				0	0	0	0	0	0	0
Sc	mg/L	0						0	0		0	0	0				0	0.032	0	0	0	0	0
Se	mg/L	0						0.247	0		0	0	0				0	0	0	0	0	0	0
Sn	mg/L	0.145						0.296	0.224		0.061	0.071	0.05				0.179	0.015	0.057	0.089	0	0	0
Sr	mg/L	0.085						0.273	0.29		0.054	0.047	0.052				0.108	0.128	0.099	0.093	0.057	0.042	0.03
Te	mg/L	1.07						3.108	2.472		0.622	0.681	0.448				1.429	1.598	0.991	1.393	0.473	0.571	0.395
Ti	mg/L	0.07						0.206	0.096		0.013	0.023	0.021				0.082	0.019	0.104	0.072	0.024	0.021	0.012
Tl	mg/L	0.066						0	0.098		0	0.018	0.014				0.021	0	0.032	0	0.08	0	0
V	mg/L	0.444						1.869	1.557		0.406	0.464	0.373				1.394	1.102	0.901	0.953	0.513	0.617	0.361
W	mg/L	0						0	0		0	0	0				0	0	0	0	0	0	0
Zn	mg/L	1.817						6.101	6.759		1.368	1.535	1.444				4.245	4.242	3.372	2.764	1.567	1.761	1.047

Muestra 13031

Geoloy Name:	YV9C-W49																							
Met Code:	13031																							
Composite ID	VS Geol Yp AA-Pyr/HA #10																							
Tara (kg)	0.94																							
Initial Height of Rock in Column:	1.42 m	3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.000	0.000	0.194	6.333	2.373	4.378	0.743	2.453	3.1624	0.826	0.275	0.679	0.06		0.097	2.0482	3.5366	2.4839	3.9634	2.7641	0.8974	0.742	
pH				**7.88**	**3.65**	**3.49**	**3.17**	**1.54**	**1.31**	**1.6**	**1.66**	**1.66**	**1.56**	**1.17**		**0.96**	**1.66**	**1.75**	**1.65**	**1.6**	**1.59**		**1.35**	
Electrical Conductivity	µs/cm			0.412	1.09	1.038	0.861	10.44	11.6	10.34	17.49	14.24	16.29	34.4		21.1	11.03	9.84	9.62	10.84				
Temperature	°C			17.7	17.6	18.7	18.3	17.8	15.8	16	17.1	17.1	12.6	14		17.1	15.1	14.7	17.2	7.7	14		15.5	
Eh	mV			383	315.1	408.4	548.3	804.8	807	845.8	825.9	815.9	788.5	672.6		653.2	854.7	898.5	871.2	850	908.6		960.8	
D.O	mg/L			3.62	3.68	3.71	3.81	3.69	3.65	3.59	3.15	3.95	6.9	5.58		5.2	4.51	6.41	6.63	5.5	5.28		5.72	
Rock Height in Column	mm			1390	1372	1361	1345	1329	1312	1295	1305	1302.6	1290.3	1277.6		1264.1	1262.7	1359.6	1357.3	1310	1299			
HACH, Sulfate	mg/L			700	1400	900	550	900	2700	5600	19000	30833.3333	25000	75000		111666.7	14000	11000	12200	13750	14600		19062.5	
HACH, Total Fe	mg/L			14	146	39	8	1020			52000		21625	24700		20666.67	4600	3566.67	2475	2416.66667	3650		6600	
TDS	ppt			0.203	0.546	0.523	0.431	4.98	5.76	5.12	8.54	7.12	8	17.2		10.5	5.51	4.92	4.8	5.43				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	**ppb**				**8.415**	1.592	0.158	**3.513**	**46.615**	**4.82**	**53.722**						**3.66**	**19.849**	0.162	0.767	**2.243**	1.263	1.107	
Ag	**mg/L**				0.011	**0.995**	0.013	0.01	0.005	0.01	0.044	0.012	0.012				0.001	N/A	N/A	0	N/A	0	N/A	
Al	**mg/L**				0.418	**112.961**	**60.848**	**736.4**	**199.871**	**50.324**	**98.84**	**97.532**	**125.807**				**67.406**	**40.678**	**32.98**	**23.385**	**33.684**	**17.907**	**26.378**	
As	**mg/L**				0	0	0.003	**50.149**	**17.786**	**5.511**	**21.716**	**19.284**	**34.114**				**8.388**	**5.627**	**5.933**	**5.494**	**11.138**	**4.391**	**9.94**	
B	**mg/L**				0.372	**2.269**	0.152	0	0.000	0	0	0	0				0	0	0	0	0	0	0	
Ba	**mg/L**				0.018	0	0.027	0	0.007	0.005	0.04	0	0.097				0.056	0.04	0.08	0.034	0.071	0.056	0.088	
Be	**mg/L**				0	0.001	0.001	0.004	0.001	0	0.001	0.001	0.001				0.001	0.001	0	0	0	0	0	
Bi	mg/L				0	0.006	0	0	0.000	0	0.299	0.205	0.308				0.081	0.069	0.05	0.088	0.1	0	0.038	
Ca	mg/L				60.108	28.109	19.413	20.129	10.102	10.62	18.831	70.111	60.447				24.43	13.916	12.584	11.051	12.762	10.952	22.116	
Cd	**mg/L**				**5.145**	**0.178**	**0.137**	**1.47**	**0.405**	**0.115**	**0.616**	**0.054**	**0.408**				**0.243**	**0.154**	**0.041**	**0.03**	**0.046**	**0.025**	**0.027**	
Co	**mg/L**				**9.735**	**4.515**	**2.029**	**3.152**	**1.428**	**0.579**	**1.535**	**1.415**	**1.608**				**1.097**	**0.81**	**0.891**	**0.731**	**1.241**	**0.835**	**1.405**	
Cr	**mg/L**				0.034	0.082	0.058	**2.546**	**0.573**	**0.128**	**0.284**	**0.31**	**0.427**				**0.271**	**0.135**	0.09	0.065	0.091	0.046	0.081	
Cu	**mg/L**				**3.2**	**38.953**	**22.177**	**269.782**	**93.158**	**25.884**	**59.055**	**62.183**	**30.923**				**78.328**	N/A	N/A	**39.839**	N/A	**43.705**	N/A	
Fe	**mg/L**				**2.659**	**35.335**	**8.527**	**2788**	**1979.000**	**1238**	**4335**	**766.014**	**6349**				**2571**	**2321**	**977.959**	**2402.276**	**4251**	**2240**	**4023**	
Ga	mg/L				0	0.032	0.003	5.364	1.952	0.53	1.643	1.404	2.217				1.075	0.671	0.674	0.418	0.851	0.519	0.863	
K	mg/L				2.566	17.038	9.671	3.756	2.249	1.238	1.221	1.897	2.79				3.233	1.817	2.091	1.11	1.577	1.398	1.525	
Li	mg/L				0.342	0.071	0.012	0.027	0.007	0.002	0.015	0.006	0.01				0.009	0.002	0.005	0	0.001	0.003	0.002	
Mg	mg/L				7.432	1.768	0.871	0.866	0.193	0.246	0.53	1.51	1.663				0.88	0.423	0.523	0.122	0	0	0.277	
Mn	**mg/L**				**19.815**	**0.941**	0.407	**2.151**	**1.696**	**0.874**	**3.069**	**2.162**	**2.51**				**1.435**	**1.081**	**1.156**	**1.041**	**1.807**	**1.047**	**2.16**	
Mo	**mg/L**				0.005	0	0	0.016	0.012	0.015	0	0.026	0.014				0	0	0	0	0	0	0.012	
Na	mg/L				25.418	6.471	1.071	2.513	1.085	0.837	1.522	1.316	1.496				1.036	0.635	1.145	0	0.502	1.392	0.22	
Nb	mg/L				0	0	0	0	0.000	0	0	0	0				0	0	0	0	0	0	0	
Ni	**mg/L**				**3.712**	**1.992**	**0.949**	**1.55**	**0.638**	**0.226**	**0.569**	**0.455**	**0.546**				**0.38**	**0.272**	**0.288**	**0.24**	**0.399**	**0.269**	**0.458**	
Pb	**mg/L**				**1.337**	**1.586**	**1.712**	**0.89**	**1.230**	**0.787**	**1.706**	**1.352**	**1.17**				**1.387**	**1.325**	**1.442**	**1.212**	**1.652**	**1.54**	**2.106**	
Sb	**mg/L**				0.005	0	0	0	0.000	0	0	0	0				0	0	0	0	0	0	0	
Sc	mg/L				0	0.04	0.029	1.895	0.379	0.069	0.114	0.156	0.259				0.11	0.047	0.034	0.023	0.028	0.01	0.01	
Se	**mg/L**				**0.018**	**0.036**	0	0	0.000	0	0	**0.034**	0				0	0	0	0	0	0	0	
Sn	mg/L				0	0.007	0.005	0.005	0.011	0.007	0	0.022	0				0	0	0	0	0	0	0	
Sr	mg/L				0.132	0.424	0.266	0.711	0.243	0.084	0.16	0.196	0.174				0.11	0.081	0.085	0.061	0.088	0.069	0.11	
Te	mg/L				0.015	0.103	0.008	0.792	0.400	0.133	0.558	0.59	0.92				0.644	0.451	0.595	0.352	0.766	0.439	8.606	
Ti	mg/L				0.002	0.001	0.003	0.006	0.003	0.007	0.008	0.025	0.056				0.008	0.003	0.004	0.008	0.005	0.004	0.018	
Tl	**mg/L**				**0.071**	**0.085**	**0.037**	**0.01**	**0.020**	**0.013**	**0.042**	**0.02**	**0.007**				**0.021**	**0.011**	**0.008**	0	0	0	0	
V	**mg/L**				0	0	0	**1.461**	**0.576**	**0.183**	**0.665**	**0.644**	**1.264**				**0.615**	**0.441**	**0.509**	**0.355**	**0.582**	**0.373**	**0.596**	
W	mg/L				0	0.092	0	0	0.000	0	0	0	0				0	0	0	0	0	0	0	
Zn	**mg/L**				**23.653**	**3.366**	**1.868**	**13.806**	**5.587**	**1.945**	**4.035**	**4.433**	**6.252**				**4.352**	**3.938**	**2.735**	**2.093**	**3.349**	**2.102**	**3.38**	

Geoloy Name:	YV9C-W49																							
Met Code:	13031																							
Composite ID	YS Cent Yp AA-Pyr HA #10																							
Tara (kg)	0.94																							
Initial Height of Rock in Column:	1.42 m																							
Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L	0.2			0	2.17754	1.7238	4.8568	2.2856	0.2501	1.4385	2.1123					0.752	0.781	0.5	2.16	1.76	1.1856	0.962	0.748
pH		**1.22**				**1.33**	**1.42**	**2.05**	**1.51**	**1.98**	**1.6**	**1.47**					**1.19**	**1.38**	**1.44**	**1.9**	**1.88**	**1.47**	**1.57**	**1.18**
Electrical Conductivity	µs/cm										0.02	27.63					59	22.73	21.17	19.15	11.09	0.0699	8.34	25.24
Temperature	°C	13.2					13	14.2	14.2	13	13	13					17.9	18.4	19.5	15.7	20.2	18.2	19.9	19
Eh	mV	731.1				855.8	884.8	867.7	881.9	812	1124.5	873.6					527.3	522.9	524.3	907.7	898	706.1	756.1	891.6
D.O	mg/L	5.64									4.88	4.47					4.72	4.07	4.32	6.2	5.77	5.7	6.06	5.77
Rock Height in Column	mm				1297.6	1296.8	1296.4	1296.1		1295.6	1295.4	1295.4					1295.4	1294	1294	1294	1294	1294	1294	1294
HACH, Sulfate	mg/L	83333.3333				32500	40000	20000	28500	34166.7	38125	35000					32529.1	13750	23800	17900	23500	22000	19700	37500
HACH, Total Fe	mg/L	30375				6871.2	6870	3768.12	6105.75	8159.64	6718.5	3306.212					10000	5700	7262.4	5635	6913	1744.93	6075.1	6168.64
TDS	ppt																28.88	13.957	10.371	9.386	5.43	4.1	4.7	15.2
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	**ppb**						1.989	0.11	0.546			0.443					0.747	0.277	0.215		0.225	**6.039**	**11.35**	0.176
Ag	**mg/L**					0	0	0	0		0	0					0	0	0		0	0	0.023	0
Al	**mg/L**					**36.105**	**40.159**	**16.348**	**18.98**		**19.021**	**13.773**					**39.308**	**31.56**	**26.716**		**28.703**	**25.652**	**23.263**	**39.091**
As	**mg/L**					**25.055**	**22.622**	**8.363**	**12.328**		**18.429**	**11.571**					**28.96**	**19.396**	**17.662**		**22.463**	**18.504**	**15.091**	**21.849**
B	**mg/L**					0	0	0	0		0	0					0	0	0		0	0	0	**32.823**
Ba	**mg/L**					0.078	0.088	0.065	0.075		0.096	0.059					0.137	0.071	0.076		0.089	0.132	0	0.157
Be	**mg/L**					0	0.004	0	0		0.002	0.001					0	0	0		0	0	0.002	0
Bi	mg/L					0.087	0.01	0	0		0	0					0.178	0	0.032		0	0.009	0.374	0
Ca	mg/L					41.644	36.202	12.605	14.775		21.601	14.227					54.52	48.132	25.552		22.357	15.889	10.686	16.802
Cd	**mg/L**					**1.381**	**0.09**	**0.021**	**0.011**		0	0					**0.029**	**0.047**	**0.021**		**0.133**	**0.024**	0	0
Co	**mg/L**					**1.365**	**1.84**	**0.931**	**1.367**		**1.745**	**1.308**					**2.337**	**1.782**	**1.501**		**1.42**	**1.405**	**1.392**	**1.634**
Cr	**mg/L**					**0.243**	**0.138**	0.039	0.06		0.052	0.024					**0.111**	0.038	0.064		**0.106**	0.055	0.076	0.059
Cu	**mg/L**					**133.234**	**174.912**	**86.955**	**99.171**		**119.224**	**76.228**					**232.99**	**177.771**	**182.919**		**208.968**	**170.218**	**186.874**	**163.98**
Fe	**mg/L**					**5400.946**	**7712.144**	**3244.072**	**4907**		**34774.861**	**25432.644**					**12694.441**	**N/A**	**7593.063**		**7760.979**	**5570**	**4140.304**	**6208.963**
Ga	mg/L					0.418	1.709	0.441	0.517		0.581	0.824					1.27	0.882	1.281		0.808	0.695	0.375	1.751
K	mg/L					3.748	3.489	2.099	2.635		2.426	2.254					4.494	2.949	2.691		3.14	2.473	2.578	16.175
Li	mg/L					0.004	0.002	0.001	0.001		0	0.002					0.003	0.006	0.002		0.004	0.009	0.003	0.027
Mg	mg/L					1.286	0.346	0	0		0.523	0.25					0.899	0.737	1.189		0.012	0	0.416	1.109
Mn	**mg/L**					**3.758**	**3.482**	**1.495**	**2.485**		**3.324**	**2.304**					**4.158**	**3.176**	**2.938**		**2.796**	**2.554**	**2.289**	**3.343**
Mo	**mg/L**					0.111	0	0	0.022		0.094	0.087					0.126	0.141	0.089		0.127	0.154	**0.204**	**0.287**
Na	mg/L					2.635	1.227	1.059	0.88		6.059	10.044					1.236	7.834	0.906		1.525	9.832	9.085	92.692
Nb	mg/L					0	0	0	0		0	0					0	0	0		0	0	0	0
Ni	**mg/L**					**0.506**	**0.602**	**0.3**	**0.447**		**0.56**	**0.458**					**0.749**	**0.514**	**0.495**		**0.479**	**0.496**	**0.509**	**0.36**
Pb	**mg/L**					**1.6**	**1.96**	**1.456**	**1.869**		**2.039**	**1.643**					**1.372**	**1.727**	**1.533**		**1.284**	**1.667**	**1.961**	**2.731**
Sb	**mg/L**					**0.237**	0	0	0		0	0					0	0	0		0	0	0	0
Sc	mg/L					0.027	0.037	0.008	0		0	0					0.044	0.041	0.03		0.031	0.023	0.025	0.007
Se	**mg/L**					0	0	0	0		0	0					0	0	0		0	0	0	0
Sn	mg/L					0	0	0	0		0	0					0	0	0		0	0	0.062	0
Sr	mg/L					0.097	0.116	0.073	0.093		0.087	0.067					0.131	0.109	0.094		0.098	0.083	0.085	0.105
Te	mg/L					1.227	13.071	0.595	7.086		7.513	0.519					1.489	1.837	0.891		1.05	0.813	0.912	1.257
Ti	mg/L					0.071	0.025	0.007	0.017		0.03	0.013					0.02	0.008	0.012		0.037	0.02	0.02	0.059
Tl	**mg/L**					**0.616**	**0.03**	**0.021**	**0.003**		**0.078**	**0.044**					**0.05**	**0.045**	**0.044**		**0.025**	**0.205**	**0.078**	0
V	**mg/L**					**0.832**	**0.919**	**0.492**	**0.601**		**0.639**	**0.454**					**1.133**	**0.947**	**0.681**		**0.798**	**0.641**	**0.502**	**0.897**
W	mg/L					0	0	0	0		0	0					0	0	0		0	0	0	0
Zn	**mg/L**					**14.304**	**6.364**	**2.676**	**3.711**		**3.318**	**2.291**					**7.155**	**4.907**	**3.905**		**39.206**	**13.559**	**3.483**	**1.084**

Geoloy Name:	YV9C-W49																							
Met Code:	13031																							
Composite ID	YS Ceut Yp AA-Pyr HA #10																							
Tara (kg)	0.94																							
Initial Height of Rock in Column:	1.42 m																							
Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.94			0.0189	0.02004	0.0214	2.0368	3.5623	2.0895	1.953	1.96	0.85	-	-	-	2.066	1.6165	1.107	2.553	2.8905	2.0304	4.2675
pH		1.43			1.03	1.27	1.39	1.27	1.29	1.22	1.25	1.32	1.3	-	-	-	0.96	1.04	1.11	1.2	1.35	1.39	1.5
Electrical Conductivity	µs/cm	21.69			6.22	35	29.16	28.75	24.85	28.74		23.07	28.61	-	-	-	57.15	35	35.8	29.16	20.84	11.1	15.6
Temperature	°C	17.7			15.3	17.7	16.35	18	15	15.9	17	18	18.1	-	-	-	20.1	20.1	20.6	20.1	18.1	20.3	18.7
Eh	mV	832.9			693.8	907.8	804.5	898.8	868.5	572.7	832.6	776.1	867.5	-	-	-	828.6	825.9	829.6	894.1	863.7	809.3	810.3
D.O	mg/L	6.05			6.45	6.06	4.8	4.94	4.92	5.56			5.7	-	-	-	-	-	-	-	-	-	-
Rock Height in Column	mm	1294			1294	1294	1294	1294	1294	1294	1294	1294		-	-	-	1294	1294	1294	1294	1294	1294	1294
HACH, Sulfate	mg/L	16600			38600	34000	22300	23900	21500		21300	17900	22900	-	-	-	55700	33000	32400	22100	15500	15800	12100
HACH, Total Fe	mg/L	4751.69			8067.32	12186.252	7750.97	8327.71	7797.93	13470	7768.66	6859.38	8217.3	-	-	-	9639.126	12876.38	10650.09	7461.08	6077.17	58364.9	38207.95
TDS	ppt	13			2.44	19.03	17.7	23.03	14.9	14.08		13.8	17.4	-	-	-	6.5	21.7	22.3	16.3	12.3	6.3	9
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.269						0.161		0.122	0.022	1.057	N/A	-	-	-	3.67	6.778	0.54	0.211	0.688	3.411	1.213
Ag	mg/L	0						0.014	0	0	0	0	0	-	-	-	0	0.022	0	0.018	0	0	0
Al	mg/L	14.822						22.725	25.526	8.112	24.783	17.972	19.394	-	-	-	48.938	11.342	33.903	30.889	18.694	17.544	11.472
As	mg/L	15.375						18.687	20.783	6.285	19.445	13.362	16.732	-	-	-	41.385	38.784	19.028	16.456	10.546	11.973	7.219
B	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ba	mg/L	0.087						0	0.093	0.033	0.109	0.068	0.118	-	-	-	0.258	0	0.155	0	0.062	0.108	0.072
Be	mg/L	0						0	0	0	0.001	0	0	-	-	-	0	0	0	0	0.001	0.001	0.002
Bi	mg/L	0						0	0.521	0	0.028	0	0.061	-	-	-	0.029	0	0.375	0	0.21	0.2	0.205
Ca	mg/L	12.959						24.245	29.157	5.37	12.997	11.693	19.301	-	-	-	40.011	168.719	23.071	21.458	9.69	9.966	4.247
Cd	mg/L	0						0	0.119	0.016	0.031	0	0.042	-	-	-	0.074	0.545	0.058	0	0.028	0.028	0.012
Co	mg/L	1.236						1.484	1.556	0.475	1.615	1.211	1.363	-	-	-	3.175	0.961	1.709	1.835	1.101	1.189	0.769
Cr	mg/L	0.108						0.061	0.078	0.016	0.043	0	0.056	-	-	-	0.096	0.724	0.049	0.043	0.023	0.044	0.018
Cu	mg/L	131.519						200.95	229.145	77.829	237.93	176.526	196.823	-	-	-	445.949	70.874	286.357	239.693	163.212	154.183	99.287
Fe	mg/L	5766.132						1846.906	8151.809	2243	1807.9	1884.379	5863	-	-	-	12996.71	2438.361	5119.246	2843.465	1584.565	2266.734	1790.162
Ga	mg/L	0.453						0.961	0.734	0.26	0.811	0.58	0.666	-	-	-	1.631	0.557	0.932	0.464	0.468	0.479	0.298
K	mg/L	2.665						2.984	3.355	0.997	4.258	3.39	3.667	-	-	-	7.191	2.302	7.176	6.117	7.862	3.413	2.455
Li	mg/L	0.004						0.004	0.004	0.001	0.001	0	0.002	-	-	-	0.005	0.004	0.003	0.002	0.002	0.004	0.002
Mg	mg/L	0						0.878	0	0	0	0	0	-	-	-	0	2.05	0	0.818	0	0	0
Mn	mg/L	2.374						2.471	3.026	0.844	2.673	2.046	2.33	-	-	-	5.565	2.912	2.828	2.643	1.806	1.888	1.21
Mo	mg/L	0.213						0.322	0.327	0.116	0.344	0.358	0.396	-	-	-	0.845	0.18	0.408	0.477	0.425	0.526	0.341
Na	mg/L	9.349						3.68	4.083	1.037	2.921	3.737	1.039	-	-	-	3.38	4.295	1.589	4.886	2.146	4.074	4.167
Nb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ni	mg/L	0.434						0.507	0.58	0.175	0.559	0.413	0.472	-	-	-	1.186	0.573	0.591	0.593	0.399	0.432	0.275
Pb	mg/L	1.315						1.59	1.526	0.412	1.629	1.353	1.368	-	-	-	2.267	2.12	1.406	2.052	1.196	1.366	1.03
Sb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Sc	mg/L	0.007						0.016	0.01	0.002	0.006	0	0	-	-	-	0.008	0	0.013	0.021	0.006	0	0
Se	mg/L	0						0.026	0	0	0	0	0	-	-	-	0	0	0	0.175	0	0	0
Sn	mg/L	0						0.032	0.013	0.019	0.083	0.032	0.065	-	-	-	0.142	0.043	0.043	0.085	0	0	0
Sr	mg/L	0.072						0.105	0.112	0.029	0.092	0.057	0.095	-	-	-	0.176	0.147	0.106	0.106	0.068	0.071	0.043
Te	mg/L	0.907						1.092	0.837	0.299	0.885	0.686	0.771	-	-	-	1.542	1.009	0.944	1.09	0.378	0.488	0.318
Ti	mg/L	0.013						0.02	0.015	0.004	0.003	0.004	0.019	-	-	-	0.043	0.087	0.013	0.013	0.007	0.012	0.007
Tl	mg/L	0.094						0.007	0.074	0.025	0.012	0.037	0.041	-	-	-	0.13	0.153	0.087	0	0.089	0	0
V	mg/L	0.497						0.705	0.666	0.239	0.766	0.589	0.724	-	-	-	1.655	0.45	0.936	0.894	0.473	0.551	0.322
W	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Zn	mg/L	1.906						3.902	4.415	1.218	3.594	2.645	3.379	-	-	-	7.056	2.821	4.597	3.767	2.239	2.412	1.5

Muestra 13032

Geoloy Name:	YV9C-W51																						
Met Code:	13032																						
Composite ID	VS Cent Test SM A #11																						
Tara (kg)	0.9363																						
Initial Height of Rock in Column:	1.48 m																						
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L				4.198	2.252	3.633	0.474	2.287	3.025	0.7584	0.192	0.338	0.014		1.427	2.168	3.7383	3.3993	4.135	2.101	1.543		
pH					**4.19**	**4.21**	**3.86**	**3.36**	**3.09**	**2.99**	**2.7**	**3.02**	**2.56**	**2.52**		**1.99**	**1.96**	**1.83**	**1.54**	**1.51**	**1.48**		**1.13**	
Electrical Conductivity	ms/cm				0.728	0.447	0.381	0.505	0.557	0.701	1.056	1.146	2.24	0.891		5.78	6	8.27	7.48	12.09				
Temperature	°C				17.7	18.7	18.3	17.8	15.5	16	17.1	16.8	12.6	14		17.3	15.2	15.8	17.2	8.4	14.1		15.5	
Eh	mV				304.6	388	515.1	447.9	646.8	728	688.5	728.4	740.5	717		757.9	868.2	912.3	876.5	847.9	942.9		870.8	
D.O	mg/L				3.65	3.77	3.89	3.67	3.81	3.74	3.33	3.86	6.37			6.02	6.36	5.17	6.9	5.53	5.5		6.27	
Rock Height in Column	mm				1468	1455	1449	1446	1444	1440	1429	1428.6	1418.6	1405.6		1395.1	1393.3	1387.6	1384.5	1290	1310			
HACH, Sulfate	mg/L				400	200	100	800	2100	500	700	700	1900	1429		15666.7	12500	11500	7833	12083.3333	11500		65000	
HACH, Total Fe	mg/L				174	6	6.5	17			86	88.5	190	134		3466.7	3550	3375	1558.3	2012.5	3525		14650	
TDS	ppt				0.336	0.215	0.185	0.241	0.282	0.351	0.525	0.573	1.07	0.508		2.9	3	4.12	3.74	6.02				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	**ppb**				**8.654**	1.158	0.105	**3.637**	0.201	**17.732**	**19.81**					**2.13**	**2.093**	**16.8**	0.068	0.531	1.508	0.735		
Ag	**mg/L**				0.01	**0.82**	0.011	0	0.002	0.009	0.05	0.006				0.015	0	**N/A**	**N/A**	0	**N/A**	0		
Al	**mg/L**				**143.955**	2.183	0.833	3.086	4.415	**7.577**	**13.506**	**19.187**				**42.153**	**7.736**	**61.387**	4.242	3.194	**5.369**	3.267		
As	**mg/L**				**0.036**	0	0	0.002	0.000	**0.017**	**0.08**	**0.054**				**25.236**	**26.784**	**26.729**	**14.894**	**18.357**	**42.943**	**18.487**		
B	**mg/L**				**0.528**	**1.984**	0.215	0.198	0.214	0.346	0.459	0.376				0	0	0	0	0	0	0		
Ba	**mg/L**				0.069	0	0.015	0	0.003	0.005	0.015	0.027				0.101	0.043	0.044	0.08	0.03	0.063	0.048		
Be	**mg/L**				0.001	0	0	0.001	0.000	0	0.001	0.001				0.001	0.001	0	0	0	0	0		
Bi	mg/L				0.013	0.031	0	0.001	0.001	0	0.083	0				0	0	0	0	0	0	0.028		
Ca	mg/L				102.748	34.536	22.112	26.086	16.042	11.564	13.875	21.58				97.239	26.083	22.789	20.434	9.687	11.708	11.34		
Cd	**mg/L**				**0.715**	**7.889**	**12.723**	**29.821**	**27.552**	**29.63**	**46.891**	**61.662**				**135.025**	**33.097**	**18.057**	**6.72**	**4.382**	**6.129**	**2.783**		
Co	**mg/L**				**6.255**	**4.874**	**2.637**	**2.566**	**1.086**	**0.661**	**1.017**	**1.418**				**3.403**	**1.073**	**1.005**	**0.629**	**0.679**	**1.252**	**0.76**		
Cr	**mg/L**				0.015	0.003	0.019	0.071	0.099	**0.208**	**0.944**	**1.991**				**63.937**	**11.429**	**6.407**	**2.657**	**2.001**	**3.3**	**1.549**		
Cu	**mg/L**				**2.294**	**8.443**	**9.347**	**23.117**	**29.207**	**34.424**	**62.004**	**90.251**				**242.604**	**81.514**	**N/A**	**N/A**	**31.083**	**N/A**	**30.842**		
Fe	**mg/L**				**26.668**	**3.975**	**5.732**	**18.079**	**26.701**	**45.026**	**79.363**	**76.762**				**996.443**	**2071**	**2414**	**863.933**	**2147.898**	**3873**	**2070**		
Ga	mg/L				0.008	0.01	0.003	0.001	0.000	0.005	0	0.003				0.526	0.205	0.224	0.167	0.104	0.289	0.207		
K	mg/L				82.553	1.524	0.529	0.575	0.276	0.24	0.129	0.214				0.385	0	0.115	0.625	0.009	0	0.123		
Li	mg/L				0.917	0.067	0.013	0.014	0.009	0.006	0.021	0.015				0.049	0.016	0.009	0.007	0	0.004	0.005		
Mg	mg/L				8.628	2.281	0.775	0.706	0.438	0.386	0.511	0.912				4.33	1.197	1.293	1.104	0.458	0.494	0.285		
Mn	**mg/L**				**1.909**	**11.196**	**6.835**	**7.003**	**3.124**	**1.942**	**2.582**	**3.448**				**6.039**	**2.02**	**2.026**	**1.08**	**1.22**	**2.136**	**1.232**		
Mo	**mg/L**				0.005	0.001	0	0	0.000	0.001	0.002	0.001				0.02	0	0.013	0.007	0.015	0.038	0.02		
Na	mg/L				47.962	8.831	1.379	0.902	0.581	0.867	1.146	0.961				1.599	0.629	0.696	1.794	0.128	0.727	1.139		
Nb	mg/L				0.011	0	0	0	0.000	0	0	0				0	0	0	0	0	0	0		
Ni	**mg/L**				**2.01**	**1.79**	**0.992**	**1.05**	**0.462**	**0.327**	**0.609**	**0.84**				**2.128**	**0.591**	**0.526**	**0.297**	**0.315**	**0.549**	**0.342**		
Pb	**mg/L**				**2.372**	**3.456**	**5.531**	**4.627**	**4.294**	**3.555**	**2.985**	**2.117**				**1.042**	**1.588**	**1.672**	**1.534**	**1.648**	**1.944**	**1.833**		
Sb	**mg/L**				**0.007**	**0.01**	**0.008**	0	0.000	0	**0.049**	0				0	0	0	0	0	0	0		
Sc	mg/L				0.008	0.001	0	0	0.002	0.001	0.003	0.003				0.039	0.003	0.067	0	0	0	0		
Se	**mg/L**				**0.186**	**0.021**	0.003	**0.011**	**0.014**	**0.027**	**0.041**	**0.069**				0	0	0	0	0	0	0		
Sn	mg/L				0.013	0.004	0.001	0.002	0.005	0.002	0.014	0				0	0	0	0	0	0	0		
Sr	mg/L				0.22	0.021	0.025	0.014	0.008	0.008	0.013	0.016				0.137	0.049	0.048	0.053	0.025	0.03	0.031		
Te	mg/L				0	0.114	0.014	0.068	0.000	0.105	0	0				0.429	0.507	0.568	0.393	0.344	0.671	0.412		
Ti	mg/L				0.002	0.001	0.004	0	0.000	0.001	0	0.006				0.091	0.026	0.029	0.045	0.044	0.057	0.035		
Tl	**mg/L**				**0.05**	**0.11**	**0.154**	**0.108**	**0.151**	**0.13**	**0.215**	**0.126**				**0.023**	**0.03**	**0.031**	**0.045**	**0.016**	**0.038**	**0.041**		
V	**mg/L**				0	0	0	0.008	0.000	0.002	0.004	0				**0.311**	**0.231**	**0.293**	**0.192**	**0.166**	**0.282**	**0.183**		
W	mg/L				0	0.083	0	0	0.000	0	0	0				0	0	0	0	0	0	0		
Zn	**mg/L**				**36.857**	**19.69**	**13.544**	**18.558**	**9.995**	**6.412**	**8.959**	**12.709**				**31.212**	**9.582**	**34.56**	**4.453**	**4.305**	**6.856**	**3.606**		

Geoloy Name:	YV9C-W51																							
Met Code:	13032																							
Composite ID	YS Cent Teur SM A #11																							
Tara (kg)	0.9363																							
Initial Height of Rock in Column:	1.48 m																							
Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				0	2.6496	2.7246	8.6143	5.1216	1.8766	2.4659	2.6583					1.12	0.85	0.5	0.67	2.371	2.0563	1.8562	0.8426
pH						1.36	1.83	2.15	1.62	2.28	1.65	1.47					1.23	1.58	1.58	1.97	2.04	1.8	1.62	1.22
Electrical Conductivity	ms/cm										0.0169	26.47					36.5	13.74	15.11	16.09	8.74	2.97	6.86	21.4
Temperature	°C						13	14.2	14.2	13	13	13					18	18.6	19.6	15.7	20.2	18.6	20	18.7
Eh	mV					780.6	826.9	822.7	814.6	813.6	1030.6	868					525.3	511.9	516.4	898.3	892.8	685.3	749.3	879.6
D.O	mg/L										4.99	4.52					4.83	4.21	4.55	6.23	5.71	5.88	6.12	5.87
Rock Height in Column	mm				1307	1306.8	1306.6	1306.2		1305.9	1305.9	1305.8					1305.8	1305.8	1305.6	1305.4	1305.2	1305	1304.8	1304.6
HACH, Sulfate	mg/L					18500	25833	12500	13000	16666.6667	26250	30833.33					24595.40	6500.00	12900.00	10200.00	1.24	6200.00	11900.00	20000.00
HACH, Total Fe	mg/L					3559.864	1650	2192.3	2698.16	3628.376	4479	3509.32					8050.00	2420.00	3828.50	3657.92	3544.32	3429.69	3957.91	4149.81
TDS	ppt																18.037	8.479	7.402	7.885	4.284	1.66	3.8	12.6
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	ppb						0.483	0.139	0.271	0.018		0.361					0.388	0.206	0.151		0.332	1.249	5.092	0.185
Ag	mg/L					0	0	0	0	0	0.007	0					0	0	0		0	0	0.015	0.021
Al	mg/L					7.715	2.267	1.403	0.93	3.156	3.827	7.673					9.525	7.042	4.287		2.587	2.879	3.802	20.704
As	mg/L					33.702	14.269	13.333	14.799	11.392	36.37	24.001					91.044	19.394	25.705		24.376	9.075	16.069	25.256
B	mg/L					0	0	0	0	0	0	0					0	0	0		0	0.534	0.335	35.221
Ba	mg/L					0.045	0.047	0.036	0.034	0.075	0.063	0.057					0.104	0.027	0.044		0.053	0.061	0	0.117
Be	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0.002	0
Bi	mg/L					0	0.02	0	0	0.289	0	0.038					0	0	0		0.011	0	0.139	0
Ca	mg/L					43.558	15.924	6.711	6.984	31.836	22.98	19.639					47.365	26.659	14.297		14.956	27.518	6.77	18.631
Cd	mg/L					2.294	0.542	0.411	0.352	0	0.582	0.451					1.777	0.469	0.382		0.247	0.083	0.059	0.171
Co	mg/L					0.913	0.49	0.469	0.567	0.46	1.069	0.876					1.628	0.526	0.728		0.666	0.298	0.678	0.775
Cr	mg/L					1.674	0.386	0.234	0.203	0.207	0.468	0.412					2.122	0.376	0.372		0.336	0.117	0.231	0.301
Cu	mg/L					47.945	15.433	16.989	17.982	20.444	37.976	27.923					85.776	28.888	35.286		37.502	14.901	36.261	37.669
Fe	mg/L					2850.871	1786.58	1730.549	2427	4432	24254.244	19724.539					9091.171	2104.931	3877.611		4048.893	1417.755	2827.261	4083.28
Ga	mg/L					0	0.249	0.085	0.068	0.178	0.244	0.443					0.297	0.114	0.416		0.165	0.09	0	0.925
K	mg/L					0.548	0.248	0.06	0.137	0.283	0.708	0.8					0.405	0	0		0.353	0.559	0.659	13.558
Li	mg/L					0.004	0.001	0.001	0.001	0.001	0	0.004					0.004	0.005	0.002		0.002	0.005	0.002	0.027
Mg	mg/L					1.475	0.218	0.017	0	0.411	0.783	0.879					0.861	1.688	1.071		0	0.391	0.25	1.496
Mn	mg/L					2.131	2.247	0.941	1.159	3.076	2.441	2.106					3.643	1.95	2.041		1.629	1.703	1.519	2.354
Mo	mg/L					0.046	0	0	0	0.006	0.023	0.023					0.046	0.006	0		0	0.012	0.007	0
Na	mg/L					1.887	1.167	0.856	0.672	0.206	6.367	9.688					1.262	7.578	0.915		1.174	8.836	9.425	86.085
Nb	mg/L					0	0	0	0	0	0	0					0	0.01	0		0	0	0	0
Ni	mg/L					0.454	0.281	0.222	0.268	0.255	0.591	0.504					0.975	0.292	0.398		0.362	0.179	0.384	0.292
Pb	mg/L					1.701	1.435	1.631	1.75	1.029	2.301	2.205					1.557	1.713	1.814		1.743	1.36	2.051	2.735
Sb	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Sc	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Se	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0.305	0
Sn	mg/L					0.009	0	0	0	0	0	0.552					0.005	0	0		0	0.038	0.072	0
Sr	mg/L					0.064	0.038	0.037	0.037	0.088	0.054	0.066					0.066	0.065	0.054		0.059	0.048	0.052	0.078
Te	mg/L					0.569	3.363	0.313	2.663	5.488	5.097	0.314					1.053	0.568	0.428		0.514	0.162	0.403	1.15
Ti	mg/L					0.059	0.026	0.022	0.021	0.044	0.053	0.051					0.07	0.033	0.032		0.03	0.023	0.03	0.065
Tl	mg/L					0.107	0.071	0.076	0.085	0	0.079	0.271					0.148	0.172	0.148		0.11	0.094	0.192	0
V	mg/L					0.212	0.122	0.14	0.135	0.241	0.215	0.177					0.479	0.14	0.185		0.215	0.062	0.069	0.385
W	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Zn	mg/L					6.017	3.843	1.655	1.668	1.311	3.582	3.376					6.11	2.228	3.651		2.071	0.956	1.227	0

Geoloy Name:	YV9C-W51
Met Code:	13032
Composite ID	YS Cent Teut SM A #11
Tara (kg)	0.9363
Initial Height of Rock in Column:	1.48 m

Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	1.13	0.021	0.02156	0.0198	0.02612	0.02984	2.3256	4.2569	3.1256	2.853	2.48	0.96	-	-		2.2208	1.2742	0.6578	1.4914	2.5039	1.9001	3.6171
pH		1.46	1.47	1.05	1.08	1.33	1.67	1.6	1.35	1.35	1.48	1.39	1.41	-	-		1.09	1.11	1.12	1.3	1.5	1.47	1.61
Electrical Conductivity	ms/cm	20.63	16.92	32.4	5.82	23.58	15.31	12.61	19.86	20.96		19.12	23.17	-	-		43.1	29.6	37.4	23.07	14.13	9.4	11.25
Temperature	°C	17.7	16.3	15	15.3	17.7	16.21	17.8	15	16.2	17	18	18.1	-	-		20.1	20.1	20.7	20.1	18	20.3	18.7
Eh	mV	831.4	636.5	811.7	657.5	889	785	883	846.7	562.6	810.6	765	843.3	-	-		836.5	796.9	800.8	885.7	834.8	801.5	820.13
D.O	mg/L	6.08	6.1	5.81	6.46	6.32	5.3	5.14	5.92	5.63			5.87	-	-		-	-	-	-	-	-	-
Rock Height in Column	mm	1304.4	1304.2	1304	1303.8	1303.6	1303.4	1303.2	1303.2	1303.2	1303.2	1303.2		-	-		1303.2	1303.2	1303.2	1303.2	1303.2	1303.2	1303.2
HACH, Sulfate	mg/L	12800.00	9900.00	25800.00	29300.00	17900.00	7700.00	7100.00	12600.00		7100.00	10000.00	10700	-	-		35300	23000	26400	14100	7500	11000	6800
HACH, Total Fe	mg/L	3601.22	2846.73	8493.76	5633.22	6144.84	3158.49	23686.65	4538.19	6600.00	2894.90	3911.05	3805.242	-	-		6781.509	7220.4	9326.35	4572.92	3550.03	33635.03	18652.7
TDS	ppt	12.4	10	19.9	0.0194	12.92	8.8	10.24	11.7	10.271		11.2	13.8	-	-		27.6	18	23.4	13.9	8.1	5.1	6.3
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.221						0.039		0.286	0.023	0.599	N/A	-	-		2.262	4.517	0.39	0.449	0.519	2.069	0.695
Ag	mg/L	0						0.01	0	0	0	0	0	-	-		0	0.013	0	0.02	0	0	0
Al	mg/L	3.385						3.159	3.621	1.054	2.302	2.601	2.415	-	-		24.913	46.953	12.335	8.041	3.437	3.84	2.243
As	mg/L	18.734						18.864	20.661	5.4	9.839	12.607	11.755	-	-		64.741	13.43	35.819	20.838	9.862	15.143	6.055
B	mg/L	0						0	0	0	0	0	0	-	-		0	0	0	0	0	0	0
Ba	mg/L	0.07						0	0.06	0.016	0.029	0.024	0.057	-	-		0.187	0	0.129	0	0.034	0.077	0.035
Be	mg/L	0						0	0	0	0.001	0	0	-	-		0	0.001	0	0	0.001	0	0.002
Bi	mg/L	0						0	0.285	0	0	0	0	-	-		0	0	0.244	0	0.084	0.074	0.05
Ca	mg/L	12.955						13.575	16.203	2.885	4.973	8.977	10.644	-	-		118.948	11.298	66.628	41.659	9.545	14.355	4.272
Cd	mg/L	0.129						0.044	0.219	0.061	0.119	0.155	0.197	-	-		1.224	1.407	0.702	0.119	0.147	0.185	0.082
Co	mg/L	0.685						0.582	0.627	0.156	0.367	0.404	0.437	-	-		1.314	0.691	0.837	0.625	0.297	0.409	0.193
Cr	mg/L	0.309						0.241	0.283	0.077	0.153	0.165	0.191	-	-		1.186	0.033	0.646	0.406	0.202	0.243	0.12
Cu	mg/L	38.567						42.736	49.325	14.143	28.54	36.031	35.062	-	-		108.568	36.396	86.725	55.598	33.397	46.485	22.834
Fe	mg/L	2868.045						1582.213	4649.877	1164	1295.7	1519.641	3307	-	-		9316.055	2165.986	4471.659	2311.786	1185.785	1864.175	1171.218
Ga	mg/L	0.186						0.352	0.194	0.061	0.135	0.162	0.182	-	-		0.535	0.649	0.345	0	0.092	0.159	0.073
K	mg/L	1.08						0.561	0.672	0.037	0.65	0.331	0.839	-	-		2.499	5.8	2.7	1.111	0.912	0.9	0.644
Li	mg/L	0.003						0.005	0.003	0.001	0	0	0.001	-	-		0.009	0.003	0.004	0.002	0.001	0.003	0.002
Mg	mg/L	0						0.556	0	0	0	0	0.179	-	-		4.419	1.511	1.064	1.009	0.05	0.155	0.058
Mn	mg/L	1.91						1.564	1.918	0.411	1.03	1.307	1.238	-	-		5.206	3.657	2.789	1.906	1.025	1.373	0.658
Mo	mg/L	0.016						0.072	0.072	0.011	0.022	0.067	0.043	-	-		0.415	0.037	0.124	0.164	0.088	0.139	0.041
Na	mg/L	8.697						4.119	3.907	0.902	2.213	3.159	0.969	-	-		4.285	3.337	1.763	4.657	1.928	4.281	3.523
Nb	mg/L	0						0	0	0	0	0	0	-	-		0	0	0	0	0	0	0
Ni	mg/L	0.362						0.334	0.39	0.096	0.225	0.242	0.271	-	-		0.889	0.308	0.531	0.384	0.198	0.277	0.146
Pb	mg/L	1.895						1.87	1.966	0.571	2.052	1.809	2.011	-	-		2.098	1.969	1.563	2.159	1.633	2.172	1.86
Sb	mg/L	0						0	0	0	0	0	0	-	-		0	0	0	0	0	0	0
Sc	mg/L	0						0	0	0	0	0	0	-	-		0	0.008	0	0	0	0	0
Se	mg/L	0						0	0	0	0	0	0	-	-		0	0.043	0	0	0	0	0
Sn	mg/L	0						0.023	0.011	0.001	0.041	0.007	0.037	-	-		0.162	0.022	0.042	0.132	0.006	0.011	0
Sr	mg/L	0.065						0.059	0.064	0.018	0.044	0.021	0.061	-	-		0.173	0.026	0.089	0.087	0.051	0.059	0.035
Te	mg/L	0.637						0.523	0.388	0.14	0.301	0.391	0.344	-	-		1.024	0.975	0.704	0.648	0.177	0.248	0.152
Ti	mg/L	0.03						0.041	0.036	0.009	0.014	0.018	0.026	-	-		0.305	0.014	0.075	0.05	0.023	0.051	0.014
Tl	mg/L	0.132						0.191	0.231	0.047	0.158	0.21	0.23	-	-		0.389	0.01	0.24	0.16	0.185	0.212	0.186
V	mg/L	0.173						0.203	0.177	0.056	0.128	0.165	0.189	-	-		0.729	0.468	0.472	0.328	0.112	0.19	0.055
W	mg/L	0						0	0	0	0	0	0	-	-		0	0	0	0	0	0	0
Zn	mg/L	1.409						1.866	1.988	0.491	1.142	1.343	1.374	-	-		5.065	291.171	7.065	4.06	0.872	1.232	0.499

Muestra 13033

Geoloy Name:	YV9C-W52
Met Code:	13033
Composite ID	YS Cent Ypq AA-Pyr A #12
Tara (kg)	0.9363
Initial Height of Rock in Column:	1.52 m

Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.000	0.000	0.000	3.392	2.271	3.574	0.678	2.3926	3.0636	0.7942	0.298	0.673	0.053		2.64	4.8295	5.1634	5.8238	5.7875	3.4065	1.852	1.026	0.746
pH					3.89	3.95	3.65	3.2	3.11	2.9	3.03	3.32	3.19	3.33		2.3	2.41	2.22	2.02	2	1.95		2	
Electrical Conductivity	ms/cm				1.331	1.011	0.818	1.403	1.803	2.74	3.47	2.76	3.05	6.12		6.4	4.16	5.09	3.65	5.19				
Temperature	°C				17.7	18.7	18.4	17.8	15.6	16	17.1	16.7	12.6	14.2		16.6	15	15.6	17.2	8.3	13.7		15.5	
Eh	mV				306	388.9	514.1	628	684.3	755.2	746.5	782.1	672.4	673		744.5	847.3	908.9	866.1	847.3	939.7		955.7	
D.O	mg/L				3.63	3.72	3.68	3.62	3.71	3.65	3.25	3.76	7.09			6.31	6.2	6.35	7.49	5.74	6.13		5.77	
Rock Height in Column	mm				1488	1467	1435	1422	1398	1390	1390	1389	1387.6	1386.6		1370.8	1367.4	1360.1	1358.2	1355	1312			
HACH, Sulfate	mg/L				1300	1300	950	1300	2400	5375	4500	4625	5214	13750		14583.3	8000	8750	5000	9038.46154	13750		7000	
HACH, Total Fe	mg/L				24	20	14.5	9			10.3	0.34	1	38		1000	1266.67	1291.67	716.7	1062.5	1275		1350	
TDS	ppt				0.667	0.505	0.409	0.704	0.904	1.35	1.71	1.36	1.48	3.09		3.19	2.08	2.54	1.82	2.6				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				11.418	0.921	0.052	2.874	0.43	11.093	18.813					0.578	0.563	6.156	0.002	0.216	2.629	0.188	0.275	0.275
Ag	mg/L				0.011	0.79	0.01	0	0.000	0.007	0.035	0.009	0.018			0	0	N/A	N/A	0	N/A	0	N/A	N/A
Al	mg/L				207.307	94.377	43.086	145.199	218.493	253.349	498.831	576.8	662.9			0	456.4	366.338	156.283	162.895	144.811	74.042	92.354	92.354
As	mg/L				0.004	0	0.015	0	0.000	0.015	0.031	0.385	0.136			3.282	1.557	2.016	1.27	1.926	1.96	0.925	2.163	2.163
B	mg/L				0.606	2.795	0.279	0.213	0.264	0.278	0.471	5.861	0.424			0	0	0	0	0	0	0	0	0
Ba	mg/L				0.057	0	0.012	0	0.001	0.008	0.01	0.071	0.019			0.023	0.02	0.023	0.039	0.018	0.037	0.028	0.033	0.033
Be	mg/L				0.002	0.002	0.001	0.002	0.002	0.003	0.004	0.005	0.005			0.01	0.006	0.006	0.002	0.002	0.002	0.001	0.013	0.013
Bi	mg/L				0.002	0.018	0	0	0.002	0.001	0	0	0.016			0.077	0.011	0.022	0.033	0.03	0	0.001	0.029	0.029
Ca	mg/L				124.565	47.114	23.939	45.287	42.825	32.359	37.298	59.996	54.965			37.579	17.282	13.298	9.007	9.166	10.811	4.832	16.979	16.979
Cd	mg/L				0.813	0.535	0.335	0.73	0.857	1.274	2.998	4.506	4.249			9.719	4.756	4.942	2.336	2.411	2.718	1.526	1.746	1.746
Co	mg/L				11.49	4.31	2.623	4.622	3.897	2.593	2.963	2.765	1.822			2.167	0.766	0.619	0.313	0.363	0.395	0.251	0.353	0.353
Cr	mg/L				0.039	0.011	0.004	0.014	0.003	0.019	0.057	0.085	0.125			0.46	0.196	0.18	0.077	0.077	0.08	0.038	0.09	0.09
Cu	mg/L				23.499	1.387	1.189	2.75	3.814	4.174	6.707	10.89	2.123			8.696	7.411	N/A	N/A	6.208	N/A	4.286	N/A	N/A
Fe	mg/L				25.109	23.709	13.384	5.874	5.783	6.04	8.92	10.406	17.281			650.551	755.9	643.471	602.279	1166.187	1625	516.589	1504	1504
Ga	mg/L				0.013	0.027	0.004	0.001	0.002	0.009	0	0	0.027			0.718	0.403	0.559	0.38	0.357	0.391	0.239	0.349	0.349
K	mg/L				73.773	63.466	49.233	73.143	52.011	38.467	30.266	26.746	16.265			3.161	0.68	0.929	0.766	0.635	0.751	0.732	0.113	0.113
Li	mg/L				0.822	0.545	0.159	0.093	0.057	0.03	0.06	0.05	0.057			0.099	0.034	0.017	0.008	0.002	0.005	0.004	0.003	0.003
Mg	mg/L				10.809	6.111	3.521	6.272	6.184	4.475	4.814	5.066	4.481			4.257	1.597	1.324	0.85	0.669	0.697	0.399	0.877	0.877
Mn	mg/L				3.383	1.428	0.872	1.517	1.367	1.011	1.426	1.608	1.296			2.914	1.546	1.874	1.137	1.53	2.103	1.314	2.422	2.422
Mo	mg/L				0.006	0	0	0	0.000	0.003	0.001	0.008	0			0	0	0	0	0	0	0	0	0
Na	mg/L				42.587	27.084	7.718	4.239	2.016	1.402	1.391	8.65	1.618			1.896	0.819	0.952	1.198	0.197	0.763	1.131	0.217	0.217
Nb	mg/L				0	0	0	0	0.000	0	0.004	0	0			0	0	0	0	0	0	0	0	0
Ni	mg/L				3.483	1.325	0.814	1.494	1.254	0.848	1.01	0.971	0.651			0.85	0.327	0.293	0.145	0.173	0.196	0.121	0.186	0.186
Pb	mg/L				2.23	2.889	3.401	3.294	2.589	2.108	2.125	1.329	0.842			0.738	0.504	0.873	0.544	0.727	0.958	0.931	0.465	0.465
Sb	mg/L				0	0	0.001	0	0.000	0	0.056	0.015	0			0	0	0	0	0	0	0	0	0
Sc	mg/L				0.016	0.006	0.003	0.009	0.015	0.019	0.057	0.101	0.273			0.691	0.393	0.361	0.136	0.132	0.09	0.036	0.045	0.045
Se	mg/L				0.213	0.05	0.013	0.007	0.020	0.003	0.059	0	0.021			0.026	0	0	0	0	0	0	0	0
Sn	mg/L				0.024	0.016	0.011	0	0.000	0.005	0	0	0.004			0.014	0	0	0	0	0	0	0	0
Sr	mg/L				0.56	0.106	0.074	0.098	0.058	0.033	0.035	0.059	0.061			0.092	0.043	0.041	0.022	0.018	0.026	0.017	0.033	0.033
Te	mg/L				0	0.117	0.009	0.012	0.036	0	0	0	0.061			0.351	0.271	0.376	0.221	0.185	0.263	0.107	2.709	2.709
Ti	mg/L				0.004	0.002	0.002	0	0.000	0.002	0	0.006	0.004			0.004	0.003	0.002	0.002	0.003	0.005	0.004	0.011	0.011
Tl	mg/L				0.057	0.138	0.031	0.028	0.034	0.026	0.111	0	0.028			0.01	0	0.002	0.001	0	0	0.001	0.01	0.01
V	mg/L				0.02	0	0	0.009	0.000	0.001	0.005	0	0			0.355	0.233	0.354	0.201	0.206	0.204	0.115	0.164	0.164
W	mg/L				0	0.152	0	0	0.000	0	0.034	0	0			0	0	0	0	0	0	0	0	0
Zn	mg/L				15.687	35.094	20.119	47.896	67.497	80.213	150.643	235.192	112.783			156.075	109.1	126.432	120.552	140.481	154.125	104.538	120.192	120.192

Geoloy Name:	YV9C-W52																							
Met Code:	13033																							
Composite ID	YS Cent Ypq AA-Pyr A #12																							
Tara (kg)	0.9363																							
Initial Height of Rock in Column:	1.52 m																							
Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L	0.026			0.9934	1.88733	2.3943	6.6438		0	1.2171	2.4066					1.152	0.856	0.524	0.33	2.0908	1.642	1.164	1.065
pH		**1.7**				**1.54**	**1.62**	**2.31**			**1.79**	**1.58**					**1.28**	**1.45**	**1.57**	**1.97**	**2.01**	**1.67**	**1.7**	**1.36**
Electrical Conductivity	ms/cm										0.0118	21.49					36.8	18.18	16.29	18.5	7.79	4.27	5.03	17.1
Temperature	°C	13.2					13	14.2			13	13					17.9	17.9	19.6	16	20.3	18.9	20.1	18.6
Eh	mV	779.7				832.1	869.2	857.6			1115.3	871.3					522.4	515.8	516.9	931.8	903.5	697.4	752.2	882.8
D.O	mg/L	5.58									6.14	4.51					4.98	4.38	4.62	6.14	5.86	5.88	6.04	5.86
Rock Height in Column	mm				1309.4	1308.4	1308.1	1307.9		1307.6	1307.6	1307.6					1307.6	1307.6	1307.6	1307.6	1307.6	1307.6	1307.6	1307.6
HACH, Sulfate	mg/L	142000				30000	35833	12500			23125	36667					42619.1	7382	18400	17100	15700	14000	9400	22500
HACH, Total Fe	mg/L	12300				6062.2	3340	1930.6			4001.24	3548.8					12650	4540	5412.4	5402	4442	2948.33	2993.4	3972.72
TDS	ppt																18.05	7.382	7.982	9.06	3.82	2.74	2.7	10.1
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	**ppb**				1.376		0.745	0.046				0.734					0.747	0.313	0		0.211	**2.805**	**2.973**	0.126
Ag	**mg/L**				0	0	0	0			0	0					0	0	0		0	0	0.006	0.111
Al	**mg/L**				**631.3**	**245.142**	**147.657**	**52.389**			**90.044**	**76.767**					**199.672**	**79.472**	**75.259**		**55.331**	**44.471**	**38.355**	**72.201**
As	**mg/L**				**23.886**	**12.498**	**6.374**	**1.943**			**7.834**	**6.93**					**31.787**	**10.023**	**9.345**		**9.6**	**6.151**	**4.149**	**8.202**
B	**mg/L**				0	0	0	0			0	0					0	0	0		0	0	**1.342**	**35.368**
Ba	**mg/L**				0.145	0.07	0.058	0.035			0.062	0.053					0.164	0.06	0.062		0.066	0.077	0	0.332
Be	**mg/L**				**0.005**	0.003	**0.024**	0.001			**0.018**	0.002					0.002	0.001	0.001		0.001	0	0.002	0
Bi	mg/L				0	0.017	0.085	0			0	0.005					0	0	0.023		0	0.039	0.102	0
Ca	mg/L				33.011	22.447	23.598	11.484			23.374	59.658					201.42	18.686	36.285		51.617	37.728	14.548	25.92
Cd	**mg/L**				**10.483**	**5.48**	**4.439**	**1.606**			**2.369**	**2.056**					**5.241**	**2.445**	**2.574**		**1.949**	**1.659**	**1.241**	**2.002**
Co	**mg/L**				**1.446**	**0.882**	**0.911**	**0.36**			**0.621**	**0.612**					**1.384**	**0.73**	**0.775**		**0.625**	**0.526**	**0.463**	**0.68**
Cr	**mg/L**				**0.412**	**0.16**	0.1	0.025			0.038	0.042					**0.161**	0	0.066		**0.107**	0.042	0.057	**0.204**
Cu	**mg/L**				**48.09**	**30.443**	**22.349**	**9.628**			**15.048**	**12.86**					**48.298**	**25.2**	**28.657**		**26.303**	**19.839**	**19.479**	**22.956**
Fe	**mg/L**				**12720**	**4634.065**	**3414.774**	**1552.534**			**2930.088**	**2896.456**					**14576.239**	**3327.543**	**5574.762**		**4956.659**	**2543.132**	**2274.627**	**3943.396**
Ga	mg/L				2.398	0.502	0.959	0.228			0.41	0.704					1.482	0.537	0.877		0.441	0.292	0.155	1.13
K	mg/L				2.292	2.116	2.401	1.52			2.102	2.421					4.792	2.751	3.393		2.125	2.017	1.904	16.517
Li	mg/L				0.012	0.019	0.016	0.006			0	0.004					0.01	0.006	0.006		0.006	0.005	0.003	0.067
Mg	mg/L				3.376	1.765	1.317	0.596			2.034	1.619					5.667	1.174	2.382		1.833	0.925	1.007	2.718
Mn	**mg/L**				**11.375**	**6.128**	**5.69**	**2.253**			**4.575**	**4.172**					**10.607**	**4.855**	**5.211**		**4.223**	**3.36**	**2.729**	**4.672**
Mo	**mg/L**				0.005	0	0	0			0	0.025					0.097	0	0.022		0.071	0.02	0.036	0
Na	mg/L				2.95	2.444	1.412	0.956			6.335	9.723					2.166	8.484	1.344		1.869	9.08	9.454	77.557
Nb	mg/L				0	0	0	0			0	0					0	0	0		0	0	0	0
Ni	**mg/L**				**0.753**	**0.429**	**0.427**	0.172			**0.307**	**0.332**					**0.65**	**0.306**	**0.356**		**0.312**	**0.25**	**0.245**	0.163
Pb	**mg/L**				**1.885**	**1.408**	**2.451**	**1.6**			**2.118**	**1.951**					**1.451**	**1.582**	**1.675**		**1.298**	**1.875**	**1.782**	**2.772**
Sb	**mg/L**				0	0	0	0			0	0					0	0	0		0	0	0	0
Sc	mg/L				0.305	0.149	0.066	0.016			0.004	0.008					0.062	0.028	0.019		0.012	0.006	0.008	0.003
Se	**mg/L**				0	0	0	0			0	0					0	0	0		0	0	0.01	0
Sn	mg/L				0	0	0	0			0	0					0	0	0		0	0	0.041	0
Sr	mg/L				0.072	0.037	0.039	0.026			0.04	0.071					0.191	0.036	0.071		0.085	0.045	0.028	0.147
Te	mg/L				1.841	1.06	9.008	0.328			6.088	0.444					2.19	1.097	0.804		0.832	0.58	0.537	1.472
Ti	mg/L				0.049	0.015	0.012	0.007			0.041	0.043					0.113	0.05	0.135		0.08	0.041	0.015	0.081
Tl	**mg/L**				0	0	**0.004**	0.001			0	**0.047**					**0.011**	0	**0.008**		0	0.001	**0.005**	0
V	**mg/L**				**0.994**	**0.613**	**0.427**	**0.187**			**0.265**	**0.259**					**0.992**	**0.43**	**0.418**		**0.413**	**0.252**	0.099	**0.402**
W	mg/L				0	0	0	0			0	0					0	0	0		0	0	0	0
Zn	**mg/L**				**223.236**	**198.788**	**251.656**	**150.24**			**549.344**	**507.372**					**217.242**	**560.261**	**173.919**		**147.82**	**445.237**	**357.338**	**622.683**

Geoloy Name:	YV9C-W52
Met Code:	13033
Composite ID	YS Cent Ypq AA-Pyr A #12
Tara (kg)	0.9363
Initial Height of Rock in Column:	1.52 m

Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.9374					0.0264				1.053	2.64	1.41				3.2771	1.9203	1.6858	4.1745	4.0617	3.3121	5.6958
pH		1.6					0.87				2.34	2.74	1.69				1.41	1.46	1.48	1.52	1.65	1.74	1.79
Electrical Conductivity	ms/cm	16.39					55.6					11.93	11.79				22.25	17.12	17.08	15.48	10.62	5.22	7.25
Temperature	°C	17.8					16.2				17	18	18.6				20.4	20.1	20.3	20.1	18.5	20.3	18.7
Eh	mV	830.9					804.5				797	756.4	845.7				830.9	821.8	825.6	876	852.4	782	832.15
D.O	mg/L	6.01					5.28						5.8				-	-	-	-	-	-	-
Rock Height in Column	mm	1307.6					1307.6				1307.6	1307.6					1307.6	1307.6	1307.6	1307.6	1307.6	1307.6	1307.6
HACH, Sulfate	mg/L	12400					82000				1900	7100	5700				17900	15400	13400	10000	5800	5900	4600
HACH, Total Fe	mg/L	3847.37					25842.76				1209.632	3128.84	2218.671				4033.566	5776.32	4994.11	3429.69	2527.14	16065.39	12395.02
TDS	ppt	9.6					22.5					6.7	6.7				13.3	9.9	9.9	9	6	3.4	3.9
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.321									0	0.258	N/A				6.727	3.048	1.015	0.165	0.175	1.433	0.239
Ag	mg/L	0									0	0	0				0	0.011	0	0	0	0	0
Al	mg/L	49.239									10.434	25.981	19.415				61.936	30.172	39.093	35.759	19.884	16.14	11.964
As	mg/L	8.772									0.871	4.326	3.281				17.933	9.501	9.372	8.023	3.423	7.26	1.531
B	mg/L	0									0	0	0				0	0	0	0	0	0	1.389
Ba	mg/L	0.084									0.007	0.014	0.037				0.106	0	0.069	0	0.025	0.067	0.027
Be	mg/L	0.001									0.001	0.001	0.001				0.002	0	0.001	0	0.001	0.001	0.002
Bi	mg/L	0									0	0	0.017				0	0	0.085	0	0.083	0.203	0.022
Ca	mg/L	30.503									55.435	10.191	7.435				15.277	11.283	9.986	12.382	7.553	9.505	3.655
Cd	mg/L	1.675									0.221	0.791	0.702				1.828	0.225	1.228	1.156	0.691	0.786	0.457
Co	mg/L	0.618									0.144	0.349	0.322				0.815	1.17	0.522	0.575	0.323	0.665	0.209
Cr	mg/L	0.129									0.072	0.003	0.017				0.093	0.054	0.033	0.03	0.018	0.078	0
Cu	mg/L	24.361									5.867	21.037	17.543				45.147	144.166	33.376	29.852	19.829	23.129	11.806
Fe	mg/L	2958.493									664.52	1291.418	1988				2281.327	2401.602	2853.981	1963.205	1001.361	1717.658	788.728
Ga	mg/L	0.365									0.079	0.208	0.175				0.638	0.836	0.374	0.205	0.151	0.204	0.076
K	mg/L	2.618									0.321	2.205	1.704				2.334	14.527	3.255	2.604	2.869	1.944	1.539
Li	mg/L	0.006									0	0	0.001				0.004	0.003	0.002	0.002	0.002	0.004	0.002
Mg	mg/L	1.317									1.553	0.526	0.425				1.228	0.522	0.905	1.382	0.582	0.456	0.491
Mn	mg/L	4.091									1.405	2.028	1.651				4.823	2.448	2.96	2.877	1.674	1.965	1.019
Mo	mg/L	0.016									0	0.001	0.01				0.011	1.259	0.005	0.037	0.011	0	0
Na	mg/L	7.851									2.762	3.188	0.804				3.129	3.937	1.322	4.852	1.909	4.324	3.898
Nb	mg/L	0									0	0	0				0	0	0	0	0	0	0
Ni	mg/L	0.303									0.132	0.156	0.154				0.424	0.657	0.256	0.247	0.155	0.441	0.111
Pb	mg/L	1.777									0.039	1.651	1.719				1.979	1.966	1.591	2.057	1.584	2.449	1.674
Sb	mg/L	0									0	0	0				0	0	0	0	0	0	0
Sc	mg/L	0.005									0.001	0	0				0	0	0.001	0.007	0.003	0	0
Se	mg/L	0									0	0	0				0	0.137	0	0.124	0	0	0
Sn	mg/L	0									0	0.022	0.014				0.119	0.004	0.027	0.094	0.016	0	0.02
Sr	mg/L	0.057									0.062	0	0.021				0.04	0.072	0.025	0.032	0.024	0.03	0.018
Te	mg/L	0.943									0.115	0.383	0.264				0.879	1.287	0.566	0.683	0.224	0.405	0.148
Ti	mg/L	0.038									0.015	0.027	0.006				0.009	0.005	0	0.003	0.001	0.018	0.004
Tl	mg/L	0.191									0	0	0.011				0	0	0.021	0	0.03	0.667	0
V	mg/L	0.308									0.032	0.198	0.17				0.58	1.19	0.381	0.374	0.156	0.234	0.062
W	mg/L	0									0	0	0				0	0	0	0	0	0	0
Zn	mg/L	430.847									59.516	178.748	106.116				290.396	72.866	140.657	271.206	147.585	153.217	128.004

Muestra 13034

Geoloy Name:	YV9C-W53
Met Code:	13034
Composite ID	YS Cent Ypq AA-Pyr A #13
Tara (kg)	0.9376
Initial Height of Rock in Column:	1.52 m

Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L				4.257	2.300	3.616	0.622	2.432	3.092	0.7421	0.288	0.468	0.101		1.866	2.8038	3.6952	2.3303	3.5233	4.2102			
pH					3.71	3.81	3.66	3.05	3.1	3	2.67	2.73	2.37	2.25		1.45	1.63	1.68	1.56	1.57	1.66		1.46	1.26
Electrical Conductivity	ms/cm				1.452	0.905	0.747	1.293	2.09	2.54	4.55	4.50	7.26	3.85		17.92	6.76	10.92	9.78	6.06				
Temperature	°C				17.9	18.6	18.4	17.7	15.7	16	17.10	16.90	12.6	14.2		16.8	15	15.7	17.2	6.3	14		15.5	13.3
Eh	mV				302.1	401.5	505.5	646.2	713	786.9	809.60	826.20	760.8	761.8		769.2	871.5	926.9	880	855	940.7		965.4	821.7
D.O	mg/L				3.64	3.71	3.69	3.73	3.73	3.67	3.18	3.76	6.89	6.3		5.93	5.96	5.84	6.52	6.42	4.97		5.68	5.62
Rock Height in Column	mm				1489	1470	1451	1423	1399	1395	1412.00	1410.60	1387.6	1387		1380.6	1381.1	1375.2	1374.1	1359	1313			
HACH, Sulfate	mg/L				1400	1000	500	1100	2300	3125	6166.67	10000.00	18333	21500		63750	21500	15500	13500	17000	6750		17000	88000
HACH, Total Fe	mg/L				21	18	13.5	8			79.00	239.17	1329	14600		8666.7	9533.3	4275	2487.5	2450	2325		4925	25500
TDS	ppt				0.726	0.439	0.373	0.639	1.04	1.27	2.26	2.25	3.56	3.9		8.97	3.38	5.46	4.88	12.18				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				11.433	1.169	0.101	3.92	0.819	23.047	40.604					2.469	2.186	14.382	0.083	0.368	1.981	0.301	0.532	
Ag	mg/L				0.051	0.784	0.013	0	0.002	0.007	0.027	0.02	0.017			0	0.002	N/A	N/A	0	N/A	0	N/A	
Al	mg/L				2.811	88.386	46.376	139.594	285.341	329.348	700.043	1023	1105			N/A	268.043	145.097	105.808	82.272	71.357	38.753	72.402	
As	mg/L				0	0	0.015	0	0.000	0.003	0.129	1.257	25.147			42.475	9.962	4.123	3.71	3.141	3.437	1.469	4.787	
B	mg/L				0.545	2.576	0.178	0.188	0.253	0.321	0.484	4.939	0			0	0	0	0	0	0	0	0	
Ba	mg/L				0.033	0	0.019	0	0.004	0.01	0.015	0.005	0.021			0.121	0.057	0.046	0.079	0.031	0.049	0.041	0.073	
Be	mg/L				0	0.002	0.001	0.001	0.002	0.003	0.005	0.006	0.01			0.007	0.003	0.001	0.001	0	0	0	0.004	
Bi	mg/L				0	0.009	0	0.008	0.000	0	0.015	0.237	0			0.098	0.032	0.016	0.061	0.065	0	0	0	
Ca	mg/L				176.277	42.317	23.449	35.99	38.145	21.412	17.863	26.085	24.515			20.464	17.641	16.772	16.237	14.322	10.038	5.64	22.331	
Cd	mg/L				0.771	0.398	0.242	0.463	0.488	0.688	1.737	3.118	4.014			4.445	1.449	0.859	0.634	0.465	0.488	0.316	0.537	
Co	mg/L				3.671	5.155	3.313	4.68	3.650	1.593	1.458	1.727	1.64			2.057	0.993	0.772	0.728	0.595	0.595	0.389	0.796	
Cr	mg/L				0	0.022	0.015	0.044	0.072	0.133	0.849	1.741	2.892			2.233	0.545	0.241	0.157	0.109	0.093	0.056	0.13	
Cu	mg/L				816.969	16.642	9.909	24.266	44.180	49.996	89.395	122.181	74.055			144.905	78.548	N/A	N/A	32.334	N/A	18.445	N/A	
Fe	mg/L				0.192	18.884	12.825	5.157	8.429	10.437	74.636	238.1	1549			1029.14	3053	2515	975.46	2573.226	2864	675.923	3376	
Ga	mg/L				0.004	0.015	0.007	0.004	0.017	0.019	0.118	0.517	2.633			7.775	2.268	1.126	0.96	0.666	0.685	0.436	0.878	
K	mg/L				12.887	40.216	30.084	45.041	31.035	21.074	9.504	7.187	3.459			3.017	2.547	2.619	3.213	2.188	1.889	1.488	2.153	
Li	mg/L				1.064	0.214	0.062	0.033	0.027	0.015	0.02	0.018	0.029			0.199	0.113	0.028	0.008	0	0.002	0.005	0.004	
Mg	mg/L				25.839	4.663	2.722	3.818	3.513	1.739	1.47	1.953	2.191			1.61	1.097	1.003	1.025	0.581	0.285	0.154	0.737	
Mn	mg/L				9.978	1.709	1.024	1.403	1.128	0.54	0.672	1.014	1.573			4.525	2.052	1.485	1.393	1.389	1.396	0.841	2.163	
Mo	mg/L				0.003	0.002	0	0.002	0.001	0	0	0	0.069			0.417	0.137	0.059	0.042	0.034	0.028	0.014	0.041	
Na	mg/L				60.159	11.296	3.058	2.108	1.383	1.387	1.462	7.239	1.973			2.375	1.049	0.722	1.197	0.119	0.524	1.357	0.281	
Nb	mg/L				0	0	0	0	0.000	0	0	0	0.01			0	0	0	0	0	0	0	0	
Ni	mg/L				1.26	1.607	1.081	1.618	1.286	0.619	0.665	0.84	0.859			1.209	0.571	0.434	0.397	0.339	0.34	0.23	0.488	
Pb	mg/L				0.225	2.267	2.55	2.952	2.090	1.32	0.558	0.204	0.076			0.895	0.958	1.162	1.304	1.227	1.252	1.084	1.899	
Sb	mg/L				0	0	0	0	0.000	0	0	0	0			0	0	0	0	0	0	0	0	
Sc	mg/L				0.004	0.008	0.004	0.013	0.029	0.046	0.407	0.812	2.314			1.179	0.299	0.111	0.054	0.034	0.025	0.016	0.029	
Se	mg/L				0.002	0.026	0.032	0.002	0.008	0.003	0.071	0.27	0			0	0	0	0	0	0	0	0	
Sn	mg/L				0.016	0.013	0.002	0.004	0.001	0.003	0.03	0.039	0			0.011	0	0	0	0	0	0	0	
Sr	mg/L				0.56	0.319	0.255	0.387	0.317	0.244	0.603	0.831	0.794			0.403	0.17	0.122	0.104	0.078	0.073	0.052	0.101	
Te	mg/L				0	0.119	0.007	0.016	0.039	0.017	0.081	0.281	0.511			1.885	0.878	0.582	0.631	0.382	0.539	0.309	8.169	
Ti	mg/L				0.011	0.001	0.003	0	0.000	0	0	0.008	0.017			0.007	0.004	0.003	0.007	0.006	0.003	0.003	0.015	
Tl	mg/L				0.095	0	0.032	0.031	0.033	0.03	0.109	0	0			0	0	0.016	0.008	0	0	0.005	0	
V	mg/L				0.031	0	0	0.009	0.000	0.002	0.021	0.026	1.137			2.283	0.942	0.596	0.568	0.419	0.409	0.263	0.53	
W	mg/L				0.037	0.135	0	0	0.000	0	0	0	0			0	0	0	0	0	0	0	0	
Zn	mg/L				18.047	8.415	5.519	14.776	29.376	42.614	97.323	188.605	119.417			138.367	90.093	87.577	84.309	79.54	82.293	52.973	80.031	

Geoloy Name:	YV9C-W53
Met Code:	13034
Composite ID	YS Cent Ypq AA-Pyr A #13
Tara (kg)	0.9376
Initial Height of Rock in Column:	1.52 m

Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				1.2884	1.53846		7.9278	1.0215	1.6087	1.699	2.2037					1.234	0.856	0.525	1.19	1.3456	1.683	0.976	0.872
pH						**1.33**			**1.64**	**2.24**	**1.67**	**1.47**					**1.59**	**1.48**	**1.55**	**1.99**	**2.25**	**1.58**	**1.62**	**1.4**
Electrical Conductivity	ms/cm										0.0158	27.5					19.3	17.44	19.59	16.36	9.96	5.54	6.75	15.98
Temperature	°C								14.2	13	13	13					17.9	17.8	19.5	15.9	20.2	18.5	20.1	18.6
Eh	mV					842.6			874.9	850	1124.8	875.2					504.4	516.9	519.9	942	914.5	702.5	749.6	881.7
D.O	mg/L										4.99	4.46					4.2	4.55	4.53	5.67	5.79	5.97	5.89	5.83
Rock Height in Column	mm				1310.5	1310.2	1310	1309.8		1309.2	1309.2	1309.2					1309.2	1308.6	1308.6	1308.6	1308.6	1308.6	1308.6	1308.6
HACH, Sulfate	mg/L					36500			16500	23333.3333	28125	40000					18587.5	10500	27100	16100	17300	14500	13000	20000
HACH, Total Fe	mg/L					7703.407			3169.175	4693.896	5279.25	4423.3					5850.0	3980.0	9365.1	4984.0	5495.0	3550.0	4316.7	3500.5
TDS	ppt																9.472	6.975	9.601	8.015	4.88	3.19	3.7	9.3
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	**ppb**				1.529			0.067	0.238	0.013		0.566					0.178	0.251	0.336		0.151	**3.538**	**5.197**	0.172
Ag	**mg/L**				0	0		0	0	0	**0.571**	0					0	0	0		0	0	0.011	0.005
Al	**mg/L**				**186.298**	**134.574**		**22.874**	**24.271**	1.45	**38.399**	**31.708**					**54.154**	**39.111**	**81.774**		**34.072**	**24.67**	**28.335**	**38.886**
As	**mg/L**				**22.475**	**12.308**		**1.814**	**2.667**	**26.911**	**7.33**	**6.212**					**8.312**	**4.943**	**11.07**		**8.092**	**3.989**	**4.133**	**4.59**
B	**mg/L**				0	0		0	0	0	0	0					0	0	0		0	0	0	**35.002**
Ba	**mg/L**				0.18	0.085		0.042	0.044	0.052	0.083	0.069					0.093	0.059	0.102		0.077	0.083	0	0.159
Be	**mg/L**				0.001	0.001		0	0.002	0	**0.008**	0.002					0.001	0	0		0	0	0.002	0
Bi	mg/L				0.065	0.104		0.011	0	0	0	0					0	0	0.038		0.003	0.024	0.188	0
Ca	mg/L				61.217	34.991		9.376	9.981	11.023	35.805	16.922					231.248	50.95	246.714		32.267	16.704	21.824	18.94
Cd	**mg/L**				**2.17**	**1.954**		**0.289**	**0.276**	**0.464**	**0.52**	**0.458**					**0.838**	**0.458**	**0.78**		**0.504**	**0.309**	**0.288**	**0.244**
Co	**mg/L**				**1.956**	**1.259**		**0.436**	**0.561**	**0.942**	**1.019**	**0.93**					**1.137**	**0.807**	**1.362**		**0.964**	**0.689**	**0.807**	**0.62**
Cr	**mg/L**				**0.498**	**0.189**		0.031	0.037	**0.406**	0.052	0.028					**0.308**	0.038	**0.31**		**0.125**	0.044	0.075	0.055
Cu	**mg/L**				**154.775**	**92.524**		**26.907**	**27.392**	**33.381**	**49.2**	**41.692**					**97.647**	**75.064**	**140.836**		**103.508**	**65.949**	**80.981**	**54.886**
Fe	**mg/L**				**13700**	**5906.319**		**1872.558**	**2950**	**4377**	**29031.583**	**26205.821**					**6943.548**	**3063.161**	**9726.903**		**6313.302**	**2746.03**	**3206.147**	**3417.3**
Ga	mg/L				3.097	0.805		0.285	0.313	0.165	0.434	0.841					0.698	0.531	1.619		0.573	0.337	0.202	0.76
K	mg/L				6.326	4.652		2.032	2.193	0.039	3.17	2.498					1.643	3.192	7.183		4.021	2.656	3.148	15.306
Li	mg/L				0.011	0.022		0.004	0.003	0.001	0	0.003					0.007	0.006	0.017		0.005	0.005	0.004	0.025
Mg	mg/L				2.909	1.409		0.141	0	0	1.07	0.378					25.509	1.276	7.52		0.405	0.205	0.886	1.87
Mn	**mg/L**				**6.642**	**4.196**		**1.076**	**1.508**	**1.775**	**3.1**	**2.57**					**7.582**	**2.466**	**6.32**		**2.771**	**1.861**	**2.456**	**2.461**
Mo	**mg/L**				**0.185**	0.081		0.028	0.057	0	0.13	0.172					**0.223**	**0.24**	**0.75**		**0.264**	**0.218**	**0.323**	0.166
Na	mg/L				2.698	1.671		0.832	0.64	0.1	6.535	8.601					1.457	9.505	3.531		1.52	9.548	9.49	85.152
Nb	mg/L				0	0		0	0	0	0	0					0	0	0		0	0	0	0
Ni	**mg/L**				**1.208**	**0.704**		**0.265**	**0.334**	**0.607**	**0.605**	**0.579**					**0.784**	**0.525**	**0.904**		**0.597**	**0.437**	**0.568**	**0.338**
Pb	**mg/L**				**1.908**	**1.624**		**1.215**	**1.565**	**2.053**	**2.123**	**1.851**					**0.507**	**1.222**	**1.399**		**1.371**	**1.597**	**1.869**	**2.74**
Sb	**mg/L**				0	0		0	0	0	0	0					0	0	0		0	0	0	0
Sc	mg/L				0.114	0.074		0.001	0	0	0	0					0.012	0.01	0.012		0	0	0.002	0
Se	**mg/L**				0	0		0	0	0	0	0					0	0	0		0	0	0	0
Sn	mg/L				0	0		0	0	0	0	0					0	0	0		0	0.006	0.093	0
Sr	mg/L				0.206	0.114		0.047	0.052	0.045	0.09	0.063					0.242	0.11	0.399		0.097	0.06	0.089	0.082
Te	mg/L				2.209	1.652		0.443	4.697	5.469	9.359	0.75					1.06	1.001	1.466		1.095	0.616	0.808	1.561
Ti	mg/L				0.148	0.026		0.008	0.014	0.033	0.042	0.02					0.062	0.075	0.541		0.046	0.022	0.05	0.074
Tl	**mg/L**				0	0		**0.003**	0	**0.098**	**0.016**	**0.066**					**0.02**	0	**0.038**		**0.153**	**0.073**	**0.031**	0
V	**mg/L**				**1.724**	**1.166**		**0.335**	**0.347**	**0.216**	**0.647**	**0.574**					**0.849**	**0.752**	**1.297**		**1.004**	**0.636**	**0.584**	**0.752**
W	mg/L				0	0		0	0	0	0	0					0	0	0		0	0	0	0
Zn	**mg/L**				**133.114**	**155.294**		**59.121**	**57.012**	**2.798**	**126.174**	**117.563**					**101.548**	**115.81**	**104.271**		**82.246**	**85.254**	**84.527**	**71.783**

Geoloy Name:	YV9C-W53
Met Code:	13034
Composite ID	YS Cent Ypq AA-Pyr A #13
Tara (kg)	0.9376
Initial Height of Rock in Column:	1.52 m

Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0	0	0	0	0	0.0256	2.2564	3.0597	1.8652	1.853	2.43	1.42				3.0364	1.8783	1.5978	3.8025	3.8444	3.0337	5.2977
pH							0.93	2.2	1.4	1.48	1.54	1.5	1.56				1.23	1.24	1.37	1.38	1.56	1.67	1.71
Electrical Conductivity	ms/cm						60.1	6.55	18.47	17.19		16.36	15.59				32	23.23	21.9	19.54	12.93	6.25	8.19
Temperature	°C						16.22	18.2	15	15.8	17	18	18.3				20.6	20.1	20.7	20.1	18.5	20.2	18.7
Eh	mV						741	734.2	873	564.7	810	769	853.9				862.4	821.3	836.1	876.5	853.8	785.2	792.3
D.O	mg/L						5.13	5.32	5.75	5.71			5.85				-	-	-	-	-	-	-
Rock Height in Column	mm						1308.6	1308.6	1308.6	1308.6	1308.6	1308.6					1308.6	1308.6	1308.6	1308.6	1308.6	1308.6	1308.6
HACH, Sulfate	mg/L						92900	11500	14600		8200	11800	8200				26800	20700	17600	13200	7300	8000	5600
HACH, Total Fe	mg/L						33395.9	5171.5	5222.86	7540	3211.98	4512.75	3267.957				5465.421	6859.38	6017	4512.75	3008.5	22623.92	39832.54
TDS	ppt						27.3	8.47	10.7	8.424		9.4	9				19.7	13.8	13	11.6	7.4	3.4	4.5
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb							0.016		0.262	0.008	0.721	N/A				6.048	3.921	0.626	0.142	0.868	1.279	0.397
Ag	mg/L							0.011	0	0	0	0	0				0	0.013	0	0.006	0	0	0
Al	mg/L							30.005	33.384	8.737	15.678	19.352	13.718				43.334	12.496	24.208	21.392	11.915	7.531	7.365
As	mg/L							6.772	7.575	1.843	3.097	4.777	3.058				16.083	8.675	6.801	5.757	2.666	1.345	1.211
B	mg/L							0	0	0	0	0	0				0	0	0	0	0	0.569	0.599
Ba	mg/L							0	0.071	0.021	0.04	0.041	0.052				0.152	0	0.09	0	0.036	0.034	0.039
Be	mg/L							0	0	0	0.001	0	0				0.001	0	0	0	0.001	0.001	0.002
Bi	mg/L							0	0.329	0	0.059	0	0				0	0	0.244	0.077	0.058	0.155	0
Ca	mg/L							49.97	59.226	16.419	10.437	7.919	6.875				12.554	58.477	11.578	13.91	7.572	3.192	3.033
Cd	mg/L							0.536	0.642	0.149	0.174	0.165	0.16				0.395	0	0.229	0.149	0.104	0.066	0.06
Co	mg/L							0.766	0.799	0.209	0.574	0.632	0.534				1.428	0.877	0.85	0.88	0.458	0.297	0.287
Cr	mg/L							0.053	0.076	0.027	0.055	0.011	0.019				0.113	0.537	0.031	0.016	0.019	0.003	0
Cu	mg/L							79.916	91.404	25.16	75.658	90.803	69.181				199.572	55.864	131.802	115.852	71.729	41.442	40.66
Fe	mg/L							1624.902	5106.137	1340	1368.8	1664.357	2882				2539.475	2607.954	3402.852	2253.962	1168.161	1067.637	1007.463
Ga	mg/L							0.622	0.46	0.131	0.293	0.344	0.271				0.939	0.707	0.468	0.224	0.182	0.121	0.109
K	mg/L							2.913	3.367	0.667	2.183	2.492	2.658				4.005	4.152	4.634	3.69	3.315	1.934	1.922
Li	mg/L							0.005	0.005	0.001	0	0	0.002				0.004	0.003	0.003	0.002	0.001	0.002	0.002
Mg	mg/L							1.911	1.322	0.416	0.058	0	0				0	2.229	0	0.626	0.033	0.125	0.098
Mn	mg/L							2.575	3.063	0.877	1.696	1.552	1.149				3.794	6.38	1.983	1.787	1.045	0.624	0.589
Mo	mg/L							0.4	0.421	0.108	0.348	0.557	0.45				1.674	1.342	1.098	1.114	0.696	0.432	0.387
Na	mg/L							4.192	4.443	1.154	2.625	3.674	0.718				2.691	3.542	1.284	4.399	1.958	3.94	3.844
Nb	mg/L							0	0	0	0	0	0				0	0	0	0	0	0	0
Ni	mg/L							0.445	0.525	0.146	0.391	0.38	0.334				0.951	0.761	0.539	0.507	0.281	0.199	0.18
Pb	mg/L							1.675	1.694	0.389	1.347	1.407	1.323				1.899	1.176	1.481	1.951	1.236	1.187	1.157
Sb	mg/L							0	0	0	0	0	0				0	0	0	0	0	0	0
Sc	mg/L							0.002	0	0	0	0	0				0	0	0	0	0	0	0
Se	mg/L							0.116	0	0	0	0	0				0	0.162	0	0.511	0	0.017	0
Sn	mg/L							0	0.008	0.002	0.044	0.023	0.024				0.091	0.04	0.03	0.003	0	0	0
Sr	mg/L							0.106	0.115	0.033	0.054	0.029	0.047				0.094	0.142	0.067	0.071	0.046	0.03	0.029
Te	mg/L							0.88	0.681	0.195	0.438	0.574	0.395				1.357	1.159	0.708	0.87	0.281	0.166	0.208
Ti	mg/L							0.034	0.032	0.011	0.012	0.002	0.003				0.01	0.042	0.004	0.004	0.002	0.004	0.004
Tl	mg/L							0	0	0.002	0	0.008	0.014				0	0	0	0	0.009	0	0.058
V	mg/L							0.702	0.727	0.208	0.569	0.714	0.58				1.704	0.777	1	0.936	0.483	0.294	0.268
W	mg/L							0	0	0	0	0	0				0	0	0	0	0	0	0
Zn	mg/L							124.675	151.491	35.284	43.7	49.456	36.272				88.849	3.522	49.499	53.344	26.258	17.912	17.146

Muestra 13035

Geoloy Name:	YV9W-W52																						
Met Code:	13035																						
Composite ID	YS Oeste YpqBx AA-PyrHA #14																						
Tara (kg)	0.9366																						
Initial Height of Rock in Column:	1.4 m																						
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L				4.356	2.255	3.641	0.5434	2.45	3.105	0.7519	0.241	0.291	0.055		2.145	2.498	4.2574	2.8446	4.7352	5.0366			
pH					4.66	4.49	4.53	3.83	4.02	3.68	3.04	2.88	2.3	2.37		1.96	2.11	2.05	1.76	1.72	1.62		1.51	1.15
Electrical Conductivity	ms/cm				2.28	1.569	1.178	2.18	1.49	1.681	5.96	7.46	10.05	8.59		10.26	13.24	5.94	6.67	8.91				
Temperature	°C				18	18.7	18.3	17.8	15.7	16	17.10	17.00	12.6	14.1		17.1	15.1	15.7	17.2	7.6	13.7		15.6	13.3
Eh	mV				293.2	415.9	502.5	598.5	642.3	741.2	738.80	791.50	751.6	758		767.6	866.6	922.4	887.7	861.2	949.7		965.1	798.1
D.O	mg/L				3.69	3.73	3.8	3.75	3.81	3.78	3.18	3.64	7.05	6.83		5.68	6.15	6.53	6.25	5.72	5.2		5.58	5.71
Rock Height in Column	mm				1383	1364	1345	1338	1334	1330	1323.00	1320.60	1318.6	1315.6		1297.2	1397.1	1387.6	1386.1	1328	1296			
HACH, Sulfate	mg/L				2000	1600	800	1800	1700	1625	6200.00	20000.00	12500	26250		71666.7	15500	16000	16000	18333.3333	8750		24500	46000
HACH, Total Fe	mg/L				18	8	5	24			57.75	250.83	1367	12000		6900	7500	5850	3425	2866.66667	3400		6300	23875
TDS	ppt				1.14	0.756	0.587	1.09	0.746	0.841	2.93	3.72	4.93	4.3		5.11	6.61	2.97	3.33	4.46				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				9.891	1.855	1.047	12.69	2.168	24.289	274.757					2.08	2.002	18.091	0.175	0.441	1.86	1.298	0.249	
Ag	mg/L				0.015	0.716	0.027	0.035	0.016	0.022	0.084	0.118	0.101			0.094	0.048	N/A	N/A	0.012	N/A	0.006	N/A	
Al	mg/L				28.789	3.646	1.673	8.319	6.291	11.97	204.554	425.274	566			205.118	68.333	47.967	67.251	24.91	27.144	10.105	13.546	
As	mg/L				0	0	0	0	0.000	0	0.066	0	10.267			35.385	12.657	8.108	3.987	5.022	6.25	2.084	5.042	
B	mg/L				0.555	2.489	0.171	0.121	0.578	0.286	0.658	5.05	0			0	0	0	37.17	0	0	0	0	
Ba	mg/L				0.049	0	0.015	0	0.005	0.008	0.012	0.012	0.037			0.13	0.074	0.062	0.141	0.043	0.072	0.058	0.089	
Be	mg/L				0	0	0	0.001	0.001	0.001	0.009	0.016	0.016			0.003	0.001	0	0	0	0	0	0	
Bi	mg/L				0	0.015	0	0	0.000	0	0	0.375	0			0	0	0	0	0	0	0	0	
Ca	mg/L				135.798	79.642	35.346	60.131	32.071	24.967	52.356	76.841	67.049			34.16	27.444	18.946	25.114	16.184	23.156	12.117	25.17	
Cd	mg/L				0.022	0.02	0.012	0.026	0.000	0.017	0.107	0.223	0.368			0.269	0.098	0.061	0	0.001	0.026	0.007	0.007	
Co	mg/L				2.682	1.252	0.612	0.82	0.336	0.238	0.722	1.291	1.356			1.435	0.646	0.522	0.498	0.424	0.649	0.356	0.693	
Cr	mg/L				0.011	0	0.002	0	0.000	0.006	0.478	2.724	6.815			6.029	1.815	1.19	0.781	0.414	0.437	0.161	0.275	
Cu	mg/L				162.468	863.062	390.251	972.4	558.355	50.55	2555.504	4492	4339			N/A	1099	N/A	N/A	355.103	N/A	193.531	N/A	
Fe	mg/L				4.442	0.268	0.608	2.393	1.465	0.675	25.577	209.123	2298			1009.15	3453	3107	4457.5	3027.046	4155	2230	4133	
Ga	mg/L				0.003	0.01	0.008	0.003	0.004	0.007	0	0.131	0.844			1.904	0.759	0.613	0.075	0.266	0.397	0.27	0.496	
K	mg/L				18.819	5.729	3.081	4.513	2.019	1.274	1.203	2.001	0.392			0.157	0	0.015	11.335	0.056	0.148	0.146	0.017	
Li	mg/L				0.243	0.174	0.059	0.074	0.032	0.019	0.088	0.093	0.149			0.085	0.019	0.007	0.02	0.001	0.004	0.004	0.003	
Mg	mg/L				13.721	10.53	5.138	10.064	5.100	3.861	9.691	12.113	11.42			2.757	1.223	0.971	0	0.652	0.591	0.091	0.302	
Mn	mg/L				3.757	3.389	1.512	1.839	0.752	0.508	1.475	2.869	3.959			4.653	2.442	2.152	2.279	1.605	2.291	1.36	3.35	
Mo	mg/L				0.003	0.002	0	0	0.000	0.001	0	0	0.129			0.862	0.504	0.668	1.045	1.332	1.443	0.513	1.06	
Na	mg/L				77.175	15.207	4.262	3.189	1.869	1.347	2.644	9.795	2.339			1.146	0.696	0.683	69.097	0.195	0.755	1.001	0.188	
Nb	mg/L				0	0	0	0	0.000	0	0	0	0			0	0	0	0	0	0	0	0	
Ni	mg/L				1.759	0.446	0.232	0.317	0.123	0.097	0.329	0.561	0.637			0.696	0.326	0.276	0	0.209	0.306	0.178	0.362	
Pb	mg/L				0.043	0.107	0.083	0.186	0.076	0.053	0.318	1.441	0.434			0.254	0.129	0.051	0	0.076	0.247	0.14	0.23	
Sb	mg/L				0	0	0	0	0.000	0	0	0	0			0	0	0	0.099	0	0	0	0	
Sc	mg/L				0.012	0.003	0.002	0.006	0.008	0.013	0.43	1.669	3.522			0.522	0.122	0.065	0.06	0.041	0.039	0.007	0.006	
Se	mg/L				0	0.033	0.001	0.034	0.009	0.021	0.053	0.192	0			0	0	0	0.882	0	0	0	0	
Sn	mg/L				0.022	0	0.016	0	0.004	0	0.042	0.05	0.047			0.028	0	0	0	0	0	0	0	
Sr	mg/L				0.806	0.337	0.246	0.34	0.231	0.207	0.282	0.278	0.179			0.108	0.106	0.131	0.262	0.228	0.391	0.218	0.33	
Te	mg/L				0	0.076	0	0	0.005	0	0.076	0.118	0.389			1.413	0.998	0.813	1.558	0.451	0.725	0.421	8.82	
Ti	mg/L				0.005	0.006	0.005	0.003	0.000	0	0	0	0			0.018	0.016	0.022	0	0.027	0.02	0.012	0.024	
Tl	mg/L				0.013	0	0.024	0.002	0.027	0.012	0.099	0.048	0			0	0	0.001	0.425	0	0	0.003	0	
V	mg/L				0.042	0	0	0.012	0.000	0.001	0.003	0	0.311			1.147	0.654	0.5	1.048	0.294	0.378	0.219	0.382	
W	mg/L				0	0.308	0.063	0.131	0.062	0.085	0.694	0.482	0			0	0	0	0	0	0	0	0	
Zn	mg/L				6.17	7.142	3.296	5.982	2.363	1.625	7.061	21.441	39.691			34.735	11.328	6.87	7.993	3.836	4.723	2.056	3.007	

Met Code:	13035
Composite ID	YS Oeste YpqBx AA-Pyr HA #14
Tara (kg)	0.9366
Initial Height of Rock in Column:	1.4 m

Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				1.314	2.89292	1.9939	7.5348		2.6902	2.1814	2.1658					1.12	0.85	0.525	1.7642	2.5544	2.8956	1.764	1.048
pH						1.32	1.5	2.12	1.55	2.15	1.54	1.36					1.08	1.5	1.45	1.77	1.89	1.49	1.59	1.15
Electrical Conductivity	ms/cm										2.31	35.1					71.5	16.56	21.22	24.93	10.8	6.46	7.32	26.54
Temperature	°C						13	14.2	14.2	13	13	13					19.2	17.7	19.7	15.8	20.2	18.6	20	18.8
Eh	mV					866	877.7	874.6	883.1	870.9	1130	885					534.1	516.6	529.9	958.6	919.2	716.6	752.6	852.8
D.O	mg/L										6	4.47					5.017	4.53	4.53	5.49	4.83	5.85	5.74	3.18
Rock Height in Column	mm				1292.9	1291.7	1291.5	1291.2		1290.9	1290.9	1290.9					1290.5	1290.5	1290.5	1290.5	1290.5	1290.5	1290.5	1290.5
HACH, Sulfate	mg/L					37000	22500	18500	18500	33333.3	43750	54166.7					44355.6	9750.0	23800	23600	21100	19000	18100	27500
HACH, Total Fe	mg/L					8136.832	6140	3640.2	4111.2	7559.6	8086.09	5794.3					0.1	3880.0	8240	7253	6438	4813.6	1088	6611.36
TDS	ppt																35.005	6.837	10.397	12.21	5.29	3.88	4.1	16.4
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	ppb				1.159		1.084	0.178	0.282	0.021		0.606					0.381	0.198	0.222		0.103	4.276	7.863	0.129
Ag	mg/L				0.02	0.008	0	0	0	0	0	0					0	0	0		0	0	0.018	0
Al	mg/L				74.618	28.73	11.43	3.072	2.384	30.417	8.855	7.559					29.936	12.136	12.266		8.421	8.012	8.175	25.708
As	mg/L				25.677	10.279	6.386	2.006	2.296	4.907	5.752	4.326					11.543	3.023	5.979		4.842	3.281	3.119	4.524
B	mg/L				0	0	0	0	0	0	0	0					0	0	0		0	0	0	29.103
Ba	mg/L				0.22	0.094	0.103	0.065	0.056	0.064	0.103	0.084					0.17	0.06	0.092		0.09	0.103	0	0.16
Be	mg/L				0	0	0	0	0	0.003	0	0					0	0	0		0	0	0	0
Bi	mg/L				0	0	0	0	0	0	0.117	0.026					0.028	0	0		0.013	0.1	0.295	0.011
Ca	mg/L				58.423	36.938	16.787	3.201	2.245	12.167	20.994	13.813					64.47	32.622	27.32		26.844	18.269	16.02	18.05
Cd	mg/L				0.258	0	0.003	0.002	0	0.347	0	0.003					0.026	0.002	0.008		0.01	0	0	0
Co	mg/L				2.197	0.981	0.941	0.371	0.427	0.744	0.891	0.78					1.229	0.463	0.78		0.639	0.521	0.662	0.685
Cr	mg/L				2.047	0.699	0.267	0.046	0.031	0.062	0.109	0.078					0.447	0.09	0.17		0.162	0.088	0.115	0.139
Cu	mg/L				1306	375.106	196.586	71.268	57.848	40.025	107.924	78.423					185.642	65.96	92.235		70.393	49.867	55.515	53.427
Fe	mg/L				20090	6455.031	6985.858	3037.012	3760	5358	38529.598	33889.581					15976.979	3105.031	8427.042		7208.146	3591.058	4213.578	6538.648
Ga	mg/L				1.754	0	0.956	0.181	0.146	0.488	0.24	0.77					0.691	0.243	0.891		0.33	0.226	0.012	1.156
K	mg/L				4.598	0.896	0.693	0.262	0.295	2.241	1.271	1.171					4.732	0.677	0.792		0.688	0.746	1.169	14.925
Li	mg/L				0.013	0.005	0.002	0.001	0.001	0.002	0	0.003					0.006	0.003	0.003		0.004	0.005	0.003	0.019
Mg	mg/L				3.106	0.937	0	0	0	0.258	0.572	0.282					2.058	0.318	0.575		0.299	0.138	0.472	1.017
Mn	mg/L				8.256	3.572	3.747	1.356	1.688	2.098	3.682	2.987					5.878	2.799	5.791		4.175	3.069	4.419	5.048
Mo	mg/L				3.521	1.26	0.856	0.277	0.326	0.097	0.908	0.708					1.534	0.4	0.73		0.859	0.662	0.785	1.076
Na	mg/L				2.916	1.49	1.299	0.845	0.654	0.097	6.382	9.217					2.253	7.813	1.238		1.407	9.789	9.847	76.393
Nb	mg/L				0	0	0	0	0	0	0	0					0	0	0		0	0	0	0
Ni	mg/L				1.012	0.454	0.48	0.189	0.216	0.438	0.477	0.415					0.685	0.265	0.656		0.45	0.331	0.445	0.301
Pb	mg/L				1.448	0.656	0.664	0.241	0.25	1.559	0.89	0.628					0.782	0.718	0.843		0.67	0.813	0.993	2.129
Sb	mg/L				0	0	0	0	0	0	0	0					0	0	0		0	0	0	0
Sc	mg/L				0.06	0.01	0	0	0	0	0	0					0	0	0		0	0	0	0
Se	mg/L				0	0	0	0	0	0	0	0					0	0	0		0	0	0	0
Sn	mg/L				0.098	0	0	0	0	0	0	0					0	0	0		0	0.004	0.071	0
Sr	mg/L				1.524	0.589	0.445	0.178	0.138	0.063	0.245	0.2					0.408	0.25	0.272		0.169	0.128	0.143	0.163
Te	mg/L				2.359	1.231	12.72	0.517	4.373	6.912	8.103	0.64					1.71	0.796	0.925		0.912	0.604	0.84	1.793
Ti	mg/L				0.131	0.029	0.034	0.012	0.011	0.026	0.046	0.035					0.095	0.046	0.108		0.05	0.038	0.059	0.089
Tl	mg/L				0.122	0.027	0.085	0.026	0.015	0	0.037	0.105					0.157	0	0.083		0.053	0.063	0	0
V	mg/L				1.293	0.664	0.547	0.275	0.251	0.497	0.472	0.398					0.966	0.334	0.51		0.51	0.36	0.302	0.649
W	mg/L				0	0	0	0	0	0	0	0					0	0	0		0	0	0	0
Zn	mg/L				15.259	3.999	2.568	1.094	0.945	66.752	2.51	1.67					4.093	1.114	1.793		2.026	1.268	1.185	0

Geoloy Name:	YV9W-W52
Met Code:	13035
Composite ID	YS Oeste YpqBx AA-Pyr HA #14
Tara (kg)	0.9366
Initial Height of Rock in Column:	1.4 m

Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.9366	0	0.026	0.018	0.021	0.024	2.2451	3.7462	2.4859	2.953	2.32	1.09	-	-	-	2.6815	2.4563	1.9677	3.9551	3.6214	3.0052	6.8901
pH		1.3		0.21	0.81	1.94	1.32	1.43	1.24	1.2	1.46	1.41	1.43	-	-	-	1.00	1.29	1.22	1.24	1.36	1.5	1.67
Electrical Conductivity	ms/cm	31		43.6	8.58	37.2	66.13	20.21	29.94	30.9		25.16	21.46	-	-	-	45.5	24.31	29.11	27.41	19.95	8.8	9.32
Temperature	°C	17.8		15	15.1	17.8	16.27	18.2	15	15.8	17	18	18	-	-	-	20.2	20.2	20.8	20.1	18.3	20.2	18.7
Eh	mV	842.1		694	574.7	717.4	813.4	748.6	888.2	575.4	808.1	781.1	756.2	-	-	-	803.4	723.3	727.7	887.2	824.7	798	811.25
D.O	mg/L	6.15		6.12	6.47	5.83	4.93	5.23	6.72	5.66			5.87	-	-	-	-	-	-	-	-	-	-
Rock Height in Column	mm	1290.5		1290.5	1290.5	1290.5	1290.5	1290.5	1290.5	1290.5	1290.5	1290.5		-	-	-	1290.5	1290.5	1290.5	1290.5	1290.5	1290.5	1290.5
HACH, Sulfate	mg/L	22400		4550	57800	36500	18600	18400	24400		10400	18800	15800	-	-	-	50200	22900	25900	23100	14800	11900	7400
HACH, Total Fe	mg/L	6587.08		16154.91	5946.174	13999.28	6737.29	6357.32	8815.85	12410	4174.99	7761.93	5606.727	-	-	-	10449.495	8784.82	9687.37	7822.1	5294.96	41818.15	22022.22
TDS	ppt	19.2		27.4	3.838	22.3	30.15	17.68	18.2	15.154		15.1	9	-	-	-	32	14.5	17.8	16.9	11.8	4.9	5.2
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.176						0.108		0.209	0.003	0.865	N/A	-	-	-	7.701	4.237	0.578	0.17	0.567	1.081	0.447
Ag	mg/L	0						0.02	0	0	0	0	0	-	-	-	0	0.074	0	0.014	0	0	0
Al	mg/L	6.855						9.716	10.36	2.731	4.605	5.89	3.915	-	-	-	21.258	20.454	11.879	12.017	6.485	2.584	2.729
As	mg/L	5.339						6.997	7.705	1.967	3.186	5.648	4.13	-	-	-	20.353	7.954	7.203	7.315	4.276	1.497	1.464
B	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ba	mg/L	0.116						0	0.102	0.031	0.057	0.079	0.087	-	-	-	0.272	0	0.147	0	0.063	0.05	0.05
Be	mg/L	0						0	0	0	0.001	0	0	-	-	-	0	0	0	0	0.001	0.001	0.002
Bi	mg/L	0						0.059	0.504	0	0.001	0.121	0.032	-	-	-	0	0	0.199	0.058	0.229	0.067	0.083
Ca	mg/L	9.604						10.605	12.458	2.698	4.493	6.35	7.371	-	-	-	79.248	60.23	28.11	18.633	6.364	2.186	2.063
Cd	mg/L	0						0	0.016	0.005	0.003	0	0.008	-	-	-	0.017	0	0.023	0	0.01	0	0
Co	mg/L	0.817						0.844	0.868	0.222	0.43	0.581	0.48	-	-	-	1.595	1.747	0.754	0.877	0.491	0.225	0.212
Cr	mg/L	0.144						0.097	0.098	0.023	0.049	0.043	0.082	-	-	-	0.886	0.258	0.221	0.189	0.086	0.019	0.004
Cu	mg/L	56.66						70.083	77.669	21.132	36.032	54.219	37.713	-	-	-	132.656	99.563	57.735	49.116	33.197	11.994	11.654
Fe	mg/L	7754.949						1901.765	8679.218	2095	1556.9	1910.016	4444	-	-	-	2697.403	2741.844	4720.883	2698.717	4081.212	1372.152	1303.825
Ga	mg/L	0.216						0.731	0.369	0.131	0.234	0.341	0.283	-	-	-	0.897	0.996	0.396	0.055	0.202	0.107	0.089
K	mg/L	1.468						1.352	1.187	0.2	1.696	3.247	0.51	-	-	-	2.205	4.322	2.44	1.383	1.793	0.748	0.855
Li	mg/L	0.004						0.004	0.004	0.001	0	0	0.002	-	-	-	0.006	0.006	0.003	0.003	0.002	0.002	0.002
Mg	mg/L	0						0.509	0	0	0	0	0	-	-	-	1.107	3.846	0.214	0.791	0	0	0
Mn	mg/L	3.105						2.728	3.272	0.742	1.769	2.443	2.72	-	-	-	10.981	5.019	5.168	3.908	2.121	1.356	1.269
Mo	mg/L	1.579						1.324	1.427	0.389	0.613	1.245	0.796	-	-	-	3.07	0.132	1.289	1.409	0.973	0.431	0.419
Na	mg/L	8.778						3.559	4.03	1.05	2.428	3.657	0.92	-	-	-	3.555	3.822	1.655	4.69	2.26	3.894	3.866
Nb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ni	mg/L	0.449						0.452	0.511	0.134	0.273	0.373	0.344	-	-	-	1.506	0.906	0.605	0.543	0.315	0.164	0.168
Pb	mg/L	0.984						1.354	1.217	0.305	0.722	0.95	0.674	-	-	-	1.602	1.046	0.903	1.238	0.804	0.495	0.448
Sb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Sc	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Se	mg/L	0						0.133	0	0	0	0	0	-	-	-	0	0.238	0	0	0	0	0
Sn	mg/L	0						0	0.029	0.007	0.06	0.046	0.055	-	-	-	0.309	0.069	0.043	0.132	0	0	0
Sr	mg/L	0.137						0.149	0.155	0.04	0.087	0.085	0.095	-	-	-	0.251	0.19	0.132	0.133	0.097	0.045	0.043
Te	mg/L	1.137						1.09	0.81	0.266	0.493	0.734	0.498	-	-	-	1.582	1.482	0.773	1.04	0.35	0.179	0.186
Ti	mg/L	0.028						0.03	0.024	0.006	0.008	0.014	0.016	-	-	-	0.095	0.041	0.025	0.024	0.015	0.01	0.01
Tl	mg/L	0.124						0.031	0.095	0.022	0	0.059	0.055	-	-	-	0.149	0	0.073	0.084	0.086	0	0.08
V	mg/L	0.504						0.668	0.598	0.182	0.33	0.555	0.437	-	-	-	1.631	1.038	0.796	0.783	0.391	0.168	0.14
W	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Zn	mg/L	1.629						1.965	2.019	0.575	1.173	1.929	1.306	-	-	-	4.656	3.038	2.98	2.152	0.952	0.273	0.269

Muestra 13036

Met Code:	13036																						
Composite ID	YS Oeste Yp2 AA-Pyr A #15 HCT-02																						
Tara (kg)	0.938																						
Initial Height of Rock in Column:	1.52 m																						
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L				3.400	1.701	2.157	0.2692	1.664	2.71	0.7359	0.083	0.29	0.012		1.003	1.6247	3.2109	2.2143	3.1188	0.8228	0.945	0.027	
pH					4.13	4.01	3.79	3.58	3.27	2.5	2.28	2.43	2.27	2.73		1.77	1.75	1.81	1.68	1.69	1.81		1.83	
Electrical Conductivity	ms/cm				1.139	0.836	0.607	0.824	1.282	3.1	4.51	3.83	4.51	1.348		9.56	10.63	8.22	6.89	8.63				
Temperature	°C				18.1	18.8	18.6	17.8	15.7	16	17.1	17.2	12.6	14.3		17.4	15.1	15.7	17.2	8.7	14		15.6	
Eh	mV				285.3	415.7	523.6	587.5	683.6	841.1	850.3	831.4	770.9	749		782.9	882.5	937.9	883.9	857.2	956.5		957.9	
D.O	mg/L				3.67	3.74	3.84	3.78	3.82	3.83	3.05	3.76	5.85			5.92	4.75	5.48	6.04	6.07	5.27		5.52	
Rock Height in Column	mm				1490	1473	1456	1440	1436	1435	1429	1429	1426.6	1420.6		1418.4	1420.3	1400.2	1394.1	1339	1316			
HACH, Sulfate	mg/L				800	700	650	700	700	3500	6000	7750	9667	5750		31000	24000	10500	10250	12333.3333	12250		14250	
HACH, Total Fe	mg/L				2	4	4	9			10800	1555	3450	5600		7875	7500	4175	2062.5	1933.33333	2050		4700	
TDS	ppt				0.568	0.413	0.302	0.409	0.641	1.55	2.24	1.91	2.18	0.706		4.79	5.33	4.11	3.44	4.31				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				11.996	2.453	0.654	8.097	0.929	16.553	22.982					2.874	3.13	9.621	0.338	0.422	0.738	0.317		
Ag	mg/L				0.026	0.646	0.012	0.003	0.007	0.02	0.043					0.034	0.018	N/A	N/A	0.006	N/A	0.004		
Al	mg/L				23.385	20.731	10.186	26.169	69.348	170.243	125.1					134.035	71.884	46.259	28.41	20.923	15.032	6.983		
As	mg/L				0	0	0	0	0.016	0.048	2.482					24.831	10.987	3.604	2.64	2.49	2.232	1.281		
B	mg/L				0.517	2.446	0.226	0.155	0.237	0.262	0					0	0	0	0	0	0	0		
Ba	mg/L				0.033	0	0.023	0	0.006	0.008	0.025					0.099	0.071	0.052	0.068	0.03	0.046	0.042		
Be	mg/L				0	0.001	0	0.001	0.001	0.002	0.002					0.001	0.001	0.001	0	0	0	0		
Bi	mg/L				0	0.006	0	0.009	0.000	0	0					0	0	0	0	0	0	0.02		
Ca	mg/L				94.241	68.974	32.273	43.474	33.114	19.899	29.443					41.502	33.294	31.119	20.28	14.038	24.907	6.732		
Cd	mg/L				0.065	0.016	0.016	0.023	0.000	0.038	0.123					0.131	0.084	0.054	0.023	0.004	0.017	0.003		
Co	mg/L				3.658	1.416	0.676	0.841	0.526	0.349	0.405					1.257	0.859	0.611	0.41	0.376	0.365	0.253		
Cr	mg/L				0	0.008	0.011	0.023	0.036	0.699	1.536					2.178	1.058	0.627	0.349	0.247	0.191	0.091		
Cu	mg/L				376.796	159.661	78.224	150.296	228.875	411.481	432.016					518.515	429.222	N/A	N/A	113.569	N/A	43.749		
Fe	mg/L				3.034	3.503	3.204	7.767	7.676	166.632	834.755					1046.592	3363	2354	911.598	2035.341	2313	1439		
Ga	mg/L				0.006	0.017	0.004	0.001	0.007	0.123	0.511					1.914	0.915	0.468	0.371	0.22	0.276	0.197		
K	mg/L				12.417	12.6	6.658	9.52	5.587	3.632	0.55					0.358	0.351	0.521	0.652	0.313	0.354	0.349		
Li	mg/L				0.188	0.1	0.024	0.015	0.007	0.008	0.011					0.02	0.016	0.007	0.005	0	0.004	0.003		
Mg	mg/L				8.8	6.76	2.907	3.486	2.600	1.43	1.465					2.367	1.971	1.649	1.116	0.568	0.687	0.183		
Mn	mg/L				1.824	2.297	1.124	1.295	0.790	0.547	1.204					3.691	2.379	1.649	1.086	1.036	1.674	1.076		
Mo	mg/L				0.006	0	0	0	0.001	0	0.003					0	0	0	0	0	0	0		
Na	mg/L				43.821	28.858	5.192	3.175	1.343	1.304	1.592					2.312	1.449	1.066	1.178	0.145	0.925	1.16		
Nb	mg/L				0	0	0	0	0.000	0	0					0	0	0	0	0	0	0		
Ni	mg/L				1.94	0.966	0.476	0.63	0.388	0.248	0.285					0.759	0.494	0.353	0.23	0.209	0.224	0.144		
Pb	mg/L				0.109	0.017	0.026	0.046	0.037	0.061	0.085					0.071	0.144	0.076	0.051	0.056	0.103	0.08		
Sb	mg/L				0	0	0	0	0.000	0	0					0	0	0	0	0	0	0		
Sc	mg/L				0.019	0.01	0.006	0.009	0.039	0.379	0.35					0.342	0.172	0.097	0.047	0.031	0.017	0.005		
Se	mg/L				0	0.076	0.003	0.01	0.000	0.031	0					0	0	0	0	0	0	0		
Sn	mg/L				0.048	0.001	0.006	0.001	0.000	0.008	0.005					0	0	0	0	0	0	0		
Sr	mg/L				0.578	0.463	0.311	0.392	0.279	0.131	0.095					0.208	0.258	0.229	0.147	0.118	0.125	0.08		
Te	mg/L				0	0.116	0.001	0	0.000	0.016	0.139					0.921	0.795	0.472	0.428	0.27	0.353	0.221		
Ti	mg/L				0.007	0.002	0.003	0	0.000	0	0					0.013	0.007	0.004	0.007	0.004	0.009	0.004		
Tl	mg/L				0.017	0	0.006	0	0.007	0.01	0.06					0	0	0	0.001	0	0	0		
V	mg/L				0.019	0	0	0.011	0.000	0.007	0.082					1.243	1.014	0.547	0.385	0.322	0.299	0.193		
W	mg/L				0	0.182	0.002	0.012	0.010	0	0					0	0	0	0	0	0	0		
Zn	mg/L				5.734	3.796	1.863	2.852	2.147	1.672	1.732					7.152	4.077	2.584	2.062	1.165	1.667	0.726		

Met Code:	13036
Composite ID	YS Oeste Yp2 A A-Pyr A #15 HCT-02
Tara (kg)	0.938
Initial Height of Rock in Column:	1.52 m

Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				0.2679	5.627	4.022	12.1284	4.516	2.69	2.5595	4.0581					1.5	0.85	0.525	2.5737	2.5322	1.4612	1.5642	0.8541
pH						1.55	1.66	2.34	1.81	2.53	1.8	1.65					1.31	1.57	1.63	2.13	2.07	1.76	1.84	1.46
Electrical Conductivity	ms/cm										2.05	16.64					19.6	14.93	15.65	10.84	6.43	3.38	3.03	13.37
Temperature	°C						13	14.2	14.2	13	13	13					17.9	17.7	19.5	15.7	20.1	18.9	19.9	18.9
Eh	mV					865.6	869.8	880.2	880.9	875.7	1142	875.4					520.6	511.8	513.3	866.7	762.4	710.8	765.1	879.3
D.O	mg/L										4.94	4.54					4.63	4.55	4.25	4.49	2.45	5.78	5.26	5.96
Rock Height in Column	mm				1314.8	1313.5	1313.2	1313.1		1312.9	1312.9	1312.9					1312.9	1312.5	1312.5	1312.5	1312.5	1312.5	1312.5	1312.5
HACH, Sulfate	mg/L					27500	8500	10500	11000	15000	21875	26666.7					30327.6	11750.0	25600	16100	17100	12000	9700	17500
HACH, Total Fe	mg/L					6437.806	3710	2453.93	2430.67	2848.864	3953.46	2685.6					10050.0	4940.0	9376.9	5816.0	6080.0	3489.9	4146.1	3913.7
TDS	ppt																15.684	6.045	7.671	5.311	3.15	2	1.5	7.7
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	ppb						0.905	0.324	0.303	0.004		0.326					0.311	0.473	0.021		0.13	3.091	1.103	0.176
Ag	mg/L					0.007	0	0	0	0	0.011	0.006					0	0	0		0	0	0.012	0.015
Al	mg/L					17.482	8.888	4.605	2.849	5.952	7.082	5.316					22.941	13.042	14.705		8.839	7.178	6.77	24.206
As	mg/L					8.742	3.895	2.083	1.586	4.97	3.347	2.058					11.588	4.806	5.709		3.958	2.222	1.492	2.09
B	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	37.549
Ba	mg/L					0.088	0.056	0.05	0.04	0.107	0.061	0.047					0.143	0.07	0.11		0.087	0.086	0	0.128
Be	mg/L					0	0	0	0	0	0.002	0.001					0	0.001	0		0	0	0.001	0
Bi	mg/L					0	0	0	0	0	0.051	0.007					0	0	0		0	0.05	0.052	0.038
Ca	mg/L					34.374	16.902	9.252	7.566	8.284	26.239	12.253					96.091	26.056	50.361		24.142	11.223	18.082	18.681
Cd	mg/L					0	0	0	0	0	0	0					0.018	0	0		0	0	0	0.006
Co	mg/L					0.821	0.578	0.351	0.357	0.81	0.648	0.497					1.362	0.803	1.168		0.833	0.563	0.602	0.605
Cr	mg/L					0.264	0.14	0.063	0.044	0.102	0.07	0.032					0.322	0.121	0.367		0.197	0.073	0.09	0.085
Cu	mg/L					96.091	51.298	30.956	19.464	121.643	32.397	20.099					95.71	48.703	75.153		52.561	29.242	27.627	28.433
Fe	mg/L					5107.14	4091.356	2072.097	2301	8980	2910.344	2311.3					12230.837	N/A	9962.372		6824.101	2706.673	2991.731	4033.903
Ga	mg/L					0	0.513	0.136	0.093	0.338	0.171	0.385					0.583	0.338	1.101		0.284	0.164	0	0.698
K	mg/L					0.852	0.679	0.695	0.479	0.452	1.369	0.811					2.143	0.585	0.509		0.882	0.904	1.277	14.938
Li	mg/L					0.004	0.001	0.002	0.002	0.001	0	0.002					0.006	0.004	0.006		0.005	0.007	0.005	0.028
Mg	mg/L					1.429	0.39	0.227	0.034	0	1.048	0.576					3.409	0.879	1.793		0.634	0.309	0.887	2.016
Mn	mg/L					4.253	2.939	3.182	1.652	3.004	3.315	2.235					5.952	3.726	11.132		5.814	2.645	5.041	4.788
Mo	mg/L					0	0	0	0	0.81	0	0					0	0	0		0	0	0	0.041
Na	mg/L					1.157	0.973	0.926	0.758	0.178	6.662	8.565					1.647	7.755	1.431		1.508	9.754	9.399	90.032
Nb	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Ni	mg/L					0.48	0.35	0.204	0.255	0.399	0.397	0.334					0.853	0.442	1.18		0.627	0.288	0.464	0.175
Pb	mg/L					0.219	0.168	0.063	0.073	0.471	0.399	0.145					0.374	0.181	0.18		0.157	0.228	0.361	1.039
Sb	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Sc	mg/L					0.009	0	0	0	0	0	0					0	0	0		0	0	0	0
Se	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0.3	0
Sn	mg/L					0	0	0	0	0	0	0					0	0	0		0	0.007	0.055	0
Sr	mg/L					0.164	0.105	0.072	0.056	0.232	0.086	0.057					0.237	0.118	0.18		0.115	0.068	0.081	0.1
Te	mg/L					0.891	4.717	0.345	2.527	8.926	4.869	0.232					1.29	0.899	1.069		0.829	0.382	0.515	1.171
Ti	mg/L					0.02	0.011	0.01	0.016	0.045	0.03	0.016					0.045	0.033	0.095		0.024	0.018	0.023	0.084
Tl	mg/L					0	0	0	0.004	0.025	0	0.066					0.013	0	0.022		0	0.018	0	0
V	mg/L					0.761	0.361	0.249	0.187	0.501	0.313	0.197					1.213	0.592	0.743		0.545	0.256	0.162	0.44
W	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Zn	mg/L					2.242	1.113	0.894	0.679	2.02	1.212	0.92					2.95	1.179	2.162		1.798	0.813	0.671	0

Met Code:	13036
Composite ID	YS Oeste Yp2 AA-Pyr A #15 HCT-02
Tara (kg)	0.938
Initial Height of Rock in Column:	1.52 m

Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.9928	0.0234	0.0198	0.0267	0.0143	0	2.2845	4.5621	1.8425	1.453	2.91	1.02	-	-	-	2.0784	1.5383	0.2856	-	0.2475	1.5057	7.9895
pH		1.59	1.71	1.25	1.46	1.3		1.58	1.62	1.6	1.64	1.76	1.49				1.18	1.23	1.00		1.22	1.68	1.96
Electrical Conductivity	ms/cm	14.81	10.48	22.3	3.01	26.33		14.8	12.84	13.57		12.11	18.91	-	-	-	35	30.7	46	-	26.51	5.91	5.23
Temperature	°C	17.8	16.2	15	15.1	17.8		18.7	15	16.1	17	18	18	-	-	-	20.1	20.2	20.6	-	19	20.2	18.7
Eh	mV	738	636	669.7	514.1	779.5		890.4	870	575.9	851.6	726.1	856.2	-	-	-	870.3	821.7	724.1	-	775.4	768.9	772.5
D.O	mg/L	3.16	5.4	6.24	6.45	4.8		681.4	6.52	5.68			5.84	-	-	-	-	-	-	-	-	-	-
Rock Height in Column	mm	1312.5	1312.5	1312.5	1312.5	1312.5		1312.5	1312.5	1312.5	1312.5	1312.5		-	-	-	1312.5	1312.5	1312.5	1312.5	1312.5	1312.5	1312.5
HACH, Sulfate	mg/L	11300	3800	28200	32000	25200		52200	17700		8400	9600	14300	-	-	-	34700	29300	68500	-	30700	8600	4000
HACH, Total Fe	mg/L	3713.6	2044.1	10534.8	8241.2	9119.9		6180.7	7543.46	8960	3945.98	4058.082	5581.443	-	-	-	7402.995	11432.3	26534.97	-	12936.55	31408.74	14561.14
TDS	ppt	8.6	5.1	13.1	1.046	14.39		14.34	7.3	6.651		6.8	11.1	-	-	-	21.9	18.8	29.6	-	16.1	3.2	2.8
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.488						0.444		0.273	0.04	0.404	N/A	-	-	-	4.915	8.216	1.178	-	4.93	0.824	0.308
Ag	mg/L	0						0.032	0	0	0	0	0	-	-	-	0	0.029	0	-	0	0	0.001
Al	mg/L	6.556						9.827	10.84	2.328	6.024	5.053	6.462	-	-	-	24.793	25.779	38.967	-	24.054	2.969	2.808
As	mg/L	2.072						2.983	3.395	0.758	1.688	1.486	2.369	-	-	-	8.485	12.409	11.107	-	6.051	0.2	0.319
B	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	-	0	1.368	1.195
Ba	mg/L	0.077						0	0.094	0.024	0.056	0.031	0.085	-	-	-	0.199	0	0.358	-	0.225	0.068	0.04
Be	mg/L	0						0	0	0	0.001	0	0	-	-	-	0	0	0	-	0	0.001	0.002
Bi	mg/L	0						0	0.406	0	0.003	0	0	-	-	-	0	2.413	0.506	-	0.457	0.023	0.034
Ca	mg/L	19.343						39.178	45.734	5.503	8.393	12.748	10.959	-	-	-	103.131	51.328	100.076	-	47.745	3.687	3.326
Cd	mg/L	0						0	0.012	0.002	0.003	0	0.015	-	-	-	0.036	0	0.067	-	0.046	0.003	0.001
Co	mg/L	0.661						1.012	1.031	0.223	0.613	0.509	0.786	-	-	-	1.859	1.592	2.307	-	1.624	0.216	0.197
Cr	mg/L	0.162						0.335	0.375	0.062	0.115	0.069	0.082	-	-	-	0.425	0.274	0.838	-	0.442	0.046	0.017
Cu	mg/L	34.604						50.863	57.237	13.601	32.034	29.589	42.115	-	-	-	129.915	275.598	211.184	-	114.572	10.708	10.511
Fe	mg/L	2899.605						1860.681	7567.361	1554	1518.1	1563.788	4375	-	-	-	10548.17	2823.587	7031.384	-	9259.475	912.537	853.507
Ga	mg/L	0.182						0.617	0.336	0.098	0.229	0.198	0.304	-	-	-	0.737	1.286	1.079	-	0.534	0.068	0.056
K	mg/L	1.712						1.076	1.374	0.189	0.805	1.184	2.95	-	-	-	2.428	4.091	5.464	-	61.079	0.928	0.889
Li	mg/L	0.004						0.007	0.006	0.001	0.001	0	0.002	-	-	-	0.008	0.008	0.016	-	0.008	0.003	0.003
Mg	mg/L	0.323						2.06	1.064	0.119	0.241	0.285	0.362	-	-	-	5.285	2.973	6.712	-	2.618	0.262	0.221
Mn	mg/L	3.295						8.746	9.897	1.614	2.989	3.21	2.689	-	-	-	7.588	5.742	14.474	-	8.457	1.258	1.173
Mo	mg/L	0						0.022	0.01	0	0	0	0	-	-	-	0.194	0.133	0.128	-	0.03	0	0.006
Na	mg/L	8.934						4.365	4.409	1.071	2.429	3.326	1.123	-	-	-	3.977	4.147	3.585	-	3.438	4.26	3.946
Nb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	-	0	0	0
Ni	mg/L	0.577						0.968	1.082	0.208	0.366	0.365	0.398	-	-	-	1.241	0.886	1.642	-	1.093	0.147	0.122
Pb	mg/L	0.292						0.58	0.418	0.087	0.265	0.222	0.353	-	-	-	0.924	2.077	0.827	-	0.809	0.109	0.082
Sb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	-	0	0	0
Sc	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	-	0	0	0
Se	mg/L	0						0.092	0	0	0	0	0	-	-	-	0	0.253	0	-	0	0	0
Sn	mg/L	0						0.031	0.07	0.004	0.054	0.036	0.036	-	-	-	0.139	0.071	0.089	-	0	0.039	0.028
Sr	mg/L	0.087						0.128	0.136	0.026	0.065	0.037	0.088	-	-	-	0.262	0.182	0.333	-	0.222	0.027	0.025
Te	mg/L	0.709						0.926	0.656	0.186	0.445	0.405	0.472	-	-	-	1.145	1.86	2.051	-	0.744	0.102	0.135
Ti	mg/L	0.071						0.033	0.036	0.006	0.007	0.008	0.014	-	-	-	0.084	0.041	0.141	-	0.279	0.013	0.011
Tl	mg/L	0.107						0	0.014	0.008	0	0.016	0.017	-	-	-	0.038	0	0.025	-	0.083	0	0.076
V	mg/L	0.3						0.531	0.472	0.118	0.274	0.249	0.388	-	-	-	1.32	2.812	1.928	-	0.902	0.07	0.038
W	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	-	0	0	0
Zn	mg/L	0.707						1.884	1.954	0.467	1.176	0.965	1.488	-	-	-	4.022	3.874	8.354	-	9.715	0.137	0.143

Muestra 13037

Geoloy Name:	YV9W-W58																						
Met Code:	13037																						
Composite ID	VS Oeste Yp2 AA-Pyr/HA #16																						
Tara (kg)	0.938																						
Initial Height of Rock in Column:	1.47 m																						
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.000	0.000	0.242	3.662	2.150	4.971	0.3259	2.2075	2.723	0.762	0.224	0.431	0.021		1.79	2.2264	3.7352	2.4176	3.9137	3.1533	2.054	0.0294	
pH				7.32	4.32	4.34	4.55	3.81	3.75	3.63	2.69	2.53	2.47	2.49		2.19	2.31	2.2	1.78	1.87	1.75		1.47	
Electrical Conductivity	ms/cm			0.26	1.283	1.215	0.661	1.108	0.869	0.782	2.34	3.35	3.76	2.32		4.9	4.5	8.47	5.69	6.61				
Temperature	°C			17.6	18.2	18.8	18.3	17.8	15.6	16	17.1	17.1	12.6	14		17.4	14.8	16.2	17.2	8.2	14.1		15.6	
Eh	mV			388	287	417.9	496.2	594.6	647.6	721.8	809.2	804.7	743.6	745.2		759.4	843.8	913.2	878.3	859	956.6		975.1	
D.O	mg/L			3.58	3.66	3.58	3.73	3.59	3.64	3.68	3.15	3.49	6.07			6.25	6.15	5.44	6.08	6.15	5.38		5.66	
Rock Height in Column	mm			1440	1427	1413	1398	1383	1378	1365	1367	1366.6	1360.4	1361.6		1360.5	1359.6	1346.2	1344.5	1289	1311			
HACH, Sulfate	mg/L			56	1100	1000	400	800	300	250	1833.3	4750	7000	5167		10750	11000	9500	11333	11666.6667	7833.33333		25000	
HACH, Total Fe	mg/L			0.31	45	5	3	31			57	554	1880	3200		1881.25	2825	2550	2275	2150	3425		7275	
TDS	ppt			0.127	0.643	0.598	0.33	0.556	0.434	0.388	1.17	1.67	1.84			2.45	2.25	2.4	2.84	3.3				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				18.243	3.072	1.339	10.447	1.008	21.197	112.067					0.541	0.699	16.159	0.366	3.555	0.83	0.363		
Ag	mg/L				0.024	0.627	0.015	0.011	0.007	0.008	0.033	0.028	0.039			0.041	0.041	N/A	N/A	0.014	N/A	0.014		
Al	mg/L				2.545	22.033	6.617	20.476	13.107	12.765	83.357	143.638	168.466			163.435	139.99	72.726	74.421	55.069	46.314	32.063		
As	mg/L				0	0	0	0	0.000	0.012	0.013	1.525	3.769			6.608	4.75	4.412	6.097	5.439	5.693	3.899		
B	mg/L				0.623	2.54	0.171	0.144	0.266	0.371	0.432	5.582	0			0	0	0	0	0	0	0		
Ba	mg/L				0.064	0	0.034	0	0.010	0.013	0.024	0.007	0.023			0.033	0.033	0.027	0.071	0.036	0.059	0.059		
Be	mg/L				0	0.001	0	0	0.000	0	0.001	0.002	0.001			0.001	0.001	0	0	0	0	0		
Bi	mg/L				0	0	0	0	0.000	0	0	0.154	0			0	0	0	0	0	0	0		
Ca	mg/L				168.952	59.49	23.495	37.659	21.822	16.107	21.108	117.263	41.117			29.092	27.986	18.892	21.238	14.186	16.748	13.741		
Cd	mg/L				0.014	0.015	0.016	0.037	0.000	0.018	0.073	0.621	0.2			0.078	0.061	0.044	0.026	0.011	0.008	0.006		
Co	mg/L				2.333	2.685	1.032	1.813	0.947	0.602	0.715	1.077	0.792			0.895	0.68	0.375	0.475	0.376	0.434	0.353		
Cr	mg/L				0	0.003	0.002	0.008	0.000	0.002	0.101	0.385	0.485			0.554	0.43	0.278	0.328	0.272	0.265	0.179		
Cu	mg/L				146.723	527.802	148.646	312.882	222.109	168.789	404.627	572.7	545.4			591.546	788.9	N/A	N/A	363.899	N/A	261.645		
Fe	mg/L				0.218	3.483	1.795	7.413	5.699	5.218	53.738	559.3	1062			874.02	1716	1509	949.01	2272.412	3180	2218		
Ga	mg/L				0.004	0.007	0.004	0.001	0.002	0.001	0	0.191	0.385			0.755	0.541	0.496	0.698	0.446	0.593	0.498		
K	mg/L				13.519	8.997	3.408	6.802	3.570	2.522	2.083	2.501	0.591			0.451	0.069	0.533	0.322	0.105	0.107	0.3		
Li	mg/L				0.508	0.091	0.026	0.035	0.019	0.011	0.016	0.016	0.019			0.019	0.015	0.006	0.006	0	0.003	0.005		
Mg	mg/L				27.465	5.248	1.805	3.046	1.745	1.188	1.434	6.818	2.214			1.57	1.584	1.063	1.278	0.725	0.629	0.414		
Mn	mg/L				4.072	1.35	0.491	0.813	0.434	0.292	0.521	1.58	1.214			1.513	1.403	2.374	1.37	1.242	2.239	1.556		
Mo	mg/L				0.004	0	0	0	0.000	0.002	0	0.007	0			0	0.001	0.006	0.006	0.009	0.013	0.011		
Na	mg/L				83.315	31.482	8.115	11.666	5.636	3.329	2.657	9.043	2.459			2.144	1.403	0.996	1.468	0.533	0.846	1.453		
Nb	mg/L				0	0	0	0	0.000	0	0	0	0			0	0	0	0	0	0	0		
Ni	mg/L				1.247	1.452	0.568	1.034	0.529	0.341	0.44	0.64	0.518			0.597	0.46	0.253	0.294	0.236	0.279	0.219		
Pb	mg/L				0.04	0.084	0.04	0.056	0.030	0.02	0.11	0.209	0.073			0.1	0.108	0.057	0.087	0.068	0.171	0.17		
Sb	mg/L				0	0	0	0	0.000	0	0	0	0			0	0	0	0	0	0	0		
Sc	mg/L				0.002	0.021	0.007	0.018	0.017	0.014	0.171	0.31	0.551			0.372	0.336	0.159	0.157	0.117	0.086	0.062		
Se	mg/L				0	0	0	0	0.000	0	0.026	0.144	0			0	0	0	0	0	0	0		
Sn	mg/L				0.026	0.001	0.011	0	0.002	0	0.009	0	0			0.013	0	0.01	0	0	0	0		
Sr	mg/L				0.543	0.378	0.152	0.229	0.150	0.113	0.136	0.229	0.125			0.117	0.116	0.088	0.134	0.116	0.159	0.145		
Te	mg/L				0	0.098	0	0	0.006	0	0.022	0.095	0.182			0.308	0.356	0.283	0.52	0.339	0.501	0.411		
Ti	mg/L				0.008	0.004	0.004	0	0.000	0	0	0.046	0			0	0	0	0.01	0.004	0.007	0.006		
Tl	mg/L				0.01	0	0.001	0	0.024	0.005	0.089	0.055	0.003			0	0	0	0	0	0	0		
V	mg/L				0.03	0	0	0.012	0.000	0	0.015	0	0.168			0.522	0.468	0.522	0.746	0.599	0.737	0.61		
W	mg/L				0	0.224	0.012	0.037	0.011	0.016	0.129	0	0			0	0	0	0	0	0	0		
Zn	mg/L				3.285	4.331	1.562	3.15	1.465	0.856	1.1	3.182	3.436			4.699	3.637	2.491	4.305	1.872	1.997	1.766		

Geoloy Name:	YV9W-W58																							
Met Code:	13037																							
Composite ID	YS Oeste Yp2 AA-Pyr HA #16																							
Tara (kg)	0.938																							
Initial Height of Rock in Column:	1.47 m																							
Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				0.7841	2.18958	6.1302	7.3384	2.2016	1.0932	1.9658	2.0737					1.52	1.02	0.525	2.0296	1.823	2.0541	1.583	0.746
pH						1.47	1.93	2.29	1.76	1.55	1.6	1.42					1.19	1.45	1.49	2.04	1.96	1.53	1.55	1.14
Electrical Conductivity	ms/cm										1.932	31.6					40.5	19.59	19.34	14.24	8.6	6.1	9.04	27.23
Temperature	°C						13	14.2	14.2	13	13	13					17.9	17.8	19.2	15.8	20.2	18.2	20	18.5
Eh	mV					708.1	850.3	881.9	883.2	871.4	1152.6	886					527.4	518.6	521.2	956.7	914.1	701.9	778.8	888.8
D.O	mg/L										4.93	4.51					4.86	4.33	4.44	5.47	5.41	5.99	5.76	5.62
Rock Height in Column	mm				1308.9	1307.8	1307.7	1307.6		1307.4	1307.4	1307.4					1307.4	1307.4	1307.4	1307.4	1307.4	1307.4	1307.4	1307.4
HACH, Sulfate	mg/L					47000	8000	9000	15500	19166.6667	38125	48333.3					30924.2	12500	23400	12400	16500	18000	23200	35000
HACH, Total Fe	mg/L					9541.129	1670	2483.0	3483.2	5804.3	7029.04	4998.8					9150.0	4920.0	8134.1	4209.0	5322.0	4332.2	7480.6	6764.8
TDS	ppt																19.837	7.989	9.474	6.978	4.22	3.66	4.9	16.9
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	ppb				0.701		0.459	0.483	0.576	0.438		0.788					0.276	0.656	0.014		0.41	4.129	6.474	0.714
Ag	mg/L				0.016	0.024	0	0	0	0	0	0					0	0	0		0	0	0.029	0
Al	mg/L				92.801	66.056	9.835	6.886	4.718	3.573	12.872	8.99					30.335	0	20.302		12.551	11.073	17.123	31.245
As	mg/L				20.334	13.632	1.453	1.598	1.902	1.818	6.794	4.079					9.377	0	5.701		5.079	3.624	4.509	6.154
B	mg/L				0	0	0	0	0	0	0	0					0	0	0		0	0	0	30.338
Ba	mg/L				0.203	0.106	0.036	0.048	0.049	0.049	0.1	0.075					0.133	0	0.093		0.081	0.103	0	0.251
Be	mg/L				0.001	0	0	0	0	0	0	0.001					0	0.008	0		0	0	0.001	0
Bi	mg/L				0.432	0.888	0.119	0.125	0.043	0	0.463	0.542					2.241	0.081	0.688		0.586	0.528	1	1.078
Ca	mg/L				77.143	57.456	13.883	6.818	8.971	21.159	30.246	20.149					99.996	0	52.105		32.181	17.214	37.141	24.769
Cd	mg/L				1.741	0.012	0.002	0.002	0.001	0	0	0					0.033	0	0.019		0.014	0	0	0
Co	mg/L				1.42	0.968	0.177	0.248	0.325	0.425	0.864	0.649					0.945	0	0.807		0.576	0.545	0.938	0.956
Cr	mg/L				1.541	0.48	0.074	0.041	0.044	0.059	0.086	0.052					0.254	0	0.204		0.159	0.084	0.133	0.142
Cu	mg/L				730.622	614.672	91.19	99.916	104.09	24.682	239.158	146.029					350.451	0	285.290		201.783	150.49	235.392	173.833
Fe	mg/L				17260	10757.763	1739.54	2080.525	3123	3276	38313.262	29388.405					11066.132	0	8301.434		6145.199	3388.535	4969.516	6851.544
Ga	mg/L				2.071	0.308	0.294	0.205	0.175	0.131	0.409	0.862					0.781	0	1.129		0.42	0.31	0.17	1.356
K	mg/L				1.63	1.749	0.348	0.462	0.63	0.338	1.694	1					5.065	0	2.123		1.631	1.227	1.851	17.081
Li	mg/L				0.013	0.008	0	0.001	0.001	0.001	0	0.003					0.007	0	0.005		0.004	0.006	0.005	0.029
Mg	mg/L				4.997	3.053	0.334	0	0	0.562	1.184	0.638					4.014	0.017	2.017		0.611	0.301	1.6	1.736
Mn	mg/L				15.267	7.744	1.673	1.652	3.406	2.475	4.715	2.991					5.557	0.053	9.478		4.363	2.311	6.901	4.502
Mo	mg/L				0.114	0.039	0	0	0	0	0	0					0.048	0	0		0.026	0	0.012	0.029
Na	mg/L				2.613	2.352	0.822	0.956	0.812	0.087	6.364	9.364					2.423	0	1.619		1.592	9.883	9.808	92.193
Nb	mg/L				0	0	0	0	0	0	0	0					0	0.025	0		0	0	0	0
Ni	mg/L				1.153	0.935	0.192	0.159	0.277	0.287	0.48	0.367					0.594	0.006	0.909		0.447	0.298	0.681	0.284
Pb	mg/L				0.714	0.668	0.164	0.148	0.18	0.085	0.838	0.614					1.141	0	0.816		0.695	0.78	1.345	1.61
Sb	mg/L				0	0	0	0	0	0	0	0					0	0	0		0	0	0	0
Sc	mg/L				0.177	0.125	0.011	0	0	0	0	0					0.011	0	0.007		0	0	0.001	0
Se	mg/L				0	0	0	0	0	0	0	0					0	0.15	0		0	0	0.234	0
Sn	mg/L				0	0	0	0	0	0	0	0					0	0	0		0	0	0.083	0.045
Sr	mg/L				0.662	0.467	0.079	0.103	0.095	0.068	0.178	0.119					0.325	0	0.234		0.134	0.101	0.191	0.174
Te	mg/L				2.034	1.396	2.107	0.341	3.696	3.169	7.448	0.56					1.189	0	0.891		0.748	0.556	1.111	1.696
Ti	mg/L				0.177	0.027	0.007	0.005	0.009	0.027	0.044	0.016					0.097	0	0.084		0.028	0.021	0.206	0.161
Tl	mg/L				0.437	0	0.008	0	0	0.004	0	0.059					0.042	0	0.031		0.017	0.051	0	0
V	mg/L				2.704	2.367	0.353	0.534	0.539	0.241	1.565	1.097					2.219	0	1.596		1.323	1.106	1.496	1.592
W	mg/L				0	0	0	0	0	0	0	0					0	0	0		0	0	0	0
Zn	mg/L				15.534	4.083	0.815	0.887	1.316	0.819	2.413	1.716					4.146	0	3.325		5.569	1.563	4.156	0.423

Geoloy Name:	YV9W-W58																						
Met Code:	13037																						
Composite ID	YS Oeste Yp2 AA-Pyr HA #16																						
Tara (kg)	0.938																						
Initial Height of Rock in Column:	1.47 m																						
Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.938	0	0.0256	0.0175	0.026	0.021	2.8541	4.1985	2.0847	2.693	2.22	1.05	-	-	-	2.4317	1.6181	0.1446	0.9257	1.6943	4.38	4.38
pH		1.44		1.03	0.95	1.33	1.31	1.28	1.41	1.27	1.4	1.41	1.33				1.02	1.09	1.58	1.53	1.33	1.54	1.55
Electrical Conductivity	ms/cm	21.04		32.7	7.53	28.44	34.2	28.33	19.97	26.55		20.09	26.24	-	-	-	46.8	41	26.58	15.99	21.66	8.06	14.26
Temperature	°C	17.8		15	16.4	17.7	16.3	18.9	15	15.8	17	18	18	-	-	-	20.2	20.2	20.6	20.1	18.9	20.2	18.7
Eh	mV	829.4		702.5	545.2	739.8	768.4	877.5	861.9	584.2	852.5	729.5	815.7	-	-	-	862.1	801.7	767.6	883.1	853.1	806.96	835.3
D.O	mg/L	5.51		5.75	6.17	4.01	4.85	5.29	5.6	5.53			5.82	-	-	-	-	-	-	-	-	-	-
Rock Height in Column	mm	1307.4		1307.4	1307.4	1307.4	1307.4	1307.4	1307.4	1307.4	1307.4	1307.4		-	-	-	1307.4	1307.4	1307.4	1307.4	1307.4	1307.4	1307.4
HACH, Sulfate	mg/L	15400		33300	47600	27600	27600	26800	18300		15000	16400	20200	-	-	-	49600	37800	127800	16500	17600	12000	10900
HACH, Total Fe	mg/L	4548.4		12414.0	9736.4	9831.7	10303.7	8788.9	6731.55	11540	5719.33	6799.21	7686.336	-	-	-	10010.799	13718.76	43924.1	6017	6739.04	43021.55	36884.21
TDS	ppt	12.6		20.1	3.14	15.52	21.1	23.13	11.7	13.007		11.8	15.9	-	-	-	30.1	25.8	16.1	9.4	12.9	4.4	8.2
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.385						0.293		0.296	0.008	0.633	N/A	-	-	-	5.002	7.429	1.371	0.962	0.626	1.519	0.689
Ag	mg/L	0						0.013	0	0	0	0	0	-	-	-	0	0.033	0	0.017	0	0	0
Al	mg/L	9.002						12.542	14.378	4.276	11.055	10.25	11.048	-	-	-	34.86	28.847	60.516	16.747	13.788	8.404	6.236
As	mg/L	3.618						4.778	5.344	1.617	4.524	3.866	5.295	-	-	-	16.343	13.109	24.525	5.458	5.081	3.559	2.258
B	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ba	mg/L	0.087						0	0.09	0.031	0.086	0.072	0.114	-	-	-	0.267	0	0.555	0	0.081	0.092	0.071
Be	mg/L	0						0	0	0	0.001	0	0	-	-	-	0	0	0	0.001	0	0.001	0.002
Bi	mg/L	0.363						0.878	1.255	0.256	0.58	0.526	0.72	-	-	-	1.933	2.633	5.902	0.002	0.918	0.71	0.341
Ca	mg/L	21.339						40.693	50.09	5.653	10.567	16.505	11.782	-	-	-	109.669	55.201	65.409	41.159	12.86	11.285	3.871
Cd	mg/L	0						0	0.026	0.002	0.009	0	0.009	-	-	-	0.032	0	0.032	0	0.011	0.007	0.004
Co	mg/L	0.602						0.728	0.775	0.233	0.664	0.603	0.776	-	-	-	1.773	1.719	2.404	0.761	0.769	0.574	0.406
Cr	mg/L	0.16						0.276	0.319	0.032	0.06	0.096	0.062	-	-	-	0.56	0.293	0.426	0.331	0.078	0.064	0.017
Cu	mg/L	117.318						169.102	196.843	58.158	139.49	134.695	155.105	-	-	-	348.112	303.899	756.069	105.106	151.432	91.297	66.279
Fe	mg/L	5127.612						1789.501	6767.475	1972	5237.8	1849.523	5685	-	-	-	13171.811	2784.094	7644.022	2499.633	1578.001	2056.352	1674.373
Ga	mg/L	0.286						0.663	0.44	0.155	0.406	0.406	0.491	-	-	-	1.064	1.379	1.966	0.02	0.361	0.279	0.181
K	mg/L	1.784						1.153	1.533	0.341	1.404	1.512	1.755	-	-	-	3.568	4.53	9.252	1.024	2.929	1.348	1.133
Li	mg/L	0.004						0.005	0.006	0.001	0.002	0	0.004	-	-	-	0.012	0.01	0.027	0.005	0.004	0.004	0.003
Mg	mg/L	0.265						1.787	0.969	0.049	0.069	0.195	0	-	-	-	4.038	3.281	3.525	4.6	0.204	0.224	0.066
Mn	mg/L	2.54						4.635	5.644	0.908	3.523	3.929	3.372	-	-	-	7.63	6.113	10.68	5.791	2.931	3.085	1.286
Mo	mg/L	0						0.031	0.008	0.001	0	0	0	-	-	-	0.216	0.122	0.041	0.049	0.025	0.006	0.02
Na	mg/L	8.33						3.724	4.208	1.093	2.707	3.951	1.19	-	-	-	4.153	4.619	4.515	4.413	2.348	4.218	4.001
Nb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ni	mg/L	0.353						0.555	0.658	0.143	0.429	0.469	0.436	-	-	-	1.097	0.95	1.267	0.561	0.422	0.363	0.196
Pb	mg/L	0.669						0.944	0.839	0.26	0.723	0.63	0.763	-	-	-	1.899	2.237	2.046	0.904	0.899	0.563	0.395
Sb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Sc	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Se	mg/L	0						0.204	0	0	0	0	0	-	-	-	0	0.519	0	0	0	0	0
Sn	mg/L	0						0.036	0.037	0	0.055	0.089	0.053	-	-	-	0.111	0.115	0.119	0.045	0	0	0
Sr	mg/L	0.094						0.114	0.126	0.03	0.076	0.053	0.091	-	-	-	0.301	0.204	0.351	0.158	0.088	0.062	0.038
Te	mg/L	0.77						0.845	0.649	0.248	0.644	0.656	0.697	-	-	-	1.434	2.001	3.397	0.728	0.436	0.374	0.275
Ti	mg/L	0.04						0.02	0.017	0.005	0.003	0.009	0.008	-	-	-	0.174	0.078	0.105	0.065	0.018	0.014	0.008
Tl	mg/L	0.1						0	0.019	0.008	0	0.047	0.014	-	-	-	0.076	0.05	0.102	0.01	0.079	0	0
V	mg/L	1.033						1.227	1.32	0.463	1.204	1.167	1.525	-	-	-	2.997	3.045	6.241	0.637	1.358	0.921	0.601
W	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Zn	mg/L	1.102						3.549	4.111	0.857	2.617	2.289	2.418	-	-	-	5.564	4.197	14.096	3.717	1.934	1.318	0.883

Muestra 13038

Geoloy Name:	YV9W-W61																						
Met Code:	13038																						
Composite ID	VS Oeste Yp2 AA-Pyr/HA #17																						
Tara (kg)	0.938																						
Initial Height of Rock in Column:	1.41 m																						
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.000	0.000	0	1.575	1.199	2.5366	0.244	0.634	1.802	0.5732	0.019	0.013	0.01		1.1962	1.8284	2.3576	2.6276	3.0663	2.6025	1.624	0.0284	
pH					4.67	5	4.93	4.88	4.35	3.85	3.84	4.88		3.45		3.48	3.2	2.73	2.16	2.28	1.98		1.87	
Electrical Conductivity	ms/cm				1.097	0.736	0.548	0.747	0.797	0.926	1.23			0.349		1.702	1.74	2.69	2.59	3.2				
Temperature	°C				18.4	18.7	18.3	17.7	15.5	16	17.1	17.1		14.1		17.2	14.9	16.1	17.2	7.6	14.2		15.7	
Eh	mV				269.5	395.8	477.3	589.1	578	721	622.4	388.8		738.9		497.3	741.3	888.2	858.1	849.2	948.8		964.1	
D.O	mg/L				3.64	3.73	3.78	3.69	3.86	3.77	3.2	2.16				5.78	6.59	5.83	5.76	6.22	5.71		5.58	
Rock Height in Column	mm				1380	1353	1344	1329	1316	1315	1312	1310.9	1310	1309.6		1542.1	1541.8	1537.8	1531.2	1370	1305			
HACH, Sulfate	mg/L				900	600	300	500	600	875	950	800		500		1843.8	2150	4000	4100	6666.66667	9125		15000	
HACH, Total Fe	mg/L				90	1	1.5	4			103	5.625		2.6		0.88	266	250	725	1050	2700		4975	
TDS	ppt				0.547	0.375	0.274	0.377	0.398	0.471	0.607			1.21		0.851	0.87	1.34	1.3	1.6				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				3.951	4.581	2.481	7.172	1.384	56	52.554					0.597	0.158	2.245	0.974	1.011	0.515	0.187		
Ag	mg/L				0.008	0.549	0.013	0.001	0.004	0.009	0.024					0.035	0.035	N/A	N/A	0.008	N/A	0.013		
Al	mg/L				50.016	2.253	0.966	2.037	2.98	3.905	0.173					70.842	113.157	167.625	61.492	35.153	45.785	29.612		
As	mg/L				194.475	0	0.002	0	0	0.008	0.081					0.405	0.024	0.132	0.685	1.66	4.776	3.182		
B	mg/L				0	2.244	0.171	0.129	0.272	0.314	0.521					0.591	0.292	0	0	0	0	0		
Ba	mg/L				0.158	0	0.023	0	0.009	0.012	0.044					0.015	0.01	0.012	0.044	0.029	0.043	0.053		
Be	mg/L				0.001	0.001	0.001	0	0	0	0					0.003	0.005	0.007	0.002	0.001	0.001	0.007		
Bi	mg/L				0	0.022	0	0.014	0	0	0.008					0	0	0	0	0	0	0		
Ca	mg/L				334.759	80.937	44.535	68.504	59.517	40.211	31.384					83.319	44.376	42.621	26.541	17.004	30.163	29.453		
Cd	mg/L				186.234	0.007	0.008	0.019	0	0.009	0.012					0.039	0.023	0.038	0.011	0.002	0	0.013		
Co	mg/L				143.711	0.941	0.586	0.826	0.556	0.278	0					0.501	0.264	0.339	0.223	0.189	0.353	0.284		
Cr	mg/L				23.922	0	0	0	0	0	0					0.014	0.076	0.524	0.596	0.476	0.703	0.38		
Cu	mg/L				29.64	120.18	65.157	123.703	156.88	149.012	0.015					439.505	530.992	N/A	N/A	227.911	N/A	248.077		
Fe	mg/L					0	0.324	0.338	0	0.323	0.109					7.082	15.98	259.676	584.37	1136.096	2355	1677		
Ga	mg/L				3.678	0.009	0.002	0	0.005	0.005	0					0.015	0.023	0.182	0.324	0.237	0.405	0.338		
K	mg/L				3.906	6.321	3.34	4.707	2.554	1.739	4.601					2.707	0.963	0.64	0.337	0.025	0	0.143		
Li	mg/L				1.719	0.147	0.04	0.024	0.011	0.008	0.015					0.036	0.018	0.015	0.007	0	0.004	0.018		
Mg	mg/L				12.17	13.904	7.497	11.027	9.979	7.13	2.421					14.872	5.662	6.404	2.685	1.175	1.609	1.315		
Mn	mg/L				21.387	1.887	1.145	1.558	1.143	0.675	1.124					1.417	0.649	0.855	0.691	0.712	1.441	1.224		
Mo	mg/L				0	0	0	0.001	0	0.002	0.005					0.008	0.001	0	0	0	0	0		
Na	mg/L				56.197	24.143	5.599	3.569	1.763	1.489	23.47					2.969	1.383	1.357	1.293	0.15	1.112	1.342		
Nb	mg/L				0	0	0	0	0	0	0.02					0	0	0	0	0	0	0		
Ni	mg/L				40.684	0.496	0.321	0.477	0.318	0.165	0.007					0.337	0.17	0.207	0.129	0.115	0.221	0.181		
Pb	mg/L				3.875	0	0.029	0.028	0.015	0.016	0.015					0.068	0.09	0.096	0.046	0.031	0.123	0.123		
Sb	mg/L				0	0	0	0	0	0	0.039					0	0	0	0	0	0	0		
Sc	mg/L				0.085	0.001	0.001	0.001	0.003	0.002	0					0.041	0.186	0.455	0.191	0.083	0.099	0.061		
Se	mg/L				0	0	0	0.017	0	0.006	0.027					0.073	0.027	0	0	0	0	0		
Sn	mg/L				0.211	0.012	0.012	0	0.004	0.003	0					0.039	0.004	0.006	0.014	0.001	0	0		
Sr	mg/L				0.379	0.334	0.246	0.332	0.281	0.215	0.607					0.222	0.13	0.132	0.084	0.079	0.148	0.179		
Te	mg/L				4.162	0.098	0	0	0	0	0					0	0.001	0.061	0.17	0.145	0.369	0.298		
Ti	mg/L				0.611	0.002	0.004	0	0	0	0					0	0	0	0.011	0.018	0.037	0.037		
Tl	mg/L					0	0.012	0	0.01	0.008	0.134					0.01	0.015	0.016	0.009	0	0	0.053		
V	mg/L				0.789	0	0	0.008	0	0.001	0.004					0	0	0.014	0.085	0.079	0.197	0.178		
W	mg/L				0	0.156	0.008	0.02	0.011	0.015	0.012					0.077	0.037	0	0	0	0	0		
Zn	mg/L				158.623	1.449	0.9	1.514	1.067	0.583	0.795					2.764	2.083	2.515	2.408	1.069	1.678	1.383		

Geoloy Name:	YV9W-W61																							
Met Code:	13038																							
Composite ID	YS Oeste Yp2 AA Pyr HA #17																							
Tara (kg)	0.938																							
Initial Height of Rock in Column:	1.41 m																							
Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				0	2.99024	1.424	5.5661	1.5412	1.0341	1.3227	1.9727					1.525	0.86	0.524	1.7585	1.279	1.6524	1.243	0.854
pH						1.95	1.59	2.25	1.54	1.57	1.58	1.45					1.13	1.15	1.48	1.92	1.81	1.56	1.62	1.11
Electrical Conductivity	ms/cm										2.065	28.7					47.9	19.48	20.41	19.62	13.41	5.94	6.85	28.78
Temperature	°C						13	14.2	14.2	13	13	13					17.8	17.7	19.4	15.7	20.4	18.4	20	18.6
Eh	mV					786.8	874.5	881.5	886.3	889.8	1147.9	876.8					920.1	917.9	915.3	956.2	986	708.1	774.9	891.1
D.O	mg/L										4.75	4.51					4.48	3.9	3.59	5.07	5.76	5.91	5.84	5.54
Rock Height in Column	mm				1294.8	1293.4	1293.4	1293.2		1292.9	1292.7	1292.7					1292.7	1292.4	1292.4	1292.4	1292.4	1292.4	1292.4	1292.4
HACH, Sulfate	mg/L					8500	35833	13000	20000	32500	37500	42500					52013.6	15750	27400	22900	28200	20000	17900	30000
HACH, Total Fe	mg/L					1566.109	6480	3140.1	4419.4	7598.84	7900.96	4750.564					10450	10200	9565.4	7708	8480	4475.44	6139.8	8323.23
TDS	ppt																30.7	7.957	10	9.612	6.57	3.55	3.7	17.6
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	ppb						1.859	0.78	1.043	0.197		0.737					0.356	0.522	0.074		0.917	4.28	2.354	0.634
Ag	mg/L					0.002	0	0	0	0	0	0					0	0	0		0	0	0.029	0
Al	mg/L					12.593	40.056	12.835	12.929	8.385	19.708	10.444					42.553	21.842	23.374		12.977	7.779	8.409	28.342
As	mg/L					2.989	10.673	3.345	3.774	4.4	9.815	4.599					23.352	7.312	6.856		7.619	3.062	3.286	6.847
B	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	27.194
Ba	mg/L					0.068	0.088	0.056	0.064	0.083	0.112	0.074					0.219	0.105	0.104		0.11	0.109	0	0.195
Be	mg/L					0	0.006	0	0	0	0	0.001					0	0.001	0		0	0	0	0
Bi	mg/L					0	0	0	0	0.355	0	0					0	0	0		0	0	0.211	0
Ca	mg/L					27.785	36.747	11.004	12.433	19.651	35.985	20.977					80.21	54.26	81.318		27.412	19.532	17.123	31.277
Cd	mg/L					0	0	0	0	0	0	0					0	0.005	0.012		0	0	0	0
Co	mg/L					0.175	0.762	0.337	0.471	0.616	1.012	0.633					1.352	0.743	0.928		0.872	0.555	0.782	1.094
Cr	mg/L					0.128	0.443	0.129	0.153	0.085	0.207	0.099					0.533	0.193	0.273		0.186	0.074	0.139	0.074
Cu	mg/L					89.073	363.344	143.812	140.33	210.017	212.333	104.317					355.095	173.229	215.493		210.396	91.989	97.882	124.856
Fe	mg/L					1259.332	7165.881	2623.453	4052	6759	42359.191	28515.559					18891.941	10045.493	10075.493		9826.302	3486.568	4671.266	8153.843
Ga	mg/L					0	0.926	0.188	0.197	0.433	0.259	0.747					0.795	0.345	1.004		0.418	0.175	0	1.183
K	mg/L					0.312	0.406	0.212	0.616	0.828	1.304	0.922					2.044	0.695	1.288		1.052	0.811	1.057	15.836
Li	mg/L					0.002	0.004	0.002	0.002	0.001	0	0.002					0.006	0.006	0.005		0.004	0.005	0.004	0.022
Mg	mg/L					0.773	0.955	0.198	0.107	0.4	1.414	0.662					3.214	1.835	2.583		0.221	0.113	0.681	1.255
Mn	mg/L					0.816	3.291	1.295	2.145	3.76	4.234	3.266					7.575	4.778	10.615		3.584	3.219	6.197	6.956
Mo	mg/L					0.011	0	0	0	0	0.021	0.025					0.156	0	0.021		0	0	0.017	0
Na	mg/L					1.546	1.907	0.946	0.822	0.343	7.217	8.777					1.724	9.883	1.611		1.498	9.311	9.81	82.791
Nb	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Ni	mg/L					0.1	0.391	0.166	0.248	0.387	0.445	0.373					0.773	0.389	1.061		0.421	0.293	0.493	0.503
Pb	mg/L					0.102	0.348	0.156	0.292	0.397	0.914	0.527					0.882	0.709	0.835		0.744	0.715	1.024	1.897
Sb	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Sc	mg/L					0.02	0.058	0.014	0.006	0	0	0					0.014	0.005	0		0	0	0	0
Se	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0.424	0
Sn	mg/L					0.005	0	0	0	0	0	0					0	0	0		0	0	0.003	0
Sr	mg/L					0.096	0.285	0.151	0.183	0.15	0.338	0.221					0.465	0.268	0.348		0.266	0.171	0.198	0.26
Te	mg/L					0.191	8.638	0.433	4.705	6.741	8.818	0.461					1.934	1.117	1.04		1.14	0.468	0.967	1.365
Ti	mg/L					0.05	0.057	0.022	0.035	0.026	0.092	0.034					0.129	0.06	0.171		0.063	0.038	0.041	0.136
Tl	mg/L					0.001	0.028	0.031	0.051	0	0.052	0.086					0.123	0.068	0.139		0.111	0.092	0.015	0
V	mg/L					0.121	0.514	0.25	0.285	1.097	0.564	0.305					1.426	0.603	0.562		0.621	0.306	0.301	0.784
W	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Zn	mg/L					0.645	2.108	1.01	1.213	1.812	2.073	1.021					3.743	1.373	1.925		1.999	0.973	1.154	0.098

Geoloy Name:	YV9W-W61																						
Met Code:	13038																						
Composite ID	YS Oeste Yp2 AA Pyr HA #17																						
Tara (kg)	0.938																						
Initial Height of Rock in Column:	1.41 m																						
Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.938	0	0.0246		0.027	0.019	1.3842	3.1875	0	1.853	2.5956						1.1524	0.4103	-	0.3545	2.1652	4.0926
pH		1.19		1.02		1.11	1.57	1.08	1.23		1.46	1.77						1.01	1.11		1.68	1.56	1.62
Electrical Conductivity	ms/cm	15.04		33.4		41.4	19.63	42.8	26.78			9.72						46.3	36.2	-	12.33	7.51	11.32
Temperature	°C	17.8		15		17.8	16.25	19.2	15		17	18						20.1	20.4	-	18	20.2	18.7
Eh	mV	842.1		714.7		780.4	749.5	879.5	892.8		832.9	662.9						795.7	781.3	-	699	810.1	735.64
D.O	mg/L	5.86		6.35		5.54	5.23	5.3	4.72									-	-	-	-	-	-
Rock Height in Column	mm	1292.4		1292.4		1292.4	1292.4	1292.4	1292.4		1292.4	1292.4						1292.4	1292.4	1292.4	1292.4	1292.4	1292.4
HACH, Sulfate	mg/L	7369		49300		47500	16500	41800	24400		11700	8300						54700	41400	-	11500	11000	7900
HACH, Total Fe	mg/L	3783.16		20722.69		16542.4	7194.68	13286.6	8676.49		4815.04	4693.26						19735.76	15584.03	-	5956.83	31589.25	23767.15
TDS	ppt	8.6		20.5		12.68	11.5	23.35	16			5.4						29.5	22.7	-	7	4.1	6.4
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	1.289						0.668			0.078	0.263						11.009	0.479		0.129	1.256	0.563
Ag	mg/L	0						0.017	0		0	0						0.009	0		0	0	0
Al	mg/L	10.727						13.834	15.373		6.35	4.433						8.064	27.982		14.878	5.015	3.07
As	mg/L	7.84						5.901	6.792		2.717	1.84						39.68	13.66		3.109	2.206	1.076
B	mg/L	0						0	0		0	0						0	0		0	0	0
Ba	mg/L	0.172						0	0.111		0.067	0.034						0	0.237		0.07	0.072	0.047
Be	mg/L	0						0	0		0.001	0						0	0		0.001	0.001	0.002
Bi	mg/L	0.046						0.045	0.474		0.026	0						1.009	0.481		0.32	0.211	0.086
Ca	mg/L	19.867						53.272	64.457		10.298	16.152						55.124	46.597		134.588	8.547	3.897
Cd	mg/L	0						0	0.029		0	0						3.585	0.035		0.018	0	0.001
Co	mg/L	1.29						0.941	0.998		0.537	0.35						2.236	1.297		0.538	0.416	0.254
Cr	mg/L	0.195						0.152	0.165		0.074	0.141						0.436	0.324		0.411	0.046	0.025
Cu	mg/L	154.541						165.28	193.091		85.878	64.927						57.017	245.813		94.106	61.776	35.73
Fe	mg/L	11138.221						1907.553	8972.775		1608.6	1587.883						2695.787	6020.404		4339.779	1785.911	1282.194
Ga	mg/L	0.432						0.705	0.419		0.241	0.178						0.746	0.619		0.212	0.151	0.09
K	mg/L	1.822						1.682	1.24		1.66	0.466						5.921	3.218		2.414	1.016	0.814
Li	mg/L	0.005						0.006	0.006		0	0						0.003	0.008		0.005	0.002	0.002
Mg	mg/L	0						1.747	0.569		0.072	0.226						1.562	6.257		3.613	0.166	0.07
Mn	mg/L	5.325						3.479	4.28		3.465	5.766						3.615	7		8.246	1.882	1.012
Mo	mg/L	0.008						0.091	0.075		0	0						0.172	0.041		0	0	0
Na	mg/L	7.832						4.32	4.572		2.678	3.514						3.97	2.309		2.008	4.32	4.074
Nb	mg/L	0						0	0		0	0						0	0		0	0	0
Ni	mg/L	0.622						0.46	0.549		0.278	0.583						1.785	0.723		0.642	0.267	0.14
Pb	mg/L	1.187						1.253	1.157		0.672	0.289						2.369	1.317		0.484	0.563	0.333
Sb	mg/L	0						0	0		0	0						0	0		0	0	0
Sc	mg/L	0						0	0		0	0						0	0		0	0	0
Se	mg/L	0						0.101	0		0	0						0.192	0		0	0	0
Sn	mg/L	0						0.021	0.021		0.04	0.033						0.177	0.123		0.014	0	0
Sr	mg/L	0.288						0.231	0.254		0.117	0.057						0.036	0.264		0.213	0.097	0.063
Te	mg/L	1.483						1.05	0.757		0.527	0.391						2.108	1.291		0.322	0.262	0.177
Ti	mg/L	0.076						0.062	0.061		0.019	0.02						0.153	0.126		0.047	0.017	0.012
Tl	mg/L	0.206						0	0.107		0	0.016						5.331	0.089		0.08	0.034	0.014
V	mg/L	0.755						0.589	0.53		0.309	0.227						0.631	1.238		0.496	0.238	0.096
W	mg/L	0						0	0		0	0						0	0		0	0	0
Zn	mg/L	1.898						4.206	4.817		1.308	0.907						27.438	5.607		2.478	0.654	0.332

Muestra 13041

Geoloy Name:	YV9S-W22
Met Code:	13041
Composite ID	VS Sur Test AA: Alu HA #20
Tara (kg)	0.9381
Initial Height of Rock in Column:	1.49 m

Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.000	0.000	0.243	3.9819	1.8539	0.8464	0	0	0.968	0.3475	0.112	0.157	0.013		0.8608	1.3583	2.4579	1.9135	2.9202	3.9011	1.648	0.0342	0
pH				7.16	1.91	1.88	1.82			1.84	1.96	1.79	1.28	2.4		1.08	1.37	1.51	1.44	1.31	1.49		1.22	
Electrical Conductivity	ms/cm			3.6	16.456	8.95	8.23			8.51	9.27	12.98	32.1	1.351		42.6	24	16.35	13.21	19.15				
Temperature	°C			17.7	18.3	18.7	18.3			16	17.2	17.1	12.6	14.6		16.9	14.9	16	17.2	8.2	13.7		15.7	
Eh	mV			372	409.6	549.4	574.1			568.2	701.6	696.3	613.9	699.4		610.8	696.9	791.7	867.4	846.6	905.3		938.4	
D.O	mg/L			3.89	3.81	3.75	3.83			3.76	2.44	3.26	6.77			4.5	5.95	1.2	5.73	6.85	5.58		5.33	
Rock Height in Column	mm			1485	1479	1470	1463	1458	1453	1450	1449	1449	1448.6	1448.6		1345.7	1344.9	1340.6	1338.4	1330	1317.5			
HACH, Sulfate	mg/L			800	1400	6000	3400			6200	4200	6666.66667	31818	10000		45714.3	16000	10500	9000	11666.6667	7833.33333		15250	
HACH, Total Fe	mg/L			11	74	1850	840				1160	4625	11417	13150		9281.25	4933	3050	1481.3	1525	1350		3325	
TDS	ppt			1.79	8.2	4.43	4.13			4.26	4.6	6.49	15.8	0.43		21.3	12	8.18	6.59	9.59				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				5.336	10.224	2.604			22.625						0.938	0.25	11.41	0.395	0.522	0.16	0.069		
Ag	mg/L				0.006	0.341	0.014			0.011						0	0	N/A	N/A	0	N/A	0		
Al	mg/L				0.253	5.953	4.347			4.735						26.666	8.344	4.129	3.258	2.071	2.121	1.29		
As	mg/L				0.059	32.435	27.229			35.417						140.938	40.866	20.759	21.899	19.703	19.401	9.867		
B	mg/L				0.515	1.446	0			0						0	0	0	0	0	0	0		
Ba	mg/L				0.068	0	0.019			0.013						0.309	0.055	0.045	0.059	0.029	0.035	0.028		
Be	mg/L				0	0	0.001			0						0	0	0	0	0	0	0.001		
Bi	mg/L				0.011	0	0			0						0.15	0.069	0.062	0.032	0.068	0.022	0.062		
Ca	mg/L				194.975	17.384	14.745			79.816						144.765	19.277	21.054	10.658	6.96	14.137	4.296		
Cd	mg/L				0.028	102.915	78.852			87.428						122.545	39.606	26.935	17.212	16.581	17.175	9.358		
Co	mg/L				0.024	10.48	3.099			1.041						2.317	0.725	0.491	0.367	0.383	0.407	0.214		
Cr	mg/L				0	2.179	0.916			0.412						1.609	0.424	0.273	0.197	0.173	0.162	0.079		
Cu	mg/L				3.547	14.104	9.746			19.856						46.923	32.786	N/A	N/A	14.764	N/A	9.541		
Fe	mg/L				0.149	1167.949	1433			2050						1021.921	2709	2086	833.845	1612.966	1945	525.532		
Ga	mg/L				0	0.809	0.518			0.202						0.855	0.234	0.174	0.177	0.079	0.127	0.089		
K	mg/L				15.964	1.225	0.777			0.743						9.678	2.147	1.313	1.235	0.609	0.448	0.352		
Li	mg/L				0.012	0.206	0.082			0.044						0.02	0.007	0.002	0.002	0	0.001	0.003		
Mg	mg/L				16.939	1.149	1.279			3.105						5.667	0.529	0.659	0.508	0.168	0.314	0.084		
Mn	mg/L				5.17	1.876	0.898			1.5						5.277	2.044	1.918	1.292	1.316	1.393	0.741		
Mo	mg/L				0.01	0.026	0.003			0.029						0.149	0.018	0.021	0.011	0.02	0.016	0.005		
Na	mg/L				139.045	7.248	2.231			2.517						6.96	1.566	1.153	1.201	0.09	0.617	1.53		
Nb	mg/L				0	0.033	0			0						0	0	0	0	0	0	0		
Ni	mg/L				0.022	3.966	1.802			0.912						2.343	0.735	0.526	0.38	0.396	0.413	0.216		
Pb	mg/L				0	2.256	2.79			1.9						2.331	1.51	1.72	1.529	1.503	1.705	1.504		
Sb	mg/L				0	0	0			0						0	0	0	0	0	0	0		
Sc	mg/L				0	0.01	0.003			0						0	0	0	0	0	0	0		
Se	mg/L				0	0	0			0						0	0	0	0	0	0	0		
Sn	mg/L				0.026	0	0.012			0.009						0.1	0.007	0	0	0	0	0.13		
Sr	mg/L				2.922	0.008	0.019			0.052						0.171	0.015	0.023	0.017	0.008	0.011	0.003		
Te	mg/L				0	0.585	0.632			1.23						3.35	1.175	0.893	0.592	0.577	0.593	0.298		
Ti	mg/L				0.005	0.056	0.102			0.16						0.99	0.134	0.093	0.071	0.065	0.06	0.024		
Tl	mg/L				0.026	26.978	24.798			13.494						12.916	19.269	12.349	7.912	7.118	6.827	3.627		
V	mg/L				0.007	0.081	0.09			0.083						0.666	0.225	0.177	0.16	0.126	0.115	0.059		
W	mg/L				0	0	0			0						0	0	0	0	0	0	0		
Zn	mg/L				2.13	105.022	59.991			66.184						102.158	44.46	30.176	21.928	22.603	24.073	11.555		

Geoloy Name:	YV9S-W22
Met Code:	13041
Composite ID	YS Sur Teut AAs Aln HA #20
Tara (kg)	0.9381
Initial Height of Rock in Column:	1.49 m

Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				0	2.7678	1.1546	6.7215	1.3216	1.4983	1.9839	2.0961					1.52	0.856	0.525	1.2685	1.0949	1.7815	1.4621	1.0518
pH		1.09				1.23	1.36	2.01	1.58	1.49	1.68	1.27					0.8	1.16	1.24	1.64	1.72	1.25	1.23	0.92
Electrical Conductivity	ms/cm										2.888	41.4					135.2	34.9	33.6	62.15	20.56	11.83	15.46	42.5
Temperature	°C	13.4					13	14.2	14.2	13	13	13					19.2	17.6	19.4	15.7	20.4	18.5	20.1	18.7
Eh	mV	635.2				714.3	628	655	694	826.3	1046.6	689.2					549.9	534.9	535.4	687.1	683	649.4	701	677.8
D.O	mg/L	5.8									4.81	4.43					4.5	4.62	4.02	4.87	3.62	1.38	4.4	3.48
Rock Height in Column	mm				1315.2	1314.8	1314.7	1314.6		1314.1	1314.1	1314.1					1314.1	1313.5	1313.5	1313.5	1313.5	1313.5	1313.5	1313.5
HACH, Sulfate	mg/L	45000				57000	21500	9500	10750	14166.6667	23125	31666.6667					46409	9250	18200	15200	18800	19000	19400	23000
HACH, Total Fe	mg/L	11700				9552.687	3700	1657.275	2000.36	2719.88	3517.51	2894.346					12150	2840	4229	3879	4723	3481.55	4810.7	4610.24
TDS	ppt																55.84	14.246	16.488	30.455	10.07	6.79	8.9	27.8
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	ppb						0.793	0.142	0.255	0.012		0.085					0.121	0.078	0.022		0.05	2.413	1.155	0.129
Ag	mg/L					0.046	0	0	0	0	0	0					0	0	0		0	0	0.005	0
Al	mg/L					162.352	6.11	0.942	0.935	1.799	4.517	3.621					19.596	7.002	5.108		7.791	4.561	5.978	23.614
As	mg/L					110.802	26.788	11.833	14.613	21.755	29.331	20.361					82.245	19.799	27.55		29.586	20.281	21.812	29.611
B	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	39.36
Ba	mg/L					0.167	0.051	0.029	0.029	0.041	0.055	0.061					0.151	0.027	0.052		0.077	0.109	0	0.157
Be	mg/L					0	0	0	0	0	0	0.001					0	0.001	0		0.002	0	0.001	0
Bi	mg/L					0.107	0.094	0.032	0.041	0.082	0.236	0.188					0.816	0.11	0.241		0.314	0.349	0.435	0.093
Ca	mg/L					111.571	22.47	4.597	8.078	17.504	34.68	23.18					205.668	31.329	23.658		43.631	14.857	17.477	30.898
Cd	mg/L					22.916	10.334	4.119	5.517	6.665	7.722	5.316					19.29	4.05	4.173		3.363	2.498	2.464	2.806
Co	mg/L					2.331	0.671	0.29	0.4	0.631	0.829	0.692					1.868	0.661	0.809		0.984	0.876	1.098	1.224
Cr	mg/L					6.963	0.384	0.085	0.106	0.165	0.206	0.153					0.688	0.125	0.228		0.291	0.197	0.254	0.372
Cu	mg/L					1417.817	50.309	13.724	16.695	25.45	28.55	21.576					105.292	25.368	36.045		41.321	24.551	36.657	34.132
Fe	mg/L					10951.999	3785.804	1385.229	1945	3243	2738.453	2352.058					12725.01	2345.745	4194.692		5580.817	2928.783	3627.999	4800.645
Ga	mg/L					0.46	0.447	0.067	0.064	0.115	0.116	0.345					0.382	0.118	0.437		0.181	0.103	0	0.855
K	mg/L					3.722	1.232	0.383	2.433	0.205	0.996	0.55					2.735	0.241	0.348		4.014	0.968	1.05	15.563
Li	mg/L					0.045	0.002	0.001	0.001	0	0	0.003					0.006	0.002	0.002		0.01	0.007	0.003	0.032
Mg	mg/L					5.512	0.291	0	0.024	0.455	1.28	0.625					8.459	0.819	0.507		1.407	0.015	0.652	1.632
Mn	mg/L					10.568	3.914	1.081	0.924	1.265	2.082	1.711					5.541	1.419	2.319		3.807	1.904	2.199	2.743
Mo	mg/L					2.946	0.067	0	0.007	0.03	0.056	0.039					0.53	0.011	0.069		0.209	0.033	0.083	0.116
Na	mg/L					10.143	1.222	0.85	0.71	0	6.814	9.207					3.115	8.204	1.01		1.877	10.143	9.397	98.226
Nb	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Ni	mg/L					12.443	0.86	0.278	0.353	0.543	0.725	0.634					1.672	0.539	0.683		0.845	0.743	0.94	0.844
Pb	mg/L					1.986	1.899	1.698	1.865	1.982	2.336	2.14					1.616	1.798	1.76		1.527	2.191	2.089	3.212
Sb	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0.193	0
Sc	mg/L					0.267	0	0	0	0	0	0					0	0	0		0	0	0	0
Se	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0.183	0
Sn	mg/L					0.082	0	0	0	0	0.068	0					0	0	0		0	0.023	0.077	0
Sr	mg/L					0.163	0.025	0.006	0.011	0.02	0.025	0.026					0.205	0.011	0.022		0.198	0.034	0.045	0.074
Te	mg/L					3.901	10.44	0.461	4.983	7.383	10.484	0.548					2.556	0.897	0.924		1.207	0.776	1.134	1.85
Ti	mg/L					0.339	0.102	0.028	0.03	0.052	0.09	0.091					0.344	0.081	0.128		0.193	0.064	0.088	0.118
Tl	mg/L					12.301	8.847	3.555	3.208	4.145	5.684	5.278					10.936	4.88	4.513		4.289	3.951	4.209	4.828
V	mg/L					1.036	0.214	0.099	0.098	0.156	0.153	0.098					0.643	0.155	0.21		0.314	0.214	0.149	0.459
W	mg/L					0	0	0	0	0	0	0					0	0	0		0	0	0	0
Zn	mg/L					56.591	21.186	9.713	12.879	20.069	26.348	18.515					62.174	14.708	16.877		24.48	14.542	16.157	17.847

Geoloy Name:	YV9S-W22
Met Code:	13041
Composite ID	YS Sur Teut AA-Ain HA #20
Tara (kg)	0.9381
Initial Height of Rock in Column:	1.49 m

Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.9834	0.024	0.01756	0	0.021	0.026	1.5248	2.5742	1.3974	1.853	2.8246	0.87	-	-	-	1.3956	1.4424	0.9166	1.7201	1.8129	1.9877	3.5452
pH		1.16	1.76	1.02		0.97	1.18	1.07	1.08	1.02	1.72	1.16	1.23	-	-	-	0.78	0.87	0.85	0.98	1.16	1.18	1.3
Electrical Conductivity	ms/cm	16.73	7.83	32.83		60	35.87	43.4	38.2	49.8		36.1	32.3	-	-	-	118.05	110.2	35.2	48.7	31.4	17.4	23.3
Temperature	°C	17.9	16.1	15		17.8	16.4	19.6	15	15.6	17	18	18	-	-	-	20.2	20.1	20.5	20.1	18.3	20.3	18.7
Eh	mV	669.3	598.3	655.3		665.9	677.5	670.6	664.5	463.9	657.8	186.8	678.8	-	-	-	683.3	681.1	672.2	682.5	681.2	671.3	683.2
D.O	mg/L	3.3	6.05	6.34		5.26	5.1	5.34	4.1	5.6			5.85	-	-	-	-	-			-		-
Rock Height in Column	mm	1313.5	1313.5	1313.5		1313.5	1313.5	1313.5	1313.5	1313.5	1313.5	1313.5	1313.5	-	-	-	1313.5	1313.5	1313.5	1313.5	1313.5	1313.5	1313.5
HACH, Sulfate	mg/L	18400	3800	46100		28600	22800	15200	18900		15300	17400	13700	-	-	-	53900	32400	34700	25900	17000	12500	11300
HACH, Total Fe	mg/L	4345.01	963.18	12824.84		9582.3	6236.63	5282.3	6071.12	11220	270.112	6438.19	4487.91	-	-	-	9566.01	10228.9	11131.45	7521.25	5595.81	44405.46	33755.37
TDS	ppt	9.6	4.3	5.23		36.7	35.3	33.4	23.9	31.9		22.4	19.9	-	-	-	14.2	12	22	31.6	19.3	10.2	13.9
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0.06						0		0.247	0	0.374	N/A	-	-	-	3.285	2.96	0.154	0.392	0.04	0.156	0.677
Ag	mg/L	0						0.01	0	0	0	0	0	-	-	-	0	0.003	0	0.015	0	0	0
Al	mg/L	5.438						5.719	6.412	1.521	3.802	3.829	1.851	-	-	-	38.631	14.064	8.399	8.022	5.463	3.325	2.172
As	mg/L	23.252						22.473	25.147	7.765	16.133	16.892	14.023	-	-	-	59.039	31.758	33.878	23.783	12.792	15.55	7.716
B	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ba	mg/L	0.093						0	0.082	0.028	0.06	0.063	0.068	-	-	-	0.259	0	0.177	0	0.058	0.089	0.054
Be	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0.001	0.002
Bi	mg/L	0.436						0.421	0.777	0.185	0.395	0.299	0.314	-	-	-	1.337	0.567	1.386	0.704	0.478	0.585	0.313
Ca	mg/L	36.313						45.664	55.176	5.136	9.334	19.146	7.83	-	-	-	239.028	57.395	42.058	28.466	31.517	10.078	3.209
Cd	mg/L	2.447						1.755	2.077	0.671	1.39	1.341	0.96	-	-	-	4.855	1.492	3.264	1.808	0.947	0.797	0.39
Co	mg/L	1.164						1.209	1.31	0.423	1.043	1.095	0.883	-	-	-	2.937	1.334	1.946	1.758	1.078	1.174	0.683
Cr	mg/L	0.317						0.292	0.336	0.091	0.19	0.279	0.186	-	-	-	0.934	0.548	0.41	0.376	0.245	0.199	0.108
Cu	mg/L	32.18						35.25	40.684	12.854	25.31	33.304	22.351	-	-	-	96.662	54.265	60.925	38.808	25.953	24.236	13.708
Fe	mg/L	5278.257						1774.426	6257.124	1928	4167.78	1849.061	3770	-	-	-	12722.862	2824.702	5061.972	2691.212	4270.255	2125.901	1595.288
Ga	mg/L	0.088						0.465	0.262	0.1	0.209	0.263	0.207	-	-	-	0.737	1.097	0.389	0.007	0.169	0.206	0.135
K	mg/L	1.468						0.906	1.072	0.132	1.051	0.825	1.475	-	-	-	4.348	6.405	1.524	1.098	1.396	8.876	0.821
Li	mg/L	0.003						0.005	0.004	0.001	0	0	0.001	-	-	-	0.012	0.006	0.003	0.003	0.003	0.003	0.002
Mg	mg/L	0.319						1.428	0.616	0	0	0	0	-	-	-	9.404	1.931	0.724	1.661	0.486	0	0
Mn	mg/L	2.484						2.709	3.294	0.832	1.75	3.616	1.909	-	-	-	10.181	4.561	4.185	4.88	3.586	1.929	1.137
Mo	mg/L	0.108						0.071	0.062	0.02	0.021	0.024	0.017	-	-	-	0.576	0.044	0.102	0.098	0.025	0.017	0
Na	mg/L	7.715						4.618	4.412	1.066	2.492	3.708	0.975	-	-	-	4.862	4.95	1.812	3.891	2.079	4.443	3.876
Nb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Ni	mg/L	0.974						0.972	1.139	0.368	0.857	1.014	0.749	-	-	-	2.685	1.118	1.586	1.489	0.956	0.978	0.578
Pb	mg/L	1.898						1.854	1.931	0.539	1.874	1.801	1.599	-	-	-	2.365	2.461	1.72	2.205	1.718	2.197	1.619
Sb	mg/L	0						0	0	0	0	0	0	-	-	-	0	0.395	0	0	0	0	0
Sc	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Se	mg/L	0						0.206	0	0	0	0	0	-	-	-	0	0	0	0.257	0	0	0
Sn	mg/L	0						0.052	0.05	0.023	0.083	0.08	0.05	-	-	-	0.266	0.082	0.108	0.093	0	0	0
Sr	mg/L	0.055						0.063	0.07	0.005	0.007	0	0.013	-	-	-	0.249	0.036	0.033	0.027	0.033	0.016	0.004
Te	mg/L	1.251						1.05	1.054	0.345	0.773	0.87	0.718	-	-	-	2.442	2.586	1.562	1.51	0.562	0.721	0.398
Ti	mg/L	0.113						0.092	0.101	0.028	0.053	0.067	0.04	-	-	-	0.71	0.256	0.14	0.105	0.069	0.054	0.029
Tl	mg/L	4.391						3.729	4.035	1.215	2.741	2.807	2.218	-	-	-	7.043	3.974	4.18	3.603	2.045	2.217	1.238
V	mg/L	0.248						0.314	0.269	0.107	0.242	0.287	0.234	-	-	-	1.055	0.854	0.658	0.544	0.252	0.291	0.12
W	mg/L	0						0	0	0	0	0	0	-	-	-	0	0	0	0	0	0	0
Zn	mg/L	17.219						14.668	17.051	5.174	10.113	11.917	8.981	-	-	-	37.309	55.218	21.606	16.678	8.647	9.734	5.167

Muestra 13042

Geoloy Name:	YV9N-W4																						
Met Code:	13042																						
Composite ID	YS Norte Yp ARG1#21																						
Tara (kg)	0.9432																						
Initial Height of Rock in Column:	1.52 m																						
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11
Leachate Volume	L	0.000	0.000	0.686	2.8188	1.9528	5.053	0.563	2.337	3.077	0.661	12.9	0.002	0.039		1.448	3.19	3.953	2.9949	4.2831	6.2941		
pH				7.89	6.37	7.01	6.25	6.71	6.1	5.16	3.79	6.13		5.62		4.78	4.11	4.36	2.44	3.9	3.45		6.51
Electrical Conductivity	ms/cm			0.222	1.492	1.057	0.517	0.586	0.511	0.457	0.39	0.431		0.747		1.243	0.548	0.488	0.999	0.289			
Temperature	°C			17.7	18.5	18.7	18.1	17.7	15.5	16	17.2	16.9		14.2		17	15.1	16.2	17.2	8.9	14		15.6
Eh	mV			445	241.5	459..3	443.5	479.2	568.2	660.4	560.1	348.7		557.9		313.1	403.4	797.5	826.8	510.1	861.6		866.2
D.O	mg/L			3.75	3.72	3.7	3.68	3.76	3.62	3.69	3.26	2.16				6.05	6.43	5.9	6	5.8	3.86		5.55
Rock Height in Column	mm			1476	1441	1409	1365	1346	1324	1320	1319	1316.6	1316.1	1315.6		1297.4	1297.1	1295.9	1294.3	1290	1284.5		
HACH, Sulfate	mg/L			39	900	700	250	300	220	250	150	237.5		538		1475	400	300	213	195.454545	1850		120
HACH, Total Fe	mg/L			0.16	221	1	0.5	2			0.09	3.87142857		9.1		0.64	1.63	0.58	0.1	0.08	0.268		0.13
TDS	ppt			0.116	0.748	0.513	0.266	0.302	0.255	0.227	0.192	0.216		0.411		0.631	0.274	0.244	0.488	0.144			
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hg	ppb				4.816	1.272	0.142	5.488	2.75	4.152	14.023					0.036	0.005	0.035	0.046	0.001	0.188	0	0.13
Ag	mg/L				0.005	0.392	0.011	0	0	0.004	0					0.009	0.002	N/A	N/A	0	N/A	0.002	N/A
Al	mg/L				1.739	0.886	0.218	0	0.027	0.127	0					0.713	0.188	0.144	0.66	0.26	0.183	0.411	0.172
As	mg/L				0.113	0.106	0.022	0	0	0.016	0.029					0.326	0.052	0	0	0.054	0.02	0.008	0.012
B	mg/L				0.537	2.057	0.279	0.074	0.259	0.265	0					0.425	0.467	0.341	0.578	0.592	0.596	0.995	0.47
Ba	mg/L				0.028	0	0.036	0	0.021	0.029	0					0.027	0.024	0.025	0.027	0.019	0.023	0.023	0.03
Be	mg/L				0	0	0	0	0	0	0.001					0.002	0	0.001	0	0	0	0.001	0.001
Bi	mg/L				0.007	0	0.001	0.005	0.005	0	0.099					0.033	0	0.001	0.019	0.003	0	0.014	0.002
Ca	mg/L				13.059	104.065	36.063	60.4	43.413	26.007	0.012					247.019	92.923	81.786	40.329	42.852	41.597	27.776	28.656
Cd	mg/L				0.001	0.069	0.011	0.023	0	0.01	0					0.095	0.071	0.032	0.036	0.043	0.038	0.032	0.02
Co	mg/L				0.014	0.018	0.004	0.007	0.003	0.003	0					0.256	0.02	0.021	0.01	0.012	0.013	0.011	0.011
Cr	mg/L				0	0	0	0	0	0	0					0.002	0.009	0	0.001	0	0	0.003	0
Cu	mg/L				0.265	0	0.018	0.04	0.379	0.015	0					1.798	0.282	N/A	N/A	0.234	N/A	0.246	N/A
Fe	mg/L				0.579	0.397	0.21	0	0	0.102	0					0.788	0.638	0	0	0	0.141	0.876	0.173
Ga	mg/L				0.004	0.007	0.003	0	0.001	0.003	0					0	0.012	0.013	0.055	0.003	0	0.023	0.007
K	mg/L				6.389	10.801	5.207	11.224	7.15	5.157	0					33.661	7.258	7.503	7.842	5.02	4.314	3.551	2.931
Li	mg/L				0.9	0.008	0.005	0.006	0.004	0.005	0					0.023	0.018	0.014	0.009	0.004	0.006	0.008	0.005
Mg	mg/L				1.814	8.874	2.936	4.706	3.527	2.172	0					17.503	7.334	6.435	4.063	3.316	2.836	2.022	1.877
Mn	mg/L				0.092	2.917	0.992	2.071	1.574	0.901	0.016					114.659	4.917	4.757	3.004	2.761	2.394	1.787	1.776
Mo	mg/L				0.293	0.011	0	0.001	0	0	0.007					0.001	0	0.001	0	0.003	0.001	0.005	0.001
Na	mg/L				83.654	98.053	41.666	53.606	41.369	27.731	0					12.697	16.404	12.371	6.886	3.935	2.573	2.353	0.403
Nb	mg/L				0.008	0.035	0.002	0	0.006	0	0.027					0	0.001	0.011	0	0.003	0	0.004	0.005
Ni	mg/L				0.002	0.01	0.007	0.014	0	0.005	0					0.039	0.033	0.031	0.019	0.018	0.024	0.014	0.013
Pb	mg/L				0.012	0	0.003	0.002	0.001	0.007	0.03					0.145	0.006	0.02	0	0.002	0	0	0.003
Sb	mg/L				0.017	0.012	0.003	0	0	0.008	0.127					0	0.003	0	0.021	0	0.014	0.012	0
Sc	mg/L				0	0	0	0	0	0	0					0	0	0.001	0	0	0	0	0
Se	mg/L				0	0	0	0.009	0	0	0.045					0	0	0	0.009	0	0.002	0	0.03
Sn	mg/L				0.022	0	0.005	0	0	0.002	0					0.041	0.007	0.005	0.004	0.002	0	0	0.004
Sr	mg/L				0.111	1.788	0.645	1.073	0.799	0.483	0					1.218	1.798	1.578	0.785	0.858	0.746	0.561	0.546
Te	mg/L				0	0.021	0	0	0	0	0					0.004	0.002	0	0	0	0	0	0
Ti	mg/L				0.016	0.001	0.005	0	0	0	0					0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002
Tl	mg/L				0.005	0.2	0.03	0	0.005	0.011	0.131					0.039	0.031	0.028	0.03	0.012	0.002	0.017	0.018
V	mg/L				0.004	0	0	0.009	0	0.001	0					0	0	0	0.002	0	0	0	0
W	mg/L				0.168	0.121	0	0	0	0	0					0	0	0.001	0	0	0	0	0.002
Zn	mg/L				0.254	1.444	0.484	1.611	1.397	0.673	0					8.171	5.797	5.666	4.047	3.858	3.628	2.605	2.204

Geoloy Name:	YV9N-W4																						
Met Code:	13042																						
Composite ID	YS Norte Yp ARG1#21																						
Tara (kg)	0.9432																						
Initial Height of Rock in Column:	1.52 m																						
Sampled		3-Jun-11	3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13
Leachate Volume	L					0.6164	1.62991	1.4206	4.3074		0.476	0.6787	0.7232						0.856	0.55	0.787	1.2362	1.184
pH			**1.74**				**3.01**	**3.25**	**4.31**		**4.72**	**3**	**3.32**						**6.75**	**6.73**	**6.56**	**2.7**	**3.19**
Electrical Conductivity	ms/cm											0.939	13.4						14.74	9.48	0.698	1.196	0.369
Temperature	°C		13.4					13	14.2		13	13	13						17.6	19.8	15.7	20.3	18.3
Eh	mV		720.6				709.3	700.1	722.9		725.4	964.8	713.8						547.3	541.8	601.8	682.5	478.9
D.O	mg/L		5.29									5.88	4.19						4.29	4.99	5.6	5.96	3.12
Rock Height in Column	mm					1280.3	1270.6	1270.1	1269.6		1269.1	1269.1	1269.1					1269.1	1269.1	1261.9	1254.7	1247.5	1240.3
HACH, Sulfate	mg/L		3375				900	625	330		4250	525	2500						1500	1800	200	1600	7000
HACH, Total Fe	mg/L		780				260.055	150	215.155		168.635	143.33	141.05						0.94	312.2	1.495	322.2	7
TDS	ppt																		0.594	0.466	0.342	0.59	205.835
Month Number		23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
Hg	**ppb**					0.66		0.019	0.001		0		0.112					0.019	0.163	0.007		0.02	1.107
Ag	**mg/L**					0.019	0.003	0.003	0.001		0.003	0.037	0.004					0.003	0	0.002		0	0
Al	**mg/L**					**1051**	**5.025**	0.683	0.37		0.214	1.719	1.475					0.226	3.239	0.15		**7.097**	2.724
As	**mg/L**					**16.031**	**0.047**	0.009	0.002		**0.013**	**0.016**	**0.077**					**0.021**	0	**0.034**		**0.594**	0
B	**mg/L**					0	**1.028**	0.407	**0.647**		0.011	**4.292**	**5.855**					0.336	**5.491**	0.479		0	**5.387**
Ba	**mg/L**					0.077	0.008	0.016	0.02		0.019	0.025	0.011					0.013	0.059	0.019		0.015	0.054
Be	**mg/L**					**0.016**	0.003	**0.02**	0.001		**0.01**	0.004	0.001					0	0	0		0.003	0.001
Bi	mg/L					0	0.003	0	0		0.003	0.042	0					0.006	0	0		0.001	0.036
Ca	mg/L					78.465	207.738	143.78	70.412		55.963	108.124	91.841					196.249	308.965	197.093		127.37	103.903
Cd	**mg/L**					**6.59**	**0.336**	**0.199**	**0.094**		**0.08**	**0.111**	**0.12**					**0.221**	**0.209**	**0.109**		**0.238**	**0.147**
Co	**mg/L**					**3.207**	0.089	0.051	0.023		0.019	0.015	0.012					0.058	0.042	0.032		**0.105**	0.03
Cr	**mg/L**					**0.548**	0.006	0	0		0	0	0					0.006	0	0.002		0.071	0.02
Cu	**mg/L**					**469.926**	**4.24**	**1.729**	**0.795**		**0.762**	**0.533**	**0.43**					**0.21**	0.12	0.091		**9.231**	**1.739**
Fe	**mg/L**					**5987**	**11.953**	0.092	0.142		0.224	**17.199**	**4.333**					**2.628**	0	1.097		**322.185**	**7.823**
Ga	mg/L					0.782	0	0	0		0	0	0					0	0	0		0.002	0
K	mg/L					12.467	16.027	12.958	8.176		6.699	7.719	7.397					11.648	11.52	11.646		7.922	7.264
Li	mg/L					0.052	0.026	0.016	0.01		0.006	0.001	0.008					0.014	0.015	0.012		0.013	0.01
Mg	mg/L					9.288	17.215	11.199	5.296		4.108	5.634	5.661					11.514	12.417	9.083		7.805	5.979
Mn	**mg/L**					**31.71**	**14.533**	**10.803**	**4.911**		**4.29**	**5.726**	**5.841**					**11.029**	**12.414**	**7.843**		**7.339**	**6.302**
Mo	**mg/L**					0.023	0.003	0.002	0		0	0.018	0.022					0.004	0.013	0.017		0.016	0.004
Na	mg/L					3.719	6.053	3.669	2.178		0.426	8.071	10.306					3.08	10.067	3.228		3.138	10.109
Nb	mg/L					0	0	0	0.004		0	0.049	0					0	0.016	0.004		0	0.006
Ni	**mg/L**					**2.491**	0.158	0.108	0.045		0.04	0.049	0.082					0.112	0.065	0.079		0.132	0.055
Pb	**mg/L**					**1.505**	0.005	**0.072**	0.003		0	**0.262**	**0.072**					0.002	0.004	0.006		**0.044**	**0.111**
Sb	**mg/L**					0	0	0	0		0	**0.083**	0					0	0	0		0	**0.044**
Sc	mg/L					0.657	0.003	0	0		0	0	0					0	0	0		0.002	0
Se	**mg/L**					0	0.001	**0.018**	**0.014**		**0.08**	0	**0.043**					0.008	**0.195**	**0.012**		0	0.003
Sn	mg/L					0.014	0.016	0.001	0.003		0.001	0.147	0.059					0.006	0.002	0		0	0.105
Sr	mg/L					0.408	3.934	2.834	1.374		1.152	1.63	1.614					3.123	4.019	2.822		1.848	1.605
Te	mg/L					1.147	0.004	0	0.01		0	0.144	0					0	0.165	0		0.089	0
Ti	mg/L					0.031	0.004	0.003	0.001		0	0.014	0.003					0.003	0.064	0.004		0.025	0.008
Tl	**mg/L**					0	**0.014**	**0.01**	**0.019**		0	0	**0.078**					**0.015**	**0.025**	**0.021**		**0.015**	**0.038**
V	**mg/L**					**1.592**	0	0	0		0	0	0					0	0	0		0.047	0
W	mg/L					0	0	0	0		0	0	0					0	0.143	0		0	0
Zn	**mg/L**					**176.015**	**30.094**	**18.796**	**9.198**		**7.632**	**9.364**	**11.203**					**18.479**	**13.57**	**5.587**		**28.262**	**13.546**

Geoloy Name:	YV9N-W4
Met Code:	13042
Composite ID	YS None Yp ARG1 #21
Tara (kg)	0.9432
Initial Height of Rock in Column:	1.52 m

Sampled		1-Apr-13	1-May-13	3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15
Leachate Volume	L	0.856	0.713	0.9432	0	0	0	0.036	0.025	1.05624	3.0641	1.6415	2.9689	1.49				1.4154	1.4406	1.1228	2.6164	3.316
pH		2.39	2.58	3.3				5.21	3.11		5.2	4.6	3.84	2.96				3.4	3.66	4.01	3.81	4.06
Electrical Conductivity	ms/cm	0.647	1.575	0.377				0.661	0.01019		1.422	0.639	0.497	0.959				0.896	1.155	0.702	0.831	0.831
Temperature	°C	20	19.3	17.7				17.7	16.4		15	15.8	18	18.7				20.1	20.2	20.5	20.1	20.1
Eh	mV	707.9	785.7	481.6				618.9	754.8		889.5	254.8	165	738.1				644.9	437.3	337.3	705.6	705.6
D.O	mg/L	5.84	5.77	5.87				5.91	5.25		5.19	5.68		5.91				-	-	-	-	-
Rock Height in Column	mm	1233.1	1225.9	1218.7				1211.5	1204.3		1204.3	1204.3	1204.3	1204.3				1204.3	1204.3	1204.3	1204.3	1204.3
HACH, Sulfate	mg/L	700	15000	500				300	400		800		200	200				200	200	200	200	200
HACH, Total Fe	mg/L	364.6	295.15	577.91				273.78	927.15		727.08	470	601.7	328.692				548.37	85.875	143.125	120.225	120.225
TDS	ppt	0.3	1	0.2				0.4	0.5		0.7	0.313	0.2	0.5				0.4	0.6	0.3	0.4	0.477
Month Number		45	46	47	48	49	50	51	52	53	54	55	57	58	59	60	61	62	63	64	65	66
Hg	ppb	0.001	0.038	0						0.551		0.247	0.054	N/A				0	0.007	0	0	0.006
Ag	mg/L	0.001	0.06	0.007						0.011	0.007	0	0	0				0.002	0.045	0.001	0.001	0.002
Al	mg/L	2.123	24.884	2.618						1.817	0.819	1.521	1.296	0.931				2.719	2.004	1.348	1.864	1.237
As	mg/L	0	0.333	0.015						0.107	0	7.765	0	0.028				0.065	0.057	0.027	0	0
B	mg/L	5.526	45.848	4.025						1.817	2.517	0	1.42	0.456				2.081	2.48	0.716	1.74	1.349
Ba	mg/L	0.001	0.093	0.023						0.229	0.02	0.028	0	0.021				0.036	0.027	0.024	0.024	0.024
Be	mg/L	0.003	0	0.001						0.001	0	0	0.002	0.002				0.004	0.002	0.003	0.003	0.002
Bi	mg/L	0	0	0						0.05	0.024	0.185	0.008	0.008				0.019	0.007	0.018	0.007	0
Ca	mg/L	78.835	101.645	104.335						235.837	295.614	5.136	62.814	61.882				98.66	92.772	105.447	98.863	63.539
Cd	mg/L	0.113	0.119	0.123						0.196	0.22	0.671	0.097	0.139				0.212	0.209	0.237	0.235	0.146
Co	mg/L	0.019	0	0.025						0.075	0.088	0.423	0.001	0.034				0.044	0.035	0.045	0.043	0.029
Cr	mg/L	0.026	0.041	0.09						0.006	0.014	0.091	0	0.006				0.048	0	0	0	0
Cu	mg/L	1.423	1.241	1.051						0.362	0	12.854	2.037	1.705				2.514	2.041	2.354	1.083	1.412
Fe	mg/L	4.403	144.621	13.575						6.792	1.081	1928	0.679	19.714				1.268	9.59	3.525	1.3	0
Ga	mg/L	0	0.392	0						0	0	0.1	0	0				0	0.007	0	0	0
K	mg/L	6.998	20.532	7.695						17.631	19.606	0.132	6.672	7.164				7.641	131.384	12.705	9.884	8.914
Li	mg/L	0.007	0.024	0.011						0.016	0.019	0.001	0	0.006				0.01	0.009	0.01	0.009	0.006
Mg	mg/L	4.7	7.432	6.246						14.97	18.273	0	4.289	4.312				6.694	6.413	7.361	6.904	4.497
Mn	mg/L	5.02	5.793	9.605						50.586	61.552	0.832	4.464	4.354				22.844	6.794	7.552	11.522	4.741
Mo	mg/L	0	0.038	0						0.018	0.01	0.02	0.005	0.002				0	0	0.004	0.014	0.009
Na	mg/L	9.65	77.935	10.05						7.381	9.264	1.066	4.646	2.032				4.939	6.186	3.567	5.176	3.468
Nb	mg/L	0.028	0.02	0.007						0.004	0	0	0	0.002				0	0	0	0	0.014
Ni	mg/L	0.087	0	0.074						0.096	0.126	0.368	0.024	0.055				0.092	0.068	0.077	0.071	0.044
Pb	mg/L	0.089	0.666	0.039						0.134	0.016	0.539	0.02	0.081				0.02	0	0.013	0.015	0.008
Sb	mg/L	0.076	0.48	0						0	0	0	0.009	0				0	0	0	0	0
Sc	mg/L	0	0	0						0	0	0	0	0				0	0	0	0.001	0
Se	mg/L	0.202	0.4	0.123						0.017	0.029	0	0.064	0				0.051	0	0.028	0	0.027
Sn	mg/L	0	0.4	0						0	0	0.023	0	0				0.006	0	0.013	0.018	0.04
Sr	mg/L	1.435	1.436	1.58						3.015	3.458	0.005	1.24	1.166				1.777	1.803	2.069	1.946	1.361
Te	mg/L	0.031	1.068	0.11						0	0	0.345	0	0				0.004	0	0	0	0.011
Ti	mg/L	0.005	0.055	0.008						0.065	0.005	0.028	0	0.001				0.004	0.003	0.001	0.003	0
Tl	mg/L	0	0.088	0.038						0.024	0.044	1.215	0.003	0.027				0.014	0	0.024	0	0.042
V	mg/L	0	0.165	0						0	0	0.107	0	0				0	0	0	0	0
W	mg/L	0	0	0.117						0	0	0	0.003	0				0	0	0	0	0.026
Zn	mg/L	9.132	9.5	9.614						14.916	18.454	5.174	9.687	10.442				17.103	16.248	17.709	18.555	10.884

Geoloy Name:	YV9N-W4
Met Code:	13042
Composite ID	YS Norte Yp ARG1 #21
Tara (kg)	0.9432
Initial Height of Rock in Column:	1.52 m

Sampled		2-Feb-15	2-Mar-15	2-Apr-15	2-May-15	2-Jun-15	1-Jul-15	1-Aug-15	2-Sep-15	3-Oct-15	2-Nov-15	1-Dec-15	3-Jan-16	3-Feb-16	2-Mar-16	1-Apr-16	2-May-16	2-Jun-16	1-Jul-16	2-Aug-16	3-Set-16	3-Oct-16	1-Nov-16
Leachate Volume	L	2.334	4.704	0.7618	0.7365								0.5798	0.7148	2132.5	1830.1	0.88					2.23	2.13
pH		4.14	3.98	6.51	6.9								5.15	4.125	6.3	6.4	6					6.5	6.7
Electrical Conductivity	ms/cm	0.2137	0.464	0.571	0.423								0.4123	0.5169	0.437	0.413	0.403					422	392.5
Temperature	°C	20.3	18.7	17.9	16.8								18.05	19.02	20	20.3	13.3					13	18.5
Eh	mV	632	710.62	512	514.8								618.26	504.65	436.9	399.5	582.4					587.2	322.5
D.O	mg/L	-	-										-										
Rock Height in Column	mm	1204.3	1204.3	1204.3	1204.3								1204.3	1204.3	1204.3	1204.3	1204.3					1204.3	1204.3
HACH, Sulfate	mg/L	980	1000	400	300								560	700	300	200	300					0	0
HACH, Total Fe	mg/L	240.45	309.15	269.08	326.33								291.975	389.3	211.825	177.475	234.725					240.45	257.625
TDS	ppt	0.1	0.2	0.2	0.2								0.31	0.2	0.2	0.2	0.2					0.2	0.2
Month Number		67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
Hg	ppb	0.197	0.052	N/A	N/A								0.123	0.247	0	0	0						
Ag	mg/L	0.034	0	0.003	0.002								0.007	0	0	0	0						
Al	mg/L	13.724	1.296	0.931	0.95								0.819	1.521	2.054	1.678	1.341						
As	mg/L	0	0.017	0.03	0.029								0.01	0.016	0	0.241	0.272						
B	mg/L	3.649	2.836	3.25	3.02								2.517	1.123	4.549	4.519	3.169						
Ba	mg/L	0.019	0.02	0.044	0.033								0.02	0.028	0.031	0.014	0.023						
Be	mg/L	0.03	0.004	0	0								0	0	0.005	0.005	0						
Bi	mg/L	0.024	0.007	0	0								0.024	0.018	0	0.018	0.019						
Ca	mg/L	182.681	38.71	99.439	63.96								68.125	70.152	49.19	43.991	56.361						
Cd	mg/L	0.248	0.089	0.177	0.049								0.22	0.216	0.098	0.072	0.12						
Co	mg/L	0.128	0.019	0.04	0.005								0.088	0.074	0	0	0.025						
Cr	mg/L	0	0	0.004	0.007								0.008	0.005	0.012	0	0.037						
Cu	mg/L	15.184	0.345	0.158	0.109								0	0.162	0.311	0	0.925						
Fe	mg/L	19.183	0	0.067	0.303								0.465	0.078	0	0.137	0.01						
Ga	mg/L	0	0	0	0								0	0.1	0	0.027	0						
K	mg/L	5.987	4.687	10.708	9.86								7.845	5.842	6.661	6.079	9.275						
Li	mg/L	0.01	0.005	0.01	0.007								0.019	0.001	0.008	0	0.008						
Mg	mg/L	10.49	2.662	6.227	5.761								5.623	4.123	3.537	2.739	3.609						
Mn	mg/L	308.145	2.743	6.157	2.987								8.126	7.562	3.647	2.919	3.694						
Mo	mg/L	0	0	0.003	0								0.01	0.02	0.018	0.028	0.028						
Na	mg/L	6.129	4.582	7.22	5.904								5.268	4.956	7.502	7.987	7.208						
Nb	mg/L	0	0.014	0	0								0	0	0.111	0.051	0.079						
Ni	mg/L	0.097	0.022	0.069	0.04								0.035	0.048	0.042	0.023	0.054						
Pb	mg/L	0.075	0.039	0.006	0.007								0.009	0.01	0	0	0.099						
Sb	mg/L	0	0	0	0								0	0	0	0.013	0						
Sc	mg/L	0.003	0	0.001	0								0	0	0	0.001	0						
Se	mg/L	0.063	0	0	0								0.029	0	0.086	0.107	0						
Sn	mg/L	0.002	0	0.032	0.052								0	0.023	0	0	0.058						
Sr	mg/L	1.014	0.78	1.604	1.134								1.356	1.568	1.023	0.888	1.025						
Te	mg/L	0	0.022	0	0								0	0.035	0.059	0	0						
Ti	mg/L	0.004	0.002	0.002	0.003								0.005	0.028	0.001	0.007	0.006						
Tl	mg/L	0	0	0	0								0.004	0.006	0	0.047	0.345						
V	mg/L	0	0	0	0								0	0	0	0	0						
W	mg/L	0	0	0	0								0	0	0.281	0	0						
Zn	mg/L	52.884	7.169	13.138	3.309								7.456	6.456	9.098	7.553	10.318						

Muestra 13044

Geoloy Name:	YV9C-W22																					
Met Code:	13044																					
Composite ID	YS Cent Teut SM 1#23 HCT-03																					
Tara (kg)	0.9383																					
Initial Height of Rock in Column:	1.52 m																					
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11
Leachate Volume	L	0.000	0	0.1163	4.1617	2.3457	3.5242	0.7	2.493	3.149	0.8227	0.262	0.486	0.135		1.497	1.9438	3.3178	2.0875	3.0501	3.749	1.246	0.642
pH				**7.28**	**7.67**	**7.84**	**7.37**	**7.34**	**6.82**	**5.35**	**4.39**	**7.32**	**6.28**	**6.82**		**6.96**	**6.51**	**5.99**	**5.3**	**5.71**	**4.71**		**5.86**
Electrical Conductivity	ms/cm			1.169	0.456	0.225	0.1702	0.1397	0.0913	0.0789	108.3	118.9	0.1155	0.1212		0.0927	0.083	0.0597	0.1367	0.0607			
Temperature	°C			18	18.6	18.7	18.4	17.6	15.5	16	17.2	16.9	12.6	14.3		17	15.1	15.2	17.2	8.8	14.2		15.5
Eh	mV			408	163.2	363.4	404	498.1	581.7	652.4	520.3	505	450.8	515.3		146	346.7	620.2	690.9	507	825.5		835.1
D.O	mg/L			3.69	3.76	3.71	3.79	3.81	3.88	3.85	3.28	3.43	6.2			5.9	6.48	5.23	5.82	5.76	5.06		5.2
Rock Height in Column	mm			1497	1479	1471	1463	1460	1453	1440	1458	1458	1453.6	1375.6		1366.4	1366.8	1365.6	1363.2	1345	1315.5		
HACH, Sulfate	mg/L			800	400	400	100	100	140	250	0	39	33	50		31	25	14	18	17	76		22
HACH, Total Fe	mg/L			11	22	1	1	2			0.04	0.79	0	0.6		0.11	0.52	0.1	0	0.06	0.128		0.61
TDS	ppt			0.638	0.228	0.111	0.853	0.609	0.458	0.0392	0.0535	59.3	0.0524	0.0615		0.046	0.0415	0.0298	0.069	0.0303			
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hg	**ppb**				**6.436**	**460.671**	0.629	**4.263**	0.213	**9.419**	**219.089**					0.095	0.012	0.048	0.02	0.008	0.064	0	0.128
Ag	**mg/L**				0.014	**0.342**	0.008	0	0.001	0.005	0.04	0.001	0.007			0.001	0.002	**N/A**	**N/A**	0	**N/A**	0	**N/A**
Al	**mg/L**				0.839	3.066	1.155	0.481	0.24	0.223	0.492	0.27	0.184			0.32	0.159	0.775	0.867	0.23	0.377	0.37	0.108
As	**mg/L**				0	**0.166**	**0.086**	**0.034**	**0.026**	**0.037**	**0.082**	**0.065**	**0.182**			**0.105**	**0.04**	0	0.002	**0.039**	**0.045**	**0.039**	**0.014**
B	**mg/L**				**0.554**	**2.029**	0.163	0.042	0.258	0.228	**0.597**	0.426	0.448			0.414	0.445	0.228	**0.659**	**0.599**	**0.586**	**0.835**	0.391
Ba	**mg/L**				0.042	0	0.047	0	0.061	0.068	0.04	0.084	0.107			0.104	0.08	0.087	0.098	0.084	0.094	0.096	0.123
Be	**mg/L**				0.001	0	0	0	0	0	0.001	0	0			0	0	0	0	0	0	0	0
Bi	mg/L				0.003	0.008	0	0.003	0.001	0.004	0	0.002	0.007			0.014	0	0.001	0.015	0.004	0.005	0.009	0.001
Ca	mg/L				373.305	3.161	3.325	5.114	6.841	6.547	191.994	13.272	14.822			13.7	11.338	23.785	9.917	9.448	9.282	7.246	11.961
Cd	**mg/L**				**0.034**	0	0.002	0	0	0.004	**0.029**	**0.028**	**0.009**			**0.008**	**0.009**	0	0	0.002	0.004	0.001	0.002
Co	**mg/L**				**0.357**	0.004	0.005	0.004	0.002	0.006	**0.201**	0.001	0.001			0.002	0.007	0.032	0.007	0.004	0.006	0.003	0.001
Cr	**mg/L**				0	0.001	0.003	0.001	0	0	0.002	0.001	0			0.001	0	0.003	0	0	0	0	0
Cu	**mg/L**				**3.111**	0	0.021	0.008	0	0.009	**0.96**	**0.369**	0.035			**0.336**	0.103	**N/A**	**N/A**	0	**N/A**	0.038	**N/A**
Fe	**mg/L**				0.193	0.762	0.92	0.215	0	0.12	0.229	0.999	0.49			0.453	0.591	**14.666**	0	0	0.758	0.51	0.184
Ga	mg/L				0	0	0.006	0	0.005	0.005	0	0	0.016			0.002	0.01	0.006	0.047	0.01	0	0.016	0.008
K	mg/L				62.645	3.628	2.436	2.998	1.575	1.015	25.599	1.494	1.534			0.994	0.392	2.418	0.638	0.284	0.217	0.242	0.129
Li	mg/L				0.04	0.475	0.317	0.24	0.176	0.12	0.016	0.225	0.219			0.121	0.088	0.054	0.04	0.031	0.035	0.027	0.034
Mg	mg/L				27.405	0.624	0.508	0.763	0.866	0.842	12.592	1.174	1.413			1.609	1.317	2.042	1.395	0.983	1.149	0.919	1.136
Mn	**mg/L**				**88.52**	0.021	0.037	0.026	0.044	0.04	**88.502**	0.045	0.035			0.072	0.083	**9.267**	0.054	0.053	0.045	0.037	0.016
Mo	**mg/L**				0.005	**0.224**	0.135	0.14	0.086	0.055	0.009	0.1	0.138			0.074	0.07	0.054	0.044	0.05	0.055	0.053	0.066
Na	mg/L				57.767	37.391	17.619	10.971	6.106	4.034	4.611	6.266	5.275			2.254	1.778	1.148	1.439	0.401	0.765	1.151	0.208
Nb	mg/L				0	0.023	0	0.001	0.004	0.001	0.028	0	0.005			0.004	0.003	0.003	0	0.004	0.002	0.002	0.006
Ni	**mg/L**				0.038	0	0.004	0.003	0	0.005	0.028	0.004	0.003			0.005	0.005	0.007	0.007	0	0.005	0.002	0.002
Pb	**mg/L**				**0.08**	0.01	**0.025**	0.001	0.006	0.007	**0.18**	0	0			0.006	**0.018**	**0.03**	0	0.007	0	0	0.006
Sb	**mg/L**				0	**0.01**	**0.01**	0	0.004	**0.007**	**0.075**	**0.007**	**0.015**			0	0.005	**0.016**	**0.021**	0.006	**N/A**	0	**0.009**
Sc	mg/L				0	0	0	0	0	0	0	0	0.001			0	0	0.002	0	0	0	0	0
Se	**mg/L**				0.007	0	0	0	0	0.006	**0.07**	0.003	0			0	**0.018**	0	0.01	0	0.005	**0.013**	0
Sn	mg/L				0.024	0	0.012	0.002	0.001	0.002	0	0	0.006			0.002	0.002	0	0.002	0.003	0	0.003	0.003
Sr	mg/L				0.884	0.027	0.032	0.045	0.058	0.058	0.448	0.076	0.1			0.114	0.096	0.118	0.083	0.076	0.088	0.074	0.099
Te	mg/L				0	0.025	0	0	0.003	0	0	0	0			0.01	0	0	0	0	0.002	0	0
Ti	mg/L				0.003	0.019	0.012	0	0.003	0.001	0.001	0.003	0.001			0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.001
Tl	**mg/L**				**0.033**	0	**0.011**	0.001	**0.016**	**0.014**	**0.211**	**0.012**	**0.009**			**0.016**	**0.012**	**0.004**	**0.013**	**0.007**	0	**0.012**	**0.004**
V	**mg/L**				0.019	0	0	0.007	0.002	0.001	0	0	0			0	0	0	0.004	0	0	0	0.001
W	mg/L				0	0.369	0.145	0.075	0.072	0.04	0.093	0.028	0.066			0.038	0.034	0.021	0.017	0.031	0.023	0.012	0.033
Zn	**mg/L**				**3.595**	0.291	0.313	0.199	0.35	0.35	**2.845**	0.159	0.164			0.453	0.342	0.774	0.39	0.348	0.479	0.362	0.365

Geoloy Name:	YV9C-W22																						
Met Code:	13044																						
Composite ID	YS Cent Teut SM 1#23 HCT-03																						
Tara (kg)	0.9383																						
Initial Height of Rock in Column:	1.52 m																						
Sampled		3-Jun-11	3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13
Leachate Volume	L		0.031			0.2359	1.12117	2.0957	5.2476	1.7416	1.0477	1.6322	1.8607					1.5	0.856	0.55	1.5877	1.4683	1.2456
pH			**6.72**				**2.68**	**5.95**	**6.19**	**6.64**	**6.95**	**6.75**	**6.5**					**7.2**	**6.55**	**6.27**	**7.61**	**6.73**	**6.01**
Electrical Conductivity	ms/cm											0.0816	131.1					197.2	111.3	97.6	0.0978	0.175	0.091
Temperature	°C		13.5					13	14.2	14.2	13	13	13					17.8	17.7	19.7	15.9	20.4	18.7
Eh	mV		563.4				705.1	615.3	744.1	654.3	697.3	937.1	670.9					562.6	570.4	562.1	611.1	721	251.8
D.O	mg/L		5.5									4.83	4.38					4.08	4.6	4.3	5.48	5.78	5.89
Rock Height in Column	mm					1312.5	1311.2	1311.2	1311.1		1311	1311	1311					1310.4	1310.4	1310.4	1310.4	1310.4	1310.4
HACH, Sulfate	mg/L		41				388	33	20	55	13333.3333	20	1667					65.8	85	1400	200	200	45
HACH, Total Fe	mg/L		1.35				202.265	150	226.785	226.785	122.115	143.33	141.1					0.22	0.13	206.2	0.148	2.011	0.045
TDS	ppt																	0.097	0.046	0.048	0.048	0.09	182.311
Month Number		23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
Hg	**ppb**							0.032	0.015	0.016	0		0.103					0.018	0.02	0		0.004	0.035
Ag	**mg/L**						0.003	0.001	0	0	0.001	0.015	0.003					0	0	0		0.001	0
Al	**mg/L**						1.303	0.192	0.234	0.653	0.096	1.456	2.136					0.147	2.219	0.075		0.253	1.662
As	**mg/L**						**0.548**	0.004	0.007	**0.036**	0.005	0	0					0.009	0	0.003		**0.034**	0
B	**mg/L**						**0.734**	0.39	**0.609**	**1.502**	0.011	**4.031**	**6.735**					0.324	**5.319**	0.422		**0.564**	**4.743**
Ba	**mg/L**						0.093	0.094	0.094	0.062	0.105	0.112	0.096					0.14	0.092	0.119		0.096	0.108
Be	**mg/L**						0	0.001	0	0.002	0.001	0	0.001					0	0.001	0		0	0
Bi	mg/L						0	0.002	0.001	0	0.01	0.066	0.026					0.005	0	0		0	0.006
Ca	mg/L						36.539	13.747	11.314	15.146	11.436	13.264	11.338					23.387	14.737	14.453		14.925	19.191
Cd	**mg/L**						**0.123**	0	0	0.004	0	0	0					0.003	0	0.004		0.002	0
Co	**mg/L**						0.051	0.004	0.005	0.007	0.002	0.004	0					0.005	0	0.005		0.005	0
Cr	**mg/L**						0.036	0	0	0	0	0	0					0.007	0	0.002		0.049	0.029
Cu	**mg/L**						**7.522**	0.001	0	0.017	0.008	0.026	0.035					0.04	0	0.019		0.041	0.026
Fe	**mg/L**						**55.688**	0	0.835	0.188	0	0.695	0					0.53	0	0.78		**2.011**	0.722
Ga	mg/L						0	0	0	0	0	0.008	0.028					0	0.006	0.006		0	0
K	mg/L						2.462	0.662	0.364	1.237	0.22	0.83	0.729					0.347	0	0.096		0.394	0.572
Li	mg/L						0.06	0.032	0.02	0.016	0.018	0.011	0.014					0.022	0.017	0.018		0.017	0.013
Mg	mg/L						3.768	1.566	1.183	1.354	1.076	1.448	1.37					1.569	1.405	1.145		1.097	1.154
Mn	**mg/L**						**18.031**	**1.992**	0.393	**6.492**	0.301	0.155	0.603					**0.81**	0.059	0.063		0.075	0.136
Mo	**mg/L**						0.025	0.094	0.078	0.031	0.078	0.077	0.081					0.09	0.05	0.021		0.024	0.021
Na	mg/L						1.687	0.907	0.854	1.91	0	5.883	8.435					0.736	7.847	0.782		1.003	8.951
Nb	mg/L						0	0.002	0.002	0	0	0.009	0					0.001	0	0.001		0	0
Ni	**mg/L**						0.077	0.004	0.005	0.002	0.004	0	0.017					0.009	0	0.015		0.021	0
Pb	**mg/L**						**0.02**	**0.063**	0	0.007	0.005	**0.195**	0.002					0.009	0	0.005		0.006	**0.035**
Sb	**mg/L**						0.003	0.004	0	0	0.001	**0.021**	0					0.002	**0.069**	0		0	**0.092**
Sc	mg/L						0.001	0	0	0	0	0	0					0	0	0		0	0
Se	**mg/L**						0	0	0.002	0	**0.19**	0	**0.046**					0.002	**0.015**	0		0.003	0
Sn	mg/L						0.007	0.006	0.007	0	0.002	0	0.084					0.009	0.028	0		0.003	0.091
Sr	mg/L						0.194	0.108	0.088	0.091	0.091	0.091	0.085					0.135	0.117	0.106		0.094	0.086
Te	mg/L						0.026	0	0.011	0.825	0.002	0	0					0	0.114	0		0	0
Ti	mg/L						0.008	0.003	0.002	0.003	0.001	0.007	0.001					0.005	0.007	0.001		0.001	0.007
Tl	**mg/L**						**0.091**	**0.006**	0	0	0.001	0	**0.054**					**0.004**	0	**0.011**		0	**0.034**
V	**mg/L**						0	0	0	0	0	0	0					0	0	0		0	0
W	mg/L						0	0	0.018	0.049	0.014	0	0					0.035	0.144	0		0	0
Zn	**mg/L**						**2.023**	0.087	0.092	0.011	0.107	0.155	0.098					0.232	0	0.83		0.358	0.405

Geoloy Name:	YV9C-W22																					
Met Code:	13044																					
Composite ID	YS Cent Teut SM 1#23 HCT-03																					
Tara (kg)	0.9383																					
Initial Height of Rock in Column:	1.52 m																					
Sampled		1-Apr-13	1-May-13	3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15
Leachate Volume	L	1.0254	0.8542	0.9383	0	0	0	0.0364	0.042	2.1354	3.1984	1.6845	1.253	2.7174	1.04				2.0262	1.5139	1.0342	2.2564	2.7177
pH		6.46	6.78	6.82				7.66	2.61	3.33	7.1	7.58	7.72	7.25	3.07				4.27	6.83	6.91	3.35	7.47
Electrical Conductivity	ms/cm	0.0438	0.1784	1.585				0.3916	0.0164	0.578	0.0835	0.1146		0.0966	0.592				0.2964	0.2835	0.1412	0.325	0.0921
Temperature	°C	20	19.1	17.8				17.7	16.25	19.2	15	16	17	18	19				20.4	20.3	20.5	20.1	19
Eh	mV	213	751.4	324.7				340.9	732.3	688	727.4	144.2	657.8	667.2	712.7				648.7	207.7	246.8	749.6	711.9
D.O	mg/L	6.03	5.82	6.14				5.91	5.2	5.38	6.8	5.73			5.99				-	-	-	-	-
Rock Height in Column	mm	1310.4	1310.4	1310.4				1310.4	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4	1310.4				1310.4	1310.4	1310.4	1310.4	1310.4
HACH, Sulfate	mg/L	200	17500	200				200	300	200	200		200	200	200				200	200	200	200	200
HACH, Total Fe	mg/L	491	360.08	449.48				255.528	537.75	44.92	684.67	490	270.112	541.53	309.729				548.37	962.72	722.04	361.02	421.19
TDS	ppt	0	0.1	0.8				0.14	0.6	0.053	0	0.056		0	0.3				0.1	0.1	0.1	0.2	0
Month Number		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
Hg	ppb	0.001	0.023	0						0		0	0	0.047	N/A				0	0.013	0	0.027	0.032
Ag	mg/L	0	0.109	0.013						0.001	0.002	0	0	0	0				0	0.045	0	0	0
Al	mg/L	2.028	19.91	2.094						0.629	0.503	0.126	0.633	0.695	0.589				0.475	2.004	0.153	0.813	0.499
As	mg/L	0.096	0.542	0.05						0.014	0	0.004	0	0	0.038				0.071	0.057	0.03	0.063	0
B	mg/L	6.044	49.771	4.425						1.728	2.158	0.451	1.456	1.726	0.44				1.556	2.48	0.469	2.044	1.174
Ba	mg/L	0.053	0.145	0.081						0.085	0.099	0.027	0.1	0.054	0.05				0.09	0.027	0.095	0.112	0.101
Be	mg/L	0.002	0	0						0	0	0	0.001	0	0.001				0.001	0.002	0	0	0.001
Bi	mg/L	0	0	0						0.036	0.029	0.006	0	0	0.009				0.045	0.007	0.014	0.015	0
Ca	mg/L	12.031	34.024	14.423						9.916	13.694	4.83	17.269	13.906	18.361				23.209	92.772	20.663	18.455	13.688
Cd	mg/L	0	0	0.001						0	0	0	0	0	0.013				0	0.209	0.002	0.007	0
Co	mg/L	0	0	0.002						0	0	0	0.001	0	0.02				0.001	0.035	0	0.014	0
Cr	mg/L	0.016	0.007	0.097						0.002	0.015	0	0	0	0.005				0.031	0	0.001	0.009	0
Cu	mg/L	0.273	0.139	0.066						0	0	0	0	0.036	0.481				0.088	2.041	0.059	0	0
Fe	mg/L	0.968	12.8	0.976						0.293	0.302	0.29	2.326	0.421	9.376				0.573	9.59	1.404	1.181	0
Ga	mg/L	0	0.499	0.031						0.007	0.009	0.002	0	0	0				0	0.007	0	0.016	0
K	mg/L	0.836	14.34	1.111						0.528	0.493	0.06	1.024	0.706	0.515				0.436	131.384	2.399	0.97	2.104
Li	mg/L	0.013	0.037	0.013						0.012	0.015	0.004	0.012	0	0.011				0.017	0.009	0.016	0.014	0.009
Mg	mg/L	0.911	3.203	1.06						0.713	0.886	0.291	1.08	0.884	1.083				1.422	6.413	1.171	1.115	0.788
Mn	mg/L	0.053	0.126	0.15						0.023	0.016	0.015	0.025	0.046	3.921				0.163	6.794	0.009	0.02	0.01
Mo	mg/L	0.064	0	0.053						0.073	0.098	0.024	0.086	0.041	0.003				0.005	0	0.007	0.019	0.082
Na	mg/L	8.744	91.39	7.754						2.403	3.282	0.925	2.458	2.88	0.757				2.448	6.186	1.049	3.515	1.769
Nb	mg/L	0.017	0	0.01						0.004	0	0	0.006	0.003	0.002				0	0	0.003	0.007	0.012
Ni	mg/L	0.047	0	0.016						0.002	0.008	0.005	0	0	0.023				0.014	0.068	0.002	0	0
Pb	mg/L	0.067	0.093	0.033						0.023	0.021	0	0	0.011	0.02				0.009	0	0.008	0.028	0
Sb	mg/L	0.102	0.341	0.063						0	0	0.001	0	0.014	0.007				0	0	0.023	0	0
Sc	mg/L	0	0.001	0						0	0	0	0	0	0				0	0	0	0	0
Se	mg/L	0	0.278	0.002						0.032	0	0	0	0.037	0.002				0	0	0.02	0	0.037
Sn	mg/L	0.038	0	0						0.004	0	0	0.006	0	0				0.008	0	0.002	0.021	0.03
Sr	mg/L	0.083	0.122	0.086						0.065	0.081	0.029	0.096	0.06	0.111				0.123	1.803	0.113	0.107	0.084
Te	mg/L	0.042	0.16	0.201						0	0	0	0	0	0				0	0	0	0	0.03
Ti	mg/L	0.005	0.053	0.014						0.003	0	0	0	0	0				0.003	0.003	0.001	0.002	0
Tl	mg/L	0.106	0	0.073						0.023	0	0	0	0	0.024				0	0	0.011	0	0.016
V	mg/L	0	0.161	0						0	0	0	0	0	0				0	0	0	0	0
W	mg/L	0.052	0.029	0.179						0	0	0	0.012	0.017	0				0	0	0	0	0.038
Zn	mg/L	0	0	0						0	0	0	0	0	1.191				0.033	16.248	0	0	0

Geoloy Name:	YV9C-W22																					
Met Code:	13044																					
Composite ID	YS Cent Teut SM I #23 HCT-03																					
Tara (kg)	0.9383																					
Initial Height of Rock in Column:	1.52 m																					
Sampled		2-Feb-15	2-Mar-15	2-Apr-15	2-May-15	2-Jun-15	1-Jul-15	1-Aug-15	2-Sep-15	3-Oct-15	2-Nov-15	1-Dec-15	3-Jan-16	3-Feb-16	2-Mar-16	1-Apr-16	2-May-16	2-Jun-16	1-Jul-16	2-Aug-16	3-Set-16	3-Oct-16	1-Nov-16
Leachate Volume	L	2.1638	4.0628	0.7797	1.1673								0.6306	1150	3005.5	1694.2	0.96					1.72	2.07
pH		7.48	7.5	**8.13**	**7.31**								**7.51**	**6**	**7.32**	**8.36**	**8.4**					**6.77**	**6.54**
Electrical Conductivity	ms/cm	0.0499	0.095	0.166	0.1953								0.1263	0.2013	0.1957	0.1623	0.1703					155.3	163.4
Temperature	°C	20.3	18.7	17.8	17								18.52	17	20	20.5	13					13	18
Eh	mV	630.15	705.2	496.5	471.3								612.13	452.3	236.7	343.8	580.6					588.3	340.5
D.O	mg/L	-	-	-	-									-									
Rock Height in Column	mm	1310.4	1310.4	1310.4	1310.4								1310.4	1310.4	1310.4	1310.4	1310.4					1310.4	1310.4
HACH, Sulfate	mg/L	700	1000	200	200								800	-	200	200	200					0	0
HACH, Total Fe	mg/L	246.175	343.5	297.7	383.575								412.2	-	188.925	160.3	229					286.25	211.825
TDS	ppt	0	0	0.1	0.1								0.1	0.1	0.1	0.1	0.1					0.1	0.1
Month Number		67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
Hg	**ppb**	0.211	0.023	**N/A**	**N/A**								0.035		0.173	0	0						
Ag	**mg/L**	0.071	0	0.003	0.004								0		0	0	0						
Al	**mg/L**	27.269	1.006	0.974	0.985								0.987		2.025	1.913	1.274						
As	**mg/L**	0	0	**0.066**	**0.075**								0		**0.212**	**0.211**	**0.104**						
B	**mg/L**	3.059	2.966	**3.101**	**3.173**								2.135		**4.248**	**5.224**	**2.926**						
Ba	**mg/L**	0.105	0.089	0.153	0.106								0.135		0.074	0.067	0.097						
Be	**mg/L**	0.061	0.003	0	0								0.002		**0.006**	0.004	0						
Bi	mg/L	0.232	0	0	0								0		0	0.01	0						
Ca	mg/L	306.14	9.976	33.727	24.429								10.256		19.779	21.298	28.767						
Cd	**mg/L**	0.313	0	0.003	0.005								0		0.001	0	0						
Co	**mg/L**	0.244	0.002	0	0								0		0	0	0.003						
Cr	**mg/L**	0.016	0	0.01	0.003								0		0.014	0	0.08						
Cu	**mg/L**	31.875	0	0.052	0.043								0		0.15	0	**0.327**						
Fe	**mg/L**	41.736	0	0.076	0.192								0		0	0.112	0.247						
Ga	mg/L	0	0	0	0								0		0.005	0.024	0						
K	mg/L	1.569	0.647	0.88	3.417								0.745		11.278	1.575	15.034						
Li	mg/L	0.022	0.006	0.013	0.01								0.009		0.01	0	0.013						
Mg	mg/L	17.129	0.62	1.285	2.085								1.025		1.175	0.798	1.377						
Mn	**mg/L**	638.19	0.016	0.006	0.01								0.01		0.039	0	0.017						
Mo	**mg/L**	0.045	0.042	0.099	0.063								0.061		0.083	0.071	0.066						
Na	mg/L	5.006	3.668	4.591	4.354								1.985		6.145	7.472	5.252						
Nb	mg/L	0	0.012	0	0.001								0.012		0.078	0.025	0.034						
Ni	**mg/L**	0.148	0	0.01	0.01								0		0	0	0.016						
Pb	**mg/L**	0.1	0.003	0	0								0		0	0	**0.087**						
Sb	**mg/L**	0	0	**0.016**	0								0		0	**0.058**	0						
Sc	mg/L	0.007	0	0	0								0		0	0.001	0						
Se	**mg/L**	0.257	0	0	0								0		0	0	0						
Sn	mg/L	0.02	0.053	0.05	0.071								0.03		0	0	0.044						
Sr	mg/L	0.49	0.053	0.126	0.101								0.084		0.094	0.079	0.114						
Te	mg/L	0.022	0.001	0.007	0								0.03		0.003	0	0						
Ti	mg/L	0.006	0.007	0.002	0.002								0.005		0	0.006	0.01						
Tl	**mg/L**	0	0.053	0	0								0.016		0	0	0.002						
V	**mg/L**	0	0	0	0								0		0	0	0						
W	mg/L	0	0	0	0								0.038		0.254	0	0						
Zn	**mg/L**	89.556	0	0	0								0		0	0	0						

Muestra 13046

Geoloy Name:	YV9C-W51																					
Met Code:	13046																					
Composite ID	YS Cent Teut SM A #11																					
Tara (kg)	0.9385																					
Initial Height of Rock in Column:	1.48 m																					
Sampled		3-Aug-09	1-Sep-09	2-Oct-09	3-Nov-09	1-Dec-09	2-Jan-10	3-Feb-10	2-Mar-10	3-Apr-10	1-May-10	3-Jun-10	3-Jul-10	1-Aug-10	2-Sep-10	3-Oct-10	1-Nov-10	1-Dec-10	3-Jan-11	1-Feb-11	3-Mar-11	1-Apr-11	3-May-11	3-Jun-11
Leachate Volume	L	0.000	0.000	0.000	4.027	2.299	3.615	0.5242	2.3075	3.0701	0.6975	0.012	0.017	0.006		1.689	2.2542	3.8679	2.4621	3.3126	3.456	0.946	0.0276	
pH					4.18	5.21	5.47	5.38	5.17	4.79	4.5	7.09				5.14	5.01	4.53	5.43	5.18	4.25		4.71	
Electrical Conductivity	ms/cm				1.762	1.48	1.128	0.1542	1.226	1.141	1.461					0.227	1.278	1.033	0.654	0.993				
Temperature	°C				18.7	18.8	18.2	17.9	15.6	16	17.2	16.9				17.1	15.1	15.4	17.2	10.7	14.2		15.5	
Eh	mV				260.9	418.2	448.3	571.5	600	676.8	509.2	286.5				357.2	460	616.4	600.1	470.2	794.5		813.3	
D.O	mg/L				3.82	3.74	3.85	3.74	3.82	3.77	3.36	1.62				5.94	6.37	6.4	5.74	5.38	5.52		5.28	
Rock Height in Column	mm				1489	1468	1445	1423	1412	1390	1386	1386	1383.6	1369.6		1367.9		1365.8	1364.2	1345	1312			
HACH, Sulfate	mg/L				1600	1500	650	900	700	1000	1050	1000				1300	1050	1000	575	1000	1000		1225	
HACH, Total Fe	mg/L				37	2	0.5	3			0.14					0.03	0.12	0.10	0	0.05	0.056		0.12	
TDS	ppt				0.879	0.734	0.562	0.774	0.61	0.57	0.716					0.114	0.639	0.516	0.328	0.498				
Month Number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hg	ppb				7.146	1.742	0.156	4.315	0.325	5.648	27.444					0.032	0.01	0.035	0.021	0.025	0.435	0		
Ag	mg/L				0.006	0.305	0.011	0.005	0.009	0.011	0.073					0.014	0.014	N/A	N/A	0.007	N/A	0.02		
Al	mg/L				124.316	2.046	0.417	0.928	0.674	0.32	12.709					1.225	1.384	0.561	0.759	0.78	0.731	1.066		
As	mg/L				0.022	0.052	0	0	0.000	0	0.067					0.042	0.024	0	0	0.013	0	0.002		
B	mg/L				0.457	1.982	0.201	0.164	0.295	0.332	0.514					0.499	0.404	0.268	0.554	0.541	0.656	0.873		
Ba	mg/L				0.067	0	0.024	0	0.015	0.019	0.028					0.023	0.014	0.006	0.016	0.013	0.014	0.014		
Be	mg/L				0.001	0.001	0.001	0.001	0.001	0.001	0.001					0.002	0.003	0.001	0	0.002	0.001	0.002		
Bi	mg/L				0	0.006	0.003	0.008	0.002	0	0					0.046	0.005	0.013	0.009	0.007	0.007	0.01		
Ca	mg/L				97.162	240.047	162.424	267.974	199.036	144.027	65.618					283.647	242.856	92.105	37.06	161.891	171.463	178.128		
Cd	mg/L				0.261	0.019	0.026	0.027	0.000	0.018	0.069					0.061	0.037	0	0.007	0.024	0.029	0.033		
Co	mg/L				8.309	0.247	0.182	0.284	0.198	0.147	0.335					0.306	0.292	0.12	0.083	0.203	0.195	0.211		
Cr	mg/L				0.076	0	0	0	0.000	0	0.002					0	0	0	0.001	0	0	0.001		
Cu	mg/L				28.413	3.489	1.302	1.603	1.006	0.881	276.141					2.369	2.847	N/A	N/A	1.806	N/A	2.213		
Fe	mg/L				19.013	0	0.137	0	0.000	0.197	3.116					0.407	0.259	0	0	0	0.115	0.677		
Ga	mg/L				0.011	0	0	0	0.000	0	0					0	0	0	0.02	0	0	0		
K	mg/L				15.266	42.551	35.781	60.183	42.902	32.145	1.688					39.237	41.901	15.365	15.31	29.406	27.987	27.175		
Li	mg/L				0.176	0.015	0.011	0.011	0.010	0.009	0.024					0.026	0.023	0.007	0.007	0.011	0.014	0.017		
Mg	mg/L				5.211	17.63	11.147	17.327	13.259	9.798	9.913					20.449	16.865	6.087	4.401	10.499	9.898	10.552		
Mn	mg/L				1.872	67.732	54.674	98.102	76.230	57.164	0.982					137.345	141.01	60.831	40.993	109.293	107.119	117.768		
Mo	mg/L				0.002	0.013	0	0.002	0.000	0	0					0	0	0	0	0	0	0.002		
Na	mg/L				10.542	33.669	18.768	15.511	9.089	5.309	2.213					16.56	3.465	1.198	1.522	1.551	1.608	2.114		
Nb	mg/L				0	0.012	0	0	0.001	0	0					0.001	0.002	0.003	0	0.009	0	0.004		
Ni	mg/L				3.566	0.022	0.02	0.023	0.008	0.014	0.214					0.045	0.032	0.011	0.01	0.022	0.025	0.024		
Pb	mg/L				0.696	0.083	0.082	0.072	0.128	0.102	0.094					0.338	0.323	0.107	0.037	0.298	0.203	0.273		
Sb	mg/L				0	0.018	0.002	0	0.000	0	0					0	0.011	0	0	0	0	0.005		
Sc	mg/L				0.03	0	0	0	0.000	0	0.007					0	0	0	0	0	0	0		
Se	mg/L				0	0	0	0.022	0.037	0.032	0.029					0.079	0.062	0.014	0	0.016	0.031	0.036		
Sn	mg/L				0.023	0.015	0.013	0	0.001	0.002	0					0.048	0.009	0.014	0.014	0.002	0.004	0.005		
Sr	mg/L				0.496	0.516	0.353	0.561	0.416	0.311	0.256					1.382	0.555	0.179	0.09	0.375	0.366	0.39		
Te	mg/L				0	0.016	0	0	0.003	0	0					0	0	0	0	0	0.002	0		
Ti	mg/L				0.003	0.001	0.002	0	0.000	0	0					0.001	0.001	0.001	0.002	0.001	0.001	0.002		
Tl	mg/L				0.039	0	0.026	0.013	0.031	0.026	0.04					0.039	0.012	0.002	0.008	0.012	0	0.001		
V	mg/L				0.024	0	0	0.008	0.000	0	0.001					0	0	0	0.005	0	0	0		
W	mg/L				0	0.092	0	0	0.000	0	0.104					0.018	0	0.002	0	0	0	0		
Zn	mg/L				5.646	2.652	1.857	3.271	2.720	2.304	0.677					9.254	6.91	2.886	2.375	6.017	6.334	6.846		

Geoloy Name:	YV9C-W51																						
Met Code:	13046																						
Composite ID	YS Cent Teut SM A #11																						
Tara (kg)	0.9385																						
Initial Height of Rock in Column:	1.48 m																						
Sampled		3-Jul-11	3-Aug-11	3-Sep-11	1-Oct-11	3-Nov-11	3-Dec-11	1-Jan-12	3-Feb-12	1-Mar-12	1-Apr-12	2-May-12	2-Jun-12	1-Jul-12	2-Aug-12	1-Sep-12	2-Oct-12	3-Nov-12	1-Dec-12	2-Jan-13	2-Feb-13	1-Mar-13	1-Apr-13	1-May-13
Leachate Volume	L				0.2519	1.59876	0.6354	4.3726		1.8312	1.1074	2.0957					1.52	0.85	0.525	1.72	1.72	2.2903	2.0842	1.2654
pH						**3.7**	**3.45**	**4.4**			**4.16**	**3.98**					**3.41**	**3.63**	**3.51**	**3.44**	**3.29**	**3.29**	**3.11**	**2.99**
Electrical Conductivity	ms/cm										0.0032	5.38					7.16	4.01	3.39	3.87	1821	1432	1371	3.63
Temperature	°C						13	14.2			13	13					17.8	17.6	19.8	15.9	20.3	18.3	20	19.5
Eh	mV					688.5	709.3	758.7			1017.8	684.3					781.2	748.3	768.8	812.4	774.1	426.8	415.6	704.5
D.O	mg/L										4.9	4.54					4.64	4.7	4.68	5.78	6.28	5.87	6.06	5.8
Rock Height in Column	mm				1308.9	1307.6	1307.4	1307.3		1307.1	1307.1	1307.1					1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4
HACH, Sulfate	mg/L					1325	2500	1625			5500	13333					5995.6	4600	5000	3500	3700	5000	3300	20000
HACH, Total Fe	mg/L					138.696	150	290.75			143.33	141.05					0.6	0.25	191.4	14.08	12.42	247	313.5	271.54
TDS	ppt																0.351	1.631	1.662	1.898	0.89	0.76	0.7	1.9
Month Number		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Hg	**ppb**				0.438		0.143	0.008				0.05					0.053	0.011	0		0.011	0.062	0.002	0
Ag	**mg/L**				0.063	0.031	0.055	0.042			**0.204**	0.164					**0.287**	0.151	0.163		0.148	0.119	0.101	**0.222**
Al	**mg/L**				**11.198**	1.662	1.862	2.119			**67.259**	**40.776**					**140.955**	**62.267**	**47.806**		**51.761**	**52.084**	**46.838**	**68.923**
As	**mg/L**				**1.774**	**0.032**	0	0			0	0					0	0	0		0	0	**0.174**	0
B	**mg/L**				**1.061**	**0.698**	0.38	**0.539**			**4.733**	**5.664**					0.278	**5.822**	0.49		**0.562**	**4.787**	**5.378**	**45.644**
Ba	**mg/L**				0.067	0.041	0.019	0.012			0.026	0.004					0.01	0	0.011		0.009	0.037	0	0.259
Be	**mg/L**				**0.007**	0.003	**0.04**	**0.005**			**0.907**	**0.061**					**0.164**	**0.087**	**0.075**		**0.088**	**0.082**	**0.064**	**0.071**
Bi	mg/L				0.048	0	0	0.014			0	0					0.079	0	0.02		0.058	0.081	0	0.276
Ca	mg/L				392.646	237.456	361.126	230.274			537.164	483.08					360.285	413.736	417.431		435.811	490.787	485.492	545.138
Cd	**mg/L**				**0.973**	**0.064**	**0.106**	**0.079**			**0.554**	**0.393**					**0.845**	**0.404**	**0.369**		**0.331**	**0.265**	**0.212**	**0.36**
Co	**mg/L**				**0.654**	**0.274**	**0.485**	**0.324**			**1.134**	**0.909**					**1.289**	**0.699**	**0.581**		**0.538**	**0.492**	**0.429**	**0.635**
Cr	**mg/L**				0.044	0.004	0.002	0			0	0					0.009	0	0.004		0.045	0.02	0.022	**0.165**
Cu	**mg/L**				**11.746**	**4.142**	**7.556**	**6.637**			**65.343**	**38.845**					**77.711**	**41.775**	**33.193**		**32.302**	**25.362**	**24.533**	**23.525**
Fe	**mg/L**				**230.358**	**8.671**	**4.197**	0.929			0.918	0					**10.781**	0.323	**10.97**		**12.415**	**21.446**	**10.451**	**23.399**
Ga	mg/L				0	0	0	0			0	0					0	0	0		0	0	0	0
K	mg/L				42.55	23.203	40.979	30.883			25.731	21.236					20.623	9.846	10.308		8.428	5.411	4.968	19.073
Li	mg/L				0.026	0.035	0.023	0.02			0.044	0.04					0.059	0.035	0.033		0.035	0.028	0.023	0.082
Mg	mg/L				26.818	15.074	21.78	15.648			50.227	42.865					66	36.092	32.394		31.903	25.984	23.009	27.537
Mn	**mg/L**				**465.5**	**192.258**	**430.021**	**250.757**			**1176.748**	**1019.83**					**2232.784**	**1040.466**	**1078.174**		**1158.753**	**818.314**	**739.68**	**915.659**
Mo	**mg/L**				0.012	0.006	0	0			0	0.015					0	0	0		0	0.012	0	0.11
Na	mg/L				4.04	2.853	2.64	1.953			9.599	10.869					1.875	9.29	1.59		1.852	9.584	9.327	78.968
Nb	mg/L				0	0.003	0	0			0	0					0	0	0		0	0	0.008	0
Ni	**mg/L**				**0.206**	0.057	0.094	0.062			**0.349**	**0.309**					**0.427**	0.186	**0.203**		0.194	0.171	0.186	0.049
Pb	**mg/L**				**0.788**	**0.11**	**0.221**	**0.367**			**1.148**	**0.472**					**0.317**	**0.165**	**0.185**		**0.17**	**0.29**	**0.259**	**0.697**
Sb	**mg/L**				0	0	0	0			0	0					0	0	0		0	0	0	0
Sc	mg/L				0	0	0	0			0	0					0.02	0.006	0.006		0.01	0.008	0	0.006
Se	**mg/L**				**0.088**	**0.052**	**1.059**	**0.053**			**3.842**	**0.23**					**0.394**	**0.465**	**0.252**		**0.227**	**0.111**	**0.317**	**0.919**
Sn	mg/L				0.012	0.012	0.005	0.003			0.096	0.005					0	0.007	0.003		0	0.041	0.049	0.16
Sr	mg/L				1.032	0.531	0.771	0.507			1.185	1.015					0.956	0.73	0.729		0.758	0.774	0.828	0.985
Te	mg/L				0.033	0.004	0.034	0.006			0	0					0.033	0.152	0		0.003	0	0.014	0.681
Ti	mg/L				0.084	0.002	0.007	0.002			0.007	0.001					0.002	0.007	0.001		0.001	0.008	0.006	0.054
Tl	**mg/L**				**0.282**	**0.004**	**0.169**	**0.104**			**0.483**	**0.386**					**0.544**	**0.25**	**0.412**		**0.282**	**0.361**	0	**0.449**
V	**mg/L**				0.009	0	0	0			0	0					0	0	0		0	0	0	0.033
W	mg/L				0	0	0	0			0	0					0	0.053	0		0	0	0	0.04
Zn	**mg/L**				**25.348**	**14.032**	**23.736**	**19.243**			**128.184**	**98.916**					**112.88**	**109.404**	**71.682**		**71.451**	**82.873**	**66.858**	**85.538**

Geoloy Name:	YV9C-W51
Met Code:	13046
Composite ID	YS Cent Test SM A #11
Tara (kg)	0.9385
Initial Height of Rock in Column:	1.48 m

Sampled		3-Jun-13	1-Jul-13	1-Aug-13	3-Sep-13	3-Oct-13	1-Nov-13	2-Dec-13	1-Jan-14	3-Feb-14	1-Mar-14	1-Apr-14	3-May-14	3-Jun-14	1-Jul-14	1-Aug-14	1-Sep-14	3-Oct-14	1-Nov-14	2-Dec-14	3-Jan-15	2-Feb-15	2-Mar-15
Leachate Volume	L	0.7541	0	0.0164	0	0.024	0.035	1.8245	3.2841	1.8643	2.303	2.9051	1.3				2.2256	1.6346	1.2304	2.6108	3.118	2.3097	4.4524
pH		2.89		1.81		2.76	2.7	2.7	2.4	2.63	2.73	2.68	2.82				2.45	2.51	2.55	2.61	2.72	2.71	2.75
Electrical Conductivity	ms/cm	1649		4.58		5.14	5.33	5.03	4.7	5.65		4.71	4.84				7.22	6.86	6.82	6.25	4.78	2.591	4.43
Temperature	°C	17.8		15		17.8	16.3	18.9	15	15.6	17	18	19				20.5	20.1	20.5	20.1	18.7	20.3	18.7
Eh	mV	605.8		777.2		769.7	768.6	535.2	797.3	471.8	749.2	668.7	743.8				788.4	722.6	747.1	796.1	793.5	720.1	762.5
D.O	mg/L	6.18		5.83		5.89	5.18	5.4	6.55	5.67			5.81				-	-	-	-	-	-	-
Rock Height in Column	mm	1306.4		1306.4		1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4				1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4
HACH, Sulfate	mg/L	3400		4700		5700	4400	5000	4800		3800	4200	3800				9100	7500	7500	6500	4800	5000	4500
HACH, Total Fe	mg/L	294.31		867.3		344.62	358.5	122.78	430.19	730	334.704	541.53	322.371				8652.06	842.38	1805.1	661.87	601.7	722.04	902.55
TDS	ppt	0.8		2.4		3.11	2.8	2.74	2.5	2.767		2.5	2.6				3.9	3.7	3.7	3.4	2.5	1.3	2.3
Month Number		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Hg	ppb	0						0		0	0.14	0.12	N/A				0.018	0.223	0.054	0.027	0.034	0.083	0.092
Ag	mg/L	0.129						0.154	0.111	0.037	0.096	0.11	0.099				0.212	0.334	0.218	0.273	0.133	0.002	0.121
Al	mg/L	49.359						62.607	84.788	24.511	54.601	57.16	46.903				132.969	129.578	116.933	87.669	54.38	1.571	43.783
As	mg/L	0						0.075	0	0	0	0	0				0	0.143	0	0.114	0	0	0
B	mg/L	4.06						1.469	2.184	0.395	1.024	1.254	0.219				0.279	1.885	0	1.775	1.045	3.435	3.612
Ba	mg/L	0.016						0	0.01	0.002	0	0	0.008				0.019	0	0.015	0.004	0.011	0.044	0.01
Be	mg/L	0.073						0.072	0.102	0.028	0.066	0.067	0.054				0.142	0.147	0.118	0.114	0.079	0.002	0.098
Bi	mg/L	0						0.072	0.075	0.036	0.07	0.023	0.096				0.049	0.119	0.1	0.026	0.074	0	0.026
Ca	mg/L	453.548						307.868	453.649	119.857	403.626	396.809	409.617				443.741	409.573	374.5	407.855	376.488	6.888	459.426
Cd	mg/L	0.283						0.358	0.472	0.142	0.397	0.399	0.412				0.943	0.97	0.926	0.863	0.604	0	0.511
Co	mg/L	0.505						0.511	0.696	0.198	0.55	0.492	0.464				0.97	0.965	0.815	0.772	0.493	0.004	0.401
Cr	mg/L	0.094						0.015	0.032	0.004	0.007	0	0.007				0.084	0.032	0.027	0.04	0.009	0.003	0.003
Cu	mg/L	24.842						27.947	38.712	12.554	31.269	35.748	31.674				71.958	73.161	73.638	64.311	54.528	0	52.861
Fe	mg/L	45.44						90.989	132.464	39.709	78.056	101.426	72.3				409.159	349.723	282.204	175.101	86.782	0	66.944
Ga	mg/L	0						0	0	0	0	0	0				0	0	0	0	0	0	0
K	mg/L	4.52						1.345	1.905	0.322	1.631	34.109	1.275				0.68	4.308	1.615	2.237	1.361	0.705	1.352
Li	mg/L	0.023						0.024	0.03	0.009	0.025	0.009	0.026				0.039	0.035	0.039	0.03	0.021	0.002	0.018
Mg	mg/L	25.075						27.388	38.656	11.403	30.118	32.056	29.359				55.16	54.338	51.486	46.594	33.707	0.424	26.477
Mn	mg/L	839.526						857.694	1533.118	354.232	1035.116	1066.636	N/A				2007.887	1891.241	2086.67	1647.895	1277.168	11.337	1001.352
Mo	mg/L	0						0	0	0	0	0	0				0	0	0	0.002	0	0	0.029
Na	mg/L	8.913						3.768	4.607	1.224	3.08	3.693	1.303				3.068	4.639	1.609	4.522	2.633	4.189	5.173
Nb	mg/L	0						0	0	0	0.008	0	0				0	0	0	0	0	0.016	0
Ni	mg/L	0.18						0.195	0.298	0.09	0.242	0.216	0.222				0.508	0.456	0.406	0.366	0.259	0.005	0.232
Pb	mg/L	0.208						0.168	0.176	0.046	0.154	0.128	0.118				0.218	0.242	0.179	0.216	0.13	0	0.183
Sb	mg/L	0						0	0	0	0	0	0				0	0	0	0	0	0.026	0
Sc	mg/L	0.017						0.014	0.028	0.007	0.012	0.015	0.01				0.072	0.059	0.043	0.02	0.012	0	0.012
Se	mg/L	0.415						0.23	0.507	0.098	0.277	0.356	0.149				0.399	0.65	0.436	0.432	0.348	0	0.195
Sn	mg/L	0						0.005	0	0	0.02	0.009	0				0.002	0.023	0	0.031	0.024	0.038	0
Sr	mg/L	0.856						0.669	0.881	0.259	0.781	0.78	0.742				1.104	0.944	0.857	0.817	0.676	0.008	0.645
Te	mg/L	0.202						0	0	0	0.002	0	0				0.081	0.016	0.005	0	0.024	0.035	0.014
Ti	mg/L	0.007						0.005	0	0	0	0	0				0.003	0.006	0.001	0.006	0	0.006	0.004
Tl	mg/L	0.39						0.022	0.734	0.154	0.357	0.457	0.396				0.856	0.104	0.715	0.082	0.64	0	0
V	mg/L	0						0	0	0	0	0	0				0.008	0.086	0.028	0.064	0	0	0
W	mg/L	0.027						0	0	0	0	0	0				0	0	0	0	0	0.033	0
Zn	mg/L	80.279						87.737	125.214	35.253	96.966	108.506	78.101				194.353	216.422	121.916	195.665	125.015	1.433	134.016

APÉNDICE 8

Reporte de Análisis del Laboratorio Analítico de MYSRL

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.035	N/A	0.059	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	32.51	N/A	23.507	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	0.721	N/A	0.491	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	0	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	0.086	N/A	0.049	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	0.01	N/A	0.003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	0	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	371.152	N/A	243.445	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	124.016	N/A	142.619	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	140.087	N/A	233.013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	3.329	N/A	2.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	19.917	N/A	16.088	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	2820	N/A	5959	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	0.339	N/A	0.613	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	0.082	N/A	0.137	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	4.158	N/A	7.256	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	4.726	N/A	1.678	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	38.922	N/A	25.101	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	55.511	N/A	29.419	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	0	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	59.662	N/A	113.296	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	0	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	53.415	N/A	56.922	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/08/2009

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.727	N/A	2.113	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	0.044	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	0.021	N/A	0.013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	0	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	0.022	N/A	0.028	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.096	N/A	0.104	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	0.579	N/A	1.022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	0.038	N/A	0.003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	1.87	N/A	8.024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	0.207	N/A	0.369	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	0	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	74.266	N/A	48.532	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
02/10/2009

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
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Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
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Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/11/2009

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.029	0.023	0.01	0.022	0.017	0.011	0.01	0.011	0.051	0.015	0.026	0.024	0.008	0.006	0.005	0.014	0.006
Al	mg/L	3.044	53.129	0.451	38.469	13.351	0.418	143.955	207.307	2.811	28.789	23.385	2.545	50.016	0.253	1.739	0.839	124.316
As	mg/L	0.184	193.981	0.182	0.036	0.016	0	0.036	0.004	0	0	0	0	194.475	0.059	0.113	0	0.022
B	mg/L	0.349	0	0.282	0.525	0.426	0.372	0.528	0.606	0.545	0.555	0.517	0.623	0	0.515	0.537	0.554	0.457
Ba	mg/L	0.025	0.231	0.013	0.045	0.03	0.018	0.069	0.057	0.033	0.049	0.033	0.064	0.158	0.068	0.028	0.042	0.067
Be	mg/L	0.003	0.003	0.001	0.001	0.001	0	0.001	0.002	0	0	0	0	0.001	0	0	0.001	0.001
Bi	mg/L	0	0	0	0	0	0	0.013	0.002	0	0	0	0	0	0.011	0.007	0.003	0
Ca	mg/L	118.259	539.839	47.973	91.546	89.556	60.108	102.748	124.565	176.277	135.798	94.241	168.952	334.759	194.975	13.059	373.305	97.162
Cd	mg/L	74.697	129.309	61.522	0.323	0.033	5.145	0.715	0.813	0.771	0.022	0.065	0.014	186.234	0.028	0.001	0.034	0.261
Co	mg/L	46.479	205.685	37.08	1.093	1.97	9.735	6.255	11.49	3.671	2.682	3.658	2.333	143.711	0.024	0.014	0.357	8.309
Cr	mg/L	0.704	24.422	0.085	0.029	0.146	0.034	0.015	0.039	0	0.011	0	0	23.922	0	0	0	0.076
Cu	mg/L	23.976	42.913	1.874	117.692	82.356	3.2	2.294	23.499	816.969	162.468	376.796	146.723	29.64	3.547	0.265	3.111	28.413
Fe	mg/L	82.473	1890	39.78	5.29	8.268	2.659	26.668	25.109	0.192	4.442	3.034	0.218	N/A	0.149	0.579	0.193	19.013
Ga	mg/L	0	2.343	0	0.004	0	0	0.008	0.013	0.004	0.003	0.006	0.004	3.678	0	0.004	0	0.011
Hg	ppb	12.669	4.92	3.653	7.281	7.389	8.415	8.654	11.418	11.433	9.891	11.996	18.243	3.951	5.336	4.816	6.436	7.146
K	mg/L	0.516	4.832	0.342	75.118	5.659	2.566	82.553	73.773	12.887	18.819	12.417	13.519	3.906	15.964	6.389	62.645	15.266
Li	mg/L	2.087	0.628	0.225	0.299	1.44	0.342	0.917	0.822	1.064	0.243	0.188	0.508	1.719	0.012	0.9	0.04	0.176
Mg	mg/L	13.038	18.162	4.615	8.376	10.042	7.432	8.628	10.809	25.839	13.721	8.8	27.465	12.17	16.939	1.814	27.405	5.211
Mn	mg/L	30.183	22.526	6.583	8.847	12.228	19.815	1.909	3.383	9.978	3.757	1.824	4.072	21.387	5.17	0.092	88.52	1.872
Mo	mg/L	0.002	0.025	0.004	0.014	0.003	0.005	0.005	0.006	0.003	0.003	0.006	0.004	0	0.01	0.293	0.005	0.002
Na	mg/L	24.756	85.707	14.595	80.93	50.669	25.418	47.962	42.587	60.159	77.175	43.821	83.315	56.197	139.045	83.654	57.767	10.542
Nb	mg/L	0	0	0.005	0	0	0	0.011	0	0	0	0	0	0	0	0.008	0	0
Ni	mg/L	20.089	58.954	9.003	0.602	1.404	3.712	2.01	3.483	1.26	1.759	1.94	1.247	40.684	0.022	0.002	0.038	3.566

Yanacocha

Fecha de Publicación:
03/11/2009

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.889	2.297	2.189	1.258	0.056	1.337	2.372	2.23	0.225	0.043	0.109	0.04	3.875	0	0.012	0.08	0.696
Sb	mg/L	0.079	0	0	0	0	0.005	0.007	0	0	0	0	0	0	0	0.017	0	0
Sc	mg/L	0.003	0.049	0	0.002	0.003	0	0.008	0.016	0.004	0.012	0.019	0.002	0.085	0	0	0	0.03
Se	mg/L	0.004	0	0.012	0.096	0.13	0.018	0.186	0.213	0.002	0	0	0	0	0	0	0.007	0
Sn	mg/L	0	0.269	0.002	0.003	0.004	0	0.013	0.024	0.016	0.022	0.048	0.026	0.211	0.026	0.022	0.024	0.023
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.041	0.532	0.127	0.59	0.571	0.132	0.22	0.56	0.56	0.806	0.578	0.543	0.379	2.922	0.111	0.884	0.496
Te	mg/L	0.247	3.201	0.037	0	0	0.015	0	0	0	0	0	0	4.162	0	0	0	0
Ti	mg/L	0.002	0.64	0	0.002	0.002	0.002	0.002	0.004	0.011	0.005	0.007	0.008	0.611	0.005	0.016	0.003	0.003
Tl	mg/L	1.592	42.992	1.683	0.017	0	0.071	0.05	0.057	0.095	0.013	0.017	0.01	N/A	0.026	0.005	0.033	0.039
V	mg/L	0	0.919	0	0	0	0	0	0.02	0.031	0.042	0.019	0.03	0.789	0.007	0.004	0.019	0.024
W	mg/L	0	0	0	0.007	0	0	0	0	0.037	0	0	0	0	0	0.168	0	0
Zn	mg/L	51.932	116.543	13.88	11.371	4.83	23.653	36.857	15.687	18.047	6.17	5.734	3.285	158.623	2.13	0.254	3.595	5.646

Yanacocha

Fecha de Publicación:
03/11/2009

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.029	0.023	0.01	0.022	0.017	0.011	0.01	0.011	0.051	0.015	0.026	0.024	0.008	0.006	0.005	0.014	0.006
Al	mg/L	3.044	53.129	0.451	38.469	13.351	0.418	143.955	207.307	2.811	28.789	23.385	2.545	50.016	0.253	1.739	0.839	124.316
As	mg/L	0.184	193.981	0.182	0.036	0.016	0	0.036	0.004	0	0	0	0	194.475	0.059	0.113	0	0.022
B	mg/L	0.349	0	0.282	0.525	0.426	0.372	0.528	0.606	0.545	0.555	0.517	0.623	0	0.515	0.537	0.554	0.457
Ba	mg/L	0.025	0.231	0.013	0.045	0.03	0.018	0.069	0.057	0.033	0.049	0.033	0.064	0.158	0.068	0.028	0.042	0.067
Be	mg/L	0.003	0.003	0.001	0.001	0.001	0	0.001	0.002	0	0	0	0	0.001	0	0	0.001	0.001
Bi	mg/L	0	0	0	0	0	0	0.013	0.002	0	0	0	0	0	0.011	0.007	0.003	0
Ca	mg/L	118.259	539.839	47.973	91.546	89.556	60.108	102.748	124.565	176.277	135.798	94.241	168.952	334.759	194.975	13.059	373.305	97.162
Cd	mg/L	74.697	129.309	61.522	0.323	0.033	5.145	0.715	0.813	0.771	0.022	0.065	0.014	186.234	0.028	0.001	0.034	0.261
Co	mg/L	46.479	205.685	37.08	1.093	1.97	9.735	6.255	11.49	3.671	2.682	3.658	2.333	143.711	0.024	0.014	0.357	8.309
Cr	mg/L	0.704	24.422	0.085	0.029	0.146	0.034	0.015	0.039	0	0.011	0	0	23.922	0	0	0	0.076
Cu	mg/L	23.976	42.913	1.874	117.692	82.356	3.2	2.294	23.499	816.969	162.468	376.796	146.723	29.64	3.547	0.265	3.111	28.413
Fe	mg/L	82.473	1890	39.78	5.29	8.268	2.659	26.668	25.109	0.192	4.442	3.034	0.218	N/A	0.149	0.579	0.193	19.013
Ga	mg/L	0	2.343	0	0.004	0	0	0.008	0.013	0.004	0.003	0.006	0.004	3.678	0	0.004	0	0.011
Hg	ppb	12.669	4.92	3.653	7.281	7.389	8.415	8.654	11.418	11.433	9.891	11.996	18.243	3.951	5.336	4.816	6.436	7.146
K	mg/L	0.516	4.832	0.342	75.118	5.659	2.566	82.553	73.773	12.887	18.819	12.417	13.519	3.906	15.964	6.389	62.645	15.266
Li	mg/L	2.087	0.628	0.225	0.299	1.44	0.342	0.917	0.822	1.064	0.243	0.188	0.508	1.719	0.012	0.9	0.04	0.176
Mg	mg/L	13.038	18.162	4.615	8.376	10.042	7.432	8.628	10.809	25.839	13.721	8.8	27.465	12.17	16.939	1.814	27.405	5.211
Mn	mg/L	30.183	22.526	6.583	8.847	12.228	19.815	1.909	3.383	9.978	3.757	1.824	4.072	21.387	5.17	0.092	88.52	1.872
Mo	mg/L	0.002	0.025	0.004	0.014	0.003	0.005	0.005	0.006	0.003	0.003	0.006	0.004	0	0.01	0.293	0.005	0.002
Na	mg/L	24.756	85.707	14.595	80.93	50.669	25.418	47.962	42.587	60.159	77.175	43.821	83.315	56.197	139.045	83.654	57.767	10.542
Nb	mg/L	0	0	0.005	0	0	0	0.011	0	0	0	0	0	0	0	0.008	0	0
Ni	mg/L	20.089	58.954	9.003	0.602	1.404	3.712	2.01	3.483	1.26	1.759	1.94	1.247	40.684	0.022	0.002	0.038	3.566

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.889	2.297	2.189	1.258	0.056	1.337	2.372	2.23	0.225	0.043	0.109	0.04	3.875	0	0.012	0.08	0.696
Sb	mg/L	0.079	0	0	0	0	0.005	0.007	0	0	0	0	0	0	0	0.017	0	0
Sc	mg/L	0.003	0.049	0	0.002	0.003	0	0.008	0.016	0.004	0.012	0.019	0.002	0.085	0	0	0	0.03
Se	mg/L	0.004	0	0.012	0.096	0.13	0.018	0.186	0.213	0.002	0	0	0	0	0	0	0.007	0
Sn	mg/L	0	0.269	0.002	0.003	0.004	0	0.013	0.024	0.016	0.022	0.048	0.026	0.211	0.026	0.022	0.024	0.023
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.041	0.532	0.127	0.59	0.571	0.132	0.22	0.56	0.56	0.806	0.578	0.543	0.379	2.922	0.111	0.884	0.496
Te	mg/L	0.247	3.201	0.037	0	0	0.015	0	0	0	0	0	0	4.162	0	0	0	0
Ti	mg/L	0.002	0.64	0	0.002	0.002	0.002	0.002	0.004	0.011	0.005	0.007	0.008	0.611	0.005	0.016	0.003	0.003
Tl	mg/L	1.592	42.992	1.683	0.017	0	0.071	0.05	0.057	0.095	0.013	0.017	0.01	N/A	0.026	0.005	0.033	0.039
V	mg/L	0	0.919	0	0	0	0	0	0.02	0.031	0.042	0.019	0.03	0.789	0.007	0.004	0.019	0.024
W	mg/L	0	0	0	0.007	0	0	0	0	0.037	0	0	0	0	0	0.168	0	0
Zn	mg/L	51.932	116.543	13.88	11.371	4.83	23.653	36.857	15.687	18.047	6.17	5.734	3.285	158.623	2.13	0.254	3.595	5.646

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	1.798	1.666	1.529	1.453	1.265	0.995	0.82	0.79	0.784	0.716	0.646	0.627	0.549	0.341	0.392	0.342	0.305
Al	mg/L	2.008	8.816	1.192	28.615	21.379	112.961	2.183	94.377	88.386	3.646	20.731	22.033	2.253	5.953	0.886	3.066	2.046
As	mg/L	0.153	51.708	0.18	0	0.027	0	0	0	0	0	0	0	0	32.435	0.106	0.166	0.052
B	mg/L	1.934	0.774	2.102	2.02	2.228	2.269	1.984	2.795	2.576	2.489	2.446	2.54	2.244	1.446	2.057	2.029	1.982
Ba	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Be	mg/L	0.003	0.001	0.002	0.001	0.001	0.001	0	0.002	0.002	0	0.001	0.001	0.001	0	0	0	0.001
Bi	mg/L	0.012	0	0.019	0	0.002	0.006	0.031	0.018	0.009	0.015	0.006	0	0.022	0	0	0.008	0.006
Ca	mg/L	46.857	24.647	21.103	35.26	48.04	28.109	34.536	47.114	42.317	79.642	68.974	59.49	80.937	17.384	104.065	3.161	240.047
Cd	mg/L	39.005	65.688	55.421	0.21	0.039	0.178	7.889	0.535	0.398	0.02	0.016	0.015	0.007	102.915	0.069	0	0.019
Co	mg/L	13.6	30.209	11.405	0.637	1.075	4.515	4.874	4.31	5.155	1.252	1.416	2.685	0.941	10.48	0.018	0.004	0.247
Cr	mg/L	0.435	3.312	0.054	0	0.188	0.082	0.003	0.011	0.022	0	0.008	0.003	0	2.179	0	0.001	0
Cu	mg/L	31.931	20.326	1.059	132.293	113.08	38.953	8.443	1.387	16.642	863.062	159.661	527.802	120.18	14.104	0	0	3.489
Fe	mg/L	89.424	N/A	50.305	3.075	15.097	35.335	3.975	23.709	18.884	0.268	3.503	3.483	0	1167.949	0.397	0.762	0
Ga	mg/L	0.031	0.667	0.011	0.006	0.005	0.032	0.01	0.027	0.015	0.01	0.017	0.007	0.009	0.809	0.007	0	0
Hg	ppb	4.851	468.838	1.848	2.005	1.56	1.592	1.158	0.921	1.169	1.855	2.453	3.072	4.581	10.224	1.272	460.671	1.742
K	mg/L	0.616	1.41	0.592	53.513	3.677	17.038	1.524	63.466	40.216	5.729	12.6	8.997	6.321	1.225	10.801	3.628	42.551
Li	mg/L	0.473	0.05	0.055	0.137	0.667	0.071	0.067	0.545	0.214	0.174	0.1	0.091	0.147	0.206	0.008	0.475	0.015
Mg	mg/L	4.109	2.238	1.197	4.38	4.768	1.768	2.281	6.111	4.663	10.53	6.76	5.248	13.904	1.149	8.874	0.624	17.63
Mn	mg/L	8.92	3.369	2.009	5.566	6.61	0.941	11.196	1.428	1.709	3.389	2.297	1.35	1.887	1.876	2.917	0.021	67.732
Mo	mg/L	0.003	0.022	0.003	0	0.003	0	0.001	0	0.002	0.002	0	0	0	0.026	0.011	0.224	0.013
Na	mg/L	7.668	11.143	6.998	29.62	20.223	6.471	8.831	27.084	11.296	15.207	28.858	31.482	24.143	7.248	98.053	37.391	33.669
Nb	mg/L	0.014	0	0.002	0	0	0	0	0	0	0	0	0	0	0.033	0.035	0.023	0.012
Ni	mg/L	6.53	9.792	2.959	0.351	0.774	1.992	1.79	1.325	1.607	0.446	0.966	1.452	0.496	3.966	0.01	0	0.022

Yanacocha

Fecha de Publicación:
01/12/2009

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.679	1.871	3.377	1.963	0.054	1.586	3.456	2.889	2.267	0.107	0.017	0.084	0	2.256	0	0.01	0.083
Sb	mg/L	0.018	0.095	0	0	0	0	0.01	0	0	0	0	0	0	0	0.012	0.01	0.018
Sc	mg/L	0.002	0.007	0	0.002	0.006	0.04	0.001	0.006	0.008	0.003	0.01	0.021	0.001	0.01	0	0	0
Se	mg/L	0.026	0	0.073	0.038	0.077	0.036	0.021	0.05	0.026	0.033	0.076	0	0	0	0	0	0
Sn	mg/L	0.014	0.025	0.011	0.006	0.007	0.007	0.004	0.016	0.013	0	0.001	0.001	0.012	0	0	0	0.015
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.006	0.008	0.002	0.308	0.399	0.424	0.021	0.106	0.319	0.337	0.463	0.378	0.334	0.008	1.788	0.027	0.516
Te	mg/L	0.233	0.824	0.124	0.068	0.079	0.103	0.114	0.117	0.119	0.076	0.116	0.098	0.098	0.585	0.021	0.025	0.016
Ti	mg/L	0.002	0.104	0.001	0.001	0.002	0.001	0.001	0.002	0.001	0.006	0.002	0.004	0.002	0.056	0.001	0.019	0.001
Tl	mg/L	1.419	19.121	1.945	0	0	0.085	0.11	0.138	0	0	0	0	0	26.978	0.2	0	0
V	mg/L	0	0.175	0	0	0	0	0	0	0	0	0	0	0	0.081	0	0	0
W	mg/L	0.028	0	0.052	0.198	0.151	0.092	0.083	0.152	0.135	0.308	0.182	0.224	0.156	0	0.121	0.369	0.092
Zn	mg/L	36.087	68.625	8.537	7.762	3.021	3.366	19.69	35.094	8.415	7.142	3.796	4.331	1.449	105.022	1.444	0.291	2.652

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.015	0.015	0.015	0.016	0.013	0.013	0.011	0.01	0.013	0.027	0.012	0.015	0.013	0.014	0.011	0.008	0.011
Al	mg/L	1.193	3.645	0.324	16.64	16.145	60.848	0.833	43.086	46.376	1.673	10.186	6.617	0.966	4.347	0.218	1.155	0.417
As	mg/L	6.632	25.759	0.124	0.005	0.024	0.003	0	0.015	0.015	0	0	0	0.002	27.229	0.022	0.086	0
B	mg/L	0.028	0	0.143	0.218	0.168	0.152	0.215	0.279	0.178	0.171	0.226	0.171	0.171	0	0.279	0.163	0.201
Ba	mg/L	0.009	0.009	0.01	0.027	0.025	0.027	0.015	0.012	0.019	0.015	0.023	0.034	0.023	0.019	0.036	0.047	0.024
Be	mg/L	0.001	0.001	0	0.001	0.001	0.001	0	0.001	0.001	0	0	0	0.001	0.001	0	0	0.001
Bi	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0	0.003
Ca	mg/L	18.721	17.821	9.897	36.871	26.854	19.413	22.112	23.939	23.449	35.346	32.273	23.495	44.535	14.745	36.063	3.325	162.424
Cd	mg/L	27.204	37.782	43.398	0.28	0.042	0.137	12.723	0.335	0.242	0.012	0.016	0.016	0.008	78.852	0.011	0.002	0.026
Co	mg/L	4.906	11.81	4.274	0.571	0.575	2.029	2.637	2.623	3.313	0.612	0.676	1.032	0.586	3.099	0.004	0.005	0.182
Cr	mg/L	0.469	1.224	0.052	0.008	0.224	0.058	0.019	0.004	0.015	0.002	0.011	0.002	0	0.916	0	0.003	0
Cu	mg/L	16.72	12.534	1.196	82.349	63.024	22.177	9.347	1.189	9.909	390.251	78.224	148.646	65.157	9.746	0.018	0.021	1.302
Fe	mg/L	376.637	1990	42.696	2.749	20.67	8.527	5.732	13.384	12.825	0.608	3.204	1.795	0.324	1433	0.21	0.92	0.137
Ga	mg/L	0.106	0.338	0.01	0.005	0.007	0.003	0.003	0.004	0.007	0.008	0.004	0.004	0.002	0.518	0.003	0.006	0
Hg	ppb	1.727	2.493	0.153	0.306	0.279	0.158	0.105	0.052	0.101	1.047	0.654	1.339	2.481	2.604	0.142	0.629	0.156
K	mg/L	0.233	0.501	0.109	38.005	1.978	9.671	0.529	49.233	30.084	3.081	6.658	3.408	3.34	0.777	5.207	2.436	35.781
Li	mg/L	0.093	0.025	0.013	0.056	0.146	0.012	0.013	0.159	0.062	0.059	0.024	0.026	0.04	0.082	0.005	0.317	0.011
Mg	mg/L	1.049	1.048	0.415	3.256	2.11	0.871	0.775	3.521	2.722	5.138	2.907	1.805	7.497	1.279	2.936	0.508	11.147
Mn	mg/L	2.182	1.686	0.733	4.681	3.458	0.407	6.835	0.872	1.024	1.512	1.124	0.491	1.145	0.898	0.992	0.037	54.674
Mo	mg/L	0	0.006	0	0	0	0	0	0	0	0	0	0	0	0.003	0	0.135	0
Na	mg/L	1.593	3.019	1.244	8.141	4.855	1.071	1.379	7.718	3.058	4.262	5.192	8.115	5.599	2.231	41.666	17.619	18.768
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002	0	0
Ni	mg/L	2.415	4.147	1.218	0.321	0.436	0.949	0.992	0.814	1.081	0.232	0.476	0.568	0.321	1.802	0.007	0.004	0.02

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	3.38	2.342	5.024	1.977	0.129	1.712	5.531	3.401	2.55	0.083	0.026	0.04	0.029	2.79	0.003	0.025	0.082
Sb	mg/L	0.05	0.111	0.008	0	0	0	0.008	0.001	0	0	0	0	0	0	0.003	0.01	0.002
Sc	mg/L	0.001	0.002	0	0.001	0.005	0.029	0	0.003	0.004	0.002	0.006	0.007	0.001	0.003	0	0	0
Se	mg/L	0	0	0	0.018	0.09	0	0.003	0.013	0.032	0.001	0.003	0	0	0	0	0	0
Sn	mg/L	0.018	0.032	0.013	0.009	0.003	0.005	0.001	0.011	0.002	0.016	0.006	0.011	0.012	0.012	0.005	0.012	0.013
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.013	0.014	0.005	0.254	0.311	0.266	0.025	0.074	0.255	0.246	0.311	0.152	0.246	0.019	0.645	0.032	0.353
Te	mg/L	0.112	0.451	0.006	0	0.005	0.008	0.014	0.009	0.007	0	0.001	0	0	0.632	0	0	0
Ti	mg/L	0.013	0.058	0.002	0.004	0.002	0.003	0.004	0.002	0.003	0.005	0.003	0.004	0.004	0.102	0.005	0.012	0.002
Tl	mg/L	4.756	13.505	2.405	0.03	0.017	0.037	0.154	0.031	0.032	0.024	0.006	0.001	0.012	24.798	0.03	0.011	0.026
V	mg/L	0.032	0.131	0	0	0	0	0	0	0	0	0	0	0	0.09	0	0	0
W	mg/L	0	0	0	0.009	0	0	0	0	0	0.063	0.002	0.012	0.008	0	0	0.145	0
Zn	mg/L	25.157	35.719	5.238	6.242	1.65	1.868	13.544	20.119	5.519	3.296	1.863	1.562	0.9	59.991	0.484	0.313	1.857

Yanacocha

Fecha de Publicación:
03/02/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0.01	0	0.01	0	0	0	0.035	0.003	0.011	0.001	N/A	0	0	0.005
Al	mg/L	9.498	11.104	0.967	85.865	42.601	736.4	3.086	145.199	139.594	8.319	26.169	20.476	2.037	N/A	0	0.481	0.928
As	mg/L	0.35	80.327	0.176	0	0.021	50.149	0.002	0	0	0	0	0	0	N/A	0	0.034	0
B	mg/L	0	0	0.058	0.184	0.136	0	0.198	0.213	0.188	0.121	0.155	0.144	0.129	N/A	0.074	0.042	0.164
Ba	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0
Be	mg/L	0.002	0	0	0.002	0.001	0.004	0.001	0.002	0.001	0.001	0.001	0	0	N/A	0	0	0.001
Bi	mg/L	0	0	0	0.01	0	0	0.001	0	0.008	0	0.009	0	0.014	N/A	0.005	0.003	0.008
Ca	mg/L	28.383	42.471	12.339	76.449	23.512	20.129	26.086	45.287	35.99	60.131	43.474	37.659	68.504	N/A	60.4	5.114	267.974
Cd	mg/L	111.487	81.732	88.117	0.994	0.132	1.47	29.821	0.73	0.463	0.026	0.023	0.037	0.019	N/A	0.023	0	0.027
Co	mg/L	4.365	8.926	5.34	1.398	0.392	3.152	2.566	4.622	4.68	0.82	0.841	1.813	0.826	N/A	0.007	0.004	0.284
Cr	mg/L	5.557	1.526	0.429	0.024	0.742	2.546	0.071	0.014	0.044	0	0.023	0.008	0	N/A	0	0.001	0
Cu	mg/L	90.538	36.892	9.078	256.71	93.708	269.782	23.117	2.75	24.266	972.4	150.296	312.882	123.703	N/A	0.04	0.008	1.603
Fe	mg/L	511.5	606.2	162.906	5.658	66.14	2788	18.079	5.874	5.157	2.393	7.767	7.413	0.338	N/A	0	0.215	0
Ga	mg/L	0.162	1.203	0.03	0	0.011	5.364	0.001	0.001	0.004	0.003	0.001	0.001	0	N/A	0	0	0
Hg	ppb	9.954	18.254	3.757	9.43	6.224	3.513	3.637	2.874	3.92	12.69	8.097	10.447	7.172	N/A	5.488	4.263	4.315
K	mg/L	0.1	3.517	0.095	76.743	2.403	3.756	0.575	73.143	45.041	4.513	9.52	6.802	4.707	N/A	11.224	2.998	60.183
Li	mg/L	0.251	0.011	0.009	0.035	0.071	0.027	0.014	0.093	0.033	0.074	0.015	0.035	0.024	N/A	0.006	0.24	0.011
Mg	mg/L	1.323	2.099	0.486	8.172	1.262	0.866	0.706	6.272	3.818	10.064	3.486	3.046	11.027	N/A	4.706	0.763	17.327
Mn	mg/L	2.538	3.143	0.756	12.06	2.037	2.151	7.003	1.517	1.403	1.839	1.295	0.813	1.558	N/A	2.071	0.026	98.102
Mo	mg/L	0	0.101	0	0	0.002	0.016	0	0	0.002	0	0	0	0.001	N/A	0.001	0.14	0.002
Na	mg/L	1.387	4.374	0.922	3.441	1.816	2.513	0.902	4.239	2.108	3.189	3.175	11.666	3.569	N/A	53.606	10.971	15.511
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0.001	0
Ni	mg/L	3.235	4.52	1.571	0.862	0.32	1.55	1.05	1.494	1.618	0.317	0.63	1.034	0.477	N/A	0.014	0.003	0.023

Yanacocha

Fecha de Publicación:
03/02/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.369	2.455	3.471	2.239	0.315	0.89	4.627	3.294	2.952	0.186	0.046	0.056	0.028	N/A	0.002	0.001	0.072
Sb	mg/L	0	0.066	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0
Sc	mg/L	0.017	0.001	0.001	0.005	0.014	1.895	0	0.009	0.013	0.006	0.009	0.018	0.001	N/A	0	0	0
Se	mg/L	0	0	0	0.026	0.131	0	0.011	0.007	0.002	0.034	0.01	0	0.017	N/A	0.009	0	0.022
Sn	mg/L	0.005	0.026	0	0.005	0.003	0.005	0.002	0	0.004	0	0.001	0	0	N/A	0	0.002	0
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.019	0.035	0.005	0.515	0.35	0.711	0.014	0.098	0.387	0.34	0.392	0.229	0.332	N/A	1.073	0.045	0.561
Te	mg/L	0.207	1.886	0.19	0	0.006	0.792	0.068	0.012	0.016	0	0	0	0	N/A	0	0	0
Ti	mg/L	0	0.299	0	0	0	0.006	0	0	0	0.003	0	0	0	N/A	0	0	0
Tl	mg/L	1.535	24.151	3.269	0.022	0	0.01	0.108	0.028	0.031	0.002	0	0	0	N/A	0	0.001	0.013
V	mg/L	0.055	0.47	0.02	0.01	0.013	1.461	0.008	0.009	0.009	0.012	0.011	0.012	0.008	N/A	0.009	0.007	0.008
W	mg/L	0	0	0	0.03	0	0	0	0	0	0.131	0.012	0.037	0.02	N/A	0	0.075	0
Zn	mg/L	72.554	75.797	16.313	20.992	1.546	13.806	18.558	47.896	14.776	5.982	2.852	3.15	1.514	N/A	1.611	0.199	3.271

Yanacocha

Fecha de Publicación:
02/03/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.021	0.012	0.007	0.015	0.009	0.005	0.002	0	0.002	0.016	0.007	0.007	0.004	N/A	0	0.001	0.009
Al	mg/L	11.81	2.727	1.44	105.054	94.302	199.871	4.415	218.493	285.341	6.291	69.348	13.107	2.98	N/A	0.027	0.24	0.674
As	mg/L	36.553	28.979	0.154	0.013	1.246	17.786	0	0	0	0	0.016	0	0	N/A	0	0.026	0
B	mg/L	0	0	0.52	0.255	0.074	0	0.214	0.264	0.253	0.578	0.237	0.266	0.272	N/A	0.259	0.258	0.295
Ba	mg/L	0.004	0.018	0.004	0.011	0.011	0.007	0.003	0.001	0.004	0.005	0.006	0.01	0.009	N/A	0.021	0.061	0.015
Be	mg/L	0.001	0	0	0.002	0.001	0.001	0	0.002	0.002	0.001	0.001	0	0	N/A	0	0	0.001
Bi	mg/L	0	0	0	0	0	0	0.001	0.002	0	0	0	0	0	N/A	0.005	0.001	0.002
Ca	mg/L	15.295	13.967	7.363	57.478	18.382	10.102	16.042	42.825	38.145	32.071	33.114	21.822	59.517	N/A	43.413	6.841	199.036
Cd	mg/L	209.881	41.694	78.588	1.022	0.364	0.405	27.552	0.857	0.488	0	0	0	0	N/A	0	0	0
Co	mg/L	2.029	2.602	2.508	1.077	0.354	1.428	1.086	3.897	3.65	0.336	0.526	0.947	0.556	N/A	0.003	0.002	0.198
Cr	mg/L	19.546	0.504	0.564	0.037	7.246	0.573	0.099	0.003	0.072	0	0.036	0	0	N/A	0	0	0
Cu	mg/L	155.056	20.693	12.299	281.497	138.819	93.158	29.207	3.814	44.18	558.355	228.875	222.109	156.88	N/A	0.379	0	1.006
Fe	mg/L	8943	2802	160.328	4.841	N/A	1979	26.701	5.783	8.429	1.465	7.676	5.699	0	N/A	0	0	0
Ga	mg/L	0.527	0.206	0.018	0	0.275	1.952	0	0.002	0.017	0.004	0.007	0.002	0.005	N/A	0.001	0.005	0
Hg	ppb	46.704	7.799	0.551	0.856	2.923	46.615	0.201	0.43	0.819	2.168	0.929	1.008	1.384	N/A	2.75	0.213	0.325
K	mg/L	0.067	1.089	0.113	46.401	1.319	2.249	0.276	52.011	31.035	2.019	5.587	3.57	2.554	N/A	7.15	1.575	42.902
Li	mg/L	0.152	0.003	0.006	0.018	0.073	0.007	0.009	0.057	0.027	0.032	0.007	0.019	0.011	N/A	0.004	0.176	0.01
Mg	mg/L	0.561	0.282	0.325	6.944	0.997	0.193	0.438	6.184	3.513	5.1	2.6	1.745	9.979	N/A	3.527	0.866	13.259
Mn	mg/L	2.08	1.461	0.435	9.422	1.581	1.696	3.124	1.367	1.128	0.752	0.79	0.434	1.143	N/A	1.574	0.044	76.23
Mo	mg/L	0.064	0.023	0	0	0.004	0.012	0	0	0.001	0	0.001	0	0	N/A	0	0.086	0
Na	mg/L	0.599	1.713	1.075	1.37	1.381	1.085	0.581	2.016	1.383	1.869	1.343	5.636	1.763	N/A	41.369	6.106	9.089
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0.006	0.004	0.001
Ni	mg/L	1.931	1.532	0.756	0.676	0.262	0.638	0.462	1.254	1.286	0.123	0.388	0.529	0.318	N/A	0	0	0.008

Yanacocha

Fecha de Publicación:
02/03/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.917	2.312	2.801	1.492	1.305	1.23	4.294	2.589	2.09	0.076	0.037	0.03	0.015	N/A	0.001	0.006	0.128
Sb	mg/L	0.166	0.167	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0.004	0
Sc	mg/L	0.009	0	0.001	0.006	0.162	0.379	0.002	0.015	0.029	0.008	0.039	0.017	0.003	N/A	0	0	0
Se	mg/L	0	0	0	0.019	0.127	0	0.014	0.02	0.008	0.009	0	0	0	N/A	0	0	0.037
Sn	mg/L	0.011	0.048	0	0.012	0.007	0.011	0.005	0	0.001	0.004	0	0.002	0.004	N/A	0	0.001	0.001
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.039	0.021	0.004	0.427	0.282	0.243	0.008	0.058	0.317	0.231	0.279	0.15	0.281	N/A	0.799	0.058	0.416
Te	mg/L	4.789	0.737	0.19	0.027	0.113	0.4	0	0.036	0.039	0.005	0	0.006	0	N/A	0	0.003	0.003
Ti	mg/L	0.022	0.081	0.001	0	0.003	0.003	0	0	0	0	0	0	0	N/A	0	0.003	0
Tl	mg/L	0.193	11.761	2.578	0.05	0.012	0.02	0.151	0.034	0.033	0.027	0.007	0.024	0.01	N/A	0.005	0.016	0.031
V	mg/L	0.229	0.134	0.001	0	0.029	0.576	0	0	0	0	0	0	0	N/A	0	0.002	0
W	mg/L	0	0	0	0.016	0	0	0	0	0	0.062	0.01	0.011	0.011	N/A	0	0.072	0
Zn	mg/L	68.002	48.616	10.857	20.622	1.55	5.587	9.995	67.497	29.376	2.363	2.147	1.465	1.067	N/A	1.397	0.35	2.72

Yanacocha

Fecha de Publicación:
03/04/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.012	0.01	0.009	0.016	0.011	0.01	0.009	0.007	0.007	0.022	0.02	0.008	0.009	0.011	0.004	0.005	0.011
Al	mg/L	8.072	1.941	2.216	116.262	55.372	50.324	7.577	253.349	329.348	11.97	170.243	12.765	3.905	4.735	0.127	0.223	0.32
As	mg/L	64.907	22.241	0.249	0.018	7.461	5.511	0.017	0.015	0.003	0	0.048	0.012	0.008	35.417	0.016	0.037	0
B	mg/L	0	0	0.176	0.283	0	0	0.346	0.278	0.321	0.286	0.262	0.371	0.314	0	0.265	0.228	0.332
Ba	mg/L	0	0	0.002	0.017	0.004	0.005	0.005	0.008	0.01	0.008	0.008	0.013	0.012	0.013	0.029	0.068	0.019
Be	mg/L	0	0	0	0.003	0.001	0	0	0.003	0.003	0.001	0.002	0	0	0	0	0	0.001
Bi	mg/L	0	0	0	0	0	0	0	0.001	0	0	0	0	0	0	0	0.004	0
Ca	mg/L	12.356	16.608	4.885	60.711	11.681	10.62	11.564	32.359	21.412	24.967	19.899	16.107	40.211	79.816	26.007	6.547	144.027
Cd	mg/L	156.736	29.254	81.899	1.015	0.391	0.115	29.63	1.274	0.688	0.017	0.038	0.018	0.009	87.428	0.01	0.004	0.018
Co	mg/L	1.281	1.204	1.553	0.87	0.311	0.579	0.661	2.593	1.593	0.238	0.349	0.602	0.278	1.041	0.003	0.006	0.147
Cr	mg/L	10.276	0.755	1.455	0.032	8.204	0.128	0.208	0.019	0.133	0.006	0.699	0.002	0	0.412	0	0	0
Cu	mg/L	85.843	16.06	16.669	301.762	84.105	25.884	34.424	4.174	49.996	50.55	411.481	168.789	149.012	19.856	0.015	0.009	0.881
Fe	mg/L	3432	2270	386.2	2.536	4.679	1238	45.026	6.04	10.437	0.675	166.632	5.218	0.323	2050	0.102	0.12	0.197
Ga	mg/L	0.444	0.151	0.031	0.001	0.339	0.53	0.005	0.009	0.019	0.007	0.123	0.001	0.005	0.202	0.003	0.005	0
Hg	ppb	38.54	17.594	8.731	21.236	8.266	4.82	17.732	11.093	23.047	24.289	16.553	21.197	56	22.625	4.152	9.419	5.648
K	mg/L	0.111	0.842	0.101	39.982	0.427	1.238	0.24	38.467	21.074	1.274	3.632	2.522	1.739	0.743	5.157	1.015	32.145
Li	mg/L	0.113	0.01	0.004	0.012	0.072	0.002	0.006	0.03	0.015	0.019	0.008	0.011	0.008	0.044	0.005	0.12	0.009
Mg	mg/L	0.203	0.406	0.204	5.973	0.495	0.246	0.386	4.475	1.739	3.861	1.43	1.188	7.13	3.105	2.172	0.842	9.798
Mn	mg/L	2.347	1.469	0.406	7.392	1.394	0.874	1.942	1.011	0.54	0.508	0.547	0.292	0.675	1.5	0.901	0.04	57.164
Mo	mg/L	0.118	0.048	0.001	0	0.013	0.015	0.001	0.003	0	0.001	0	0.002	0.002	0.029	0	0.055	0
Na	mg/L	0.82	1.629	1.961	2.7	1.021	0.837	0.867	1.402	1.387	1.347	1.304	3.329	1.489	2.517	27.731	4.034	5.309
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0
Ni	mg/L	1.224	0.818	0.527	0.548	0.2	0.226	0.327	0.848	0.619	0.097	0.248	0.341	0.165	0.912	0.005	0.005	0.014

Yanacocha

Fecha de Publicación:
03/04/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.867	1.889	2.061	0.838	0.957	0.787	3.555	2.108	1.32	0.053	0.061	0.02	0.016	1.9	0.007	0.007	0.102
Sb	mg/L	0.621	0.197	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.007	0
Sc	mg/L	0	0	0.002	0.007	0.102	0.069	0.001	0.019	0.046	0.013	0.379	0.014	0.002	0	0	0	0
Se	mg/L	0	0	0.008	0.025	0.066	0	0.027	0.003	0.003	0.021	0.031	0	0.006	0	0	0.006	0.032
Sn	mg/L	0.017	0.022	0.003	0	0.004	0.007	0.002	0.005	0.003	0	0.008	0	0.003	0.009	0.002	0.002	0.002
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.033	0.028	0.004	0.36	0.15	0.084	0.008	0.033	0.244	0.207	0.131	0.113	0.215	0.052	0.483	0.058	0.311
Te	mg/L	1.11	0.395	1.186	0.019	0.181	0.133	0.105	0	0.017	0	0.016	0	0	1.23	0	0	0
Ti	mg/L	0.043	0.051	0.002	0	0.013	0.007	0.001	0.002	0	0	0	0	0	0.16	0	0.001	0
Tl	mg/L	0.179	6.002	1.639	0.023	0.008	0.013	0.13	0.026	0.03	0.012	0.01	0.005	0.008	13.494	0.011	0.014	0.026
V	mg/L	0.293	0.093	0.013	0	0.087	0.183	0.002	0.001	0.002	0.001	0.007	0	0.001	0.083	0.001	0.001	0
W	mg/L	0	0	0	0.033	0	0	0	0	0	0.085	0	0.016	0.015	0	0	0.04	0
Zn	mg/L	53.36	32.514	9.446	23.487	1.256	1.945	6.412	80.213	42.614	1.625	1.672	0.856	0.583	66.184	0.673	0.35	2.304

Yanacocha

Fecha de Publicación:
01/05/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.056	N/A	0.08	N/A	0.046	0.044	0.05	0.035	0.027	0.084	0.043	0.033	0.024	N/A	0	0.04	0.073
Al	mg/L	14.732	N/A	5.219	N/A	63.419	98.84	13.506	498.831	700.043	204.554	125.1	83.357	0.173	N/A	0	0.492	12.709
As	mg/L	254.812	N/A	4.931	N/A	72.376	21.716	0.08	0.031	0.129	0.066	2.482	0.013	0.081	N/A	0.029	0.082	0.067
B	mg/L	0	N/A	0	N/A	0	0	0.459	0.471	0.484	0.658	0	0.432	0.521	N/A	0	0.597	0.514
Ba	mg/L	0.051	N/A	0.016	N/A	0.026	0.04	0.015	0.01	0.015	0.012	0.025	0.024	0.044	N/A	0	0.04	0.028
Be	mg/L	0	N/A	0	N/A	0.001	0.001	0.001	0.004	0.005	0.009	0.002	0.001	0	N/A	0.001	0.001	0.001
Bi	mg/L	0.391	N/A	0.023	N/A	0.029	0.299	0.083	0	0.015	0	0	0	0.008	N/A	0.099	0	0
Ca	mg/L	10.927	N/A	7.232	N/A	11.968	18.831	13.875	37.298	17.863	52.356	29.443	21.108	31.384	N/A	0.012	191.994	65.618
Cd	mg/L	148.22	N/A	192.219	N/A	1.923	0.616	46.891	2.998	1.737	0.107	0.123	0.073	0.012	N/A	0	0.029	0.069
Co	mg/L	2.34	N/A	3.76	N/A	0.624	1.535	1.017	2.963	1.458	0.722	0.405	0.715	0	N/A	0	0.201	0.335
Cr	mg/L	17.026	N/A	7.326	N/A	13.406	0.284	0.944	0.057	0.849	0.478	1.536	0.101	0	N/A	0	0.002	0.002
Cu	mg/L	148.819	N/A	50.444	N/A	117.467	59.055	62.004	6.707	89.395	2555.504	432.016	404.627	0.015	N/A	0	0.96	276.141
Fe	mg/L	8767	N/A	952.739	N/A	3627	4335	79.363	8.92	74.636	25.577	834.755	53.738	0.109	N/A	0	0.229	3.116
Ga	mg/L	1.094	N/A	0.057	N/A	0.862	1.643	0	0	0.118	0	0.511	0	0	N/A	0	0	0
Hg	ppb	83.091	N/A	9.012	N/A	26.638	53.722	19.81	18.813	40.604	274.757	22.982	112.067	52.554	N/A	14.023	219.089	27.444
K	mg/L	0	N/A	0.045	N/A	0	1.221	0.129	30.266	9.504	1.203	0.55	2.083	4.601	N/A	0	25.599	1.688
Li	mg/L	0.304	N/A	0.015	N/A	0.281	0.015	0.021	0.06	0.02	0.088	0.011	0.016	0.015	N/A	0	0.016	0.024
Mg	mg/L	0.315	N/A	0.424	N/A	0.62	0.53	0.511	4.814	1.47	9.691	1.465	1.434	2.421	N/A	0	12.592	9.913
Mn	mg/L	6.992	N/A	1.191	N/A	3.496	3.069	2.582	1.426	0.672	1.475	1.204	0.521	1.124	N/A	0.016	88.502	0.982
Mo	mg/L	0.578	N/A	0	N/A	0.057	0	0.002	0.001	0	0	0.003	0	0.005	N/A	0.007	0.009	0
Na	mg/L	0.988	N/A	1.031	N/A	1.366	1.522	1.146	1.391	1.462	2.644	1.592	2.657	23.47	N/A	0	4.611	2.213
Nb	mg/L	0	N/A	0	N/A	0	0	0	0.004	0	0	0	0	0.02	N/A	0.027	0.028	0
Ni	mg/L	2.148	N/A	1.272	N/A	0.382	0.569	0.609	1.01	0.665	0.329	0.285	0.44	0.007	N/A	0	0.028	0.214

Yanacocha

Fecha de Publicación:
01/05/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.648	N/A	1.42	N/A	0.672	1.706	2.985	2.125	0.558	0.318	0.085	0.11	0.015	N/A	0.03	0.18	0.094
Sb	mg/L	5.132	N/A	0	N/A	0	0	0.049	0.056	0	0	0	0	0.039	N/A	0.127	0.075	0
Sc	mg/L	0	N/A	0	N/A	0.099	0.114	0.003	0.057	0.407	0.43	0.35	0.171	0	N/A	0	0	0.007
Se	mg/L	0	N/A	0.031	N/A	0.153	0	0.041	0.059	0.071	0.053	0	0.026	0.027	N/A	0.045	0.07	0.029
Sn	mg/L	0.026	N/A	0	N/A	0	0	0.014	0	0.03	0.042	0.005	0.009	0	N/A	0	0	0
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.041	N/A	0.014	N/A	0.162	0.16	0.013	0.035	0.603	0.282	0.095	0.136	0.607	N/A	0	0.448	0.256
Te	mg/L	2.464	N/A	0.291	N/A	0.616	0.558	0	0	0.081	0.076	0.139	0.022	0	N/A	0	0	0
Ti	mg/L	0.204	N/A	0.008	N/A	0.016	0.008	0	0	0	0	0	0	0	N/A	0	0.001	0
Tl	mg/L	0.395	N/A	0.592	N/A	0.007	0.042	0.215	0.111	0.109	0.099	0.06	0.089	0.134	N/A	0.131	0.211	0.04
V	mg/L	0.989	N/A	0.093	N/A	0.426	0.665	0.004	0.005	0.021	0.003	0.082	0.015	0.004	N/A	0	0	0.001
W	mg/L	0	N/A	0	N/A	0	0	0	0.034	0	0.694	0	0.129	0.012	N/A	0	0.093	0.104
Zn	mg/L	103.307	N/A	23.561	N/A	2.244	4.035	8.959	150.643	97.323	7.061	1.732	1.1	0.795	N/A	0	2.845	0.677

Yanacocha

Fecha de Publicación:
03/06/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	0.013	N/A	0.017	0.012	0.006	0.009	0.02	0.118	N/A	0.028	N/A	N/A	N/A	0.001	N/A
Al	mg/L	N/A	N/A	8.039	N/A	78.203	97.532	19.187	576.8	1023	425.274	N/A	143.638	N/A	N/A	N/A	0.27	N/A
As	mg/L	N/A	N/A	21.916	N/A	129.119	19.284	0.054	0.385	1.257	0	N/A	1.525	N/A	N/A	N/A	0.065	N/A
B	mg/L	N/A	N/A	0	N/A	0	0	0.376	5.861	4.939	5.05	N/A	5.582	N/A	N/A	N/A	0.426	N/A
Ba	mg/L	N/A	N/A	0	N/A	0	0	0.027	0.071	0.005	0.012	N/A	0.007	N/A	N/A	N/A	0.084	N/A
Be	mg/L	N/A	N/A	0.001	N/A	0.001	0.001	0.001	0.005	0.006	0.016	N/A	0.002	N/A	N/A	N/A	0	N/A
Bi	mg/L	N/A	N/A	0.071	N/A	0.316	0.205	0	0	0.237	0.375	N/A	0.154	N/A	N/A	N/A	0.002	N/A
Ca	mg/L	N/A	N/A	15.337	N/A	18.931	70.111	21.58	59.996	26.085	76.841	N/A	117.263	N/A	N/A	N/A	13.272	N/A
Cd	mg/L	N/A	N/A	156.517	N/A	0	0.054	61.662	4.506	3.118	0.223	N/A	0.621	N/A	N/A	N/A	0.028	N/A
Co	mg/L	N/A	N/A	6.141	N/A	0.884	1.415	1.418	2.765	1.727	1.291	N/A	1.077	N/A	N/A	N/A	0.001	N/A
Cr	mg/L	N/A	N/A	11.013	N/A	14.35	0.31	1.991	0.085	1.741	2.724	N/A	0.385	N/A	N/A	N/A	0.001	N/A
Cu	mg/L	N/A	N/A	88.104	N/A	149.061	62.183	90.251	10.89	122.181	4492	N/A	572.7	N/A	N/A	N/A	0.369	N/A
Fe	mg/L	N/A	N/A	734.451	N/A	770.486	766.014	76.762	10.406	238.1	209.123	N/A	559.3	N/A	N/A	N/A	0.999	N/A
Ga	mg/L	N/A	N/A	0.168	N/A	0.847	1.404	0.003	0	0.517	0.131	N/A	0.191	N/A	N/A	N/A	0	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	0.093	N/A	0.133	1.897	0.214	26.746	7.187	2.001	N/A	2.501	N/A	N/A	N/A	1.494	N/A
Li	mg/L	N/A	N/A	0.016	N/A	0.263	0.006	0.015	0.05	0.018	0.093	N/A	0.016	N/A	N/A	N/A	0.225	N/A
Mg	mg/L	N/A	N/A	1.03	N/A	1.451	1.51	0.912	5.066	1.953	12.113	N/A	6.818	N/A	N/A	N/A	1.174	N/A
Mn	mg/L	N/A	N/A	1.64	N/A	3.611	2.162	3.448	1.608	1.014	2.869	N/A	1.58	N/A	N/A	N/A	0.045	N/A
Mo	mg/L	N/A	N/A	0	N/A	0.156	0.026	0.001	0.008	0	0	N/A	0.007	N/A	N/A	N/A	0.1	N/A
Na	mg/L	N/A	N/A	0.967	N/A	1.078	1.316	0.961	8.65	7.239	9.795	N/A	9.043	N/A	N/A	N/A	6.266	N/A
Nb	mg/L	N/A	N/A	0	N/A	0	0	0	0	0	0	N/A	0	N/A	N/A	N/A	0	N/A
Ni	mg/L	N/A	N/A	1.985	N/A	0.43	0.455	0.84	0.971	0.84	0.561	N/A	0.64	N/A	N/A	N/A	0.004	N/A

Yanacocha

Fecha de Publicación:
03/06/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	0.803	N/A	0.611	1.352	2.117	1.329	0.204	1.441	N/A	0.209	N/A	N/A	N/A	0	N/A
Sb	mg/L	N/A	N/A	0	N/A	0	0	0	0.015	0	0	N/A	0	N/A	N/A	N/A	0.007	N/A
Sc	mg/L	N/A	N/A	0.009	N/A	0.163	0.156	0.003	0.101	0.812	1.669	N/A	0.31	N/A	N/A	N/A	0	N/A
Se	mg/L	N/A	N/A	0.128	N/A	0.431	0.034	0.069	0	0.27	0.192	N/A	0.144	N/A	N/A	N/A	0.003	N/A
Sn	mg/L	N/A	N/A	0.013	N/A	0.043	0.022	0	0	0.039	0.05	N/A	0	N/A	N/A	N/A	0	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	0.022	N/A	0.179	0.196	0.016	0.059	0.831	0.278	N/A	0.229	N/A	N/A	N/A	0.076	N/A
Te	mg/L	N/A	N/A	0.632	N/A	0.781	0.59	0	0	0.281	0.118	N/A	0.095	N/A	N/A	N/A	0	N/A
Ti	mg/L	N/A	N/A	0.018	N/A	0.043	0.025	0.006	0.006	0.008	0	N/A	0.046	N/A	N/A	N/A	0.003	N/A
Tl	mg/L	N/A	N/A	0.127	N/A	0	0.02	0.126	0	0	0.048	N/A	0.055	N/A	N/A	N/A	0.012	N/A
V	mg/L	N/A	N/A	0.14	N/A	0.577	0.644	0	0	0.026	0	N/A	0	N/A	N/A	N/A	0	N/A
W	mg/L	N/A	N/A	0	N/A	0	0	0	0	0	0.482	N/A	0	N/A	N/A	N/A	0.028	N/A
Zn	mg/L	N/A	N/A	35.674	N/A	3.31	4.433	12.709	235.192	188.605	21.441	N/A	3.182	N/A	N/A	N/A	0.159	N/A

Yanacocha

Fecha de Publicación:
03/07/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	N/A	0.028	N/A	0.015	0.012	N/A	0.018	0.017	0.101	N/A	0.039	N/A	N/A	N/A	0.007	N/A
Al	mg/L	25.257	N/A	11.072	N/A	76.763	125.807	N/A	662.9	1105	566	N/A	168.466	N/A	N/A	N/A	0.184	N/A
As	mg/L	482.632	N/A	121.88	N/A	306.463	34.114	N/A	0.136	25.147	10.267	N/A	3.769	N/A	N/A	N/A	0.182	N/A
B	mg/L	0	N/A	0	N/A	0	0	N/A	0.424	0	0	N/A	0	N/A	N/A	N/A	0.448	N/A
Ba	mg/L	0.203	N/A	0.068	N/A	0.101	0.097	N/A	0.019	0.021	0.037	N/A	0.023	N/A	N/A	N/A	0.107	N/A
Be	mg/L	0	N/A	0	N/A	0.001	0.001	N/A	0.005	0.01	0.016	N/A	0.001	N/A	N/A	N/A	0	N/A
Bi	mg/L	0.22	N/A	0.01	N/A	0.324	0.308	N/A	0.016	0	0	N/A	0	N/A	N/A	N/A	0.007	N/A
Ca	mg/L	34.414	N/A	39.799	N/A	26.23	60.447	N/A	54.965	24.515	67.049	N/A	41.117	N/A	N/A	N/A	14.822	N/A
Cd	mg/L	83.889	N/A	157.016	N/A	0.818	0.408	N/A	4.249	4.014	0.368	N/A	0.2	N/A	N/A	N/A	0.009	N/A
Co	mg/L	3.493	N/A	8.154	N/A	0.995	1.608	N/A	1.822	1.64	1.356	N/A	0.792	N/A	N/A	N/A	0.001	N/A
Cr	mg/L	13.268	N/A	13.424	N/A	10.818	0.427	N/A	0.125	2.892	6.815	N/A	0.485	N/A	N/A	N/A	0	N/A
Cu	mg/L	106.883	N/A	52.862	N/A	59.611	30.923	N/A	2.123	74.055	4339	N/A	545.4	N/A	N/A	N/A	0.035	N/A
Fe	mg/L	22130	N/A	6038	N/A	9191	6349	N/A	17.281	1549	2298	N/A	1062	N/A	N/A	N/A	0.49	N/A
Ga	mg/L	2.091	N/A	0.585	N/A	1.297	2.217	N/A	0.027	2.633	0.844	N/A	0.385	N/A	N/A	N/A	0.016	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	0.469	N/A	0.233	N/A	0.336	2.79	N/A	16.265	3.459	0.392	N/A	0.591	N/A	N/A	N/A	1.534	N/A
Li	mg/L	0.438	N/A	0.024	N/A	0.184	0.01	N/A	0.057	0.029	0.149	N/A	0.019	N/A	N/A	N/A	0.219	N/A
Mg	mg/L	1.547	N/A	1.596	N/A	0.848	1.663	N/A	4.481	2.191	11.42	N/A	2.214	N/A	N/A	N/A	1.413	N/A
Mn	mg/L	7.76	N/A	2.612	N/A	4.573	2.51	N/A	1.296	1.573	3.959	N/A	1.214	N/A	N/A	N/A	0.035	N/A
Mo	mg/L	2.898	N/A	0	N/A	0.358	0.014	N/A	0	0.069	0.129	N/A	0	N/A	N/A	N/A	0.138	N/A
Na	mg/L	6.405	N/A	1.069	N/A	1.21	1.496	N/A	1.618	1.973	2.339	N/A	2.459	N/A	N/A	N/A	5.275	N/A
Nb	mg/L	0	N/A	0	N/A	0	0	N/A	0	0.01	0	N/A	0	N/A	N/A	N/A	0.005	N/A
Ni	mg/L	2.256	N/A	2.685	N/A	0.489	0.546	N/A	0.651	0.859	0.637	N/A	0.518	N/A	N/A	N/A	0.003	N/A

Fecha de Publicación:
03/07/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.984	N/A	0.739	N/A	0.772	1.17	N/A	0.842	0.076	0.434	N/A	0.073	N/A	N/A	N/A	0	N/A
Sb	mg/L	18.348	N/A	0	N/A	0	0	N/A	0	0	0	N/A	0	N/A	N/A	N/A	0.015	N/A
Sc	mg/L	0	N/A	0	N/A	0.216	0.259	N/A	0.273	2.314	3.522	N/A	0.551	N/A	N/A	N/A	0.001	N/A
Se	mg/L	0	N/A	0	N/A	0	0	N/A	0.021	0	0	N/A	0	N/A	N/A	N/A	0	N/A
Sn	mg/L	0.498	N/A	0	N/A	0	0	N/A	0.004	0	0.047	N/A	0	N/A	N/A	N/A	0.006	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.058	N/A	0.043	N/A	0.265	0.174	N/A	0.061	0.794	0.179	N/A	0.125	N/A	N/A	N/A	0.1	N/A
Te	mg/L	4.272	N/A	2.091	N/A	1.387	0.92	N/A	0.061	0.511	0.389	N/A	0.182	N/A	N/A	N/A	0	N/A
Ti	mg/L	1.103	N/A	0.079	N/A	0.062	0.056	N/A	0.004	0.017	0	N/A	0	N/A	N/A	N/A	0.001	N/A
Tl	mg/L	3.314	N/A	0.112	N/A	0	0.007	N/A	0.028	0	0	N/A	0.003	N/A	N/A	N/A	0.009	N/A
V	mg/L	2.296	N/A	0.55	N/A	1.216	1.264	N/A	0	1.137	0.311	N/A	0.168	N/A	N/A	N/A	0	N/A
W	mg/L	0	N/A	0	N/A	0	0	N/A	0	0	0	N/A	0	N/A	N/A	N/A	0.066	N/A
Zn	mg/L	82.669	N/A	51.409	N/A	4.055	6.252	N/A	112.783	119.417	39.691	N/A	3.436	N/A	N/A	N/A	0.164	N/A

Yanacocha

Fecha de Publicación:
01/08/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/08/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
02/09/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
02/09/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/10/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0.046	0	N/A	0.015	0	0	0.094	0.034	0.041	0.035	0	0.009	0.001	0.014
Al	mg/L	15.794	16.114	5.636	0	52.25	N/A	42.153	0	N/A	205.118	134.035	163.435	70.842	26.666	0.713	0.32	1.225
As	mg/L	138.93	78.001	84.969	0.283	125.62	N/A	25.236	3.282	42.475	35.385	24.831	6.608	0.405	140.938	0.326	0.105	0.042
B	mg/L	0	0	0	0	0	N/A	0	0	0	0	0	0	0.591	0	0.425	0.414	0.499
Ba	mg/L	0.111	0.239	0.075	0.016	0.096	N/A	0.101	0.023	0.121	0.13	0.099	0.033	0.015	0.309	0.027	0.104	0.023
Be	mg/L	0	0	0	0.019	0.001	N/A	0.001	0.01	0.007	0.003	0.001	0.001	0.003	0	0.002	0	0.002
Bi	mg/L	0.501	0.399	0.097	0	0.59	N/A	0	0.077	0.098	0	0	0	0	0.15	0.033	0.014	0.046
Ca	mg/L	27.57	98.438	27.207	73.06	35.643	N/A	97.239	37.579	20.464	34.16	41.502	29.092	83.319	144.765	247.019	13.7	283.647
Cd	mg/L	58.795	54.225	152.545	7.117	0.464	N/A	135.025	9.719	4.445	0.269	0.131	0.078	0.039	122.545	0.095	0.008	0.061
Co	mg/L	2.451	3.974	6.033	1.225	0.959	N/A	3.403	2.167	2.057	1.435	1.257	0.895	0.501	2.317	0.256	0.002	0.306
Cr	mg/L	5.557	1.629	5.585	4.757	4.378	N/A	63.937	0.46	2.233	6.029	2.178	0.554	0.014	1.609	0.002	0.001	0
Cu	mg/L	100.723	48.159	65.761	546.913	78.803	N/A	242.604	8.696	144.905	N/A	518.515	591.546	439.505	46.923	1.798	0.336	2.369
Fe	mg/L	1050.402	1018.345	1041.551	382.883	1047.625	N/A	996.443	650.551	1029.14	1009.15	1046.592	874.02	7.082	1021.921	0.788	0.453	0.407
Ga	mg/L	0.903	1.071	0.533	0.102	0.929	N/A	0.526	0.718	7.775	1.904	1.914	0.755	0.015	0.855	0	0.002	0
Hg	ppb	1.184	9.48	8.478	1.093	4.374	N/A	2.13	0.578	2.469	2.08	2.874	0.541	0.597	0.938	0.036	0.095	0.032
K	mg/L	5.655	5.618	0.26	7.04	0.778	N/A	0.385	3.161	3.017	0.157	0.358	0.451	2.707	9.678	33.661	0.994	39.237
Li	mg/L	0.072	0.015	0.017	0.05	0.091	N/A	0.049	0.099	0.199	0.085	0.02	0.019	0.036	0.02	0.023	0.121	0.026
Mg	mg/L	2.117	4.409	0.944	5.917	1.413	N/A	4.33	4.257	1.61	2.757	2.367	1.57	14.872	5.667	17.503	1.609	20.449
Mn	mg/L	4.154	5.178	2.478	7.316	4.081	N/A	6.039	2.914	4.525	4.653	3.691	1.513	1.417	5.277	114.659	0.072	137.345
Mo	mg/L	0.864	0.126	0.013	0.003	0.204	N/A	0.02	0	0.417	0.862	0	0	0.008	0.149	0.001	0.074	0
Na	mg/L	12.128	4.87	1.191	2.156	1.173	N/A	1.599	1.896	2.375	1.146	2.312	2.144	2.969	6.96	12.697	2.254	16.56
Nb	mg/L	0	0	0	0	0	N/A	0	0	0	0	0	0	0	0	0	0.004	0.001
Ni	mg/L	1.422	2.885	2.049	1.051	0.451	N/A	2.128	0.85	1.209	0.696	0.759	0.597	0.337	2.343	0.039	0.005	0.045

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.075	2.131	1.755	0.097	1.316	N/A	1.042	0.738	0.895	0.254	0.071	0.1	0.068	2.331	0.145	0.006	0.338
Sb	mg/L	5.788	0	0	0	0	N/A	0	0	0	0	0	0	0	0	0	0	0
Sc	mg/L	0	0	0	0.725	0.073	N/A	0.039	0.691	1.179	0.522	0.342	0.372	0.041	0	0	0	0
Se	mg/L	0	0	0	0	0	N/A	0	0.026	0	0	0	0	0.073	0	0	0	0.079
Sn	mg/L	0.118	0.017	0	0.022	0	N/A	0	0.014	0.011	0.028	0	0.013	0.039	0.1	0.041	0.002	0.048
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.024	0.097	0.02	0.458	0.288	N/A	0.137	0.092	0.403	0.108	0.208	0.117	0.222	0.171	1.218	0.114	1.382
Te	mg/L	1.361	2.204	1.728	0	0.943	N/A	0.429	0.351	1.885	1.413	0.921	0.308	0	3.35	0.004	0.01	0
Ti	mg/L	0.41	0.484	0.075	0	0.023	N/A	0.091	0.004	0.007	0.018	0.013	0	0	0.99	0.002	0.001	0.001
Tl	mg/L	11.835	23.702	1.146	0	0.017	N/A	0.023	0.01	0	0	0	0	0.01	12.916	0.039	0.016	0.039
V	mg/L	0.752	0.794	0.43	0.038	0.655	N/A	0.311	0.355	2.283	1.147	1.243	0.522	0	0.666	0	0	0
W	mg/L	0	0	0	0	0	N/A	0	0	0	0	0	0	0.077	0	0	0.038	0.018
Zn	mg/L	58.237	91.517	40.752	127.262	5.922	N/A	31.212	156.075	138.367	34.735	7.152	4.699	2.764	102.158	8.171	0.453	9.254

Yanacocha

Fecha de Publicación:
01/11/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0.042	0	0.001	0	0	0.002	0.048	0.018	0.041	0.035	0	0.002	0.002	0.014
Al	mg/L	7.068	7.178	3.615	654	28.843	67.406	7.736	456.4	268.043	68.333	71.884	139.99	113.157	8.344	0.188	0.159	1.384
As	mg/L	41.365	38.282	44.555	1.158	70.543	8.388	26.784	1.557	9.962	12.657	10.987	4.75	0.024	40.866	0.052	0.04	0.024
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0.292	0	0.467	0.445	0.404
Ba	mg/L	0.056	0.057	0.06	0.02	0.07	0.056	0.043	0.02	0.057	0.074	0.071	0.033	0.01	0.055	0.024	0.08	0.014
Be	mg/L	0	0.001	0	0.013	0.001	0.001	0.001	0.006	0.003	0.001	0.001	0.001	0.005	0	0	0	0.003
Bi	mg/L	0.091	0.099	0	0	0.222	0.081	0	0.011	0.032	0	0	0	0	0.069	0	0	0.005
Ca	mg/L	23.917	23.564	23.893	28.358	22.776	24.43	26.083	17.282	17.641	27.444	33.294	27.986	44.376	19.277	92.923	11.338	242.856
Cd	mg/L	20.43	19.193	88.407	4.348	0.287	0.243	33.097	4.756	1.449	0.098	0.084	0.061	0.023	39.606	0.071	0.009	0.037
Co	mg/L	0.962	1.068	3.832	0.583	0.606	1.097	1.073	0.766	0.993	0.646	0.859	0.68	0.264	0.725	0.02	0.007	0.292
Cr	mg/L	1.518	1.188	2.594	3.808	2.673	0.271	11.429	0.196	0.545	1.815	1.058	0.43	0.076	0.424	0.009	0	0
Cu	mg/L	44.53	42.92	59.552	626.9	70.855	78.328	81.514	7.411	78.548	1099	429.222	788.9	530.992	32.786	0.282	0.103	2.847
Fe	mg/L	2374	2528	3130	839.3	3227	2571	2071	755.9	3053	3453	3363	1716	15.98	2709	0.638	0.591	0.259
Ga	mg/L	0.291	0.292	0.339	0.284	0.483	1.075	0.205	0.403	2.268	0.759	0.915	0.541	0.023	0.234	0.012	0.01	0
Hg	ppb	37.133	16.006	18.157	3.407	7.074	3.66	2.093	0.563	2.186	2.002	3.13	0.699	0.158	0.25	0.005	0.012	0.01
K	mg/L	2.463	2.148	0.243	1.793	0.223	3.233	0	0.68	2.547	0	0.351	0.069	0.963	2.147	7.258	0.392	41.901
Li	mg/L	0.02	0.018	0.015	0.025	0.038	0.009	0.016	0.034	0.113	0.019	0.016	0.015	0.018	0.007	0.018	0.088	0.023
Mg	mg/L	1.164	1.131	0.963	2.226	0.857	0.88	1.197	1.597	1.097	1.223	1.971	1.584	5.662	0.529	7.334	1.317	16.865
Mn	mg/L	1.675	1.726	1.917	3.003	2.361	1.435	2.02	1.546	2.052	2.442	2.379	1.403	0.649	2.044	4.917	0.083	141.01
Mo	mg/L	0.182	0.12	0.003	0	0.113	0	0	0	0.137	0.504	0	0.001	0.001	0.018	0	0.07	0
Na	mg/L	3.47	3.057	1.061	1.249	1.028	1.036	0.629	0.819	1.049	0.696	1.449	1.403	1.383	1.566	16.404	1.778	3.465
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0.003	0.002
Ni	mg/L	0.636	0.73	1.353	0.43	0.281	0.38	0.591	0.327	0.571	0.326	0.494	0.46	0.17	0.735	0.033	0.005	0.032

Yanacocha

Fecha de Publicación:
01/11/2010

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.291	1.447	1.707	0.14	0.902	1.387	1.588	0.504	0.958	0.129	0.144	0.108	0.09	1.51	0.006	0.018	0.323
Sb	mg/L	1.601	0.99	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0.005	0.011
Sc	mg/L	0	0	0	0.605	0.04	0.11	0.003	0.393	0.299	0.122	0.172	0.336	0.186	0	0	0	0
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0.027	0	0	0.018	0.062
Sn	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.007	0.007	0.002	0.009
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.018	0.018	0.015	0.237	0.204	0.11	0.049	0.043	0.17	0.106	0.258	0.116	0.13	0.015	1.798	0.096	0.555
Te	mg/L	0.632	0.82	1.133	0.267	0.75	0.644	0.507	0.271	0.878	0.998	0.795	0.356	0.001	1.175	0.002	0	0
Ti	mg/L	0.113	0.11	0.063	0	0.015	0.008	0.026	0.003	0.004	0.016	0.007	0	0	0.134	0.002	0.001	0.001
Tl	mg/L	5.543	6.873	1.483	0.01	0	0.021	0.03	0	0	0	0	0	0.015	19.269	0.031	0.012	0.012
V	mg/L	0.259	0.266	0.325	0.158	0.433	0.615	0.231	0.233	0.942	0.654	1.014	0.468	0	0.225	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0.037	0	0	0.034	0
Zn	mg/L	31.238	35.574	27.379	95.618	2.284	4.352	9.582	109.1	90.093	11.328	4.077	3.637	2.083	44.46	5.797	0.342	6.91

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	3.696	3.781	2.466	338.119	17.359	40.678	61.387	366.338	145.097	47.967	46.259	72.726	167.625	4.129	0.144	0.775	0.561
As	mg/L	11.269	12.61	24.783	8.723	47.993	5.627	26.729	2.016	4.123	8.108	3.604	4.412	0.132	20.759	0	0	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.341	0.228	0.268
Ba	mg/L	0.029	0.05	0.049	0.03	0.069	0.04	0.044	0.023	0.046	0.062	0.052	0.027	0.012	0.045	0.025	0.087	0.006
Be	mg/L	0	0	0	0.007	0	0.001	0	0.006	0.001	0	0.001	0	0.007	0	0.001	0	0.001
Bi	mg/L	0.057	0.086	0.039	0	0.335	0.069	0	0.022	0.016	0	0	0	0	0.062	0.001	0.001	0.013
Ca	mg/L	12.858	17.313	18.148	23.652	13.005	13.916	22.789	13.298	16.772	18.946	31.119	18.892	42.621	21.054	81.786	23.785	92.105
Cd	mg/L	9.591	15.84	50.384	7.272	0.084	0.154	18.057	4.942	0.859	0.061	0.054	0.044	0.038	26.935	0.032	0	0
Co	mg/L	0.418	1.064	2.663	0.581	0.535	0.81	1.005	0.619	0.772	0.522	0.611	0.375	0.339	0.491	0.021	0.032	0.12
Cr	mg/L	0.749	0.329	1.294	3.82	1.52	0.135	6.407	0.18	0.241	1.19	0.627	0.278	0.524	0.273	0	0.003	0
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	705.165	2447	2873	731.426	3496	2321	2414	643.471	2515	3107	2354	1509	259.676	2086	0	14.666	0
Ga	mg/L	0.142	0.302	0.256	0.369	0.418	0.671	0.224	0.559	1.126	0.613	0.468	0.496	0.182	0.174	0.013	0.006	0
Hg	ppb	70.606	68.001	70.731	25.107	44.867	19.849	16.8	6.156	14.382	18.091	9.621	16.159	2.245	11.41	0.035	0.048	0.035
K	mg/L	1.754	0.75	0.092	0.845	0.292	1.817	0.115	0.929	2.619	0.015	0.521	0.533	0.64	1.313	7.503	2.418	15.365
Li	mg/L	0.014	0.002	0.005	0.011	0.019	0.002	0.009	0.017	0.028	0.007	0.007	0.006	0.015	0.002	0.014	0.054	0.007
Mg	mg/L	0.652	0.582	0.802	1.522	0.397	0.423	1.293	1.324	1.003	0.971	1.649	1.063	6.404	0.659	6.435	2.042	6.087
Mn	mg/L	1.011	1.467	1.511	2.153	1.918	1.081	2.026	1.874	1.485	2.152	1.649	2.374	0.855	1.918	4.757	9.267	60.831
Mo	mg/L	0.153	0	0	0.008	0.076	0	0.013	0	0.059	0.668	0	0.006	0	0.021	0.001	0.054	0
Na	mg/L	2.005	1.023	0.747	0.915	0.566	0.635	0.696	0.952	0.722	0.683	1.066	0.996	1.357	1.153	12.371	1.148	1.198
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.011	0.003	0.003
Ni	mg/L	0.247	0.758	0.948	0.344	0.257	0.272	0.526	0.293	0.434	0.276	0.353	0.253	0.207	0.526	0.031	0.007	0.011

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.307	2.147	1.888	0.348	1.041	1.325	1.672	0.873	1.162	0.051	0.076	0.057	0.096	1.72	0.02	0.03	0.107
Sb	mg/L	1.162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016	0
Sc	mg/L	0	0	0	0.411	0.015	0.047	0.067	0.361	0.111	0.065	0.097	0.159	0.455	0	0.001	0.002	0
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.014
Sn	mg/L	0	0	0.001	0.002	0	0	0	0	0	0	0	0.01	0.006	0	0.005	0	0.014
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.013	0.011	0.011	0.147	0.159	0.081	0.048	0.041	0.122	0.131	0.229	0.088	0.132	0.023	1.578	0.118	0.179
Te	mg/L	0.395	0.771	0.846	0.458	0.655	0.451	0.568	0.376	0.582	0.813	0.472	0.283	0.061	0.893	0	0	0
Ti	mg/L	0.052	0.055	0.048	0.005	0.011	0.003	0.029	0.002	0.003	0.022	0.004	0	0	0.093	0.002	0.001	0.001
Tl	mg/L	2.676	7.328	1.766	0	0	0.011	0.031	0.002	0.016	0.001	0	0	0.016	12.349	0.028	0.004	0.002
V	mg/L	0.157	0.243	0.27	0.545	0.378	0.441	0.293	0.354	0.596	0.5	0.547	0.522	0.014	0.177	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0.021	0.002
Zn	mg/L	15.257	42.074	18.515	98.499	1.297	3.938	34.56	126.432	87.577	6.87	2.584	2.491	2.515	30.176	5.666	0.774	2.886

Yanacocha

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CLIENTE: LM-METALURGIA
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Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	2.592	0	19.948	222.993	35.717	32.98	4.242	156.283	105.808	67.251	28.41	74.421	61.492	3.258	0.66	0.867	0.759
As	mg/L	13.441	16.125	19.353	4.021	43.121	5.933	14.894	1.27	3.71	3.987	2.64	6.097	0.685	21.899	0	0.002	0
B	mg/L	0	37.412	41.766	0	39.583	0	0	0	0	37.17	0	0	0	0	0.578	0.659	0.554
Ba	mg/L	0.045	0	0.017	0.047	0.034	0.08	0.08	0.039	0.079	0.141	0.068	0.071	0.044	0.059	0.027	0.098	0.016
Be	mg/L	0	0	0	0.04	0	0	0	0.002	0.001	0	0	0	0.002	0	0	0	0
Bi	mg/L	0.027	0.212	0	0	0.921	0.05	0	0.033	0.061	0	0	0	0	0.032	0.019	0.015	0.009
Ca	mg/L	13.549	20.103	20.182	19.08	15.592	12.584	20.434	9.007	16.237	25.114	20.28	21.238	26.541	10.658	40.329	9.917	37.06
Cd	mg/L	3.082	13.997	34.108	2.199	0	0.041	6.72	2.336	0.634	0	0.023	0.026	0.011	17.212	0.036	0	0.007
Co	mg/L	0.191	1.167	2.378	0.342	0.59	0.891	0.629	0.313	0.728	0.498	0.41	0.475	0.223	0.367	0.01	0.007	0.083
Cr	mg/L	0.205	0.098	0.974	1.61	1.375	0.09	2.657	0.077	0.157	0.781	0.349	0.328	0.596	0.197	0.001	0	0.001
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	601.999	3260.908	3553.029	800.149	4848.261	977.959	863.933	602.279	975.46	4457.5	911.598	949.01	584.37	833.845	0	0	0
Ga	mg/L	0.17	0	0	0.436	0	0.674	0.167	0.38	0.96	0.075	0.371	0.698	0.324	0.177	0.055	0.047	0.02
Hg	ppb	2.537	0.976	0.785	0.153	0.421	0.162	0.068	0.002	0.083	0.175	0.338	0.366	0.974	0.395	0.046	0.02	0.021
K	mg/L	1.253	9.75	11.504	0.86	11.485	2.091	0.625	0.766	3.213	11.335	0.652	0.322	0.337	1.235	7.842	0.638	15.31
Li	mg/L	0.009	0.031	0.029	0.008	0.018	0.005	0.007	0.008	0.008	0.02	0.005	0.006	0.007	0.002	0.009	0.04	0.007
Mg	mg/L	0.718	0	0	1.233	0	0.523	1.104	0.85	1.025	0	1.116	1.278	2.685	0.508	4.063	1.395	4.401
Mn	mg/L	0.579	1.306	1.45	1.669	2.095	1.156	1.08	1.137	1.393	2.279	1.086	1.37	0.691	1.292	3.004	0.054	40.993
Mo	mg/L	0.105	0	0	0.008	0	0	0.007	0	0.042	1.045	0	0.006	0	0.011	0	0.044	0
Na	mg/L	1.815	67.822	77.06	1.235	75.638	1.145	1.794	1.198	1.197	69.097	1.178	1.468	1.293	1.201	6.886	1.439	1.522
Nb	mg/L	0	0.058	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni	mg/L	0.113	0.831	0.993	0.202	0.188	0.288	0.297	0.145	0.397	0	0.23	0.294	0.129	0.38	0.019	0.007	0.01

Yanacocha

Fecha de Publicación:
03/01/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	0.999	0.7	0.779	0.134	0.215	1.442	1.534	0.544	1.304	0	0.051	0.087	0.046	1.529	0	0	0.037
Sb	mg/L	0.781	1.306	0.074	0	1.175	0	0	0	0	0.099	0	0	0	0	0.021	0.021	0
Sc	mg/L	0	0	0	0.293	0	0.034	0	0.136	0.054	0.06	0.047	0.157	0.191	0	0	0	0
Se	mg/L	0	0.122	1.616	0	0	0	0	0	0	0.882	0	0	0	0	0.009	0.01	0
Sn	mg/L	0.007	0	0	0	0	0	0	0	0	0	0	0	0.014	0	0.004	0.002	0.014
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.023	0.029	0.022	0.116	0.198	0.085	0.053	0.022	0.104	0.262	0.147	0.134	0.084	0.017	0.785	0.083	0.09
Te	mg/L	0.204	1.581	1.69	0.431	0.836	0.595	0.393	0.221	0.631	1.558	0.428	0.52	0.17	0.592	0	0	0
Ti	mg/L	0.031	0	0	0.002	0	0.004	0.045	0.002	0.007	0	0.007	0.01	0.011	0.071	0.002	0.002	0.002
Tl	mg/L	1.231	6.691	4.201	0.005	0	0.008	0.045	0.001	0.008	0.425	0.001	0	0.009	7.912	0.03	0.013	0.008
V	mg/L	0.115	0.544	0.754	0.549	1.114	0.509	0.192	0.201	0.568	1.048	0.385	0.746	0.085	0.16	0.002	0.004	0.005
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.017	0
Zn	mg/L	8.353	51.992	18.813	103.576	1.514	2.735	4.453	120.552	84.309	7.993	2.062	4.305	2.408	21.928	4.047	0.39	2.375

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	0	0	0.015	0	0	0	0	0	0.012	0.006	0.014	0.008	0	0	0	0.007
Al	mg/L	1.643	2.462	1.696	204.393	6.24	23.385	3.194	162.895	82.272	24.91	20.923	55.069	35.153	2.071	0.26	0.23	0.78
As	mg/L	14.603	17.014	18.841	5.287	21.074	5.494	18.357	1.926	3.141	5.022	2.49	5.439	1.66	19.703	0.054	0.039	0.013
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.592	0.599	0.541
Ba	mg/L	0.023	0.038	0.037	0.026	0.048	0.034	0.03	0.018	0.031	0.043	0.03	0.036	0.029	0.029	0.019	0.084	0.013
Be	mg/L	0	0	0	0.004	0	0	0	0.002	0	0	0	0	0.001	0	0	0	0.002
Bi	mg/L	0.033	0.071	0.046	0	0.261	0.088	0	0.03	0.065	0	0	0	0	0.068	0.003	0.004	0.007
Ca	mg/L	7.371	11.534	14.093	17.815	15.681	11.051	9.687	9.166	14.322	16.184	14.038	14.186	17.004	6.96	42.852	9.448	161.891
Cd	mg/L	2.705	8.855	18.596	1.935	0	0.03	4.382	2.411	0.465	0.001	0.004	0.011	0.002	16.581	0.043	0.002	0.024
Co	mg/L	0.2	0.72	1.866	0.377	0.406	0.731	0.679	0.363	0.595	0.424	0.376	0.376	0.189	0.383	0.012	0.004	0.203
Cr	mg/L	0.149	0.214	0.599	1.339	0.489	0.065	2.001	0.077	0.109	0.414	0.247	0.272	0.476	0.173	0	0	0
Cu	mg/L	22.836	18.602	25.274	355.319	23.536	39.839	31.083	6.208	32.334	355.103	113.569	363.899	227.911	14.764	0.234	0	1.806
Fe	mg/L	1072.249	2555.285	2818.521	1863.716	3089.902	2402.276	2147.898	1166.187	2573.226	3027.046	2035.341	2272.412	1136.096	1612.966	0	0	0
Ga	mg/L	0.066	0.145	0.146	0.399	0.158	0.418	0.104	0.357	0.666	0.266	0.22	0.446	0.237	0.079	0.003	0.01	0
Hg	ppb	0.953	1.028	1.777	0.997	1.713	0.767	0.531	0.216	0.368	0.441	0.422	3.555	1.011	0.522	0.001	0.008	0.025
K	mg/L	0.564	0.321	0	0.772	0.234	1.11	0.009	0.635	2.188	0.056	0.313	0.105	0.025	0.609	5.02	0.284	29.406
Li	mg/L	0.002	0	0	0.002	0	0	0	0.002	0	0.001	0	0	0	0	0.004	0.031	0.011
Mg	mg/L	0.209	0.288	0.319	0.932	0.086	0.122	0.458	0.669	0.581	0.652	0.568	0.725	1.175	0.168	3.316	0.983	10.499
Mn	mg/L	0.74	1.293	1.274	1.915	1.385	1.041	1.22	1.53	1.389	1.605	1.036	1.242	0.712	1.316	2.761	0.053	109.293
Mo	mg/L	0.167	0.003	0.002	0.021	0.067	0	0.015	0	0.034	1.332	0	0.009	0	0.02	0.003	0.05	0
Na	mg/L	0.089	0	0	0.111	0	0	0.128	0.197	0.119	0.195	0.145	0.533	0.15	0.09	3.935	0.401	1.551
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0.004	0.009
Ni	mg/L	0.113	0.538	0.681	0.218	0.191	0.24	0.315	0.173	0.339	0.209	0.209	0.236	0.115	0.396	0.018	0	0.022

Yanacocha

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Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.157	1.724	1.827	0.206	0.999	1.212	1.648	0.727	1.227	0.076	0.056	0.068	0.031	1.503	0.002	0.007	0.298
Sb	mg/L	1.012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.006	0
Sc	mg/L	0	0	0	0.246	0	0.023	0	0.132	0.034	0.041	0.031	0.117	0.083	0	0	0	0
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016
Sn	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0	0.002	0.003	0.002
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.006	0.008	0.007	0.098	0.112	0.061	0.025	0.018	0.078	0.228	0.118	0.116	0.079	0.008	0.858	0.076	0.375
Te	mg/L	0.181	0.522	0.442	0.286	0.403	0.352	0.344	0.185	0.382	0.451	0.27	0.339	0.145	0.577	0	0	0
Ti	mg/L	0.041	0.054	0.051	0.003	0.013	0.008	0.044	0.003	0.006	0.027	0.004	0.004	0.018	0.065	0.003	0.001	0.001
Tl	mg/L	1.131	4.461	1.658	0	0	0	0.016	0	0	0	0	0	0	7.118	0.012	0.007	0.012
V	mg/L	0.107	0.17	0.193	0.646	0.239	0.355	0.166	0.206	0.419	0.294	0.322	0.599	0.079	0.126	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.031	0
Zn	mg/L	10.402	32.385	12.951	119.028	1.33	2.093	4.305	140.481	79.54	3.836	1.165	1.872	1.069	22.603	3.858	0.348	6.017

Yanacocha

Fecha de Publicación:
03/03/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	2.095	2.186	1.313	123.022	8.32	33.684	5.369	144.811	71.357	27.144	15.032	46.314	45.785	2.121	0.183	0.377	0.731
As	mg/L	21.369	17.059	16.051	3.978	28.276	11.138	42.943	1.96	3.437	6.25	2.232	5.693	4.776	19.401	0.02	0.045	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.596	0.586	0.656
Ba	mg/L	0.033	0.051	0.046	0.035	0.095	0.071	0.063	0.037	0.049	0.072	0.046	0.059	0.043	0.035	0.023	0.094	0.014
Be	mg/L	0	0	0	0.002	0	0	0	0.002	0	0	0	0	0.001	0	0	0	0.001
Bi	mg/L	0.017	0.094	0.03	0	0.4	0.1	0	0	0	0	0	0	0	0.022	0	0.005	0.007
Ca	mg/L	9.326	17.426	12.846	18.472	18.962	12.762	11.708	10.811	10.038	23.156	24.907	16.748	30.163	14.137	41.597	9.282	171.463
Cd	mg/L	4.056	9.464	11.335	1.37	0	0.046	6.129	2.718	0.488	0.026	0.017	0.008	0	17.175	0.038	0.004	0.029
Co	mg/L	0.324	0.764	1.751	0.29	0.598	1.241	1.252	0.395	0.595	0.649	0.365	0.434	0.353	0.407	0.013	0.006	0.195
Cr	mg/L	0.17	0.225	403	0.721	0.854	0.091	3.3	0.08	0.093	0.437	0.191	0.265	0.703	0.162	0	0	0
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	2201	2983	2786	1765	4819	4251	3873	1625	2864	4155	2313	3180	2355	1945	0.141	0.758	0.115
Ga	mg/L	0.198	0.281	0.198	0.35	0.426	0.851	0.289	0.391	0.685	0.397	0.276	0.593	0.405	0.127	0	0	0
Hg	ppb	3.048	1.395	3.035	1.769	3.204	2.243	1.508	2.629	1.981	1.86	0.738	0.83	0.515	0.16	0.188	0.064	0.435
K	mg/L	0.621	0.318	0	0.489	0.385	1.577	0	0.751	1.889	0.148	0.354	0.107	0	0.448	4.314	0.217	27.987
Li	mg/L	0.006	0.001	0.003	0.003	0.003	0.001	0.004	0.005	0.002	0.004	0.004	0.003	0.004	0.001	0.006	0.035	0.014
Mg	mg/L	0.179	0.286	0.124	0.697	0.1	0	0.494	0.697	0.285	0.591	0.687	0.629	1.609	0.314	2.836	1.149	9.898
Mn	mg/L	1.019	1.68	1.281	1.721	4.256	1.807	2.136	2.103	1.396	2.291	1.674	2.239	1.441	1.393	2.394	0.045	107.119
Mo	mg/L	0.302	0.007	0.003	0.022	0.07	0	0.038	0	0.028	1.443	0	0.013	0	0.016	0.001	0.055	0
Na	mg/L	0.677	0.569	0.381	0.474	0.801	0.502	0.727	0.763	0.524	0.755	0.925	0.846	1.112	0.617	2.573	0.765	1.608
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002	0
Ni	mg/L	0.173	0.574	0.633	0.171	0.346	0.399	0.549	0.196	0.34	0.306	0.224	0.279	0.221	0.413	0.024	0.005	0.025

Yanacocha

Fecha de Publicación:
03/03/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.975	1.752	1.954	0.242	1.294	1.652	1.944	0.958	1.252	0.247	0.103	0.171	0.123	1.705	0	0	0.203
Sb	mg/L	1.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0.014	N/A	0
Sc	mg/L	0	0	0	0.117	0	0.028	0	0.09	0.025	0.039	0.017	0.086	0.099	0	0	0	0
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002	0.005	0.031
Sn	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.011	0.01	0.009	0.079	0.129	0.088	0.03	0.026	0.073	0.391	0.125	0.159	0.148	0.011	0.746	0.088	0.366
Te	mg/L	0.425	0.703	0.599	0.339	0.837	0.766	0.671	0.263	0.539	0.725	0.353	0.501	0.369	0.593	0	0.002	0.002
Ti	mg/L	0.059	0.049	0.037	0.003	0.017	0.005	0.057	0.005	0.003	0.02	0.009	0.007	0.037	0.06	0.003	0.001	0.001
Tl	mg/L	1.286	4.6	1.773	0	0	0	0.038	0	0	0	0	0	0	6.827	0.002	0	0
V	mg/L	0.206	0.19	0.177	0.454	0.386	0.582	0.282	0.204	0.409	0.378	0.299	0.737	0.197	0.115	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.023	0
Zn	mg/L	18.73	36.655	11.918	107.588	1.404	3.349	6.856	154.125	82.293	4.723	1.667	1.997	1.678	24.073	3.628	0.479	6.334

Yanacocha

Fecha de Publicación:
01/04/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0.008	0	0	0	0	0	0.006	0.004	0.014	0.013	0	0.002	0	0.02
Al	mg/L	1.645	1.201	1.068	60.394	5.146	17.907	3.267	74.042	38.753	10.105	6.983	32.063	29.612	1.29	0.411	0.37	1.066
As	mg/L	13.402	10.121	9.642	2.03	15.856	4.391	18.487	0.925	1.469	2.084	1.281	3.899	3.182	9.867	0.008	0.039	0.002
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.995	0.835	0.873
Ba	mg/L	0.037	0.038	0.044	0.037	0.077	0.056	0.048	0.028	0.041	0.058	0.042	0.059	0.053	0.028	0.023	0.096	0.014
Be	mg/L	0	0	0	0.001	0	0	0	0.001	0	0	0	0	0.007	0.001	0.001	0	0.002
Bi	mg/L	0	0.038	0.016	0	0.243	0	0.028	0.001	0	0	0.02	0	0	0.062	0.014	0.009	0.01
Ca	mg/L	6.265	5.36	5.603	12.494	11.696	10.952	11.34	4.832	5.64	12.117	6.732	13.741	29.453	4.296	27.776	7.246	178.128
Cd	mg/L	2.541	5.643	5.229	0.74	0	0.025	2.783	1.526	0.316	0.007	0.003	0.006	0.013	9.358	0.032	0.001	0.033
Co	mg/L	0.231	0.431	1.303	0.199	0.402	0.835	0.76	0.251	0.389	0.356	0.253	0.353	0.284	0.214	0.011	0.003	0.211
Cr	mg/L	0.108	0.116	0.2	0.319	0.399	0.046	1.549	0.038	0.056	0.161	0.091	0.179	0.38	0.079	0.003	0	0.001
Cu	mg/L	27.881	12.893	15.711	138.264	19.957	43.705	30.842	4.286	18.445	193.531	43.749	261.645	248.077	9.541	0.246	0.038	2.213
Fe	mg/L	1525	1542	1818	541.657	2777	2240	2070	516.589	675.923	2230	1439	2218	1677	525.532	0.876	0.51	0.677
Ga	mg/L	0.196	0.179	0.189	0.231	0.322	0.519	0.207	0.239	0.436	0.27	0.197	0.498	0.338	0.089	0.023	0.016	0
Hg	ppb	7.24	2.757	3.713	1.214	2.617	1.263	0.735	0.188	0.301	1.298	0.317	0.363	0.187	0.069	0	0	0
K	mg/L	0.381	0.3	0.139	0.766	0.442	1.398	0.123	0.732	1.488	0.146	0.349	0.3	0.143	0.352	3.551	0.242	27.175
Li	mg/L	0.008	0.003	0.004	0.005	0.005	0.003	0.005	0.004	0.005	0.004	0.003	0.005	0.018	0.003	0.008	0.027	0.017
Mg	mg/L	0.124	0.03	0	0.424	0.012	0	0.285	0.399	0.154	0.091	0.183	0.414	1.315	0.084	2.022	0.919	10.552
Mn	mg/L	0.784	1.075	1.027	0.898	2.368	1.047	1.232	1.314	0.841	1.36	1.076	1.556	1.224	0.741	1.787	0.037	117.768
Mo	mg/L	0.189	0.002	0.001	0.016	0.036	0	0.02	0	0.014	0.513	0	0.011	0	0.005	0.005	0.053	0.002
Na	mg/L	1.007	0.984	1.017	1.219	1.268	1.392	1.139	1.131	1.357	1.001	1.16	1.453	1.342	1.53	2.353	1.151	2.114
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.002	0.004
Ni	mg/L	0.126	0.332	0.495	0.109	0.193	0.269	0.342	0.121	0.23	0.178	0.144	0.219	0.181	0.216	0.014	0.002	0.024

Yanacocha

Fecha de Publicación:
01/04/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.746	1.722	1.912	0.28	1.069	1.54	1.833	0.931	1.084	0.14	0.08	0.17	0.123	1.504	0	0	0.273
Sb	mg/L	1.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0.012	0	0.005
Sc	mg/L	0	0	0	0.048	0	0.01	0	0.036	0.016	0.007	0.005	0.062	0.061	0	0	0	0
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.013	0.036
Sn	mg/L	0	0.021	0	0	0	0	0	0	0	0	0	0	0	0.13	0	0.003	0.005
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.007	0.003	0.004	0.055	0.1	0.069	0.031	0.017	0.052	0.218	0.08	0.145	0.179	0.003	0.561	0.074	0.39
Te	mg/L	0.324	0.345	0.402	0.179	0.508	0.439	0.412	0.107	0.309	0.421	0.221	0.411	0.298	0.298	0	0	0
Ti	mg/L	0.038	0.023	0.026	0.003	0.012	0.004	0.035	0.004	0.003	0.012	0.004	0.006	0.037	0.024	0.003	0.002	0.002
Tl	mg/L	0.681	3.023	1.26	0.027	0	0	0.041	0.001	0.005	0.003	0	0	0.053	3.627	0.017	0.012	0.001
V	mg/L	0.171	0.126	0.155	0.28	0.266	0.373	0.183	0.115	0.263	0.219	0.193	0.61	0.178	0.059	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.012	0
Zn	mg/L	12.791	21.177	7.476	70.364	0.963	2.102	3.606	104.538	52.973	2.056	0.726	1.766	1.383	11.555	2.605	0.362	6.846

Yanacocha

Fecha de Publicación:
03/05/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	2.861	0.917	N/A	77.238	N/A	26.378	N/A	92.354	72.402	13.546	N/A	N/A	N/A	N/A	0.172	0.108	N/A
As	mg/L	32.631	4.719	N/A	3.913	N/A	9.94	N/A	2.163	4.787	5.042	N/A	N/A	N/A	N/A	0.012	0.014	N/A
B	mg/L	0	0	N/A	0	N/A	0	N/A	0	0	0	N/A	N/A	N/A	N/A	0.47	0.391	N/A
Ba	mg/L	0.07	0.06	N/A	0.038	N/A	0.088	N/A	0.033	0.073	0.089	N/A	N/A	N/A	N/A	0.03	0.123	N/A
Be	mg/L	0	0	N/A	0.015	N/A	0	N/A	0.013	0.004	0	N/A	N/A	N/A	N/A	0.001	0	N/A
Bi	mg/L	0.02	0.037	N/A	0	N/A	0.038	N/A	0.029	0	0	N/A	N/A	N/A	N/A	0.002	0.001	N/A
Ca	mg/L	9.259	21.148	N/A	16.928	N/A	22.116	N/A	16.979	22.331	25.17	N/A	N/A	N/A	N/A	28.656	11.961	N/A
Cd	mg/L	5.306	2.089	N/A	0.859	N/A	0.027	N/A	1.746	0.537	0.007	N/A	N/A	N/A	N/A	0.02	0.002	N/A
Co	mg/L	0.541	0.187	N/A	0.287	N/A	1.405	N/A	0.353	0.796	0.693	N/A	N/A	N/A	N/A	0.011	0.001	N/A
Cr	mg/L	0.223	0.066	N/A	0.407	N/A	0.081	N/A	0.09	0.13	0.275	N/A	N/A	N/A	N/A	0	0	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	3479	747.5	N/A	1512	N/A	4023	N/A	1504	3376	4133	N/A	N/A	N/A	N/A	0.173	0.184	N/A
Ga	mg/L	0.413	0.079	N/A	0.334	N/A	0.863	N/A	0.349	0.878	0.496	N/A	N/A	N/A	N/A	0.007	0.008	N/A
Hg	ppb	4.051	0.401	N/A	0.471	N/A	1.107	N/A	0.275	0.532	0.249	N/A	N/A	N/A	N/A	0.13	0.128	N/A
K	mg/L	0.172	0	N/A	0.54	N/A	1.525	N/A	0.113	2.153	0.017	N/A	N/A	N/A	N/A	2.931	0.129	N/A
Li	mg/L	0.006	0.001	N/A	0.003	N/A	0.002	N/A	0.003	0.004	0.003	N/A	N/A	N/A	N/A	0.005	0.034	N/A
Mg	mg/L	0.064	0.383	N/A	1.057	N/A	0.277	N/A	0.877	0.737	0.302	N/A	N/A	N/A	N/A	1.877	1.136	N/A
Mn	mg/L	1.809	0.469	N/A	1.63	N/A	2.16	N/A	2.422	2.163	3.35	N/A	N/A	N/A	N/A	1.776	0.016	N/A
Mo	mg/L	0.454	0.018	N/A	0.045	N/A	0.012	N/A	0	0.041	1.06	N/A	N/A	N/A	N/A	0.001	0.066	N/A
Na	mg/L	0.244	0.182	N/A	0.219	N/A	0.22	N/A	0.217	0.281	0.188	N/A	N/A	N/A	N/A	0.403	0.208	N/A
Nb	mg/L	0	0	N/A	0	N/A	0	N/A	0	0	0	N/A	N/A	N/A	N/A	0.005	0.006	N/A
Ni	mg/L	0.286	0.156	N/A	0.167	N/A	0.458	N/A	0.186	0.488	0.362	N/A	N/A	N/A	N/A	0.013	0.002	N/A

Yanacocha

Fecha de Publicación:
03/05/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.237	0.47	N/A	0.246	N/A	2.106	N/A	0.465	1.899	0.23	N/A	N/A	N/A	N/A	0.003	0.006	N/A
Sb	mg/L	1.674	0	N/A	0	N/A	0	N/A	0	0	0	N/A	N/A	N/A	N/A	0	0.009	N/A
Sc	mg/L	0	0	N/A	0.063	N/A	0.01	N/A	0.045	0.029	0.006	N/A	N/A	N/A	N/A	0	0	N/A
Se	mg/L	0	0	N/A	0	N/A	0	N/A	0	0	0	N/A	N/A	N/A	N/A	0.03	0	N/A
Sn	mg/L	0	0	N/A	0	N/A	0	N/A	0	0	0	N/A	N/A	N/A	N/A	0.004	0.003	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.012	0.032	N/A	0.069	N/A	0.11	N/A	0.033	0.101	0.33	N/A	N/A	N/A	N/A	0.546	0.099	N/A
Te	mg/L	8.892	2.055	N/A	2.8	N/A	8.606	N/A	2.709	8.169	8.82	N/A	N/A	N/A	N/A	0	0	N/A
Ti	mg/L	0.089	0.018	N/A	0.014	N/A	0.018	N/A	0.011	0.015	0.024	N/A	N/A	N/A	N/A	0.002	0.001	N/A
Tl	mg/L	1.04	0.904	N/A	0.005	N/A	0	N/A	0.01	0	0	N/A	N/A	N/A	N/A	0.018	0.004	N/A
V	mg/L	0.344	0.049	N/A	0.384	N/A	0.596	N/A	0.164	0.53	0.382	N/A	N/A	N/A	N/A	0	0.001	N/A
W	mg/L	0	0	N/A	0	N/A	0	N/A	0	0	0	N/A	N/A	N/A	N/A	0.002	0.033	N/A
Zn	mg/L	26.032	11.076	N/A	82.649	N/A	3.38	N/A	120.192	80.031	3.007	N/A	N/A	N/A	N/A	2.204	0.365	N/A

Yanacocha

Fecha de Publicación:
03/06/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	92.354	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.163	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.033	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.029	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.979	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.746	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.353	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1504	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.349	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.275	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.113	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.877	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.422	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.217	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.186	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/06/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.465	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.045	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.033	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.709	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.164	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	120.192	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/07/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/07/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/08/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/08/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/09/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/09/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/10/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	N/A	0	0.035	0	N/A	N/A	0	0	0.02	N/A	0.016	N/A	N/A	0.019	N/A	0.063
Al	mg/L	19.011	N/A	17.805	558.1	25.368	N/A	N/A	631.3	186.298	74.618	N/A	92.801	N/A	N/A	1051	N/A	11.198
As	mg/L	125.476	N/A	64.153	47.979	103.372	N/A	N/A	23.886	22.475	25.677	N/A	20.334	N/A	N/A	16.031	N/A	1.774
B	mg/L	0	N/A	0	0	0	N/A	N/A	0	0	0	N/A	0	N/A	N/A	0	N/A	1.061
Ba	mg/L	0.13	N/A	0.122	0.19	0.181	N/A	N/A	0.145	0.18	0.22	N/A	0.203	N/A	N/A	0.077	N/A	0.067
Be	mg/L	0	N/A	0	0.005	0	N/A	N/A	0.005	0.001	0	N/A	0.001	N/A	N/A	0.016	N/A	0.007
Bi	mg/L	0.021	N/A	0.082	0	3.401	N/A	N/A	0	0.065	0	N/A	0.432	N/A	N/A	0	N/A	0.048
Ca	mg/L	55.039	N/A	83.966	31.646	47.776	N/A	N/A	33.011	61.217	58.423	N/A	77.143	N/A	N/A	78.465	N/A	392.646
Cd	mg/L	11.232	N/A	18.894	4.75	0.616	N/A	N/A	10.483	2.17	0.258	N/A	1.741	N/A	N/A	6.59	N/A	0.973
Co	mg/L	2.705	N/A	3.932	1.589	1.376	N/A	N/A	1.446	1.956	2.197	N/A	1.42	N/A	N/A	3.207	N/A	0.654
Cr	mg/L	8.757	N/A	1.483	1.97	1.881	N/A	N/A	0.412	0.498	2.047	N/A	1.541	N/A	N/A	0.548	N/A	0.044
Cu	mg/L	141.232	N/A	71.623	1305	88.371	N/A	N/A	48.09	154.775	1306	N/A	730.622	N/A	N/A	469.926	N/A	11.746
Fe	mg/L	10530	N/A	8587	15110	14370	N/A	N/A	12720	13700	20090	N/A	17260	N/A	N/A	5987	N/A	230.358
Ga	mg/L	0.714	N/A	0.551	2.366	1.114	N/A	N/A	2.398	3.097	1.754	N/A	2.071	N/A	N/A	0.782	N/A	0
Hg	ppb	4.052	N/A	2.102	2.902	1.523	N/A	N/A	1.376	1.529	1.159	N/A	0.701	N/A	N/A	0.66	N/A	0.438
K	mg/L	1.001	N/A	1.316	4.27	3.679	N/A	N/A	2.292	6.326	4.598	N/A	1.63	N/A	N/A	12.467	N/A	42.55
Li	mg/L	0.011	N/A	0.007	0.015	0.009	N/A	N/A	0.012	0.011	0.013	N/A	0.013	N/A	N/A	0.052	N/A	0.026
Mg	mg/L	2.777	N/A	2.748	3.814	2.313	N/A	N/A	3.376	2.909	3.106	N/A	4.997	N/A	N/A	9.288	N/A	26.818
Mn	mg/L	6.027	N/A	6.243	9.138	7.962	N/A	N/A	11.375	6.642	8.256	N/A	15.267	N/A	N/A	31.71	N/A	465.5
Mo	mg/L	0.172	N/A	0.115	0.581	0.279	N/A	N/A	0.005	0.185	3.521	N/A	0.114	N/A	N/A	0.023	N/A	0.012
Na	mg/L	3.244	N/A	4.138	2.561	2.572	N/A	N/A	2.95	2.698	2.916	N/A	2.613	N/A	N/A	3.719	N/A	4.04
Nb	mg/L	0	N/A	0	0	0	N/A	N/A	0	0	0	N/A	0	N/A	N/A	0	N/A	0
Ni	mg/L	1.264	N/A	1.601	0.796	0.817	N/A	N/A	0.753	1.208	1.012	N/A	1.153	N/A	N/A	2.491	N/A	0.206

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.093	N/A	1.784	1.645	1.759	N/A	N/A	1.885	1.908	1.448	N/A	0.714	N/A	N/A	1.505	N/A	0.788
Sb	mg/L	0.163	N/A	0	0	0	N/A	N/A	0	0	0	N/A	0	N/A	N/A	0	N/A	0
Sc	mg/L	0	N/A	0	0.345	0	N/A	N/A	0.305	0.114	0.06	N/A	0.177	N/A	N/A	0.657	N/A	0
Se	mg/L	0	N/A	0	0	0	N/A	N/A	0	0	0	N/A	0	N/A	N/A	0	N/A	0.088
Sn	mg/L	0.079	N/A	0.04	0	0.046	N/A	N/A	0	0	0.098	N/A	0	N/A	N/A	0.014	N/A	0.012
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.065	N/A	0.09	0.207	0.272	N/A	N/A	0.072	0.206	1.524	N/A	0.662	N/A	N/A	0.408	N/A	1.032
Te	mg/L	1.472	N/A	1.605	2.327	1.623	N/A	N/A	1.841	2.209	2.359	N/A	2.034	N/A	N/A	1.147	N/A	0.033
Ti	mg/L	0.154	N/A	0.179	0.094	0.097	N/A	N/A	0.049	0.148	0.131	N/A	0.177	N/A	N/A	0.031	N/A	0.084
Tl	mg/L	0.429	N/A	5.09	0	0.171	N/A	N/A	0	0	0.122	N/A	0.437	N/A	N/A	0	N/A	0.282
V	mg/L	0.558	N/A	0.465	2.435	0.912	N/A	N/A	0.994	1.724	1.293	N/A	2.704	N/A	N/A	1.592	N/A	0.009
W	mg/L	0	N/A	0	0	0	N/A	N/A	0	0	0	N/A	0	N/A	N/A	0	N/A	0
Zn	mg/L	18.759	N/A	38.149	150.922	4.895	N/A	N/A	223.236	133.114	15.259	N/A	15.534	N/A	N/A	176.015	N/A	25.348

Yanacocha

Fecha de Publicación:
03/11/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0.029	0	0	0	0	0	0.008	0.007	0.024	0.002	0.046	0.003	0.003	0.031
Al	mg/L	19.1	10.813	2.423	259.642	17.913	36.105	7.715	245.142	134.574	28.73	17.482	66.056	12.593	162.352	5.025	1.303	1.662
As	mg/L	84.952	30.321	13.939	37.903	57.532	25.055	33.702	12.498	12.308	10.279	8.742	13.632	2.989	110.802	0.047	0.548	0.032
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.028	0.734	0.698
Ba	mg/L	0.09	0.084	0.038	0.1	0.079	0.078	0.045	0.07	0.085	0.094	0.088	0.106	0.068	0.167	0.008	0.093	0.041
Be	mg/L	0	0	0	0.004	0	0	0	0.003	0.001	0	0	0	0	0	0.003	0	0.003
Bi	mg/L	0.759	0.26	0.036	0.165	1.242	0.087	0	0.017	0.104	0	0	0.888	0	0.107	0.003	0	0
Ca	mg/L	66.456	49.294	17.802	40.301	49.754	41.644	43.558	22.447	34.991	36.938	34.374	57.456	27.785	111.571	207.738	36.539	237.456
Cd	mg/L	9.865	7.952	3.375	2.36	0	1.381	2.294	5.48	1.954	0	0	0.012	0	22.916	0.336	0.123	0.064
Co	mg/L	1.265	0.921	1.025	1.173	0.75	1.365	0.913	0.882	1.259	0.981	0.821	0.968	0.175	2.331	0.089	0.051	0.274
Cr	mg/L	0.985	0.428	0.196	0.92	0.885	0.243	1.674	0.16	0.189	0.699	0.264	0.48	0.128	6.963	0.006	0.036	0.004
Cu	mg/L	187.73	40.629	14.885	613.62	53.884	133.234	47.945	30.443	92.524	375.106	96.091	614.672	89.073	1417.817	4.24	7.522	4.142
Fe	mg/L	10697.08	4789.245	1543.531	11243.31	5495.554	5400.946	2850.871	4634.065	5906.319	6455.031	5107.14	10757.76	1259.332	10951.99	11.953	55.688	8.671
Ga	mg/L	0	0	0	0.497	0	0.418	0	0.502	0.805	0	0	0.308	0	0.46	0	0	0
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	6.626	1.688	0.698	3.196	2.243	3.748	0.548	2.116	4.652	0.896	0.852	1.749	0.312	3.722	16.027	2.462	23.203
Li	mg/L	0.014	0.005	0.002	0.011	0.006	0.004	0.004	0.019	0.022	0.005	0.004	0.008	0.002	0.045	0.026	0.06	0.035
Mg	mg/L	3.279	1.832	0.512	2.06	1.808	1.286	1.475	1.765	1.409	0.937	1.429	3.053	0.773	5.512	17.215	3.768	15.074
Mn	mg/L	4.34	4.196	1.045	6.285	3.873	3.758	2.131	6.128	4.196	3.572	4.253	7.744	0.816	10.568	14.533	18.031	192.258
Mo	mg/L	0.606	0.022	0.037	0.533	0.119	0.111	0.046	0	0.081	1.26	0	0.039	0.011	2.946	0.003	0.025	0.006
Na	mg/L	7.756	6.985	2.553	1.955	1.865	2.635	1.887	2.444	1.671	1.49	1.157	2.352	1.546	10.143	6.053	1.687	2.853
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003
Ni	mg/L	0.614	0.783	0.448	0.556	0.405	0.506	0.454	0.429	0.704	0.454	0.48	0.935	0.1	12.443	0.158	0.077	0.057

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.93	1.621	0.958	1.307	1.241	1.6	1.701	1.408	1.624	0.656	0.219	0.668	0.102	1.986	0.005	0.02	0.11
Sb	mg/L	4.196	0	0.005	0	0	0.237	0	0	0	0	0	0	0	0	0	0.003	0
Sc	mg/L	0	0	0	0.184	0	0.027	0	0.149	0.074	0.01	0.009	0.125	0.02	0.267	0.003	0.001	0
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0	0.052
Sn	mg/L	0.071	0	0.012	0	0	0	0.009	0	0	0	0	0	0.005	0.082	0.016	0.007	0.012
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.025	0.047	0.012	0.142	0.203	0.097	0.064	0.037	0.114	0.589	0.164	0.467	0.096	0.163	3.934	0.194	0.531
Te	mg/L	3.039	1.324	0.423	1.826	1.004	1.227	0.569	1.06	1.652	1.231	0.891	1.396	0.191	3.901	0.004	0.026	0.004
Ti	mg/L	0.442	0.183	0.057	0.012	0.027	0.071	0.059	0.015	0.026	0.029	0.02	0.027	0.05	0.339	0.004	0.008	0.002
Tl	mg/L	4.236	6.691	2.538	0	0.006	0.616	0.107	0	0	0.027	0	0	0.001	12.301	0.014	0.091	0.004
V	mg/L	0.944	0.356	0.103	1.966	0.599	0.832	0.212	0.613	1.166	0.664	0.761	2.367	0.121	1.036	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	mg/L	60.055	59.941	5.484	156.122	3.318	14.304	6.017	198.788	155.294	3.999	2.242	4.083	0.645	56.591	30.094	2.023	14.032

Yanacocha

Fecha de Publicación:
03/12/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	0	0	0	0	0	0	N/A	0	0	0	0	0	0.003	0.001	0.055
Al	mg/L	N/A	N/A	0.98	104.049	6.305	40.159	2.267	147.657	N/A	11.43	8.888	9.835	40.056	6.11	0.683	0.192	1.862
As	mg/L	N/A	N/A	10.662	13.189	22.806	22.622	14.269	6.374	N/A	6.386	3.895	1.453	10.673	26.788	0.009	0.004	0
B	mg/L	N/A	N/A	0	0	0	0	0	0	N/A	0	0	0	0	0	0.407	0.39	0.38
Ba	mg/L	N/A	N/A	0.037	0.068	0.061	0.088	0.047	0.058	N/A	0.103	0.056	0.036	0.088	0.051	0.016	0.094	0.019
Be	mg/L	N/A	N/A	0	0.019	0.002	0.004	0	0.024	N/A	0	0	0	0.006	0	0.02	0.001	0.04
Bi	mg/L	N/A	N/A	0.068	0	0.356	0.01	0.02	0.085	N/A	0	0	0.119	0	0.094	0	0.002	0
Ca	mg/L	N/A	N/A	8.476	38.506	25.513	36.202	15.924	23.598	N/A	16.787	16.902	13.883	36.747	22.47	143.78	13.747	361.126
Cd	mg/L	N/A	N/A	1.931	1.105	0	0.09	0.542	4.439	N/A	0.003	0	0.002	0	10.334	0.199	0	0.106
Co	mg/L	N/A	N/A	1.356	0.801	0.486	1.84	0.49	0.911	N/A	0.941	0.578	0.177	0.762	0.671	0.051	0.004	0.485
Cr	mg/L	N/A	N/A	0.123	0.402	0.332	0.138	0.386	0.1	N/A	0.267	0.14	0.074	0.443	0.384	0	0	0.002
Cu	mg/L	N/A	N/A	16.05	297.478	28.98	174.912	15.433	22.349	N/A	196.586	51.298	91.19	363.344	50.309	1.729	0.001	7.556
Fe	mg/L	N/A	N/A	2297.738	5878.038	4483.366	7712.144	1786.58	3414.774	N/A	6985.858	4091.356	1739.54	7165.881	3785.804	0.092	0	4.197
Ga	mg/L	N/A	N/A	0.286	0.986	0.571	1.709	0.249	0.959	N/A	0.956	0.513	0.294	0.926	0.447	0	0	0
Hg	ppb	N/A	N/A	1.853	2.212	1.291	1.989	0.483	0.745	N/A	1.084	0.905	0.459	1.859	0.793	0.019	0.032	0.143
K	mg/L	N/A	N/A	0.327	2.7	0.744	3.489	0.248	2.401	N/A	0.693	0.679	0.348	0.406	1.232	12.958	0.662	40.979
Li	mg/L	N/A	N/A	0.001	0.005	0.002	0.002	0.001	0.016	N/A	0.002	0.001	0	0.004	0.002	0.016	0.032	0.023
Mg	mg/L	N/A	N/A	0	1.15	0.252	0.346	0.218	1.317	N/A	0	0.39	0.334	0.955	0.291	11.199	1.566	21.78
Mn	mg/L	N/A	N/A	1.427	5.323	2.668	3.482	2.247	5.69	N/A	3.747	2.939	1.673	3.291	3.914	10.803	1.992	430.021
Mo	mg/L	N/A	N/A	0.009	0.268	0.011	0	0	0	N/A	0.856	0	0	0	0.067	0.002	0.094	0
Na	mg/L	N/A	N/A	0.849	1.173	1.028	1.227	1.167	1.412	N/A	1.299	0.973	0.822	1.907	1.222	3.669	0.907	2.64
Nb	mg/L	N/A	N/A	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0.002	0
Ni	mg/L	N/A	N/A	0.54	0.431	0.308	0.602	0.281	0.427	N/A	0.48	0.35	0.192	0.391	0.86	0.108	0.004	0.094

Yanacocha

Fecha de Publicación:
03/12/2011

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	1.654	1.361	1.262	1.96	1.435	2.451	N/A	0.664	0.168	0.164	0.348	1.899	0.072	0.063	0.221
Sb	mg/L	N/A	N/A	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0.004	0
Sc	mg/L	N/A	N/A	0	0.047	0	0.037	0	0.066	N/A	0	0	0.011	0.058	0	0	0	0
Se	mg/L	N/A	N/A	0	0	0	0	0	0	N/A	0	0	0	0	0	0.018	0	1.059
Sn	mg/L	N/A	N/A	0	0	0	0	0	0	N/A	0	0	0	0	0	0.001	0.006	0.005
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	0.009	0.097	0.155	0.116	0.038	0.039	N/A	0.445	0.105	0.079	0.285	0.025	2.834	0.108	0.771
Te	mg/L	N/A	N/A	5.211	10.236	6.485	13.071	3.363	9.008	N/A	12.72	4.717	2.107	8.638	10.44	0	0	0.034
Ti	mg/L	N/A	N/A	0.042	0.008	0.016	0.025	0.026	0.012	N/A	0.034	0.011	0.007	0.057	0.102	0.003	0.003	0.007
Tl	mg/L	N/A	N/A	2.934	0.021	0.022	0.03	0.071	0.004	N/A	0.085	0	0.008	0.028	8.847	0.01	0.006	0.169
V	mg/L	N/A	N/A	0.116	0.981	0.269	0.919	0.122	0.427	N/A	0.547	0.361	0.353	0.514	0.214	0	0	0
W	mg/L	N/A	N/A	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0	0
Zn	mg/L	N/A	N/A	4.744	149.343	1.467	6.364	3.843	251.656	N/A	2.568	1.113	0.815	2.108	21.186	18.796	0.087	23.736

Yanacocha

Fecha de Publicación:
01/01/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0	0.042
Al	mg/L	4.558	1.372	0.558	41.108	1.722	16.348	1.403	52.389	22.874	3.072	4.605	6.886	12.835	0.942	0.37	0.234	2.119
As	mg/L	2.112	8.484	3.444	4.83	7.098	8.363	13.333	1.943	1.814	2.006	2.083	1.598	3.345	11.833	0.002	0.007	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.647	0.609	0.539
Ba	mg/L	0.05	0.042	0.04	0.048	0.048	0.065	0.036	0.035	0.042	0.065	0.05	0.048	0.056	0.029	0.02	0.094	0.012
Be	mg/L	0	0	0	0.001	0	0	0	0.001	0	0	0	0	0	0	0.001	0	0.005
Bi	mg/L	0	0.001	0	0	0.089	0	0	0	0.011	0	0	0.125	0	0.032	0	0.001	0.014
Ca	mg/L	9.372	7.897	6.565	20.183	7.872	12.605	6.711	11.484	9.376	3.201	9.252	6.818	11.004	4.597	70.412	11.314	230.274
Cd	mg/L	0	2.132	0.635	0.42	0	0.021	0.411	1.606	0.289	0.002	0	0.002	0	4.119	0.094	0	0.079
Co	mg/L	0.361	0.275	0.537	0.356	0.178	0.931	0.469	0.36	0.436	0.371	0.351	0.248	0.337	0.29	0.023	0.005	0.324
Cr	mg/L	0.062	0.094	0.037	0.134	0.196	0.039	0.234	0.025	0.031	0.046	0.063	0.041	0.129	0.085	0	0	0
Cu	mg/L	30.598	12.228	7.183	139.781	12.475	86.955	16.989	9.628	26.907	71.268	30.956	99.916	143.812	13.724	0.795	0	6.637
Fe	mg/L	4162.951	1871.375	923.113	2063.471	1893.081	3244.072	1730.549	1552.534	1872.558	3037.012	2072.097	2080.525	2623.453	1385.229	0.142	0.835	0.929
Ga	mg/L	0.141	0.126	0.05	0.21	0.1	0.441	0.085	0.228	0.285	0.181	0.136	0.205	0.188	0.067	0	0	0
Hg	ppb	0.215	0.347	0.106	0.118	0.089	0.11	0.139	0.046	0.067	0.178	0.324	0.483	0.78	0.142	0.001	0.015	0.008
K	mg/L	0.696	0.236	0.114	1.761	0.161	2.099	0.06	1.52	2.032	0.262	0.695	0.462	0.212	0.383	8.176	0.364	30.883
Li	mg/L	0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.006	0.004	0.001	0.002	0.001	0.002	0.001	0.01	0.02	0.02
Mg	mg/L	0.228	0	0.024	0.554	0	0	0.017	0.596	0.141	0	0.227	0	0.198	0	5.296	1.183	15.648
Mn	mg/L	3.196	1.611	0.531	1.834	2.452	1.495	0.941	2.253	1.076	1.356	3.182	1.652	1.295	1.081	4.911	0.393	250.757
Mo	mg/L	0	0	0	0.16	0	0	0	0	0.028	0.277	0	0	0	0	0	0.078	0
Na	mg/L	0.909	0.979	0.809	1.012	0.895	1.059	0.856	0.956	0.832	0.845	0.926	0.956	0.946	0.85	2.178	0.854	1.953
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.002	0
Ni	mg/L	0.213	0.255	0.213	0.179	0.157	0.3	0.222	0.172	0.265	0.189	0.204	0.159	0.166	0.278	0.045	0.005	0.062

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
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Samples submitted at: LA QUINUA - MYSRL
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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	0.081	1.587	1.176	0.883	0.625	1.456	1.631	1.6	1.215	0.241	0.063	0.148	0.156	1.698	0.003	0	0.367
Sb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sc	mg/L	0	0	0	0.011	0	0.008	0	0.016	0.001	0	0	0	0.014	0	0	0	0
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.014	0.002	0.053
Sn	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0.007	0.003
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.071	0.014	0.01	0.051	0.068	0.073	0.037	0.026	0.047	0.178	0.072	0.103	0.151	0.006	1.374	0.088	0.507
Te	mg/L	0.331	0.411	0.204	0.403	0.297	0.595	0.313	0.328	0.443	0.517	0.345	0.341	0.433	0.461	0.01	0.011	0.006
Ti	mg/L	0.009	0.028	0.019	0.003	0.014	0.007	0.022	0.007	0.008	0.012	0.01	0.005	0.022	0.028	0.001	0.002	0.002
Tl	mg/L	0.012	1.957	0.959	0.012	0.003	0.021	0.076	0.001	0.003	0.026	0	0	0.031	3.555	0.019	0	0.104
V	mg/L	0.256	0.144	0.064	0.455	0.162	0.492	0.14	0.187	0.335	0.275	0.249	0.534	0.25	0.099	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.018	0
Zn	mg/L	0.905	16.812	1.809	78.244	0.949	2.676	1.655	150.24	59.121	1.094	0.894	0.887	1.01	9.713	9.198	0.092	19.243

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	0	0	N/A	0	0	N/A	0	0	0	0	0	0	N/A	0	N/A
Al	mg/L	N/A	N/A	0.732	50.72	N/A	18.98	0.93	N/A	24.271	2.384	2.849	4.718	12.929	0.935	N/A	0.653	N/A
As	mg/L	N/A	N/A	6.917	6.781	N/A	12.328	14.799	N/A	2.667	2.296	1.586	1.902	3.774	14.613	N/A	0.036	N/A
B	mg/L	N/A	N/A	0	0	N/A	0	0	N/A	0	0	0	0	0	0	N/A	1.502	N/A
Ba	mg/L	N/A	N/A	0.036	0.052	N/A	0.075	0.034	N/A	0.044	0.056	0.04	0.049	0.064	0.029	N/A	0.062	N/A
Be	mg/L	N/A	N/A	0	0.007	N/A	0	0	N/A	0.002	0	0	0	0	0	N/A	0.002	N/A
Bi	mg/L	N/A	N/A	0	0	N/A	0	0	N/A	0	0	0	0.043	0	0.041	N/A	0	N/A
Ca	mg/L	N/A	N/A	7.326	24.209	N/A	14.775	6.984	N/A	9.981	2.245	7.566	8.971	12.433	8.078	N/A	15.146	N/A
Cd	mg/L	N/A	N/A	1.21	0.448	N/A	0.011	0.352	N/A	0.276	0	0	0.001	0	5.517	N/A	0.004	N/A
Co	mg/L	N/A	N/A	1.167	0.513	N/A	1.367	0.567	N/A	0.561	0.427	0.357	0.325	0.471	0.4	N/A	0.007	N/A
Cr	mg/L	N/A	N/A	0.078	0.167	N/A	0.06	0.203	N/A	0.037	0.031	0.044	0.044	0.153	0.106	N/A	0	N/A
Cu	mg/L	N/A	N/A	13.612	155.335	N/A	99.171	17.982	N/A	27.392	57.848	19.464	104.09	140.33	16.695	N/A	0.017	N/A
Fe	mg/L	N/A	N/A	2093	3424	N/A	4907	2427	N/A	2950	3760	2301	3123	4052	1945	N/A	0.188	N/A
Ga	mg/L	N/A	N/A	0.053	0.258	N/A	0.517	0.068	N/A	0.313	0.146	0.093	0.175	0.197	0.064	N/A	0	N/A
Hg	ppb	N/A	N/A	1.122	0.592	N/A	0.546	0.271	N/A	0.238	0.282	0.303	0.576	1.043	0.255	N/A	0.016	N/A
K	mg/L	N/A	N/A	1.008	2.707	N/A	2.635	0.137	N/A	2.193	0.295	0.479	0.63	0.616	2.433	N/A	1.237	N/A
Li	mg/L	N/A	N/A	0.001	0.003	N/A	0.001	0.001	N/A	0.003	0.001	0.002	0.001	0.002	0.001	N/A	0.016	N/A
Mg	mg/L	N/A	N/A	0	0.558	N/A	0	0	N/A	0	0	0.034	0	0.107	0.024	N/A	1.354	N/A
Mn	mg/L	N/A	N/A	1.28	2.489	N/A	2.485	1.159	N/A	1.508	1.688	1.652	3.406	2.145	0.924	N/A	6.492	N/A
Mo	mg/L	N/A	N/A	0.001	0.283	N/A	0.022	0	N/A	0.057	0.326	0	0	0	0.007	N/A	0.031	N/A
Na	mg/L	N/A	N/A	0.778	0.878	N/A	0.88	0.672	N/A	0.64	0.654	0.758	0.812	0.822	0.71	N/A	1.91	N/A
Nb	mg/L	N/A	N/A	0	0	N/A	0	0	N/A	0	0	0	0	0	0	N/A	0	N/A
Ni	mg/L	N/A	N/A	0.461	0.251	N/A	0.447	0.268	N/A	0.334	0.216	0.255	0.277	0.248	0.353	N/A	0.002	N/A

Yanacocha

Fecha de Publicación:
03/02/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	1.86	1.5	N/A	1.869	1.75	N/A	1.565	0.25	0.073	0.18	0.292	1.865	N/A	0.007	N/A
Sb	mg/L	N/A	N/A	0	0	N/A	0	0	N/A	0	0	0	0	0	0	N/A	0	N/A
Sc	mg/L	N/A	N/A	0	0.006	N/A	0	0	N/A	0	0	0	0	0.006	0	N/A	0	N/A
Se	mg/L	N/A	N/A	0	0	N/A	0	0	N/A	0	0	0	0	0	0	N/A	0	N/A
Sn	mg/L	N/A	N/A	0	0	N/A	0	0	N/A	0	0	0	0	0	0	N/A	0	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	0.011	0.065	N/A	0.093	0.037	N/A	0.052	0.138	0.056	0.095	0.183	0.011	N/A	0.091	N/A
Te	mg/L	N/A	N/A	3.706	4.545	N/A	7.086	2.663	N/A	4.697	4.373	2.527	3.696	4.705	4.983	N/A	0.825	N/A
Ti	mg/L	N/A	N/A	0.028	0.012	N/A	0.017	0.021	N/A	0.014	0.011	0.016	0.009	0.035	0.03	N/A	0.003	N/A
Tl	mg/L	N/A	N/A	1.309	0	N/A	0.003	0.085	N/A	0	0.015	0.004	0	0.051	3.208	N/A	0	N/A
V	mg/L	N/A	N/A	0.115	0.528	N/A	0.601	0.135	N/A	0.347	0.251	0.187	0.539	0.285	0.098	N/A	0	N/A
W	mg/L	N/A	N/A	0	0	N/A	0	0	N/A	0	0	0	0	0	0	N/A	0.049	N/A
Zn	mg/L	N/A	N/A	3.719	84.612	N/A	3.711	1.668	N/A	57.012	0.945	0.679	1.316	1.213	12.879	N/A	0.011	N/A

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	N/A	0	N/A	0	0	0	0	0	0	0.003	0.001	N/A
Al	mg/L	8.167	3.688	2.071	75.346	3.053	N/A	3.156	N/A	1.45	30.417	5.952	3.573	8.385	1.799	0.214	0.096	N/A
As	mg/L	32.149	24.17	14.404	14.904	11.402	N/A	11.392	N/A	26.911	4.907	4.97	1.818	4.4	21.755	0.013	0.005	N/A
B	mg/L	0	0	0	0	0	N/A	0	N/A	0	0	0	0	0	0	0.011	0.011	N/A
Ba	mg/L	0.11	0.093	0.056	0.081	0.068	N/A	0.075	N/A	0.052	0.064	0.107	0.049	0.083	0.041	0.019	0.105	N/A
Be	mg/L	0	0	0	0.009	0	N/A	0	N/A	0	0.003	0	0	0	0	0.01	0.001	N/A
Bi	mg/L	0.234	0.135	0	0	0.313	N/A	0.289	N/A	0	0	0	0	0.355	0.082	0.003	0.01	N/A
Ca	mg/L	96.081	43.347	27.227	31.639	31.652	N/A	31.836	N/A	11.023	12.167	8.284	21.159	19.651	17.504	55.963	11.436	N/A
Cd	mg/L	2.636	4.804	2.414	0.526	0	N/A	0	N/A	0.464	0.347	0	0	0	6.665	0.08	0	N/A
Co	mg/L	0.922	0.849	2.18	0.708	0.453	N/A	0.46	N/A	0.942	0.744	0.81	0.425	0.616	0.631	0.019	0.002	N/A
Cr	mg/L	0.345	0.339	0.184	0.237	0.203	N/A	0.207	N/A	0.406	0.062	0.102	0.059	0.085	0.165	0	0	N/A
Cu	mg/L	96.784	37.208	26.321	228.491	20.443	N/A	20.444	N/A	33.381	40.025	121.643	24.682	210.017	25.45	0.762	0.008	N/A
Fe	mg/L	9062	6663	4439	6255	4438	N/A	4432	N/A	4377	5358	8980	3276	6759	3243	0.224	0	N/A
Ga	mg/L	0.382	0.328	0.143	0.475	0.164	N/A	0.178	N/A	0.165	0.488	0.338	0.131	0.433	0.115	0	0	N/A
Hg	ppb	0.451	0.783	0	0.31	0.047	N/A	0.018	N/A	0.013	0.021	0.004	0.438	0.197	0.012	0	0	N/A
K	mg/L	2.402	0.657	0.27	2.529	0.246	N/A	0.283	N/A	0.039	2.241	0.452	0.338	0.828	0.205	6.699	0.22	N/A
Li	mg/L	0.005	0.001	0.001	0.003	0.001	N/A	0.001	N/A	0.001	0.002	0.001	0.001	0.001	0	0.006	0.018	N/A
Mg	mg/L	2.087	0.698	0.483	0.764	0.41	N/A	0.411	N/A	0	0.258	0	0.562	0.4	0.455	4.108	1.076	N/A
Mn	mg/L	4.041	3.426	2.586	3.573	3.052	N/A	3.076	N/A	1.775	2.098	3.004	2.475	3.76	1.265	4.29	0.301	N/A
Mo	mg/L	0.377	0	0.013	0.585	0.009	N/A	0.006	N/A	0	0.097	0.81	0	0	0.03	0	0.078	N/A
Na	mg/L	1.786	0.471	0.364	0.18	0.234	N/A	0.206	N/A	0.1	0.097	0.178	0.087	0.343	0	0.426	0	N/A
Nb	mg/L	0	0	0	0	0	N/A	0	N/A	0	0	0	0	0	0	0	0	N/A
Ni	mg/L	0.438	0.718	0.865	0.344	0.252	N/A	0.255	N/A	0.607	0.438	0.399	0.287	0.387	0.543	0.04	0.004	N/A

Yanacocha

Fecha de Publicación:
01/03/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.117	2.191	1.906	1.689	0.995	N/A	1.029	N/A	2.053	1.559	0.471	0.085	0.397	1.982	0	0.005	N/A
Sb	mg/L	1.301	0	0	0	0	N/A	0	N/A	0	0	0	0	0	0	0	0.001	N/A
Sc	mg/L	0	0	0	0.008	0	N/A	0	N/A	0	0	0	0	0	0	0	0	N/A
Se	mg/L	0	0	0	0	0	N/A	0	N/A	0	0	0	0	0	0	0.08	0.19	N/A
Sn	mg/L	0	0	0	0	0	N/A	0	N/A	0	0	0	0	0	0	0.001	0.002	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.124	0.046	0.023	0.077	0.088	N/A	0.088	N/A	0.045	0.063	0.232	0.068	0.15	0.02	1.152	0.091	N/A
Te	mg/L	18.038	12.11	8.544	9.204	5.457	N/A	5.488	N/A	5.469	6.912	8.926	3.169	6.741	7.383	0	0.002	N/A
Ti	mg/L	0.277	0.122	0.058	0.021	0.037	N/A	0.044	N/A	0.033	0.026	0.045	0.027	0.026	0.052	0	0.001	N/A
Tl	mg/L	1.135	4.155	1.842	0	0.02	N/A	0	N/A	0.098	0	0.025	0.004	0	4.145	0	0.001	N/A
V	mg/L	0.623	0.339	0.217	0.828	0.239	N/A	0.241	N/A	0.216	0.497	0.501	0.241	1.097	0.156	0	0	N/A
W	mg/L	0	0	0	0	0	N/A	0	N/A	0	0	0	0	0	0	0	0.014	N/A
Zn	mg/L	32.488	46.565	7.237	103.717	1.313	N/A	1.311	N/A	2.798	66.752	2.02	0.819	1.812	20.069	7.632	0.107	N/A

Yanacocha

Fecha de Publicación:
01/04/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0.005	0.002	0.001	0	0	0.007	0	0.571	0	0.011	0	0	0	0.037	0.015	0.204
Al	mg/L	9.482	4.575	2.931	81.579	6.551	19.021	3.827	90.044	38.399	8.855	7.082	12.872	19.708	4.517	1.719	1.456	67.259
As	mg/L	38.292	21.689	11.296	19.736	20.919	18.429	36.37	7.834	7.33	5.752	3.347	6.794	9.815	29.331	0.016	0	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.292	4.031	4.733
Ba	mg/L	0.123	0.076	0.053	0.082	0.084	0.096	0.063	0.062	0.083	0.103	0.061	0.1	0.112	0.055	0.025	0.112	0.026
Be	mg/L	0	0	0	0.008	0	0.002	0	0.018	0.008	0	0.002	0	0	0	0.004	0	0.907
Bi	mg/L	0.732	0.364	0.145	0.097	0.461	0	0	0	0	0.117	0.051	0.463	0	0.236	0.042	0.066	0
Ca	mg/L	48.451	30.46	22.827	37.492	37.978	21.601	22.98	23.374	35.805	20.994	26.239	30.246	35.985	34.68	108.124	13.264	537.164
Cd	mg/L	3.63	3.83	1.975	0.606	0	0	0.582	2.369	0.52	0	0	0	0	7.722	0.111	0	0.554
Co	mg/L	1.177	0.696	1.663	0.833	0.677	1.745	1.069	0.621	1.019	0.891	0.648	0.864	1.012	0.829	0.015	0.004	1.134
Cr	mg/L	0.327	0.245	0.112	0.208	0.186	0.052	0.468	0.038	0.052	0.109	0.07	0.086	0.207	0.206	0	0	0
Cu	mg/L	110.03	28.166	18.56	231.393	26.334	119.224	37.976	15.048	49.2	107.924	32.397	239.158	212.333	28.55	0.533	0.026	65.343
Fe	mg/L	50012.21	26244.86	2227.207	32931.46	28609.77	34774.86	24254.24	2930.088	29031.58	38529.59	2910.344	38313.26	42359.19	2738.453	17.199	0.695	0.918
Ga	mg/L	0.303	0.115	0.055	0.473	0.126	0.581	0.244	0.41	0.434	0.24	0.171	0.409	0.259	0.116	0	0.008	0
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	2.039	1.309	0.801	2.872	1.003	2.426	0.708	2.102	3.17	1.271	1.369	1.694	1.304	0.996	7.719	0.83	25.731
Li	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0.011	0.044
Mg	mg/L	1.901	0.935	0.758	1.358	1.384	0.523	0.783	2.034	1.07	0.572	1.048	1.184	1.414	1.28	5.634	1.448	50.227
Mn	mg/L	7.799	3.982	2.085	4.681	4.306	3.324	2.441	4.575	3.1	3.682	3.315	4.715	4.234	2.082	5.726	0.155	1176.748
Mo	mg/L	0.402	0	0.007	0.784	0.036	0.094	0.023	0	0.13	0.908	0	0	0.021	0.056	0.018	0.077	0
Na	mg/L	7.252	6.726	6.703	7.057	8.225	6.059	6.367	6.335	6.535	6.382	6.662	6.364	7.217	6.814	8.071	5.883	9.599
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.049	0.009	0
Ni	mg/L	0.536	0.676	0.675	0.393	0.367	0.56	0.591	0.307	0.605	0.477	0.397	0.48	0.445	0.725	0.049	0	0.349

Yanacocha

Fecha de Publicación:
01/04/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.704	2.484	2.275	2.196	1.622	2.039	2.301	2.118	2.123	0.89	0.399	0.838	0.914	2.336	0.262	0.195	1.148
Sb	mg/L	1.981	0	0	0	0	0	0	0	0	0	0	0	0	0	0.083	0.021	0
Sc	mg/L	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.842
Sn	mg/L	0.011	0.016	0.009	0.018	0.005	0	0	0	0	0	0	0	0	0.068	0.147	0	0.096
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.028	0.027	0.011	0.078	0.095	0.087	0.054	0.04	0.09	0.245	0.086	0.178	0.338	0.025	1.63	0.091	1.185
Te	mg/L	20.718	6.812	4.8	7.681	5.682	7.513	5.097	6.088	9.359	8.103	4.869	7.448	8.818	10.484	0.144	0	0
Ti	mg/L	0.266	0.103	0.042	0.031	0.034	0.03	0.053	0.041	0.042	0.046	0.03	0.044	0.092	0.09	0.014	0.007	0.007
Tl	mg/L	1.313	3.939	1.509	0	0	0.078	0.079	0	0.016	0.037	0	0	0.052	5.684	0	0	0.483
V	mg/L	0.735	0.238	0.106	0.943	0.324	0.639	0.215	0.265	0.647	0.472	0.313	1.565	0.564	0.153	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	mg/L	40.615	44.846	6.228	167.162	2.118	3.318	3.582	549.344	126.174	2.51	1.212	2.413	2.073	26.348	9.364	0.155	128.184

Yanacocha

Fecha de Publicación:
02/05/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0.051	0.007	0	0	0	0	0	0	0.006	0	0	0	0.004	0.003	0.164
Al	mg/L	8.415	5.349	2.702	52.722	5.352	13.773	7.673	76.767	31.708	7.559	5.316	8.99	10.444	3.621	1.475	2.136	40.776
As	mg/L	28.666	27.618	8.154	11.86	13.452	11.571	24.001	6.93	6.212	4.326	2.058	4.079	4.599	20.361	0.077	0	0
B	mg/L	0	0	0.382	0	0	0	0	0	0	0	0	0	0	0	5.855	6.735	5.664
Ba	mg/L	0.102	0.126	0.047	0.068	0.061	0.059	0.057	0.053	0.069	0.084	0.047	0.075	0.074	0.061	0.011	0.096	0.004
Be	mg/L	0	0	0	0.001	0.001	0.001	0	0.002	0.002	0	0.001	0.001	0.001	0.001	0.001	0.001	0.061
Bi	mg/L	0.224	0.259	0	0.035	0.42	0	0.038	0.005	0	0.026	0.007	0.542	0	0.188	0	0.026	0
Ca	mg/L	46.224	40.027	26.736	25.54	30.433	14.227	19.639	59.658	16.922	13.813	12.253	20.149	20.977	23.18	91.841	11.338	483.08
Cd	mg/L	2.887	4.853	1.428	0.397	0	0	0.451	2.056	0.458	0.003	0	0	0	5.316	0.12	0	0.393
Co	mg/L	0.989	1.009	1.451	0.603	0.407	1.308	0.876	0.612	0.93	0.78	0.497	0.649	0.633	0.692	0.012	0	0.909
Cr	mg/L	0.301	0.345	0.087	0.142	0.205	0.024	0.412	0.042	0.028	0.078	0.032	0.052	0.099	0.153	0	0	0
Cu	mg/L	83.593	33.843	13.664	144.817	19.387	76.228	27.923	12.86	41.692	78.423	20.099	146.029	104.317	21.576	0.43	0.035	38.845
Fe	mg/L	42670.58	35043.91	12259.28	22858.80	2836.628	25432.64	19724.53	2896.456	26205.82	33889.58	2311.3	29388.40	28515.55	2352.058	4.333	0	0
Ga	mg/L	1.019	0.798	0.264	0.617	0.427	0.824	0.443	0.704	0.841	0.77	0.385	0.862	0.747	0.345	0	0.028	0
Hg	ppb	1.898	0.673	1.241	0.591	0.274	0.443	0.361	0.734	0.566	0.606	0.326	0.788	0.737	0.085	0.112	0.103	0.05
K	mg/L	1.95	0.96	0.515	2.6	0.58	2.254	0.8	2.421	2.498	1.171	0.811	1	0.922	0.55	7.397	0.729	21.236
Li	mg/L	0.005	0.005	0.004	0.004	0.004	0.002	0.004	0.004	0.003	0.003	0.002	0.003	0.002	0.003	0.008	0.014	0.04
Mg	mg/L	0.911	0.787	0.566	0.883	0.978	0.25	0.879	1.619	0.378	0.282	0.576	0.638	0.662	0.625	5.661	1.37	42.865
Mn	mg/L	4.409	5.236	1.874	2.996	3.712	2.304	2.106	4.172	2.57	2.987	2.235	2.991	3.266	1.711	5.841	0.603	1019.83
Mo	mg/L	0.26	0.017	0.029	0.618	0.053	0.087	0.023	0.025	0.172	0.708	0	0	0.025	0.039	0.022	0.081	0.015
Na	mg/L	10.262	10.363	9.691	9.747	10.631	10.044	9.688	9.723	8.601	9.217	8.565	9.364	8.777	9.207	10.306	8.435	10.869
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni	mg/L	0.463	0.948	0.601	0.321	0.625	0.458	0.504	0.332	0.579	0.415	0.334	0.367	0.373	0.634	0.082	0.017	0.309

Yanacocha

Fecha de Publicación:
02/05/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.502	3.039	2.391	1.796	0.905	1.643	2.205	1.951	1.851	0.628	0.145	0.614	0.527	2.14	0.072	0.002	0.472
Sb	mg/L	1.62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sc	mg/L	0	0	0	0.005	0	0	0	0.008	0	0	0	0	0	0	0	0	0
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.043	0.046	0.23
Sn	mg/L	0	0	0.008	0	0	0	0.552	0	0	0	0	0	0	0	0.059	0.084	0.005
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.026	0.031	0.019	0.055	0.074	0.067	0.066	0.071	0.063	0.2	0.057	0.119	0.221	0.026	1.614	0.085	1.015
Te	mg/L	1.651	1.389	0.383	0.497	0.262	0.519	0.314	0.444	0.75	0.64	0.232	0.56	0.461	0.548	0	0	0
Ti	mg/L	0.204	0.165	0.038	0.012	0.055	0.013	0.051	0.043	0.02	0.035	0.016	0.016	0.034	0.091	0.003	0.001	0.001
Tl	mg/L	1.299	5.523	1.395	0	0.035	0.044	0.271	0.047	0.066	0.105	0.066	0.059	0.086	5.278	0.078	0.054	0.386
V	mg/L	0.589	0.395	0.116	0.639	0.189	0.454	0.177	0.259	0.574	0.398	0.197	1.097	0.305	0.098	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	mg/L	32.869	58.377	4.455	118.132	1.696	2.291	3.376	507.372	117.563	1.67	0.92	1.716	1.021	18.515	11.203	0.098	98.916

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
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Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
02/06/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/07/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
02/08/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
02/08/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/09/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
02/10/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0	0.287
Al	mg/L	15.459	24.7	8.3	129.234	17.882	39.308	9.525	199.672	54.154	29.936	22.941	30.335	42.553	19.596	0.226	0.147	140.955
As	mg/L	63.855	56.466	32.325	39.897	54.377	28.96	91.044	31.787	8.312	11.543	11.588	9.377	23.352	82.245	0.021	0.009	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.336	0.324	0.278
Ba	mg/L	0.172	0.201	0.076	0.145	0.143	0.137	0.104	0.164	0.093	0.17	0.143	0.133	0.219	0.151	0.013	0.14	0.01
Be	mg/L	0	0	0	0.002	0	0	0	0.002	0.001	0	0	0	0	0	0	0	0.164
Bi	mg/L	1.098	0.602	0.156	0.367	2.948	0.178	0	0	0	0.028	0	2.241	0	0.816	0.006	0.005	0.079
Ca	mg/L	57.212	164.134	97.174	55.762	95.267	54.52	47.365	201.42	231.248	64.47	96.091	99.996	80.21	205.668	196.249	23.387	360.285
Cd	mg/L	5.802	7.881	6.015	0.825	0	0.029	1.777	5.241	0.838	0.026	0.018	0.033	0	19.29	0.221	0.003	0.845
Co	mg/L	1.474	1.495	2.367	1.147	1.063	2.337	1.628	1.384	1.137	1.229	1.362	0.945	1.352	1.868	0.058	0.005	1.289
Cr	mg/L	0.736	0.979	0.711	0.411	0.764	0.111	2.122	0.161	0.308	0.447	0.322	0.254	0.533	0.688	0.006	0.007	0.009
Cu	mg/L	202.682	90.575	33.89	390.767	68.466	232.99	85.776	48.298	97.647	185.642	95.71	350.451	355.095	105.292	0.21	0.04	77.711
Fe	mg/L	15530.75	17923.14	5563.223	13370.92	12162.60	12694.44	9091.171	14576.23	6943.548	15976.97	12230.83	11066.13	18891.94	12725.01	2.628	0.53	10.781
Ga	mg/L	0.678	0.8	0.166	0.971	0.52	1.27	0.297	1.482	0.698	0.691	0.583	0.781	0.795	0.382	0	0	0
Hg	ppb	1.17	0.501	0.223	1.002	0.441	0.747	0.388	0.747	0.178	0.381	0.311	0.276	0.356	0.121	0.019	0.018	0.053
K	mg/L	5.758	3.514	2.71	4.824	2.33	4.494	0.405	4.792	1.643	4.732	2.143	5.065	2.044	2.735	11.648	0.347	20.623
Li	mg/L	0.009	0.007	0.005	0.008	0.006	0.003	0.004	0.01	0.007	0.006	0.006	0.007	0.006	0.006	0.014	0.022	0.059
Mg	mg/L	1.188	5.075	3.021	2.172	2.615	0.899	0.861	5.667	25.509	2.058	3.409	4.014	3.214	8.459	11.514	1.569	66
Mn	mg/L	5.396	8.272	4.418	6.434	5.101	4.158	3.643	10.607	7.582	5.878	5.952	5.557	7.575	5.541	11.029	0.81	2232.784
Mo	mg/L	0.203	0.108	0.072	1.542	0.137	0.126	0.046	0.097	0.223	1.534	0	0.048	0.156	0.53	0.004	0.09	0
Na	mg/L	4.827	3.305	4.003	1.567	1.863	1.236	1.262	2.166	1.457	2.253	1.647	2.423	1.724	3.115	3.08	0.736	1.875
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0
Ni	mg/L	0.655	1.357	1.141	0.57	0.54	0.749	0.975	0.65	0.784	0.685	0.853	0.594	0.773	1.672	0.112	0.009	0.427

Yanacocha

Fecha de Publicación:
02/10/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.65	1.536	1.269	1.42	1.244	1.372	1.557	1.451	0.507	0.782	0.374	1.141	0.882	1.616	0.002	0.009	0.317
Sb	mg/L	1.949	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002	0
Sc	mg/L	0	0	0	0.046	0	0.044	0	0.062	0.012	0	0	0.011	0.014	0	0	0	0.02
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.002	0.394
Sn	mg/L	0	0	0.013	0	0	0	0.005	0	0	0	0	0	0	0	0.006	0.009	0
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.02	0.136	0.08	0.112	0.162	0.131	0.066	0.191	0.242	0.408	0.237	0.325	0.465	0.205	3.123	0.135	0.956
Te	mg/L	3.446	2.742	1.117	1.702	1.314	1.489	1.053	2.19	1.06	1.71	1.29	1.189	1.934	2.556	0	0	0.033
Ti	mg/L	0.466	0.44	0.114	0.04	0.067	0.02	0.07	0.113	0.062	0.095	0.045	0.097	0.129	0.344	0.003	0.005	0.002
Tl	mg/L	2.062	6.88	5.504	0.022	0.046	0.05	0.148	0.011	0.02	0.157	0.013	0.042	0.123	10.936	0.015	0.004	0.544
V	mg/L	1.085	0.872	0.297	1.722	0.775	1.133	0.479	0.992	0.849	0.966	1.213	2.219	1.426	0.643	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.035	0
Zn	mg/L	53.038	86.809	8.303	119.353	2.481	7.155	6.11	217.242	101.548	4.093	2.95	4.146	3.743	62.174	18.479	0.232	112.88

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.151
Al	mg/L	14.479	8.866	5.42	57.28	9.68	31.56	7.042	79.472	39.111	12.136	13.042	0	21.842	7.002	3.239	2.219	62.267
As	mg/L	44.425	16.608	9.977	14.872	15.553	19.396	19.394	10.023	4.943	3.023	4.806	0	7.312	19.799	0	0	0
B	mg/L	0	0	1.528	0	0	0	0	0	0	0	0	0	0	0	5.491	5.319	5.822
Ba	mg/L	0.105	0.042	0	0.045	0.045	0.071	0.027	0.06	0.059	0.06	0.07	0	0.105	0.027	0.059	0.092	0
Be	mg/L	0	0	0	0	0	0	0	0.001	0	0	0.001	0.008	0.001	0.001	0	0.001	0.087
Bi	mg/L	0.031	0	0	0	0.011	0	0	0	0	0	0	0.081	0	0.11	0	0	0
Ca	mg/L	74.77	40.477	43.356	34.47	62.476	48.132	26.659	18.686	50.95	32.622	26.056	0	54.26	31.329	308.965	14.737	413.736
Cd	mg/L	3.744	2.296	2.244	0.47	0	0.047	0.469	2.445	0.458	0.002	0	0	0.005	4.05	0.209	0	0.404
Co	mg/L	1.172	0.504	0.879	0.691	0.471	1.782	0.526	0.73	0.807	0.463	0.803	0	0.743	0.661	0.042	0	0.699
Cr	mg/L	0.508	0.189	0.1	0.147	0.207	0.038	0.376	0	0.038	0.09	0.121	0	0.193	0.125	0	0	0
Cu	mg/L	133.269	27.252	11.805	212.019	25.535	177.771	28.888	25.2	75.064	65.96	48.703	0	173.229	25.368	0.12	0	41.775
Fe	mg/L	12561.45	3635.207	1558.276	3980.485	3471.837	N/A	2104.931	3327.543	3063.161	3105.031	N/A	0	10045.49	2345.745	0	0	0.323
Ga	mg/L	0.523	0.272	0.104	0.428	0.233	0.882	0.114	0.537	0.531	0.243	0.338	0	0.345	0.118	0	0.006	0
Hg	ppb	1.313	0.249	0.218	0.364	0.205	0.277	0.206	0.313	0.251	0.198	0.473	0.656	0.522	0.078	0.163	0.02	0.011
K	mg/L	3.31	0.861	0.731	2.731	0.423	2.949	0	2.751	3.192	0.677	0.585	0	0.695	0.241	11.52	0	9.846
Li	mg/L	0.011	0.006	0.005	0.007	0.006	0.006	0.005	0.006	0.006	0.003	0.004	0	0.006	0.002	0.015	0.017	0.035
Mg	mg/L	1.467	0.609	0.933	0.854	1.32	0.737	1.688	1.174	1.276	0.318	0.879	0.017	1.835	0.819	12.417	1.405	36.092
Mn	mg/L	4.455	3.592	1.995	3.864	3.724	3.176	1.95	4.855	2.466	2.799	3.726	0.053	4.778	1.419	12.414	0.059	1040.466
Mo	mg/L	0.19	0	0.024	0.776	0.012	0.141	0.006	0	0.24	0.4	0	0	0	0.011	0.013	0.05	0
Na	mg/L	11.251	7.795	7.429	7.985	7.863	7.834	7.578	8.484	9.505	7.813	7.755	0	9.883	8.204	10.067	7.847	9.29
Nb	mg/L	0	0	0	0	0	0	0.01	0	0	0	0	0.025	0	0	0.016	0	0
Ni	mg/L	0.445	0.398	0.413	0.272	0.227	0.514	0.292	0.306	0.525	0.265	0.442	0.006	0.389	0.539	0.065	0	0.186

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.456	2.084	1.79	1.681	1.172	1.727	1.713	1.582	1.222	0.718	0.181	0	0.709	1.798	0.004	0	0.165
Sb	mg/L	1.541	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.069	0
Sc	mg/L	0	0	0	0.02	0	0.041	0	0.028	0.01	0	0	0	0.005	0	0	0	0.006
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0.15	0	0	0.195	0.015	0.465
Sn	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002	0.028	0.007
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.018	0.034	0.027	0.067	0.117	0.109	0.065	0.036	0.11	0.25	0.118	0	0.268	0.011	4.019	0.117	0.73
Te	mg/L	3.102	1.674	1.184	1.553	1.384	1.837	0.568	1.097	1.001	0.796	0.899	0	1.117	0.897	0.165	0.114	0.152
Ti	mg/L	0.294	0.092	0.028	0.026	0.05	0.008	0.033	0.05	0.075	0.046	0.033	0	0.06	0.081	0.064	0.007	0.007
Tl	mg/L	2.033	3.06	3.653	0.016	0	0.045	0.172	0	0	0	0	0	0.068	4.88	0.025	0	0.25
V	mg/L	0.947	0.358	0.177	1.001	0.434	0.947	0.14	0.43	0.752	0.334	0.592	0	0.603	0.155	0	0	0
W	mg/L	0.309	0	0.107	0	0	0	0	0	0	0	0	0	0	0	0.143	0.144	0.053
Zn	mg/L	43.191	36.3	2.335	146.55	0.681	4.907	2.228	560.261	115.81	1.114	1.179	0	1.373	14.708	13.57	0	109.404

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002	0	0.163
Al	mg/L	21.045	9.767	6.68	56.34	5.034	26.716	4.287	75.259	81.774	12.266	14.705	20.302	23.374	5.108	0.15	0.075	47.806
As	mg/L	30.663	38.25	14.41	14.07	14.495	17.662	25.705	9.345	11.07	5.979	5.709	5.701	6.856	27.55	0.034	0.003	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.479	0.422	0.49
Ba	mg/L	0.082	0.156	0.065	0.068	0.056	0.076	0.044	0.062	0.102	0.092	0.11	0.093	0.104	0.052	0.019	0.119	0.011
Be	mg/L	0	0	0	0.001	0	0	0	0.001	0	0	0	0	0	0	0	0	0.075
Bi	mg/L	0.166	0.381	0.084	0	0.41	0.032	0	0.023	0.038	0	0	0.688	0	0.241	0	0	0.02
Ca	mg/L	46.685	47.533	73.401	42.531	27.114	25.552	14.297	36.285	246.714	27.32	50.361	52.105	81.318	23.658	197.093	14.453	417.431
Cd	mg/L	2.744	4.635	2.156	0.419	0	0.021	0.382	2.574	0.78	0.008	0	0.019	0.012	4.173	0.109	0.004	0.369
Co	mg/L	0.892	1.196	1.556	0.697	0.47	1.501	0.728	0.775	1.362	0.78	1.168	0.807	0.928	0.809	0.032	0.005	0.581
Cr	mg/L	0.515	0.602	0.205	0.185	0.159	0.064	0.372	0.066	0.31	0.17	0.367	0.204	0.273	0.228	0.002	0.002	0.004
Cu	mg/L	105.387	70.689	24.776	221.263	25.888	182.919	35.286	28.657	140.836	92.235	75.153	285.298	215.493	36.045	0.091	0.019	33.193
Fe	mg/L	7649.282	13350.36	3845.91	6321.678	4509.824	7593.063	3877.611	5574.762	9726.903	8427.042	9962.372	8301.434	10075.49	4194.692	1.097	0.78	10.97
Ga	mg/L	0.874	1.443	0.394	0.809	0.495	1.281	0.416	0.877	1.619	0.891	1.101	1.129	1.004	0.437	0	0.006	0
Hg	ppb	1.1	0.237	0.138	0.236	0.087	0.215	0.151	0	0.336	0.222	0.021	0.014	0.074	0.022	0.007	0	0
K	mg/L	1.753	0.931	0.803	3.343	0.089	2.691	0	3.393	7.183	0.792	0.509	2.123	1.288	0.348	11.646	0.096	10.308
Li	mg/L	0.008	0.004	0.004	0.005	0.002	0.002	0.002	0.006	0.017	0.003	0.006	0.005	0.005	0.002	0.012	0.018	0.033
Mg	mg/L	8.916	0.964	2.143	1.551	0.549	1.189	1.071	2.382	7.52	0.575	1.793	2.017	2.583	0.507	9.083	1.145	32.394
Mn	mg/L	6.136	12.94	7.856	4.794	3.357	2.938	2.041	5.211	6.32	5.791	11.132	9.478	10.615	2.319	7.843	0.063	1078.174
Mo	mg/L	0.409	0.011	0.062	0.713	0.002	0.089	0	0.022	0.75	0.73	0	0	0.021	0.069	0.017	0.021	0
Na	mg/L	3.041	1.676	1.529	1.158	0.917	0.906	0.915	1.344	3.531	1.238	1.431	1.619	1.611	1.01	3.228	0.782	1.59
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.001	0
Ni	mg/L	0.554	1.596	1.085	0.426	0.35	0.495	0.398	0.356	0.904	0.656	1.18	0.909	1.061	0.683	0.079	0.015	0.203

Yanacocha

Fecha de Publicación:
01/12/2012

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.816	1.762	1.553	1.477	0.997	1.533	1.814	1.675	1.399	0.843	0.18	0.816	0.835	1.76	0.006	0.005	0.185
Sb	mg/L	0.895	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sc	mg/L	0	0	0	0.013	0	0.03	0	0.019	0.012	0	0	0.007	0	0	0	0	0.006
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.012	0	0.252
Sn	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.057	0.069	0.095	0.083	0.087	0.094	0.054	0.071	0.399	0.272	0.18	0.234	0.348	0.022	2.822	0.106	0.729
Te	mg/L	1.574	1.983	0.637	0.785	0.494	0.891	0.428	0.804	1.466	0.925	1.069	0.891	1.04	0.924	0	0	0
Ti	mg/L	0.268	0.284	0.161	0.087	0.017	0.012	0.032	0.135	0.541	0.108	0.095	0.084	0.171	0.128	0.004	0.001	0.001
Tl	mg/L	1.264	4.802	3.137	0.002	0.025	0.044	0.148	0.008	0.038	0.083	0.022	0.031	0.139	4.513	0.021	0.011	0.412
V	mg/L	0.581	0.632	0.208	0.81	0.26	0.681	0.185	0.418	1.297	0.51	0.743	1.596	0.562	0.21	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	mg/L	27.305	57.383	3.985	N/A	0.888	3.905	3.651	173.919	104.271	1.793	2.162	3.325	1.925	16.877	5.587	0.83	71.682

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	21.045	9.767	6.68	29.035	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	30.663	38.25	14.41	9.461	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	0.082	0.156	0.065	0.069	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	0.166	0.381	0.084	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	46.685	47.533	73.401	36.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	2.744	4.635	2.156	0.207	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	0.892	1.196	1.556	0.472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	0.515	0.602	0.205	0.165	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	105.387	70.689	24.776	127.574	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	7649.282	13350.36	3845.91	2703.429	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	0.874	1.443	0.394	0.238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	0.216	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	1.753	0.931	0.803	2.226	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	0.008	0.004	0.004	0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	8.916	0.964	2.143	0.743	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	6.136	12.94	7.856	3.726	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	0.409	0.011	0.062	0.746	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	3.041	1.676	1.529	9.114	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	0.554	1.596	1.085	0.327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.816	1.762	1.553	1.329	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	0.895	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	0	0	0	0.003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	0	0	0	0.003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.057	0.069	0.095	0.066	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	1.574	1.983	0.637	0.646	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	0.268	0.284	0.161	0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	1.264	4.802	3.137	0.095	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	0.581	0.632	0.208	0.507	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	27.305	57.383	3.985	70.162	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0.148
Al	mg/L	8.669	3.368	4.282	33.276	9.374	28.703	2.587	55.331	34.072	8.421	8.839	12.551	12.977	7.791	7.097	0.253	51.761
As	mg/L	30.394	19.677	10.586	10.681	21.855	22.463	24.376	9.6	8.092	4.842	3.958	5.079	7.619	29.586	0.594	0.034	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.564	0.562
Ba	mg/L	0.111	0.09	0.045	0.066	0.102	0.089	0.053	0.066	0.077	0.09	0.087	0.081	0.11	0.077	0.015	0.096	0.009
Be	mg/L	0	0	0	0.001	0	0	0	0.001	0	0	0	0	0	0.002	0.003	0	0.088
Bi	mg/L	0.416	0.186	0.07	0	0.82	0	0.011	0	0.003	0.013	0	0.586	0	0.314	0.001	0	0.058
Ca	mg/L	24.604	21.975	62.235	35.146	59.434	22.357	14.956	51.617	32.267	26.844	24.142	32.181	27.412	43.631	127.37	14.925	435.811
Cd	mg/L	1.809	1.451	1.361	0.27	0	0.133	0.247	1.949	0.504	0.01	0	0.014	0	3.363	0.238	0.002	0.331
Co	mg/L	0.898	0.621	1.291	0.483	0.745	1.42	0.666	0.625	0.964	0.639	0.833	0.576	0.872	0.984	0.105	0.005	0.538
Cr	mg/L	0.322	0.342	0.203	0.182	0.289	0.106	0.336	0.107	0.125	0.162	0.197	0.159	0.186	0.291	0.071	0.049	0.045
Cu	mg/L	125.694	38.201	21.731	169.454	48.619	208.968	37.502	26.303	103.508	70.393	52.561	201.783	210.396	41.321	9.231	0.041	32.302
Fe	mg/L	10443.54	7603.461	3213.549	4975.471	8681.435	7760.979	4048.893	4956.659	6313.302	7208.146	6824.101	6145.199	9826.302	5580.817	322.185	2.011	12.415
Ga	mg/L	0.457	0.339	0.11	0.302	0.352	0.808	0.165	0.441	0.573	0.33	0.284	0.42	0.418	0.181	0.002	0	0
Hg	ppb	0.214	0.091	0.107	0.22	0.117	0.225	0.332	0.211	0.151	0.103	0.13	0.41	0.917	0.05	0.02	0.004	0.011
K	mg/L	1.968	0.698	0.883	1.754	1.237	3.14	0.353	2.125	4.021	0.688	0.882	1.631	1.052	4.014	7.922	0.394	8.428
Li	mg/L	0.006	0.003	0.003	0.005	0.005	0.004	0.002	0.006	0.005	0.004	0.005	0.004	0.004	0.01	0.013	0.017	0.035
Mg	mg/L	0.058	0	0.624	0.694	0.332	0.012	0	1.833	0.405	0.299	0.634	0.611	0.221	1.407	7.805	1.097	31.903
Mn	mg/L	3.611	5.285	2.71	4.616	5.95	2.796	1.629	4.223	2.771	4.175	5.814	4.363	3.584	3.807	7.339	0.075	1158.753
Mo	mg/L	0.155	0	0.046	0.49	0.147	0.127	0	0.071	0.264	0.859	0	0.026	0	0.209	0.016	0.024	0
Na	mg/L	2.493	1.487	1.571	1.362	1.718	1.525	1.174	1.869	1.52	1.407	1.508	1.592	1.498	1.877	3.138	1.003	1.852
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni	mg/L	0.403	0.694	0.601	0.366	0.573	0.479	0.362	0.312	0.597	0.45	0.627	0.447	0.421	0.845	0.132	0.021	0.194

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.628	1.418	1.634	0.958	1.099	1.284	1.743	1.298	1.371	0.67	0.157	0.695	0.744	1.527	0.044	0.006	0.17
Sb	mg/L	0.863	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sc	mg/L	0	0	0	0.008	0	0.031	0	0.012	0	0	0	0	0	0	0.002	0	0.01
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0.227
Sn	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.019	0.033	0.046	0.071	0.16	0.098	0.059	0.085	0.097	0.169	0.115	0.134	0.266	0.198	1.848	0.094	0.758
Te	mg/L	2.212	1.172	0.566	0.695	1.071	1.05	0.514	0.832	1.095	0.912	0.829	0.748	1.14	1.207	0.089	0	0.003
Ti	mg/L	0.204	0.1	0.075	0.021	0.109	0.037	0.03	0.08	0.046	0.05	0.024	0.028	0.063	0.193	0.025	0.001	0.001
Tl	mg/L	0.986	2.743	1.754	0.001	0.035	0.025	0.11	0	0.153	0.053	0	0.017	0.111	4.289	0.015	0	0.282
V	mg/L	0.741	0.396	0.192	0.724	0.574	0.798	0.215	0.413	1.004	0.51	0.545	1.323	0.621	0.314	0.047	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	mg/L	27.842	34.497	4.281	66.179	2.23	39.206	2.071	147.82	82.246	2.026	1.798	5.569	1.999	24.48	28.262	0.358	71.451

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.119
Al	mg/L	8.084	3.521	2.816	28.796	5.56	25.652	2.879	44.471	24.67	8.012	7.178	11.073	7.779	4.561	2.724	1.662	52.084
As	mg/L	19.474	12.493	4.394	7.075	10.96	18.504	9.075	6.151	3.989	3.281	2.222	3.624	3.062	20.281	0	0	0
B	mg/L	0	0	0	0	0	0	0.534	0	0	0	0	0	0	0	5.387	4.743	4.787
Ba	mg/L	0.152	0.11	0.057	0.088	0.095	0.132	0.061	0.077	0.083	0.103	0.086	0.103	0.109	0.109	0.054	0.108	0.037
Be	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0	0.082
Bi	mg/L	0.165	0.219	0.063	0	0.539	0.009	0	0.039	0.024	0.1	0.05	0.528	0	0.349	0.036	0.006	0.081
Ca	mg/L	22.194	10.288	16.055	23.059	20.039	15.889	27.518	37.728	16.704	18.269	11.223	17.214	19.532	14.857	103.903	19.191	490.787
Cd	mg/L	1.324	1.028	0.614	0.245	0	0.024	0.083	1.659	0.309	0	0	0	0	2.498	0.147	0	0.265
Co	mg/L	0.828	0.453	0.77	0.406	0.442	1.405	0.298	0.526	0.689	0.521	0.563	0.545	0.555	0.876	0.03	0	0.492
Cr	mg/L	0.218	0.195	0.059	0.095	0.083	0.055	0.117	0.042	0.044	0.088	0.073	0.084	0.074	0.197	0.02	0.029	0.02
Cu	mg/L	83.026	23.974	9.253	124.296	19.762	170.218	14.901	19.839	65.949	49.867	29.242	150.49	91.989	24.551	1.739	0.026	25.362
Fe	mg/L	7520	3084.428	1220.587	2320.498	3068.211	5570	1417.755	2543.132	2746.03	3591.058	2706.673	3388.535	3486.568	2928.783	7.823	0.722	21.446
Ga	mg/L	0.269	0.247	0.087	0.198	0.173	0.695	0.09	0.292	0.337	0.226	0.164	0.31	0.175	0.103	0	0	0
Hg	ppb	9.942	4.78	1.197	3.215	4.102	6.039	1.249	2.805	3.538	4.276	3.091	4.129	4.28	2.413	1.107	0.035	0.062
K	mg/L	1.536	0.757	0.547	1.733	0.782	2.473	0.559	2.017	2.656	0.746	0.904	1.227	0.811	0.968	7.264	0.572	5.411
Li	mg/L	0.016	0.015	0.011	0.013	0.003	0.009	0.005	0.005	0.005	0.005	0.007	0.006	0.005	0.007	0.01	0.013	0.028
Mg	mg/L	0	0	0.182	0.569	0	0	0.391	0.925	0.205	0.138	0.309	0.301	0.113	0.015	5.979	1.154	25.984
Mn	mg/L	4.229	2.641	1.22	2.579	2.405	2.554	1.703	3.36	1.861	3.069	2.645	2.311	3.219	1.904	6.302	0.136	818.314
Mo	mg/L	0.067	0	0	0.43	0.022	0.154	0.012	0.02	0.218	0.662	0	0	0	0.033	0.004	0.021	0.012
Na	mg/L	9.591	9.144	7.681	9.694	9.07	9.832	8.836	9.08	9.548	9.789	9.754	9.883	9.311	10.143	10.109	8.951	9.584
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.006	0	0
Ni	mg/L	0.487	0.476	0.378	0.245	0.232	0.496	0.179	0.25	0.437	0.331	0.288	0.298	0.293	0.743	0.055	0	0.171

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.163	1.894	1.648	1.233	1.211	1.667	1.36	1.875	1.597	0.813	0.228	0.78	0.715	2.191	0.111	0.035	0.29
Sb	mg/L	0.832	0	0	0	0	0	0	0	0	0	0	0	0	0	0.044	0.092	0
Sc	mg/L	0	0	0	0.003	0	0.023	0	0.006	0	0	0	0	0	0	0	0	0.008
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0	0.111
Sn	mg/L	0	0	0	0	0	0	0.038	0	0.006	0.004	0.007	0	0	0.023	0.105	0.091	0.041
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.024	0.02	0.018	0.049	0.064	0.083	0.048	0.045	0.06	0.128	0.068	0.101	0.171	0.034	1.605	0.086	0.774
Te	mg/L	1.821	0.901	0.183	0.421	0.372	0.813	0.162	0.58	0.616	0.604	0.382	0.556	0.468	0.776	0	0	0
Ti	mg/L	0.152	0.058	0.024	0.016	0.029	0.02	0.023	0.041	0.022	0.038	0.018	0.021	0.038	0.064	0.008	0.007	0.008
Tl	mg/L	1.071	2.446	1.009	0.148	0	0.205	0.094	0.001	0.073	0.063	0.018	0.051	0.092	3.951	0.038	0.034	0.361
V	mg/L	0.58	0.193	0.011	0.411	0.279	0.641	0.062	0.252	0.636	0.36	0.256	1.106	0.306	0.214	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	mg/L	21.89	25.757	1.645	74.552	0.779	13.559	0.956	445.237	85.254	1.268	0.813	1.563	0.973	14.542	13.546	0.405	82.873

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.02	0.007	0.008	N/A	N/A	0.023	0.015	0.006	0.011	0.018	0.012	0.029	0.029	0.005	0.001	0	0.101
Al	mg/L	7.559	3.612	3.524	N/A	N/A	23.263	3.802	38.355	28.335	8.175	6.77	17.123	8.409	5.978	2.123	2.028	46.838
As	mg/L	16.17	13.593	5.89	N/A	N/A	15.091	16.069	4.149	4.133	3.119	1.492	4.509	3.286	21.812	0	0.096	0.174
B	mg/L	0	0	1.89	N/A	N/A	0	0.335	1.342	0	0	0	0	0	0	5.526	6.044	5.378
Ba	mg/L	0	0	0	N/A	N/A	0	0	0	0	0	0	0	0	0	0.001	0.053	0
Be	mg/L	0.001	0.001	0.002	N/A	N/A	0.002	0.002	0.002	0.002	0	0.001	0.001	0	0.001	0.003	0.002	0.064
Bi	mg/L	0.665	0.375	0.139	N/A	N/A	0.374	0.139	0.102	0.188	0.295	0.052	1	0.211	0.435	0	0	0
Ca	mg/L	16.193	5.515	12.269	N/A	N/A	10.686	6.77	14.548	21.824	16.02	18.082	37.141	17.123	17.477	78.835	12.031	485.492
Cd	mg/L	1.109	1.033	0.647	N/A	N/A	0	0.059	1.241	0.288	0	0	0	0	2.464	0.113	0	0.212
Co	mg/L	0.923	0.56	1.196	N/A	N/A	1.392	0.678	0.463	0.807	0.662	0.602	0.938	0.782	1.098	0.019	0	0.429
Cr	mg/L	0.229	0.231	0.103	N/A	N/A	0.076	0.231	0.057	0.075	0.115	0.09	0.133	0.139	0.254	0.026	0.016	0.022
Cu	mg/L	89.311	29.756	15.006	N/A	N/A	186.874	36.261	19.479	80.981	55.515	27.627	235.392	97.882	36.657	1.423	0.273	24.533
Fe	mg/L	5176.527	3594.807	2027.388	N/A	N/A	4140.304	2827.261	2274.627	3206.147	4213.578	2991.731	4969.516	4671.266	3627.999	4.403	0.968	10.451
Ga	mg/L	0.041	0.03	0.042	N/A	N/A	0.375	0	0.155	0.202	0.012	0	0.17	0	0	0	0	0
Hg	ppb	16.869	9.204	2.665	N/A	N/A	11.35	5.092	2.973	5.197	7.863	1.103	6.474	2.354	1.155	0.001	0.001	0.002
K	mg/L	1.493	0.769	0.847	N/A	N/A	2.578	0.659	1.904	3.148	1.169	1.277	1.851	1.057	1.05	6.998	0.836	4.968
Li	mg/L	0.004	0.002	0.002	N/A	N/A	0.003	0.002	0.003	0.004	0.003	0.005	0.005	0.004	0.003	0.007	0.013	0.023
Mg	mg/L	0.668	0.2	0.412	N/A	N/A	0.416	0.25	1.007	0.886	0.472	0.887	1.6	0.681	0.652	4.7	0.911	23.009
Mn	mg/L	4.05	2.278	2.65	N/A	N/A	2.289	1.519	2.729	2.456	4.419	5.041	6.901	6.197	2.199	5.02	0.053	739.68
Mo	mg/L	0.157	0.022	0.018	N/A	N/A	0.204	0.007	0.036	0.323	0.785	0	0.012	0.017	0.083	0	0.064	0
Na	mg/L	9.661	8.581	8.958	N/A	N/A	9.085	9.425	9.454	9.49	9.847	9.399	9.808	9.81	9.397	9.65	8.744	9.327
Nb	mg/L	0	0	0.005	N/A	N/A	0	0	0	0	0	0	0	0	0	0.028	0.017	0.008
Ni	mg/L	0.497	0.474	0.572	N/A	N/A	0.509	0.384	0.245	0.568	0.445	0.464	0.681	0.493	0.94	0.087	0.047	0.186

Yanacocha

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Informe Interno de Analisis
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Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.515	2.127	1.728	N/A	N/A	1.961	2.051	1.782	1.869	0.993	0.361	1.345	1.024	2.089	0.089	0.067	0.259
Sb	mg/L	1.059	0.089	0.199	N/A	N/A	0	0	0	0	0	0	0	0	0.193	0.076	0.102	0
Sc	mg/L	0	0	0	N/A	N/A	0.025	0	0.008	0.002	0	0	0.001	0	0	0	0	0
Se	mg/L	0.856	0.536	0.168	N/A	N/A	0	0.305	0.01	0	0	0.3	0.234	0.424	0.183	0.202	0	0.317
Sn	mg/L	0.054	0.082	0.088	N/A	N/A	0.062	0.072	0.041	0.093	0.071	0.055	0.083	0.003	0.077	0	0.038	0.049
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.022	0.011	0.021	N/A	N/A	0.085	0.052	0.028	0.089	0.143	0.081	0.191	0.198	0.045	1.435	0.083	0.828
Te	mg/L	1.597	1.055	0.33	N/A	N/A	0.912	0.403	0.537	0.808	0.84	0.515	1.111	0.967	1.134	0.031	0.042	0.014
Ti	mg/L	0.138	0.062	0.037	N/A	N/A	0.02	0.03	0.015	0.05	0.059	0.023	0.206	0.041	0.088	0.005	0.005	0.006
Tl	mg/L	0.895	2.277	0.744	N/A	N/A	0.078	0.192	0.005	0.031	0	0	0	0.015	4.209	0	0.106	0
V	mg/L	0.468	0.145	0.006	N/A	N/A	0.502	0.069	0.099	0.584	0.302	0.162	1.496	0.301	0.149	0	0	0
W	mg/L	0	0	0	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0.052	0
Zn	mg/L	20.258	24.677	2.219	N/A	N/A	3.483	1.227	357.338	84.527	1.185	0.671	4.156	1.154	16.157	9.132	0	66.858

Yanacocha

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Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0.032	0.023	0	0	0.021	0.111	0.005	0	0.015	0	0	0	0.06	0.109	0.222
Al	mg/L	26.662	20.756	18.955	52.629	27.156	39.091	20.704	72.201	38.886	25.708	24.206	31.245	28.342	23.614	24.884	19.91	68.923
As	mg/L	27.437	22.696	9.254	10.38	24.531	21.849	25.256	8.202	4.59	4.524	2.09	6.154	6.847	29.611	0.333	0.542	0
B	mg/L	17.761	26.449	33.097	39.488	31.169	32.823	35.221	35.368	35.002	29.103	37.549	30.338	27.194	39.36	45.848	49.771	45.644
Ba	mg/L	0.357	0.173	0.117	0.157	0.218	0.157	0.117	0.332	0.159	0.16	0.128	0.251	0.195	0.157	0.093	0.145	0.259
Be	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.071
Bi	mg/L	1.01	0.602	0	0.068	1.233	0	0	0	0	0.011	0.038	1.078	0	0.093	0	0	0.276
Ca	mg/L	26.195	16.965	17.008	33.909	25.106	16.802	18.631	25.92	18.94	18.05	18.681	24.769	31.277	30.898	101.645	34.024	545.138
Cd	mg/L	1.799	1.299	1.071	0.259	0	0	0.171	2.002	0.244	0	0.006	0	0	2.806	0.119	0	0.36
Co	mg/L	1.384	0.623	1.582	0.546	0.983	1.634	0.775	0.68	0.62	0.685	0.605	0.956	1.094	1.224	0	0	0.635
Cr	mg/L	0.318	0.274	0.046	0.239	0.19	0.059	0.301	0.204	0.055	0.139	0.085	0.142	0.074	0.372	0.041	0.007	0.165
Cu	mg/L	112.877	33.611	14.806	128.519	35.362	163.98	37.669	22.956	54.886	53.427	28.433	173.833	124.856	34.132	1.241	0.139	23.525
Fe	mg/L	10885.19	6166.318	2723.508	4029.44	7644.984	6208.963	4083.28	3943.396	3417.3	6538.648	4033.903	6851.544	8153.843	4800.645	144.621	12.8	23.399
Ga	mg/L	2.055	1.116	1.017	1.247	1.215	1.751	0.925	1.13	0.76	1.156	0.698	1.356	1.183	0.855	0.392	0.499	0
Hg	ppb	0.882	0.195	0.091	0.143	0.233	0.176	0.185	0.126	0.172	0.129	0.176	0.714	0.634	0.129	0.038	0.023	0
K	mg/L	15.384	13.589	13.156	15.89	15.448	16.175	13.558	16.517	15.306	14.925	14.938	17.081	15.836	15.563	20.532	14.34	19.073
Li	mg/L	0.033	0.024	0.022	0.025	0.031	0.027	0.027	0.067	0.025	0.019	0.028	0.029	0.022	0.032	0.024	0.037	0.082
Mg	mg/L	0.603	1.073	1.715	2.499	1.091	1.109	1.496	2.718	1.87	1.017	2.016	1.736	1.255	1.632	7.432	3.203	27.537
Mn	mg/L	6.401	4.199	3.275	5.665	5.701	3.343	2.354	4.672	2.461	5.048	4.788	4.502	6.956	2.743	5.793	0.126	915.659
Mo	mg/L	0.171	0.074	0.035	0.609	0	0.287	0	0	0.166	1.076	0.041	0.029	0	0.116	0.038	0	0.11
Na	mg/L	88.891	84.437	77.924	82.06	96.183	92.692	86.085	77.557	85.152	76.393	90.032	92.193	82.791	98.226	77.935	91.39	78.968
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02	0	0
Ni	mg/L	0.487	0.497	0.588	0.137	0.57	0.36	0.292	0.163	0.338	0.301	0.175	0.284	0.503	0.844	0	0	0.049

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	4.313	3.192	2.151	2.346	2.718	2.731	2.735	2.772	2.74	2.129	1.039	1.61	1.897	3.212	0.666	0.093	0.697
Sb	mg/L	0.986	0.366	0.051	0	0	0	0	0	0	0	0	0	0	0	0.48	0.341	0
Sc	mg/L	0	0	0	0	0	0.007	0	0.003	0	0	0	0	0	0	0	0.001	0.006
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.278	0.919
Sn	mg/L	0	0.038	0	0.047	0	0	0	0	0	0	0	0.045	0	0	0.4	0	0.16
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.076	0.041	0.034	0.079	0.115	0.105	0.078	0.147	0.082	0.163	0.1	0.174	0.26	0.074	1.436	0.122	0.985
Te	mg/L	3.612	2.145	0.952	1.716	1.317	1.257	1.15	1.472	1.561	1.793	1.171	1.696	1.365	1.85	1.068	0.16	0.681
Ti	mg/L	0.256	0.129	0.071	0.062	0.099	0.059	0.065	0.081	0.074	0.089	0.084	0.161	0.136	0.118	0.055	0.053	0.054
Tl	mg/L	1.417	2.694	0.127	0	0	0	0	0	0	0	0	0	0	4.828	0.088	0	0.449
V	mg/L	1.094	0.486	0.309	0.773	0.721	0.897	0.385	0.402	0.752	0.649	0.44	1.592	0.784	0.459	0.165	0.161	0.033
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.029	0.04
Zn	mg/L	32.922	36.555	1.808	86.157	0.32	1.084	0	622.683	71.783	0	0	0.423	0.098	17.847	9.5	0	85.538

Yanacocha

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	N/A	0	0	0	0	N/A	0	0	0	0	0	0.007	0.013	0.129
Al	mg/L	5.581	3.508	3.999	N/A	7.54	14.822	3.385	49.239	N/A	6.855	6.556	9.002	10.727	5.438	2.618	2.094	49.359
As	mg/L	15.768	16.671	9.286	N/A	17.883	15.375	18.734	8.772	N/A	5.339	2.072	3.618	7.84	23.252	0.015	0.05	0
B	mg/L	0	0	0	N/A	0	0	0	0	N/A	0	0	0	0	0	4.025	4.425	4.06
Ba	mg/L	0.135	0.096	0.059	N/A	0.117	0.087	0.07	0.084	N/A	0.116	0.077	0.087	0.172	0.093	0.023	0.081	0.016
Be	mg/L	0	0	0	N/A	0	0	0	0.001	N/A	0	0	0	0	0	0.001	0	0.073
Bi	mg/L	0.411	0.28	0	N/A	1.17	0	0	0	N/A	0	0	0.363	0.046	0.436	0	0	0
Ca	mg/L	14.69	11.777	18.376	N/A	28.524	12.959	12.955	30.503	N/A	9.604	19.343	21.339	19.867	36.313	104.335	14.423	453.548
Cd	mg/L	1.087	0.948	1.3	N/A	0	0	0.129	1.675	N/A	0	0	0	0	2.447	0.123	0.001	0.283
Co	mg/L	0.973	0.636	1.633	N/A	0.795	1.236	0.685	0.618	N/A	0.817	0.661	0.602	1.29	1.164	0.025	0.002	0.505
Cr	mg/L	0.255	0.331	0.188	N/A	0.27	0.108	0.309	0.129	N/A	0.144	0.162	0.16	0.195	0.317	0.09	0.097	0.094
Cu	mg/L	78.189	30.49	20.859	N/A	30.609	131.519	38.567	24.361	N/A	56.66	34.604	117.318	154.541	32.18	1.051	0.066	24.842
Fe	mg/L	9323.983	6849.604	2303.145	N/A	7571.683	5766.132	2868.045	2958.493	N/A	7754.949	2899.605	5127.612	11138.22	5278.257	13.575	0.976	45.44
Ga	mg/L	0.326	0.24	0.1	N/A	0.266	0.453	0.186	0.365	N/A	0.216	0.182	0.286	0.432	0.088	0	0.031	0
Hg	ppb	0.631	0.176	0.193	N/A	0.228	0.269	0.221	0.321	N/A	0.176	0.488	0.385	1.289	0.06	0	0	0
K	mg/L	2.058	1.371	1.195	N/A	1.655	2.665	1.08	2.618	N/A	1.468	1.712	1.784	1.822	1.468	7.695	1.111	4.52
Li	mg/L	0.004	0.003	0.003	N/A	0.005	0.004	0.003	0.006	N/A	0.004	0.004	0.004	0.005	0.003	0.011	0.013	0.023
Mg	mg/L	0	0	0.179	N/A	0	0	0	1.317	N/A	0	0.323	0.265	0	0.319	6.246	1.06	25.075
Mn	mg/L	3.951	2.929	2.665	N/A	3.512	2.374	1.91	4.091	N/A	3.105	3.295	2.54	5.325	2.484	9.605	0.15	839.526
Mo	mg/L	0.045	0.017	0.013	N/A	0.084	0.213	0.016	0.016	N/A	1.579	0	0	0.008	0.108	0	0.053	0
Na	mg/L	7.885	8.726	8.223	N/A	8.043	9.349	8.697	7.851	N/A	8.778	8.934	8.33	7.832	7.715	10.05	7.754	8.913
Nb	mg/L	0	0	0	N/A	0	0	0	0	N/A	0	0	0	0	0	0.007	0.01	0
Ni	mg/L	0.442	0.57	0.897	N/A	0.414	0.434	0.362	0.303	N/A	0.449	0.577	0.353	0.622	0.974	0.074	0.016	0.18

Yanacocha

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.14	1.865	1.799	N/A	1.592	1.315	1.895	1.777	N/A	0.984	0.292	0.669	1.187	1.898	0.039	0.033	0.208
Sb	mg/L	0.545	0	0	N/A	0	0	0	0	N/A	0	0	0	0	0	0	0.063	0
Sc	mg/L	0	0	0	N/A	0	0.007	0	0.005	N/A	0	0	0	0	0	0	0	0.017
Se	mg/L	0	0	0	N/A	0	0	0	0	N/A	0	0	0	0	0	0.123	0.002	0.415
Sn	mg/L	0	0	0	N/A	0.145	0	0	0	N/A	0	0	0	0	0	0	0	0
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.016	0.016	0.026	N/A	0.085	0.072	0.065	0.057	N/A	0.137	0.087	0.094	0.288	0.055	1.58	0.086	0.856
Te	mg/L	1.773	1.239	0.678	N/A	1.07	0.907	0.637	0.943	N/A	1.137	0.709	0.77	1.483	1.251	0.11	0.201	0.202
Ti	mg/L	0.157	0.088	0.064	N/A	0.07	0.013	0.03	0.038	N/A	0.028	0.071	0.04	0.076	0.113	0.008	0.014	0.007
Tl	mg/L	0.846	2.869	1.036	N/A	0.066	0.094	0.132	0.191	N/A	0.124	0.107	0.1	0.206	4.391	0.038	0.073	0.39
V	mg/L	0.579	0.293	0.128	N/A	0.444	0.497	0.173	0.308	N/A	0.504	0.3	1.033	0.755	0.248	0	0	0
W	mg/L	0	0	0	N/A	0	0	0	0	N/A	0	0	0	0	0	0.117	0.179	0.027
Zn	mg/L	20.443	29.953	3.472	N/A	1.817	1.906	1.409	430.847	N/A	1.629	0.707	1.102	1.898	17.219	9.614	0	80.279

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/07/2013

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/08/2013

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
03/09/2013

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/11/2013

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Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
02/12/2013

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.015	0.013	0.008	0.013	0.033	0.014	0.01	N/A	0.011	0.02	0.032	0.013	0.017	0.01	0.011	0.001	0.154
Al	mg/L	12.036	5.202	3.016	25.719	25.763	22.725	3.159	N/A	30.005	9.716	9.827	12.542	13.834	5.719	1.817	0.629	62.607
As	mg/L	18.096	21.668	6.528	7.471	56.235	18.687	18.864	N/A	6.772	6.997	2.983	4.778	5.901	22.473	0.107	0.014	0.075
B	mg/L	0	0	0	0	0	0	0	N/A	0	0	0	0	0	0	1.817	1.728	1.469
Ba	mg/L	0	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0.229	0.085	0
Be	mg/L	0	0	0	0.001	0	0	0	N/A	0	0	0	0	0	0	0.001	0	0.072
Bi	mg/L	0.493	0.414	0.042	0.052	3.466	0	0	N/A	0	0.059	0	0.878	0.045	0.421	0.05	0.036	0.072
Ca	mg/L	40.909	9.601	40.277	23.635	78.409	24.245	13.575	N/A	49.97	10.605	39.178	40.693	53.272	45.664	235.837	9.916	307.868
Cd	mg/L	1.114	0.86	0.6	0.168	0	0	0.044	N/A	0.536	0	0	0	0	1.755	0.196	0	0.358
Co	mg/L	1.001	0.828	1.132	0.441	2.367	1.484	0.582	N/A	0.766	0.844	1.012	0.728	0.941	1.209	0.075	0	0.511
Cr	mg/L	0.424	0.31	0.165	0.084	0.943	0.061	0.241	N/A	0.053	0.097	0.335	0.276	0.152	0.292	0.006	0.002	0.015
Cu	mg/L	102.331	40.643	14.687	136.917	134.809	200.95	42.736	N/A	79.916	70.083	50.863	169.102	165.28	35.25	0.362	0	27.947
Fe	mg/L	1943.005	1897.554	1278.343	1407.187	1994.253	1846.906	1582.213	N/A	1624.902	1901.765	1860.681	1789.501	1907.553	1774.426	6.792	0.293	90.989
Ga	mg/L	0.792	0.732	0.231	0.351	2.03	0.961	0.352	N/A	0.622	0.731	0.617	0.663	0.705	0.465	0	0.007	0
Hg	ppb	0.585	0.085	0.02	0.055	0.644	0.161	0.039	N/A	0.016	0.108	0.444	0.293	0.668	0	0.551	0	0
K	mg/L	2.32	0.893	0.714	2.042	2.762	2.984	0.561	N/A	2.913	1.352	1.076	1.153	1.682	0.906	17.631	0.528	1.345
Li	mg/L	0.007	0.004	0.003	0.004	0.012	0.004	0.005	N/A	0.005	0.004	0.007	0.005	0.006	0.005	0.016	0.012	0.024
Mg	mg/L	1.931	0.427	1.259	1.218	3.394	0.878	0.556	N/A	1.911	0.509	2.06	1.787	1.747	1.428	14.97	0.713	27.388
Mn	mg/L	3.809	2.881	4.527	2.321	13.134	2.471	1.564	N/A	2.575	2.728	8.746	4.635	3.479	2.709	50.586	0.023	857.694
Mo	mg/L	0.069	0.03	0.02	0.723	0.302	0.322	0.072	N/A	0.4	1.324	0.022	0.031	0.091	0.071	0.018	0.073	0
Na	mg/L	5.579	3.772	3.492	3.152	6.339	3.68	4.119	N/A	4.192	3.559	4.365	3.724	4.32	4.618	7.381	2.403	3.768
Nb	mg/L	0	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0.004	0.004	0
Ni	mg/L	0.536	0.669	0.802	0.25	1.545	0.507	0.334	N/A	0.445	0.452	0.968	0.555	0.46	0.972	0.096	0.002	0.195

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.948	2.115	0.897	1.419	3.13	1.59	1.87	N/A	1.675	1.354	0.58	0.944	1.253	1.854	0.134	0.023	0.168
Sb	mg/L	1.045	0.053	0	0	0	0	0	N/A	0	0	0	0	0	0	0	0	0
Sc	mg/L	0	0	0	0.005	0	0.016	0	N/A	0.002	0	0	0	0	0	0	0	0.014
Se	mg/L	0.277	0.088	0.036	0.122	0.247	0.026	0	N/A	0.116	0.133	0.092	0.204	0.101	0.206	0.017	0.032	0.23
Sn	mg/L	0.083	0.054	0.025	0.024	0.296	0.032	0.023	N/A	0	0	0.031	0.036	0.021	0.052	0	0.004	0.005
SO4	%	N/A	2.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.063	0.013	0.046	0.058	0.273	0.105	0.059	N/A	0.106	0.149	0.128	0.114	0.231	0.063	3.015	0.065	0.669
Te	mg/L	1.966	1.648	0.413	0.442	3.108	1.092	0.523	N/A	0.88	1.09	0.926	0.845	1.05	1.05	0	0	0
Ti	mg/L	0.174	0.109	0.063	0.009	0.206	0.02	0.041	N/A	0.034	0.03	0.033	0.02	0.062	0.092	0.065	0.003	0.005
Tl	mg/L	0.589	3.007	0.518	0	0	0.007	0.191	N/A	0	0.031	0	0	0	3.729	0.024	0.023	0.022
V	mg/L	0.695	0.485	0.117	0.479	1.869	0.705	0.203	N/A	0.702	0.668	0.531	1.227	0.589	0.314	0	0	0
W	mg/L	0	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0	0	0
Zn	mg/L	20.51	33.473	2.414	59.799	6.101	3.902	1.866	N/A	124.675	1.965	1.884	3.549	4.206	14.668	14.916	0	87.737

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0.007	0.002	0.111
Al	mg/L	13.235	5.53	3.371	28.669	27.43	25.526	3.621	N/A	33.384	10.36	10.84	14.378	15.373	6.412	0.819	0.503	84.788
As	mg/L	19.698	23.376	7.112	8.087	63.71	20.783	20.661	N/A	7.575	7.705	3.395	5.344	6.792	25.147	0	0	0
B	mg/L	0	0	0	0	0	0	0	N/A	0	0	0	0	0	0	2.517	2.158	2.184
Ba	mg/L	0.114	0.099	0.051	0.048	0.268	0.093	0.06	N/A	0.071	0.102	0.094	0.09	0.111	0.082	0.02	0.099	0.01
Be	mg/L	0	0	0	0.001	0	0	0	N/A	0	0	0	0	0	0	0	0	0.102
Bi	mg/L	0.964	0.907	0.205	0.238	4.632	0.521	0.285	N/A	0.329	0.504	0.406	1.255	0.474	0.777	0.024	0.029	0.075
Ca	mg/L	48.577	11.456	47.471	27.727	94.733	29.157	16.203	N/A	59.226	12.458	45.734	50.09	64.457	55.176	295.614	13.694	453.649
Cd	mg/L	1.325	1.081	0.708	0.246	0.079	0.119	0.219	N/A	0.642	0.016	0.012	0.026	0.029	2.077	0.22	0	0.472
Co	mg/L	1.051	0.818	1.24	0.444	2.354	1.556	0.627	N/A	0.799	0.868	1.031	0.775	0.998	1.31	0.088	0	0.696
Cr	mg/L	0.474	0.347	0.192	0.098	1.027	0.078	0.283	N/A	0.076	0.098	0.375	0.319	0.165	0.336	0.014	0.015	0.032
Cu	mg/L	116.752	45.905	16.301	155.312	152.716	229.145	49.325	N/A	91.404	77.669	57.237	196.843	193.091	40.684	0	0	38.712
Fe	mg/L	9421.523	9651.293	2990.34	3720.85	28963.70	8151.809	4649.877	N/A	5106.137	8679.218	7567.361	6767.475	8972.775	6257.124	1.081	0.302	132.464
Ga	mg/L	0.452	0.433	0.102	0.219	1.147	0.734	0.194	N/A	0.46	0.369	0.336	0.44	0.419	0.262	0	0.009	0
Hg	ppb	N/A	0.082	N/A	0.058	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	2.156	0.956	0.714	2.498	2.749	3.355	0.672	N/A	3.367	1.187	1.374	1.533	1.24	1.072	19.606	0.493	1.905
Li	mg/L	0.007	0.004	0.004	0.005	0.012	0.004	0.003	N/A	0.005	0.004	0.006	0.006	0.006	0.004	0.019	0.015	0.03
Mg	mg/L	0.598	0	0.914	0.788	0	0	0	N/A	1.322	0	1.064	0.969	0.569	0.616	18.273	0.886	38.656
Mn	mg/L	4.598	3.498	5.167	2.701	15.241	3.026	1.918	N/A	3.063	3.272	9.897	5.644	4.28	3.294	61.552	0.016	1533.118
Mo	mg/L	0.059	0	0.014	0.783	0.252	0.327	0.072	N/A	0.421	1.427	0.01	0.008	0.075	0.062	0.01	0.098	0
Na	mg/L	5.621	4.087	3.744	4.503	6.215	4.083	3.907	N/A	4.443	4.03	4.409	4.208	4.572	4.412	9.264	3.282	4.607
Nb	mg/L	0	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0	0	0
Ni	mg/L	0.621	0.737	0.901	0.29	1.704	0.58	0.39	N/A	0.525	0.511	1.082	0.658	0.549	1.139	0.126	0.008	0.298

Yanacocha

Fecha de Publicación:
01/01/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.935	2.068	0.886	1.41	3.922	1.526	1.966	N/A	1.694	1.217	0.418	0.839	1.157	1.931	0.016	0.021	0.176
Sb	mg/L	0.259	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0	0	0
Sc	mg/L	0	0	0	0.001	0	0.01	0	N/A	0	0	0	0	0	0	0	0	0.028
Se	mg/L	0	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0.029	0	0.507
Sn	mg/L	0.113	0.022	0.023	0.015	0.224	0.013	0.011	N/A	0.008	0.029	0.07	0.037	0.021	0.05	0	0	0
SO4	%	N/A	N/A	0.71	0.92	7.6	2.15	1.26	N/A	1.46	2.44	1.77	1.83	2.44	1.89	0.08	0.02	0.48
Sr	mg/L	0.068	0.014	0.049	0.062	0.29	0.112	0.064	N/A	0.115	0.155	0.136	0.126	0.254	0.07	3.458	0.081	0.881
Te	mg/L	1.766	1.355	0.339	0.369	2.472	0.837	0.388	N/A	0.681	0.81	0.656	0.649	0.757	1.054	0	0	0
Ti	mg/L	0.183	0.115	0.066	0.007	0.096	0.015	0.036	N/A	0.032	0.024	0.036	0.017	0.061	0.101	0.005	0	0
Tl	mg/L	0.669	3.133	0.556	0.012	0.098	0.074	0.231	N/A	0	0.095	0.014	0.019	0.107	4.035	0.044	0	0.734
V	mg/L	0.588	0.37	0.107	0.504	1.557	0.666	0.177	N/A	0.727	0.598	0.472	1.32	0.53	0.269	0	0	0
W	mg/L	0	0	0	0	0	0	0	N/A	0	0	0	0	0	0	0	0	0
Zn	mg/L	23.953	39.022	2.643	70.234	6.759	4.415	1.988	N/A	151.491	2.019	1.954	4.111	4.817	17.051	18.454	0	125.214

Yanacocha

Fecha de Publicación:
03/02/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	N/A	0	0	N/A	0	0	0	0	N/A	0	0	0	0.037
Al	mg/L	3.849	1.411	0.613	8.093	N/A	8.112	1.054	N/A	8.737	2.731	2.328	4.276	N/A	1.521	1.521	0.126	24.511
As	mg/L	6.263	5.047	1.371	2.255	N/A	6.285	5.4	N/A	1.843	1.967	0.758	1.617	N/A	7.765	7.765	0.004	0
B	mg/L	0	0	0	0	N/A	0	0	N/A	0	0	0	0	N/A	0	0	0.451	0.395
Ba	mg/L	0.048	0.031	0.011	0.016	N/A	0.033	0.016	N/A	0.021	0.031	0.024	0.031	N/A	0.028	0.028	0.027	0.002
Be	mg/L	0	0	0	0	N/A	0	0	N/A	0	0	0	0	N/A	0	0	0	0.028
Bi	mg/L	0.139	0.091	0	0	N/A	0	0	N/A	0	0	0	0.256	N/A	0.185	0.185	0.006	0.036
Ca	mg/L	5.996	3.751	3.948	5.644	N/A	5.37	2.885	N/A	16.419	2.698	5.503	5.653	N/A	5.136	5.136	4.83	119.857
Cd	mg/L	0.407	0.225	0.156	0.065	N/A	0.016	0.061	N/A	0.149	0.005	0.002	0.002	N/A	0.671	0.671	0	0.142
Co	mg/L	0.37	0.205	0.249	0.122	N/A	0.475	0.156	N/A	0.209	0.222	0.223	0.233	N/A	0.423	0.423	0	0.198
Cr	mg/L	0.085	0.08	0.029	0.027	N/A	0.016	0.077	N/A	0.027	0.023	0.062	0.032	N/A	0.091	0.091	0	0.004
Cu	mg/L	41.68	11.164	3.089	45.215	N/A	77.829	14.143	N/A	25.16	21.132	13.601	58.158	N/A	12.854	12.854	0	12.554
Fe	mg/L	2932	2114	319.67	449.438	N/A	2243	1164	N/A	1340	2095	1554	1972	N/A	1928	1928	0.29	39.709
Ga	mg/L	0.195	0.127	0.027	0.071	N/A	0.26	0.061	N/A	0.131	0.131	0.098	0.155	N/A	0.1	0.1	0.002	0
Hg	ppb	0.345	0.086	0.227	0.1	N/A	0.122	0.286	N/A	0.262	0.209	0.273	0.296	N/A	0.247	0.247	0	0
K	mg/L	0.606	0.163	0.034	0.419	N/A	0.997	0.037	N/A	0.667	0.2	0.189	0.341	N/A	0.132	0.132	0.06	0.322
Li	mg/L	0.001	0.001	0	0.001	N/A	0.001	0.001	N/A	0.001	0.001	0.001	0.001	N/A	0.001	0.001	0.004	0.009
Mg	mg/L	0	0	0.042	0.123	N/A	0	0	N/A	0.416	0	0.119	0.049	N/A	0	0	0.291	11.403
Mn	mg/L	1.178	0.865	0.628	0.864	N/A	0.844	0.411	N/A	0.877	0.742	1.614	0.908	N/A	0.832	0.832	0.015	354.232
Mo	mg/L	0	0	0	0.209	N/A	0.116	0.011	N/A	0.108	0.389	0	0.001	N/A	0.02	0.02	0.024	0
Na	mg/L	1.369	1.067	0.953	0.952	N/A	1.037	0.902	N/A	1.154	1.05	1.071	1.093	N/A	1.066	1.066	0.925	1.224
Nb	mg/L	0	0	0	0	N/A	0	0	N/A	0	0	0	0	N/A	0	0	0	0
Ni	mg/L	0.182	0.196	0.141	0.087	N/A	0.175	0.096	N/A	0.146	0.134	0.208	0.143	N/A	0.368	0.368	0.005	0.09

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	0.616	0.523	0.241	0.336	N/A	0.412	0.571	N/A	0.389	0.305	0.087	0.26	N/A	0.539	0.539	0	0.046
Sb	mg/L	0.004	0	0	0	N/A	0	0	N/A	0	0	0	0	N/A	0	0	0.001	0
Sc	mg/L	0	0	0	0	N/A	0.002	0	N/A	0	0	0	0	N/A	0	0	0	0.007
Se	mg/L	0	0	0	0	N/A	0	0	N/A	0	0	0	0	N/A	0	0	0	0.098
Sn	mg/L	0.019	0.006	0.005	0.002	N/A	0.019	0.001	N/A	0.002	0.007	0.004	0	N/A	0.023	0.023	0	0
SO4	%	N/A	2.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.007	0.004	0.005	0.013	N/A	0.029	0.018	N/A	0.033	0.04	0.026	0.03	N/A	0.005	0.005	0.029	0.259
Te	mg/L	0.664	0.376	0.071	0.13	N/A	0.299	0.14	N/A	0.195	0.266	0.186	0.248	N/A	0.345	0.345	0	0
Ti	mg/L	0.073	0.032	0.01	0.004	N/A	0.004	0.009	N/A	0.011	0.006	0.006	0.005	N/A	0.028	0.028	0	0
Tl	mg/L	0.21	0.717	0.124	0.009	N/A	0.025	0.047	N/A	0.002	0.022	0.008	0.008	N/A	1.215	1.215	0	0.154
V	mg/L	0.254	0.114	0.021	0.153	N/A	0.239	0.056	N/A	0.208	0.182	0.118	0.463	N/A	0.107	0.107	0	0
W	mg/L	0	0	0	0	N/A	0	0	N/A	0	0	0	0	N/A	0	0	0	0
Zn	mg/L	7.35	8.989	0.473	18.185	N/A	1.218	0.491	N/A	35.284	0.575	0.467	0.857	N/A	5.174	5.174	0	35.253

Yanacocha

Fecha de Publicación:
01/03/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0.096
Al	mg/L	10.523	5.117	1.242	16.569	5.717	24.783	2.302	10.434	15.678	4.605	6.024	11.055	6.35	3.802	N/A	0.633	54.601
As	mg/L	16.633	13.849	2.312	3.472	12.553	19.445	9.839	0.871	3.097	3.186	1.688	4.524	2.717	16.133	N/A	0	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	1.456	1.024
Ba	mg/L	0.132	0.112	0.024	0.023	0.081	0.109	0.029	0.007	0.04	0.057	0.056	0.086	0.067	0.06	N/A	0.1	0
Be	mg/L	0	0	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0	N/A	0.001	0.066
Bi	mg/L	0.392	0.179	0.038	0	0.494	0.028	0	0	0.059	0.001	0.003	0.58	0.026	0.395	N/A	0	0.07
Ca	mg/L	18.949	24.203	4.806	16.138	10.184	12.997	4.973	55.435	10.437	4.493	8.393	10.567	10.298	9.334	N/A	17.269	403.626
Cd	mg/L	1.049	0.689	0.246	0.155	0.003	0.031	0.119	0.221	0.174	0.003	0.003	0.009	0	1.39	N/A	0	0.397
Co	mg/L	0.948	0.624	0.516	0.319	0.598	1.615	0.367	0.144	0.574	0.43	0.613	0.664	0.537	1.043	N/A	0.001	0.55
Cr	mg/L	0.255	0.297	0.047	0.073	0.125	0.043	0.153	0.072	0.055	0.049	0.115	0.06	0.074	0.19	N/A	0	0.007
Cu	mg/L	103.07	32.94	5.292	96.262	28.731	237.93	28.54	5.867	75.658	36.032	32.034	139.49	85.878	25.31	N/A	0	31.269
Fe	mg/L	7635.5	6143.2	731.69	1259.7	5061.3	1807.9	1295.7	664.52	1368.8	1556.9	1518.1	5237.8	1608.6	4167.78	N/A	2.326	78.056
Ga	mg/L	0.485	0.385	0.053	0.14	0.305	0.811	0.135	0.079	0.293	0.234	0.229	0.406	0.241	0.209	N/A	0	0
Hg	ppb	0.073	0.062	0	0.283	0.007	0.022	0.023	0	0.008	0.003	0.04	0.008	0.078	0	N/A	0	0.14
K	mg/L	2.988	5.578	0.712	1.753	0.518	4.258	0.65	0.321	2.183	1.696	0.805	1.404	1.66	1.051	N/A	1.024	1.631
Li	mg/L	0.002	0.001	0	0.001	0.001	0.001	0	0	0	0	0.001	0.002	0	0	N/A	0.012	0.025
Mg	mg/L	0	0	0.081	0.462	0	0	0	1.553	0.058	0	0.241	0.069	0.072	0	N/A	1.08	30.118
Mn	mg/L	3.631	3.332	1.299	2.855	3.198	2.673	1.03	1.405	1.696	1.769	2.989	3.523	3.465	1.75	N/A	0.025	1035.116
Mo	mg/L	0.001	0	0	0.342	0.03	0.344	0.022	0	0.348	0.613	0	0	0	0.021	N/A	0.086	0
Na	mg/L	3.4	3.032	2.55	2.465	2.596	2.921	2.213	2.762	2.625	2.428	2.429	2.707	2.678	2.492	N/A	2.458	3.08
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0.006	0.008
Ni	mg/L	0.503	0.625	0.258	0.198	0.3	0.559	0.225	0.132	0.391	0.273	0.366	0.429	0.278	0.857	N/A	0	0.242

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.932	1.856	0.618	1.082	1.313	1.629	2.052	0.039	1.347	0.722	0.265	0.723	0.672	1.874	N/A	0	0.154
Sb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0
Sc	mg/L	0	0	0	0	0	0.006	0	0.001	0	0	0	0	0	0	N/A	0	0.012
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0.277
Sn	mg/L	0.093	0.076	0.017	0.02	0.061	0.083	0.041	0	0.044	0.06	0.054	0.055	0.04	0.083	N/A	0.006	0.02
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.019	0.035	0.005	0.033	0.054	0.092	0.044	0.062	0.054	0.087	0.065	0.076	0.117	0.007	N/A	0.096	0.781
Te	mg/L	1.521	0.923	0.137	0.303	0.622	0.885	0.301	0.115	0.438	0.493	0.445	0.644	0.527	0.773	N/A	0	0.002
Ti	mg/L	0.155	0.109	0.009	0.001	0.013	0.003	0.014	0.015	0.012	0.008	0.007	0.003	0.019	0.053	N/A	0	0
Tl	mg/L	0.559	2.099	0.257	0	0	0.012	0.158	0	0	0	0	0	0	2.741	N/A	0	0.357
V	mg/L	0.69	0.386	0.041	0.313	0.406	0.766	0.128	0.032	0.569	0.33	0.274	1.204	0.309	0.242	N/A	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0.012	0
Zn	mg/L	17.909	26.808	0.877	45.285	1.368	3.594	1.142	59.516	43.7	1.173	1.176	2.617	1.308	10.113	N/A	0	96.966

Yanacocha

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.11
Al	mg/L	9.526	3.549	3.089	21.914	5.804	17.972	2.601	25.981	19.352	5.89	5.053	10.25	4.433	3.829	1.296	0.695	57.16
As	mg/L	18.258	17.333	11.592	5.335	14.318	13.362	12.607	4.326	4.777	5.648	1.486	3.866	1.84	16.892	0	0	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.42	1.726	1.254
Ba	mg/L	0.141	0.095	0.045	0.011	0.071	0.068	0.024	0.014	0.041	0.079	0.031	0.072	0.034	0.063	0	0.054	0
Be	mg/L	0	0	0	0.001	0	0	0	0.001	0	0	0	0	0	0	0.002	0	0.067
Bi	mg/L	0.473	0.383	0.158	0.046	1.047	0	0	0	0	0.121	0	0.526	0	0.299	0.008	0	0.023
Ca	mg/L	17.314	9.348	11	19.8	15.495	11.693	8.977	10.191	7.919	6.35	12.748	16.505	16.152	19.146	62.814	13.906	396.809
Cd	mg/L	1.034	0.637	0.98	0.136	0	0	0.155	0.791	0.165	0	0	0	0	1.341	0.097	0	0.399
Co	mg/L	1.084	0.68	2.013	0.287	0.606	1.211	0.404	0.349	0.632	0.581	0.509	0.603	0.35	1.095	0.001	0	0.492
Cr	mg/L	0.25	0.25	0.176	0.033	0.058	0	0.165	0.003	0.011	0.043	0.069	0.096	0.141	0.279	0	0	0
Cu	mg/L	116.835	37.653	26.916	111.462	33.703	176.526	36.031	21.037	90.803	54.219	29.589	134.695	64.927	33.304	2.037	0.036	35.748
Fe	mg/L	2129.369	7617.399	1682.077	1286.778	1872.569	1884.379	1519.641	1291.418	1664.357	1910.016	1563.788	1849.523	1587.883	1849.061	0.679	0.421	101.426
Ga	mg/L	0.597	0.436	0.208	0.149	0.32	0.58	0.162	0.208	0.344	0.341	0.198	0.406	0.178	0.263	0	0	0
Hg	ppb	7.123	2.476	1.378	0.644	1.307	1.057	0.599	0.258	0.721	0.865	0.404	0.633	0.263	0.374	0.054	0.047	0.12
K	mg/L	2.614	1.156	1.183	1.675	1.106	3.39	0.331	2.205	2.492	3.247	1.184	1.512	0.466	0.825	6.672	0.706	34.109
Li	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.009
Mg	mg/L	0	0	0	0.575	0	0	0	0.526	0	0	0.285	0.195	0.226	0	4.289	0.884	32.056
Mn	mg/L	4.098	2.86	1.945	2.014	2.415	2.046	1.307	2.028	1.552	2.443	3.21	3.929	5.766	3.616	4.464	0.046	1066.636
Mo	mg/L	0.018	0	0.026	0.601	0.449	0.358	0.067	0.001	0.557	1.245	0	0	0	0.024	0.005	0.041	0
Na	mg/L	4.445	3.508	3.374	3.56	3.699	3.737	3.159	3.188	3.674	3.657	3.326	3.951	3.514	3.708	4.646	2.88	3.693
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0
Ni	mg/L	0.546	0.637	0.844	0.174	0.304	0.413	0.242	0.156	0.38	0.373	0.365	0.469	0.583	1.014	0.024	0	0.216

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.046	1.811	1.619	1.045	1.137	1.353	1.809	1.651	1.407	0.95	0.222	0.63	0.289	1.801	0.02	0.011	0.128
Sb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.009	0.014	0
Sc	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.015
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.064	0.037	0.356
Sn	mg/L	0.135	0.087	0.074	0.015	0.071	0.032	0.007	0.022	0.023	0.046	0.036	0.089	0.033	0.08	0	0	0.009
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0	0	0	0.019	0.047	0.057	0.021	0	0.029	0.085	0.037	0.053	0.057	0	1.24	0.06	0.78
Te	mg/L	1.852	1.236	0.607	0.279	0.681	0.686	0.391	0.383	0.574	0.734	0.405	0.656	0.391	0.87	0	0	0
Ti	mg/L	0.175	0.129	0.054	0	0.023	0.004	0.018	0.027	0.002	0.014	0.008	0.009	0.02	0.067	0	0	0
Tl	mg/L	0.596	2.136	0.822	0.019	0.018	0.037	0.21	0	0.008	0.059	0.016	0.047	0.016	2.807	0.003	0	0.457
V	mg/L	0.824	0.428	0.226	0.357	0.464	0.589	0.165	0.198	0.714	0.555	0.249	1.167	0.227	0.287	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0.017	0
Zn	mg/L	20.661	27.03	3.734	45.724	1.535	2.645	1.343	178.748	49.456	1.929	0.965	2.289	0.907	11.917	9.687	0	108.506

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0	0.099
Al	mg/L	3.115	2.017	1.015	16.199	3.61	19.394	2.415	19.415	13.718	3.915	6.462	11.048	N/A	1.851	0.931	0.589	46.903
As	mg/L	6.423	11.33	3.461	4.054	10.406	16.732	11.755	3.281	3.058	4.13	2.369	5.295	N/A	14.023	0.028	0.038	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0.456	0.44	0.219
Ba	mg/L	0.07	0.083	0.039	0.043	0.084	0.118	0.057	0.037	0.052	0.087	0.085	0.114	N/A	0.068	0.021	0.05	0.008
Be	mg/L	0	0	0	0.001	0	0	0	0.001	0	0	0	0	N/A	0	0.002	0.001	0.054
Bi	mg/L	0.122	0.208	0.044	0	0.559	0.061	0	0.017	0	0.032	0	0.72	N/A	0.314	0.008	0.009	0.096
Ca	mg/L	11.676	13.091	10.388	18.931	8.238	19.301	10.644	7.435	6.875	7.371	10.959	11.782	N/A	7.83	61.882	18.361	409.617
Cd	mg/L	0.371	0.446	0.316	0.144	0.006	0.042	0.197	0.702	0.16	0.008	0.015	0.009	N/A	0.96	0.139	0.013	0.412
Co	mg/L	0.427	0.491	0.687	0.293	0.487	1.363	0.437	0.322	0.534	0.48	0.786	0.776	N/A	0.883	0.034	0.02	0.464
Cr	mg/L	0.081	0.178	0.053	0.05	0.063	0.056	0.191	0.017	0.019	0.082	0.082	0.062	N/A	0.186	0.006	0.005	0.007
Cu	mg/L	38.121	23.329	9.024	93.116	23.58	196.823	35.062	17.543	69.181	37.713	42.115	155.105	N/A	22.351	1.705	0.481	31.674
Fe	mg/L	3535	4499	1722	2115	4265	5863	3307	1988	2882	4444	4375	5685	N/A	3770	19.714	9.376	72.3
Ga	mg/L	0.218	0.286	0.083	0.143	0.258	0.666	0.182	0.175	0.271	0.283	0.304	0.491	N/A	0.207	0	0	0
Hg	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	1.082	0.595	0.301	1.59	0.685	3.667	0.839	1.704	2.658	0.51	2.95	1.755	N/A	1.475	7.164	0.515	1.275
Li	mg/L	0.002	0.001	0.001	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.002	0.004	N/A	0.001	0.006	0.011	0.026
Mg	mg/L	0	0	0.093	0.728	0	0	0.179	0.425	0	0	0.362	0	N/A	0	4.312	1.083	29.359
Mn	mg/L	2.058	2.055	1.866	1.794	1.646	2.33	1.238	1.651	1.149	2.72	2.689	3.372	N/A	1.909	4.354	3.921	N/A
Mo	mg/L	0	0	0	0.483	0.262	0.396	0.043	0.01	0.45	0.796	0	0	N/A	0.017	0.002	0.003	0
Na	mg/L	1.197	1.069	0.847	1.049	0.906	1.039	0.969	0.804	0.718	0.92	1.123	1.19	N/A	0.975	2.032	0.757	1.303
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0.002	0.002	0
Ni	mg/L	0.236	0.435	0.366	0.17	0.223	0.472	0.271	0.154	0.334	0.344	0.398	0.436	N/A	0.749	0.055	0.023	0.222

Yanacocha

Fecha de Publicación:
03/05/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.065	1.408	0.699	1.112	1.054	1.368	2.011	1.719	1.323	0.674	0.353	0.763	N/A	1.599	0.081	0.02	0.118
Sb	mg/L	0.096	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0.007	0
Sc	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0	0.01
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0.002	0.149
Sn	mg/L	0.053	0.031	0.014	0.016	0.05	0.065	0.037	0.014	0.024	0.055	0.036	0.053	N/A	0.05	0	0	0
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.018	0.02	0.017	0.042	0.052	0.095	0.061	0.021	0.047	0.095	0.088	0.091	N/A	0.013	1.166	0.111	0.742
Te	mg/L	0.621	0.713	0.193	0.224	0.448	0.771	0.344	0.264	0.395	0.498	0.472	0.697	N/A	0.718	0	0	0
Ti	mg/L	0.059	0.055	0.031	0.004	0.021	0.019	0.026	0.006	0.003	0.016	0.014	0.008	N/A	0.04	0.001	0	0
Tl	mg/L	0.254	1.52	0.317	0	0.014	0.041	0.23	0.011	0.014	0.055	0.017	0.014	N/A	2.218	0.027	0.024	0.396
V	mg/L	0.31	0.297	0.08	0.342	0.373	0.724	0.189	0.17	0.58	0.437	0.388	1.525	N/A	0.234	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0	0
Zn	mg/L	7.138	16.874	1.539	39.096	1.444	3.379	1.374	106.116	36.272	1.306	1.488	2.418	N/A	8.981	10.442	1.191	78.101

Yanacocha

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	2.5	5.14	6.3	6.27	6.13	6.2	6.23	6.14	5.67	5.49	4.49	5.47	5.07	4.87	5.6	5.48	5.78
Eh	mV	756	696.3	872.6	915.6	910.5	907.7	898.3	931.8	942	958.6	866.7	956.7	956.2	687.1	601.8	611.1	812.4
Electrical Conductivity	ms/cm	31.2	82.75	17.65	14.69	12.89	19.15	16.09	18.5	16.36	24.93	10.84	14.24	19.62	62.15	0.698	0.0978	3.87
HACH, Sulfate	mg/L	22800	30900	8800	13500	10800	17900	10200	17100	16100	23600	16100	12400	22900	15200	200	200	3500
HACH, Total Fe	mg/L	7231	10184	2530	4527	4198	5635	3657.92	5402	4984	7253	5816	4209	7708	3879	1.495	0.148	14.08
Leachate Volume	L	1.8494	0.68	2.05	1.66	1.7078	2.16	0.67	0.33	1.19	1.7642	2.5737	2.0296	1.7585	1.2685	0.787	1.5877	1.72
pH		1.76	1.56	2.02	2.05	2.08	1.9	1.97	1.97	1.99	1.77	2.13	2.04	1.92	1.64	6.56	7.61	3.44
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1305.4	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1254.7	1310.4	1306.4
TDS	ppt	15.291	40.36	8.648	7.2	6.314	9.386	7.885	9.06	8.015	12.21	5.311	6.978	9.612	30.455	0.342	0.048	1.898
Temperature	°C	15.8	16.1	16	16	16.1	15.7	15.7	16	15.9	15.8	15.7	15.8	15.7	15.7	15.7	15.9	15.9

Yanacocha

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Samples submitted at: LA QUINUA - MYSRL
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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.06	1.7	5.07	5.76	2.17	5.77	5.71	5.86	5.79	4.83	2.45	5.41	5.76	3.62	5.96	5.78	6.28
Eh	mV	737.1	682.9	841.6	904.6	800.7	898	892.8	903.5	914.5	919.2	762.4	914.1	986	683	682.5	721	774.1
Electrical Conductivity	ms/cm	17.88	15.1	8.49	6.11	10.24	11.09	8.74	7.79	9.96	10.8	6.43	8.6	13.41	20.56	1.196	0.175	1821
HACH, Sulfate	mg/L	31200	20800	9900	12700	24100	23500	1.24	15700	17300	21100	17100	16500	28200	18800	1600	200	3700
HACH, Total Fe	mg/L	9301	6617	2820	4388	7878	6913	3544.32	4442	5495	6438	6080	5322	8480	4723	322.2	2.011	12.42
Leachate Volume	L	0.8979	1.8742	2.0779	1.9215	1.1426	1.76	2.371	2.0908	1.3456	2.5544	2.5322	1.823	1.279	1.0949	1.2362	1.4683	1.72
pH		1.73	1.78	1.97	2.1	1.91	1.88	2.04	2.01	2.25	1.89	2.07	1.96	1.81	1.72	2.7	6.73	3.29
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1305.2	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1247.5	1310.4	1306.4
TDS	ppt	8.76	7.4	4.16	2.99	5.02	5.43	4.284	3.82	4.88	5.29	3.15	4.22	6.57	10.07	0.59	0.09	0.89
Temperature	°C	20.4	20.3	20.3	20.3	20.2	20.2	20.2	20.3	20.2	20.2	20.1	20.2	20.4	20.4	20.3	20.4	20.3

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.1	3.16	4.86	5.83	5.81	5.7	5.88	5.88	5.97	5.85	5.78	5.99	5.91	1.38	3.12	5.89	5.87
Eh	mV	723.4	678.9	657.5	678.9	697	706.1	685.3	697.4	702.5	716.6	710.8	701.9	708.1	649.4	478.9	251.8	426.8
Electrical Conductivity	ms/cm	11.63	8.69	0.04	0.0428	0.0605	0.0699	2.97	4.27	5.54	6.46	3.38	6.1	5.94	11.83	0.369	0.091	1432
HACH, Sulfate	mg/L	30000	16000	6000	10800	17000	22000	6200	14000	14500	19000	12000	18000	20000	19000	7000	45	5000
HACH, Total Fe	mg/L	7098.37	4633.09	1805.1	4693.26	5535.64	1744.93	3429.69	2948.33	3550.03	4813.6	3489.86	4332.24	4475.44	3481.55	7	0.045	247
Leachate Volume	L	1.436	1.9845	2.5215	1.4563	1.2563	1.1856	2.0563	1.642	1.683	2.8956	1.4612	2.0541	1.6524	1.7815	1.184	1.2456	2.2903
pH		1.32	1.45	1.72	1.75	1.55	1.47	1.8	1.67	1.58	1.49	1.76	1.53	1.56	1.25	3.19	6.01	3.29
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1305	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1240.3	1310.4	1306.4
TDS	ppt	4.43	4.18	2.09	1.97	3.29	4.1	1.66	2.74	3.19	3.88	2	3.66	3.55	6.79	205.835	182.311	0.76
Temperature	°C	18.6	18.7	18.4	18.7	18.9	18.2	18.6	18.9	18.5	18.6	18.9	18.2	18.4	18.5	18.3	18.7	18.3

Yanacocha

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.62	3.44	4.72	N/A	N/A	6.06	6.12	6.04	5.89	5.74	5.26	5.76	5.84	4.4	5.84	6.03	6.06
Eh	mV	727.4	679.7	750	N/A	N/A	756.1	749.3	752.2	749.6	752.6	765.1	778.8	774.9	701	707.9	213	415.6
Electrical Conductivity	ms/cm	13.01	10.79	5.09	N/A	N/A	8.34	6.86	5.03	6.75	7.32	3.03	9.04	6.85	15.46	0.647	0.0438	1371
HACH, Sulfate	mg/L	26600	16100	8000	N/A	N/A	19700	11900	9400	13000	18100	9700	23200	17900	19400	700	200	3300
HACH, Total Fe	mg/L	7922	5134.1	2734.7	N/A	N/A	6075.1	3957.913	2993.4	4316.7	1088	4146.1	7480.6	6139.8	4810.7	364.6	491	313.5
Leachate Volume	L	1.2645	1.0256	1.8617	N/A	N/A	0.962	1.8562	1.164	0.976	1.764	1.5642	1.583	1.243	1.4621	0.856	1.0254	2.0842
pH		1.47	1.5	1.67	N/A	N/A	1.57	1.62	1.7	1.62	1.59	1.84	1.55	1.62	1.23	2.39	6.46	3.11
Rock Height in Column	mm	1306.1	1234.5	1304.2	N/A	N/A	1294	1304.8	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1233.1	1310.4	1306.4
TDS	ppt	7.5	6.2	2.7	N/A	N/A	4.7	3.8	2.7	3.7	4.1	1.5	4.9	3.7	8.9	0.3	0	0.7
Temperature	°C	19.9	19.9	20	N/A	N/A	19.9	20	20.1	20.1	20	19.9	20	20	20.1	20	20	20

Yanacocha

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.48	3.25	3.36	5.63	6.04	5.77	5.87	5.86	5.83	3.18	5.96	5.62	5.54	3.48	5.77	5.82	5.8
Eh	mV	735.7	682.6	838.3	855.1	876.4	891.6	879.6	882.8	881.7	852.8	879.3	888.8	891.1	677.8	785.7	751.4	704.5
Electrical Conductivity	ms/cm	47.9	36.3	15.93	12.11	28.98	25.24	21.4	17.1	15.98	26.54	13.37	27.23	28.78	42.5	1.575	0.1784	3.63
HACH, Sulfate	mg/L	52750	32500	30000	27500	25000	37500	20000	22500	20000	27500	17500	35000	30000	23000	15000	17500	20000
HACH, Total Fe	mg/L	10330.25	5891.19	2715.38	3978.62	7567.65	6168.64	4149.81	3972.72	3500.48	6611.36	3913.69	6764.84	8323.23	4610.24	295.15	360.08	271.54
Leachate Volume	L	1.0858	0.9845	1.0256	0.826	0.8563	0.748	0.8426	1.065	0.872	1.048	0.8541	0.746	0.854	1.0518	0.713	0.8542	1.2654
pH		0.9	1.03	1.36	1.55	1.12	1.18	1.22	1.36	1.4	1.15	1.46	1.14	1.11	0.92	2.58	6.78	2.99
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1304.6	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1225.9	1310.4	1306.4
TDS	ppt	31.7	23.1	9.3	7	17.7	15.2	12.6	10.1	9.3	16.4	7.7	16.9	17.6	27.8	1	0.1	1.9
Temperature	°C	18.9	18.7	18.7	18.8	18.9	19	18.7	18.6	18.6	18.8	18.9	18.5	18.6	18.7	19.3	19.1	19.5

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.2	4.2	5.7	5.15	3.71	6.05	6.08	6.01	N/A	6.15	3.16	5.51	5.86	3.3	5.87	6.14	6.18
Eh	mV	500.1	460.2	722.9	739.2	776.3	832.9	831.4	830.9	N/A	842.1	738	829.4	842.1	669.3	481.6	324.7	605.8
Electrical Conductivity	ms/cm	40.7	38.2	19.54	14.22	28.23	21.69	20.63	16.39	N/A	31	14.81	21.04	15.04	16.73	0.377	1.585	1649
HACH, Sulfate	mg/L	26800	20100	9700	10200	21600	16600	12800	12400	N/A	22400	11300	15400	7369	18400	500	200	3400
HACH, Total Fe	mg/L	7202.45	5452.67	2916.3	3392.53	6373.04	4751.69	3601.22	3847.37	N/A	6587.08	3713.59	4548.35	3783.16	4345.01	577.91	449.48	294.31
Leachate Volume	L	0.9472	1.045	0.9377	0.002	0.3562	0.94	1.13	0.9374	0	0.9366	0.9928	0.938	0.938	0.9834	0.9432	0.9383	0.7541
pH		1.18	1.21	1.44	1.64	1.33	1.43	1.46	1.6	N/A	1.3	1.59	1.44	1.19	1.16	3.3	6.82	2.89
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1304.4	1307.6	N/A	1290.5	1312.5	1307.4	1292.4	1313.5	1218.7	1310.4	1306.4
TDS	ppt	25.8	24.1	11.7	8.2	17.3	13	12.4	9.6	N/A	19.2	8.6	12.6	8.6	9.6	0.2	0.8	0.8
Temperature	°C	17.5	17.7	17.5	17.6	17.7	17.7	17.7	17.8	N/A	17.8	17.8	17.8	17.8	17.9	17.7	17.8	17.8

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	5.3	N/A	N/A	5.35	N/A	6.1	N/A	N/A	N/A	5.4	N/A	N/A	6.05	N/A	N/A	N/A
Eh	mV	N/A	544.2	N/A	N/A	605.2	N/A	636.5	N/A	N/A	N/A	636	N/A	N/A	598.3	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	24.55	N/A	N/A	6.47	N/A	16.92	N/A	N/A	N/A	10.48	N/A	N/A	7.83	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	15700	N/A	N/A	4700	N/A	9900	N/A	N/A	N/A	3800	N/A	N/A	3800	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	4569.75	N/A	N/A	0	N/A	2846.73	N/A	N/A	N/A	2044.08	N/A	N/A	963.18	N/A	N/A	N/A
Leachate Volume	L	N/A	0.002	0	N/A	0.003	N/A	0.021	N/A	0	0	0.0234	0	0	0.024	0	0	0
pH		N/A	1.35	N/A	N/A	1.87	N/A	1.47	N/A	N/A	N/A	1.71	N/A	N/A	1.76	N/A	N/A	N/A
Rock Height in Column	mm	N/A	1234.5	N/A	N/A	1305.2	N/A	1304.2	N/A	N/A	N/A	1312.5	N/A	N/A	1313.5	N/A	N/A	N/A
TDS	ppt	N/A	14.6	N/A	N/A	3.4	N/A	10	N/A	N/A	N/A	5.1	N/A	N/A	4.3	N/A	N/A	N/A
Temperature	°C	N/A	16	N/A	N/A	16	N/A	16.3	N/A	N/A	N/A	16.2	N/A	N/A	16.1	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	5.36	6.21	5.48	N/A	N/A	5.81	N/A	N/A	6.12	6.24	5.75	6.35	6.34	N/A	N/A	5.83
Eh	mV	N/A	663.5	669.1	623.4	N/A	N/A	811.7	N/A	N/A	694	669.7	702.5	714.7	655.3	N/A	N/A	777.2
Electrical Conductivity	ms/cm	N/A	22.12	24.35	12.01	N/A	N/A	32.4	N/A	N/A	43.6	22.3	32.7	33.4	32.83	N/A	N/A	4.58
HACH, Sulfate	mg/L	N/A	38600	17300	27200	N/A	N/A	25800	N/A	N/A	4550	28200	33300	49300	46100	N/A	N/A	4700
HACH, Total Fe	mg/L	N/A	11766.37	6140.48	10002.86	N/A	N/A	8493.76	N/A	N/A	16154.91	10534.8	12413.95	20722.69	12824.84	N/A	N/A	867.3
Leachate Volume	L	N/A	0.0025	0.0026	0.002	0	N/A	0.02156	N/A	0	0.026	0.0198	0.0256	0.0246	0.01756	0	0	0.0164
pH		N/A	0.84	1.11	1.1	N/A	N/A	1.05	N/A	N/A	0.21	1.25	1.03	1.02	1.02	N/A	N/A	1.81
Rock Height in Column	mm	N/A	1234.5	1304.2	1308.5	N/A	N/A	1304	N/A	N/A	1290.5	1312.5	1307.4	1292.4	1313.5	N/A	N/A	1306.4
TDS	ppt	N/A	15.2	14.5	6.7	N/A	N/A	19.9	N/A	N/A	27.4	13.1	20.1	20.5	5.23	N/A	N/A	2.4
Temperature	°C	N/A	15	15	15	N/A	N/A	15	N/A	N/A	15	15	15	15	15	N/A	N/A	15

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	6.28	6.33	N/A	N/A	6.45	6.46	N/A	N/A	6.47	6.45	6.17	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	478.8	543.1	N/A	N/A	693.8	657.5	N/A	N/A	574.7	514.1	545.2	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	9.26	7.45	N/A	N/A	6.22	5.82	N/A	N/A	8.58	3.01	7.53	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	44400	33400	N/A	N/A	38600	29300	N/A	N/A	57800	32000	47600	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	0	6154.812	N/A	N/A	8067.32	5633.218	N/A	N/A	5946.174	8241.19	9736.425	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	0.0018	0.0018	N/A	0	0.0189	0.0198	N/A	0	0.018	0.0267	0.0175	N/A	0	0	0	0
pH		N/A	0.81	1.45	N/A	N/A	1.03	1.08	N/A	N/A	0.81	1.46	0.95	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	1234.5	1304.2	N/A	N/A	1294	1303.8	N/A	N/A	1290.5	1312.5	1307.4	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	4.11	2.58	N/A	N/A	2.44	0.0194	N/A	N/A	3.838	1.046	3.14	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	16.3	15.7	N/A	N/A	15.3	15.3	N/A	N/A	15.1	15.1	16.4	N/A	N/A	N/A	N/A	N/A

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.5	4.87	5.94	N/A	N/A	6.06	6.32	N/A	N/A	5.83	4.8	4.01	5.54	5.26	5.91	5.91	5.89
Eh	mV	707.9	667.5	706.4	N/A	N/A	907.8	889	N/A	N/A	717.4	779.5	739.8	780.4	665.9	618.9	340.9	769.7
Electrical Conductivity	ms/cm	77.8	56.84	13.26	N/A	N/A	35	23.58	N/A	N/A	37.2	26.33	28.44	41.4	60	0.661	0.3916	5.14
HACH, Sulfate	mg/L	61700	31100	7600	N/A	N/A	34000	17900	N/A	N/A	36500	25200	27600	47500	28600	300	200	5700
HACH, Total Fe	mg/L	19912.93	10914.7	3188.016	N/A	N/A	12186.252	6144.84	N/A	N/A	13999.28	9119.916	9831.744	16542.4	9582.3	273.78	255.528	344.62
Leachate Volume	L	0.06	0.00264	0.0017	N/A	0	0.02004	0.02612	N/A	0	0.021	0.0143	0.026	0.027	0.021	0.036	0.0364	0.024
pH		1.55	1.59	1.78	N/A	N/A	1.27	1.33	N/A	N/A	1.94	1.3	1.33	1.11	0.97	5.21	7.66	2.76
Rock Height in Column	mm	1306.1	1234.5	1304.2	N/A	N/A	1294	1303.6	N/A	N/A	1290.5	1312.5	1307.4	1292.4	1313.5	1211.5	1310.4	1306.4
TDS	ppt	50.15	15.3	7.08	N/A	N/A	19.03	12.92	N/A	N/A	22.3	14.39	15.52	12.68	36.7	0.4	0.14	3.11
Temperature	°C	17.7	17.8	17.8	N/A	N/A	17.7	17.7	N/A	N/A	17.8	17.8	17.7	17.8	17.8	17.7	17.7	17.8

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.17	5.8	N/A	5.55	4.15	4.8	5.3	5.28	5.13	4.93	N/A	4.85	5.23	5.1	5.25	5.2	5.18
Eh	mV	714.3	714.3	N/A	688.8	708.4	804.5	785	804.5	741	813.4	N/A	768.4	749.5	677.5	754.8	732.3	768.6
Electrical Conductivity	ms/cm	27.85	0.398	N/A	23.42	77.3	29.16	15.31	55.6	60.1	66.13	N/A	34.2	19.63	35.87	0.01019	0.0164	5.33
HACH, Sulfate	mg/L	33800	18200	N/A	23200	66700	22300	7700	82000	92900	18600	N/A	27600	16500	22800	400	300	4400
HACH, Total Fe	mg/L	11743.9	6255.17	N/A	8999.54	27616.71	7750.97	3158.49	25842.76	33395.94	6737.29	N/A	10303.73	7194.68	6236.63	927.15	537.75	358.5
Leachate Volume	L	0.08	0.00187	0	0.0024	0.004	0.0214	0.02984	0.0264	0.0256	0.024	0	0.021	0.019	0.026	0.025	0.042	0.035
pH		0.99	1.67	N/A	1.7	1.14	1.39	1.67	0.87	0.93	1.32	N/A	1.31	1.57	1.18	3.11	2.61	2.7
Rock Height in Column	mm	1306.1	1234.5	N/A	1308.5	1305.2	1294	1303.4	1307.6	1308.6	1290.5	N/A	1307.4	1292.4	1313.5	1204.3	1310.4	1306.4
TDS	ppt	37.5	24.7	N/A	13.8	15.2	17.7	8.8	22.5	27.3	30.15	N/A	21.1	11.5	35.3	0.5	0.6	2.8
Temperature	°C	16.3	16.31	N/A	16.2	16.3	16.35	16.21	16.2	16.22	16.27	N/A	16.3	16.25	16.4	16.4	16.25	16.3

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.41	5.43	5.49	5.3	5.04	4.94	5.14	N/A	5.32	5.23	681.4	5.29	5.3	5.34	N/A	5.38	5.4
Eh	mV	720.3	682.7	856.2	834.1	731.2	898.8	883	N/A	734.2	748.6	890.4	877.5	879.5	670.6	N/A	688	535.2
Electrical Conductivity	ms/cm	44	39.7	8.7	16.99	34.5	28.75	12.61	N/A	6.55	20.21	14.8	28.33	42.8	43.4	N/A	0.578	5.03
HACH, Sulfate	mg/L	33500	21900	5600	15500	30800	23900	7100	N/A	11500	18400	52200	26800	41800	15200	N/A	200	5000
HACH, Total Fe	mg/L	11537.81	7234.71	1961.4	5165.51	10861.05	8327.71	23686.65	N/A	5171.5	6357.32	6180.65	8788.86	13286.6	5282.3	N/A	44.92	122.78
Leachate Volume	L	1.1947	1.3596	2.1678	2.3846	2.0896	2.0368	2.3256	N/A	2.2564	2.2451	2.2845	2.8541	1.3842	1.5248	1.05624	2.1354	1.8245
pH		1.08	1.14	1.74	1.52	1.19	1.27	1.6	N/A	2.2	1.43	1.58	1.28	1.08	1.07	N/A	3.33	2.7
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	N/A	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	N/A	1310.4	1306.4
TDS	ppt	33.69	33.69	8.6	15.78	27.93	23.03	10.24	N/A	8.47	17.68	14.34	23.13	23.35	33.4	N/A	0.053	2.74
Temperature	°C	17	18.4	18.2	18.1	17.9	18	17.8	N/A	18.2	18.2	18.7	18.9	19.2	19.6	N/A	19.2	18.9

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.56	5.42	6.7	6.8	5.52	4.92	5.92	N/A	5.75	6.72	6.52	5.6	4.72	4.1	5.19	6.8	6.55
Eh	mV	711.3	668.7	837.8	852.5	719.3	868.5	846.7	N/A	873	888.2	870	861.9	892.8	664.5	889.5	727.4	797.3
Electrical Conductivity	ms/cm	35.8	42.4	9.73	14.05	10.2	24.85	19.86	N/A	18.47	29.94	12.84	19.97	26.78	38.2	1.422	0.0835	4.7
HACH, Sulfate	mg/L	28300	26200	7100	9200	76000	21500	12600	N/A	14600	24400	17700	18300	24400	18900	800	200	4800
HACH, Total Fe	mg/L	9833.76	9009.73	2484.19	3544.52	26762.6	7797.93	4538.19	N/A	5222.86	8815.85	7543.46	6731.55	8676.49	6071.12	727.08	684.67	430.19
Leachate Volume	L	1.4859	0.9856	4.2562	3.006	2.3625	3.5623	4.2569	N/A	3.0597	3.7462	4.5621	4.1985	3.1875	2.5742	3.0641	3.1984	3.2841
pH		1.21	1.17	1.77	1.57	0.93	1.29	1.35	N/A	1.4	1.24	1.62	1.41	1.23	1.08	5.2	7.1	2.4
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	N/A	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1204.3	1310.4	1306.4
TDS	ppt	21.1	26.7	5.4	8	7.2	14.9	11.7	N/A	10.7	18.2	7.3	11.7	16	23.9	0.7	0	2.5
Temperature	°C	15	15	15	15	15	15	15	N/A	15	15	15	15	15	15	15	15	15

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.75	5.58	5.8	5.53	N/A	5.56	5.63	N/A	5.71	5.66	5.68	5.53	N/A	5.6	5.68	5.73	5.67
Eh	mV	519	464.4	565.1	563.9	N/A	572.7	562.6	N/A	564.7	575.4	575.9	584.2	N/A	463.9	254.8	144.2	471.8
Electrical Conductivity	ms/cm	0.805	42.2	N/A	13.62	N/A	28.74	20.96	N/A	17.19	30.9	13.57	26.55	N/A	49.8	0.639	0.1146	5.65
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	18770	12330	3310	5740	N/A	13470	6600	N/A	7540	12410	8960	11540	N/A	11220	470	490	730
Leachate Volume	L	0.7215	1.6458	2.7215	1.8977	0	2.0895	3.1256	N/A	1.8652	2.4859	1.8425	2.0847	0	1.3974	1.6415	1.6845	1.8643
pH		1.01	1.11	1.68	1.57	N/A	1.22	1.35	N/A	1.48	1.2	1.6	1.27	N/A	1.02	4.6	7.58	2.63
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	N/A	1294	1303.2	N/A	1308.6	1290.5	1312.5	1307.4	N/A	1313.5	1204.3	1310.4	1306.4
TDS	ppt	0.394	26.74	4.81	6.673	N/A	14.08	10.271	N/A	8.424	15.154	6.651	13.007	N/A	31.9	0.313	0.056	2.767
Temperature	°C	15.8	15.5	16.2	16	N/A	15.9	16.2	N/A	15.8	15.8	16.1	15.8	N/A	15.6	15.8	16	15.6

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	770.4	824.6	809.5	815.8	822.8	832.6	810.6	797	810	808.1	851.6	852.5	832.9	657.8	N/A	657.8	749.2
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	20400	25900	2800	5600	13800	21300	7100	1900	8200	10400	8400	15000	11700	15300	N/A	200	3800
HACH, Total Fe	mg/L	8937.184	7011.168	8937.184	4744.576	3576.048	7768.656	2894.896	1209.632	3211.984	4174.992	3945.984	5719.328	4815.04	270.112	N/A	270.112	334.704
Leachate Volume	L	1.603	0.053	7.053	2.003	1.503	1.953	2.853	1.053	1.853	2.953	1.453	2.693	1.853	1.853	0	1.253	2.303
pH		1.13	1.3	1.91	1.72	1.42	1.25	1.48	2.34	1.54	1.46	1.64	1.4	1.46	1.72	N/A	7.72	2.73
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	N/A	1310.4	1306.4
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	17	17	17	17	17	17	17	17	17	17	17	17	17	17	N/A	17	17

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	718.4	666.2	725.3	752.3	780.8	776.1	765	756.4	769	781.1	726.1	729.5	662.9	186.8	165	667.2	668.7
Electrical Conductivity	ms/cm	42.1	40.8	23.47	10.77	23.05	23.07	19.12	11.93	16.36	25.16	12.11	20.09	9.72	36.1	0.497	0.0966	4.71
HACH, Sulfate	mg/L	34800	24100	13800	6600	17700	17900	10000	7100	11800	18800	9600	16400	8300	17400	200	200	4200
HACH, Total Fe	mg/L	13839.1	9145.84	4933.94	3189.01	6739.04	6859.38	3911.05	3128.84	4512.75	7761.93	4058.082	6799.21	4693.26	6438.19	601.7	541.53	541.53
Leachate Volume	L	1.2	2.5	2.07	2.73	1.503	1.96	2.48	2.64	2.43	2.32	2.91	2.22	2.5956	2.8246	2.9689	2.7174	2.9051
pH		1.04	1.08	1.32	1.71	1.32	1.32	1.39	2.74	1.5	1.41	1.76	1.41	1.77	1.16	3.84	7.25	2.68
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1204.3	1310.4	1306.4
TDS	ppt	27.1	26	14	5.3	13.7	13.8	11.2	6.7	9.4	15.1	6.8	11.8	5.4	22.4	0.2	0	2.5
Temperature	°C	18	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.56	5.39	6.16	6.05	6.88	5.7	5.87	5.8	5.85	5.87	5.84	5.82	N/A	5.85	5.91	5.99	5.81
Eh	mV	754.2	708.2	746.1	836.5	855.4	867.5	843.3	845.7	853.9	756.2	856.2	815.7	N/A	678.8	738.1	712.7	743.8
Electrical Conductivity	ms/cm	20.26	29.8	9.9	10.05	21.5	28.61	23.17	11.79	15.59	21.46	18.91	26.24	N/A	32.3	0.959	0.592	4.84
HACH, Sulfate	mg/L	11900	16600	4400	6200	15200	22900	10700	5700	8200	15800	14300	20200	N/A	13700	200	200	3800
HACH, Total Fe	mg/L	4260.354	5701.542	1877.337	2326.128	5189.541	8217.3	3805.242	2218.671	3267.957	5606.727	5581.443	7686.336	N/A	4487.91	328.692	309.729	322.371
Leachate Volume	L	1.08	1.8	0.86	1.39	1.07	0.85	0.96	1.41	1.42	1.09	1.02	1.05	N/A	0.87	1.49	1.04	1.3
pH		1.48	1.32	1.82	1.78	1.47	1.3	1.41	1.69	1.56	1.43	1.49	1.33	N/A	1.23	2.96	3.07	2.82
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1313.5	1204.3	1310.4	1306.4
TDS	ppt	12	18.2	4.9	5.6	12.7	17.4	13.8	6.7	9	9	11.1	15.9	N/A	19.9	0.5	0.3	2.6
Temperature	°C	18.5	18	17.9	18	18.2	18.1	18.1	18.6	18.3	18	18	18	N/A	18	18.7	19	19

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	719.1	666.1	763.5	820.2	835.9	828.6	836.5	830.9	862.4	803.4	870.3	862.1	N/A	683.3	644.9	648.7	788.4
Electrical Conductivity	ms/cm	71.1	112.9	16.54	26.55	24.45	57.15	43.1	22.25	32	45.5	35	46.8	N/A	118.05	0.896	0.2964	7.22
HACH, Sulfate	mg/L	51700	44400	11000	24300	51300	55700	35300	17900	26800	50200	34700	49600	N/A	53900	200	200	9100
HACH, Total Fe	mg/L	11180.655	8249.922	3631.428	5276.538	9529.452	9639.126	6781.509	4033.566	5465.421	10449.495	7402.995	10010.799	N/A	9566.01	548.37	548.37	8652.06
Leachate Volume	L	0.3203	3.2664	5.284	2.3456	2.0299	2.066	2.2208	3.2771	3.0364	2.6815	2.0784	2.4317	N/A	1.3956	1.4154	2.0262	2.2256
pH		0.98	0.83	1.54	1.3	0.97	0.96	1.09	1.41	1.23	1	1.18	1.02	N/A	0.78	3.4	4.27	2.45
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	1307.6	1308.6	1290.5	1312.5	1307.4	N/A	1313.5	1204.3	1310.4	1306.4
TDS	ppt	33.4	13.5	9.6	16.1	33.2	6.5	27.6	13.3	19.7	32	21.9	30.1	N/A	14.2	0.4	0.1	3.9
Temperature	°C	20.6	20.6	20.1	20.1	20.2	20.1	20.1	20.4	20.6	20.2	20.1	20.2	N/A	20.2	20.1	20.4	20.5

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	714	676.1	766.4	808.2	825.5	825.9	796.9	821.8	821.3	723.3	821.7	801.7	795.7	681.1	437.3	207.7	722.6
Electrical Conductivity	ms/cm	89.4	85.55	8.63	23.59	32.8	35	29.6	17.12	23.23	24.31	30.7	41	46.3	110.2	1.155	0.2835	6.86
HACH, Sulfate	mg/L	73500	43100	0.759	22800	34200	33000	23000	15400	20700	22900	29300	37800	54700	32400	200	200	7500
HACH, Total Fe	mg/L	24068	13478.08	3369.52	7.88227	12034	12876.38	7220.4	5776.32	6859.38	8784.82	11432.3	13718.76	19735.76	10228.9	85.875	962.72	842.38
Leachate Volume	L	0.4402	1.8195	2.4018	1.8214	1.5848	1.6165	1.2742	1.9203	1.8783	2.4563	1.5383	1.6181	1.1524	1.4424	1.4406	1.5139	1.6346
pH		1.65	0.79	1.64	1.22	1.07	1.04	1.11	1.46	1.24	1.29	1.23	1.09	1.01	0.87	3.66	6.83	2.51
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1204.3	1310.4	1306.4
TDS	ppt	28.6	10	4.7	14	20.2	21.7	18	9.9	13.8	14.5	18.8	25.8	29.5	12	0.6	0.1	3.7
Temperature	°C	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.2	20.2	20.2	20.1	20.1	20.2	20.3	20.1

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CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	716.2	676.7	752.1	809.9	830.1	829.6	800.8	825.6	836.1	727.7	724.1	767.6	781.3	672.2	337.3	246.8	747.1
Electrical Conductivity	ms/cm	41.8	44.9	11.93	25.09	32.9	35.8	37.4	17.08	21.9	29.11	46	26.58	36.2	35.2	0.702	0.1412	6.82
HACH, Sulfate	mg/L	71400	26100	11500	20000	34300	32400	26400	13400	17600	25900	68500	127800	41400	34700	200	200	7500
HACH, Total Fe	mg/L	22142.56	8604.31	5174.62	6799.21	11913.66	10650.09	9326.35	4994.11	6017	9687.37	26534.97	43924.1	15584.03	11131.45	143.125	722.04	1805.1
Leachate Volume	L	0.5584	2.391	2.1413	1.4052	1.2027	1.107	0.6578	1.6858	1.5978	1.9677	0.2856	0.1446	0.4103	0.9166	1.1228	1.0342	1.2304
pH		0.77	1.04	1.67	1.29	1.16	1.11	1.12	1.48	1.37	1.22	1	1.58	1.11	0.85	4.01	6.91	2.55
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1204.3	1310.4	1306.4
TDS	ppt	26.5	28.7	6.7	15	20.3	22.3	23.4	9.9	13	17.8	29.6	16.1	22.7	22	0.3	0.1	3.7
Temperature	°C	20.4	20.5	20.5	20.4	20.5	20.6	20.7	20.3	20.7	20.8	20.6	20.6	20.4	20.5	20.5	20.5	20.5

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	726	683.2	852.8	886.8	899.4	894.1	885.7	876	876.5	887.2	-	883.1	-	682.5	705.6	749.6	796.1
Electrical Conductivity	ms/cm	36.8	43.9	11.57	22.12	28.88	29.16	23.07	15.48	19.54	27.41	-	15.99	-	48.7	0.831	0.325	6.25
HACH, Sulfate	mg/L	58100	23400	8900	8900	15600	22100	14100	10000	13200	23100	-	16500	-	25900	200	200	6500
HACH, Total Fe	mg/L	18773.04	7822.1	3911.05	4873.77	9506.86	7461.08	4572.92	3429.69	4512.75	7822.1	-	6017	-	7521.25	120.225	361.02	661.87
Leachate Volume	L	1.1446	4.9819	4.8932	3.5411	2.9182	2.553	1.4914	4.1745	3.8025	3.9551	-	0.9257	-	1.7201	2.6164	2.2564	2.6108
pH		0.82	1.07	1.71	1.35	1.23	1.2	1.3	1.52	1.38	1.24	N/A	1.53	N/A	0.98	3.81	3.35	2.61
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1204.3	1310.4	1306.4
TDS	ppt	20.9	25.5	11.9	11.9	15.9	16.3	13.9	9	11.6	16.9	-	9.4	-	31.6	0.4	0.2	3.4
Temperature	°C	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	-	20.1	-	20.1	20.1	20.1	20.1

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	720	679	767.3	738.2	847.5	863.7	834.8	852.4	853.8	824.7	775.4	853.1	699	681.2	705.6	711.9	793.5
Electrical Conductivity	ms/cm	38.4	30	16.51	11.83	20.45	20.84	14.13	10.62	12.93	19.95	26.51	21.66	12.33	31.4	0.831	0.0921	4.78
HACH, Sulfate	mg/L	30300	16300	9500	6600	18900	15500	7500	5800	7300	14800	30700	17600	11500	17000	200	200	4800
HACH, Total Fe	mg/L	10282.434	6739.04	4211.9	3309.35	7701.76	6077.17	3550.03	2527.14	3008.5	5294.96	12936.55	6739.04	5956.83	5595.81	120.225	421.19	601.7
Leachate Volume	L	2.1581	4.059	2.5991	4.1667	3.0734	2.8905	2.5039	4.0617	3.8444	3.6214	0.2475	1.6943	0.3545	1.8129	3.316	2.7177	3.118
pH		1.01	1.19	1.43	1.62	1.36	1.35	1.5	1.65	1.56	1.36	1.22	1.33	1.68	1.16	4.06	7.47	2.72
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1204.3	1310.4	1306.4
TDS	ppt	24.2	18.3	9.6	6.7	12.1	12.3	8.1	6	7.4	11.8	16.1	12.9	7	19.3	0.477	0	2.5
Temperature	°C	17.1	17.5	18.2	18.5	20.45	18.1	18	18.5	18.5	18.3	19	18.9	18	18.3	20.1	19	18.7

Fecha de Reporte:
02/02/2015

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	730.9	668.6	762.7	791.8	812.2	809.3	801.5	782	785.2	798	768.9	806.96	810.1	671.3	632	630.15	720.1
Electrical Conductivity	ms/cm	20.49	16.74	10.25	6.4	11.73	11.1	9.4	5.22	6.25	8.8	5.91	8.06	7.51	17.4	0.2137	0.0499	2.591
HACH, Sulfate	mg/L	28600	16600	11500	7400	18000	15800	11000	5900	8000	11900	8600	12000	11000	12500	980	700	5000
HACH, Total Fe	mg/L	8886.266	55296.23	33394.35	21420.52	63720.03	58364.9	33635.03	16065.39	22623.92	41818.15	31408.74	43021.55	31589.25	44405.46	240.45	246.175	722.04
Leachate Volume	L	0.8934	3.0461	2.4979	2.56987	2.1797	2.0304	1.9001	3.3121	3.0337	3.0052	1.5057	4.38	2.1652	1.9877	2.334	2.1638	2.3097
pH		1.11	1.23	1.43	1.64	1.38	1.39	1.47	1.74	1.67	1.5	1.68	1.54	1.56	1.18	4.14	7.48	2.71
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1204.3	1310.4	1306.4
TDS	ppt	12.1	9.7	5.7	3.5	6.7	6.3	5.1	3.4	3.4	4.9	3.2	4.4	4.1	10.2	0.1	0	1.3
Temperature	°C	20.2	20.2	20.2	20.3	20.3	20.3	20.3	20.3	20.2	20.2	20.2	20.2	20.2	20.3	20.3	20.3	20.3

Yanacocha

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Informe Interno de Analisis
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	760.3	676.4	765.3	790.10.	820.15	810.3	820.13	832.15	792.3	811.25	772.5	835.3	735.64	683.2	710.62	705.2	762.5
Electrical Conductivity	ms/cm	28.59	22.08	11.41	7.51	16.16	15.6	11.25	7.25	8.19	9.32	5.23	14.26	11.32	23.3	0.464	0.095	4.43
HACH, Sulfate	mg/L	23300	12300	7300	4500	12900	12100	6800	4600	5600	7400	4000	10900	7900	11300	1000	1000	4500
HACH, Total Fe	mg/L	6122.54	35801.15	21601.03	12034	44285.12	38207.95	18652.7	12395.02	39832.54	22022.22	14561.14	36884.21	23767.15	33755.37	309.15	343.5	902.55
Leachate Volume	L	3.1798	5.4679	5.1182	5.6687	5390.4621	4.2675	3.6171	5.6958	5.2977	6.8901	7.9895	4.38	4.0926	3.5452	4.704	4.0628	4.4524
pH		1.22	1.36	1.61	1.77	1.48	1.5	1.61	1.79	1.71	1.67	1.96	1.55	1.62	1.3	3.98	7.5	2.75
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1303.2	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1204.3	1310.4	1306.4
TDS	ppt	17.4	13.1	6.4	4.1	9.3	9	6.3	3.9	4.5	5.2	2.8	8.2	6.4	13.9	0.2	0	2.3
Temperature	°C	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7

Yanacocha

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Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	512	496.5
Electrical Conductivity	ms/cm	0.571	0.166
HACH, Sulfate	mg/L	400	200
HACH, Total Fe	mg/L	269.075	297.7
Leachate Volume	L	0.7618	0.7797
pH		6.51	8.13
Rock Height in Column	mm	1204.3	1310.4
TDS	ppt	0.2	0.1
Temperature	°C	17.9	17.8

Yanacocha

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X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	514.8	471.3
Electrical Conductivity	ms/cm	0.423	0.1953
HACH, Sulfate	mg/L	300	200
HACH, Total Fe	mg/L	326.325	383.575
Leachate Volume	L	0.7365	1.1673
pH		6.9	7.31
Rock Height in Column	mm	1204.3	1310.4
TDS	ppt	0.2	0.1
Temperature	°C	16.8	17

Yanacocha

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

Yanacocha

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Informe Interno de Analisis
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

Yanacocha

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

Yanacocha

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		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

Yanacocha

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Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	618.26	612.13
Electrical Conductivity	ms/cm	0.4123	0.1263
HACH, Sulfate	mg/L	560	800
HACH, Total Fe	mg/L	291.975	412.2
Leachate Volume	L	0.5798	0.6306
pH		5.15	7.51
Rock Height in Column	mm	1204.3	1310.4
TDS	ppt	0.31	0.1
Temperature	°C	18.05	18.52

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	504.65	452.3
Electrical Conductivity	ms/cm	0.5169	0.2013
HACH, Sulfate	mg/L	700	N/A
HACH, Total Fe	mg/L	389.3	N/A
Leachate Volume	L	0.7148	1150
pH		4.125	6
Rock Height in Column	mm	1204.3	1310.4
TDS	ppt	0.2	0.1
Temperature	°C	19.02	17

Yanacocha

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Informe Interno de Analisis
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Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	436.9	236.7
Electrical Conductivity	ms/cm	0.437	0.1957
HACH, Sulfate	mg/L	300	200
HACH, Total Fe	mg/L	211.825	188.925
Leachate Volume	L	2132.5	3005.5
pH		6.3	7.32
Rock Height in Column	mm	1204.3	1310.4
TDS	ppt	0.2	0.1
Temperature	°C	20	20

Yanacocha

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Informe Interno de Analisis
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Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	399.5	343.8
Electrical Conductivity	ms/cm	0.413	0.1623
HACH, Sulfate	mg/L	200	200
HACH, Total Fe	mg/L	177.475	160.3
Leachate Volume	L	1830.1	1694.2
pH		6.4	8.36
Rock Height in Column	mm	1204.3	1310.4
TDS	ppt	0.2	0.1
Temperature	°C	20.3	20.5

Yanacocha

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		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	582.4	580.6
Electrical Conductivity	ms/cm	0.403	0.1703
HACH, Sulfate	mg/L	300	200
HACH, Total Fe	mg/L	234.725	229
Leachate Volume	L	0.88	0.96
pH		6	8.4
Rock Height in Column	mm	1204.3	1310.4
TDS	ppt	0.2	0.1
Temperature	°C	13.3	13

Yanacocha

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		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

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		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

Yanacocha

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X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

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		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A
Leachate Volume	L	N/A	N/A
pH		N/A	N/A
Rock Height in Column	mm	N/A	N/A
TDS	ppt	N/A	N/A
Temperature	°C	N/A	N/A

Yanacocha

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		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	587.2	588.3
Electrical Conductivity	ms/cm	422	155.3
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	240.45	286.25
Leachate Volume	L	2.23	1.72
pH		6.5	6.77
Rock Height in Column	mm	1204.3	1310.4
TDS	ppt	0.2	0.1
Temperature	°C	13	13

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
D.O	mg/L	N/A	N/A
Eh	mV	322.5	340.5
Electrical Conductivity	ms/cm	392.5	163.4
HACH, Sulfate	mg/L	N/A	N/A
HACH, Total Fe	mg/L	257.625	211.825
Leachate Volume	L	2.13	2.07
pH		6.7	6.54
Rock Height in Column	mm	1204.3	1310.4
TDS	ppt	0.2	0.1
Temperature	°C	18.5	18

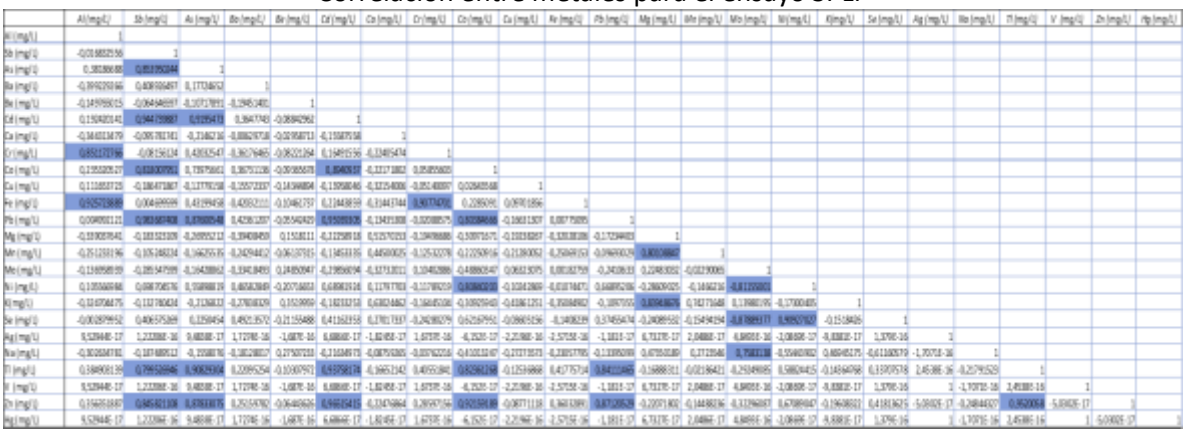
Resultados de prueba SPLP por compósito

Nº	CODIGO LIMS	CODIGO CLIENTE	Al (mg/L)	Sb (mg/L)	As (mg/L)	Ba (mg/L)	Be (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)
1	50229	Compósito 1	0.018	<0.002	<0.003	0.078	<0.002	<0.002	1.093	<0.002	0.002	0.053	1.318	<0.002
2	50230	Compósito 2	0.02	<0.002	<0.003	0.011	<0.002	0.002	12.011	<0.002	0.007	0.004	0.903	0.006
3	50231	Compósito 3	0.22	<0.002	<0.003	0.019	3.852	<0.002	7.006	<0.002	0.032	0.104	1.489	0.073
4	50232	Compósito 4	3.281	<0.002	<0.003	0.019	<0.002	0.003	3.751	0.003	0.013	0.148	2.34	0.023
5	50233	Compósito 5	5.093	<0.002	0.009	0.015	<0.002	<0.002	1.089	0.006	0.026	6.657	5.579	0.003
6	50234	Compósito 6	2.608	<0.002	<0.003	0.015	<0.002	<0.002	5.531	0.003	0.027	4.467	3.681	0.002
7	50235	Compósito 7	13.211	0.002	0.025	0.012	<0.002	0.042	1.913	0.035	0.132	0.264	16.578	1.058
8	50236	Compósito 8	0.035	<0.002	<0.003	0.118	<0.002	<0.002	1.644	<0.002	0.002	0.007	0.933	0.002
9	50237	Compósito 9	0.113	<0.002	<0.003	0.035	<0.002	<0.002	0.953	0.003	0.012	0.882	2.676	0.008
10	50238	Compósito 10	0.205	<0.002	0.012	0.026	<0.002	<0.002	2.462	0.006	0.022	2.679	2.461	<0.002
11	50239	Compósito 11	0.166	<0.002	<0.003	0.09	<0.002	<0.002	9.194	<0.002	0.022	2.637	1.102	<0.002
12	50240	Compósito 12	7.741	0.003	0.012	0.009	<0.002	0.008	3.187	0.01	0.094	0.185	8.328	0.024
13	50241	Compósito 13	0.005	<0.002	<0.003	0.027	<0.002	0.003	24.933	<0.002	0.004	<0.002	<0.3	0.01
14	50242	Compósito 14	0.019	<0.002	<0.003	0.055	<0.002	<0.002	35.211	<0.002	<0.002	<0.002	<0.3	0.01
15	50243	Compósito 15	2.081	<0.002	<0.003	0.086	<0.002	0.006	3.108	<0.002	0.166	2.243	1.727	0.043
16	50244	Compósito 16	3.002	<0.002	0.003	0.059	<0.002	0.028	4.411	0.002	0.286	4.523	4.179	0.065
17	50245	Compósito 17	3.123	0.004	0.007	0.041	<0.002	0.02	17.244	<0.002	0.187	0.042	6.02	0.234
18	50246	Compósito 18	1.576	0.015	0.045	0.113	<0.002	0.142	3.197	<0.002	0.509	0.022	2.426	15.167
19	50247	Compósito 19	0.051	<0.002	0.005	0.073	<0.002	0.003	26.722	<0.002	0.003	<0.002	<0.3	0.023
20	50248	Compósito 20	4.423	<0.002	<0.003	0.058	<0.002	0.005	0.573	<0.002	0.105	0.927	1.004	0.601

Mg (mg/L)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	Tl (mg/L)	V (mg/L)	Zn (mg/L)	Mercurio(mg/L)	pH	TDS, mg/L	Conductividad, µsm/cm
0.216	0.458	0.006	0.005	2.533	<0.005	<0.002	2.917	<0.002	<0.002	0.047	<0.00050	5,39	20,0	28,3
2.548	13.778	0.007	0.005	10	<0.005	<0.002	3.159	<0.002	<0.002	0.353	<0.00050	6,66	101,0	191,5
1.036	0.783	0.006	0.009	8.794	<0.005	<0.002	2.213	<0.002	<0.002	0.427	<0.00050	4,34	67,0	122,8
0.615	0.158	0.005	0.009	2.417	<0.005	<0.002	1.209	<0.002	<0.002	0.571	<0.00050	3,97	59,0	111,4
0.287	0.557	0.006	0.02	2.399	<0.005	<0.002	1.264	<0.002	<0.002	0.226	<0.00050	3,68	100,0	186,6
0.912	0.328	0.005	0.017	2.376	<0.005	<0.002	1.096	<0.002	<0.002	0.336	<0.00050	4,06	74,0	135,7
0.26	0.161	0.005	0.039	2.852	<0.005	<0.002	1.373	0.009	<0.002	2.541	<0.00050	3,50	172,0	320,0
<0.2	0.127	0.006	0.002	2.488	<0.005	<0.002	1.534	<0.002	<0.002	0.027	<0.00050	5,41	56,0	105,0
<0.2	0.672	0.006	0.008	2.428	<0.005	<0.002	1.468	<0.002	<0.002	0.058	<0.00050	3,81	57,0	104,9
0.511	0.713	0.006	0.033	2.407	<0.005	<0.002	1.81	<0.002	<0.002	0.124	<0.00050	3,81	63,0	117,6
0.252	0.805	<0.003	0.079	0.257	0.01	<0.002	0.32	<0.002	<0.002	0.103	<0.00050	4,72	45,0	82,6
<0.2	0.171	<0.003	0.115	1.153	0.01	<0.002	0.373	0.004	<0.002	0.511	<0.00050	3,94	163,0	190,4
1.994	27.811	0.003	0.058	11.689	0.007	<0.002	1.392	0.004	<0.002	0.285	<0.00050	7,04	147,0	272,0
1.04	2.563	0.004	0.077	8.636	0.01	<0.002	0.792	<0.002	<0.002	0.016	<0.00050	7,54	118,0	214,6
0.346	0.306	<0.003	0.129	1.908	0.011	<0.002	0.743	0.002	<0.002	0.47	<0.00050	4,27	54,0	100,2
0.48	0.335	<0.003	0.119	0.952	0.013	<0.002	0.466	0.006	<0.002	2.031	<0.00050	4,23	71,0	138,2
0.331	0.047	<0.003	0.124	2.937	0.01	<0.002	0.545	0.002	<0.002	1.088	<0.00050	4,55	90,0	165,1
0.21	0.095	<0.003	0.26	2.484	0.013	<0.002	0.895	0.014	<0.002	5.223	<0.00050	4,38	63,0	116,5
0.698	0.287	0.003	0.122	5.222	0.012	<0.002	1.537	<0.002	<0.002	0.012	<0.00050	7,63	85	156,5
<0.2	0.301	<0.003	0.151	4.986	0.012	<0.002	1.219	<0.002	<0.002	0.91	<0.00050	4,07	70	130,7

Fuente: MYSLR

Correlación entre metales para el ensayo SPLP



Fuente: MYSLR

Correlación entre metales para el ensayo SPLP. Litología Teut

	Al (mg/L)	As (mg/L)	Ba (mg/L)	Ca (mg/L)	Cr (mg/L)	Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	K(mg/L)	Se (mg/L)	Na (mg/L)	Zn (mg/L)
Al (mg/L)	1																
As (mg/L)	0,681950842	1															
Ba (mg/L)	-0,672756899	-0,623565666	1														
Ca (mg/L)	0,413101354	-0,192990208	0,31850426	1													
Cr (mg/L)	0,68041431	0,968495997	-0,78759265	-0,32472738	1												
Co (mg/L)	0,976123588	0,522232968	-0,54669148	0,59018637	0,50578054	1											
Cu (mg/L)	0,96202927	0,566539929	-0,4477074	0,63270455	0,50976873	0,98584777	1										
Fe (mg/L)	0,461522564	0,493497129	-0,96654525	-0,51276311	0,69370396	0,32292221	0,20603022	1									
Pb (mg/L)	-0,151796367	-0,333333333	-0,48751498	-0,45743718	-0,08804509	-0,17407766	-0,33620647	0,65233228	1								
Mg (mg/L)	0,769720227	0,986349429	-0,59129179	-0,02924774	0,93477219	0,63671789	0,68705283	0,42633199	-0,40640731	1							
Mn (mg/L)	0,880058434	0,290837463	-0,64898113	0,50007846	0,36055347	0,92181366	0,84571509	0,48697446	0,20168355	0,38953549	1						
Mo (mg/L)	-0,328514525	0,333333333	-0,34390591	-0,98676923	0,44022545	-0,52223297	-0,54544068	0,5104888	0,33333333	0,1735348	-0,49089015	1					
Ni (mg/L)	0,650184765	0,047606095	0,06034258	0,96050883	-0,06287224	0,79059482	0,82183971	-0,28699667	-0,42845486	0,21103128	0,68587916	-0,92355825	1				
K(mg/L)	-0,35653005	0,312422034	-0,31463143	-0,9877923	0,41599307	-0,54778717	-0,56867317	0,48501109	0,32523622	0,15177774	-0,51752593	0,99950643	-0,93296752	1			
Se (mg/L)	0,328514525	-0,333333333	0,34390591	0,98676923	-0,44022545	0,52223297	0,54544068	-0,5104888	-0,33333333	-0,1735348	0,49089015	-1	0,92355825	-0,99950643	1		
Na (mg/L)	-0,152215178	0,533237227	-0,42302047	-0,92659754	0,6128304	-0,36302026	-0,36700053	0,54099143	0,18718954	0,38681952	-0,40143096	0,97439744	-0,81942151	0,96996841	-0,97439744	1	
Zn (mg/L)	0,987566389	0,700963825	-0,56528905	0,48108053	0,6600974	0,97087181	0,98270706	0,33479831	-0,30476688	0,79874016	0,82025425	-0,3809586	0,70316711	-0,40658068	0,3809586	-0,18888672	1

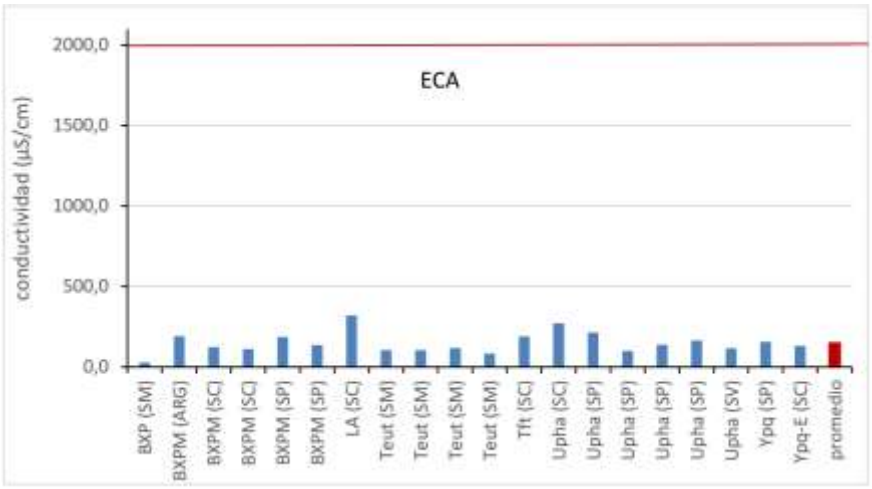
Fuente: MYSLR

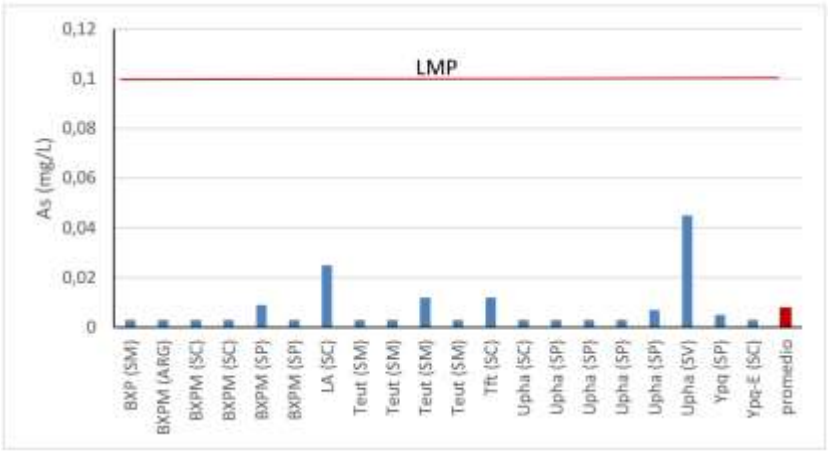
Correlación entre metales para el ensayo SPLP. Litología BXPM (SP)

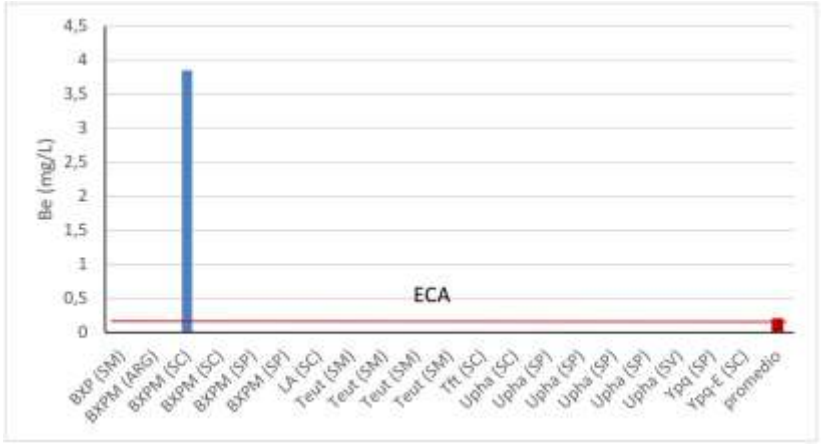
	Al (mg/L)	As (mg/L)	Ba (mg/L)	Be (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	K(mg/L)	Na (mg/L)	Zn (mg/L)
Al (mg/L)	1																	
As (mg/L)	0,743125957	1																
Ba (mg/L)	0,172435302	-0,133630621	1															
Be (mg/L)	-0,528113525	-0,25	0,53452248	1														
Cd (mg/L)	0,27042209	-0,25	0,53452248	-0,25	1													
Ca (mg/L)	-0,91296143	-0,656699423	-0,52277045	0,15474661	-0,29163785	1												
Cr (mg/L)	0,908428582	0,952579344	-0,03636965	-0,40824829	-0,06804138	-0,80723413	1											
Co (mg/L)	0,188730224	0,265897269	0,48323543	0,58497399	-0,42543563	-0,48112907	0,26052505	1										
Cu (mg/L)	0,772692102	0,790412198	-0,19557544	-0,39186836	-0,38392996	-0,66504723	0,86358534	0,46046894	1									
Fe (mg/L)	0,911644397	0,830035939	0,02035987	-0,39086854	-0,13683682	-0,84327129	0,9380924	0,44446285	0,95827768	1								
Pb (mg/L)	-0,496641596	-0,342047616	0,68164592	0,95922049	0,02974327	0,11258432	-0,46243219	0,44446638	-0,54630078	-0,47676061	1							
Mg (mg/L)	-0,80134659	-0,509060417	-0,6785784	-0,02800282	-0,29839701	0,97229842	-0,66470511	-0,60903143	-0,56477583	-0,74618035	-0,07422703	1						
Mn (mg/L)	-0,594135133	-0,240381617	-0,79975342	-0,21919188	-0,27779181	0,84629215	-0,40856697	-0,72114961	-0,40844207	-0,56814371	-0,2623321	0,94556191	1					
Mo (mg/L)	-0,505425355	0,133630621	-0,64285714	0,13363062	-0,53452248	0,63089294	-0,14547859	-0,34110736	-0,22518178	-0,37011566	0,02384767	0,72114833	0,82255655	1				
Ni (mg/L)	0,805942138	0,716114874	0,04784744	-0,26854308	-0,26854308	-0,78546637	0,82833257	0,60551331	0,96650769	0,96684768	-0,39404258	-0,73281696	-0,62559012	-0,43062694	1			
K(mg/L)	-0,90257625	-0,405502291	-0,30877322	0,52123174	-0,40289381	0,85544401	-0,66237967	-0,22411183	-0,65359492	-0,78935264	0,459908	0,80996826	0,71812492	0,80591498	-0,7530096	1		
Na (mg/L)	-0,822404149	-0,330270179	-0,51364743	0,26764359	-0,36492272	0,88952813	-0,57756828	-0,44653462	-0,60179814	-0,7459001	0,21509913	0,90479846	0,87943083	0,88982379	-0,75740493	0,95989386	1	
Zn (mg/L)	-0,266962865	-0,686540001	0,61489916	0,19465119	0,82595234	0,11252266	-0,57821668	-0,31091634	-0,77087965	-0,59148766	0,4455486	-0,00225212	-0,14659814	-0,40165288	-0,62067386	0,03222894	-0,03643733	1

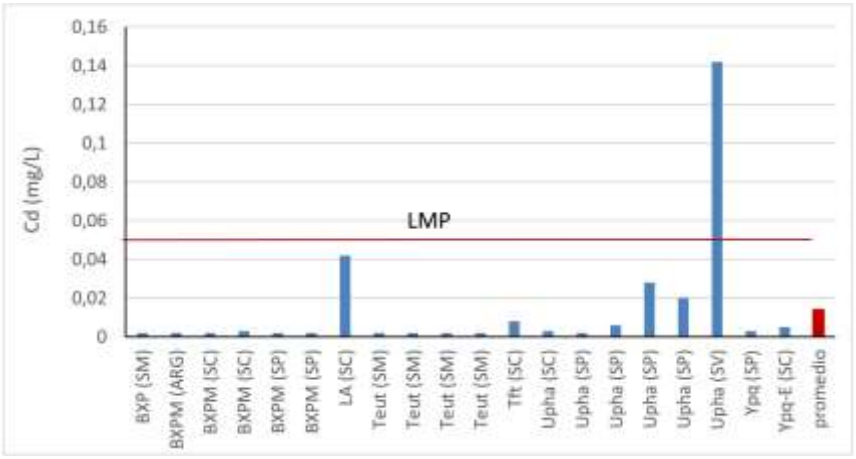
Fuente: MYSLR

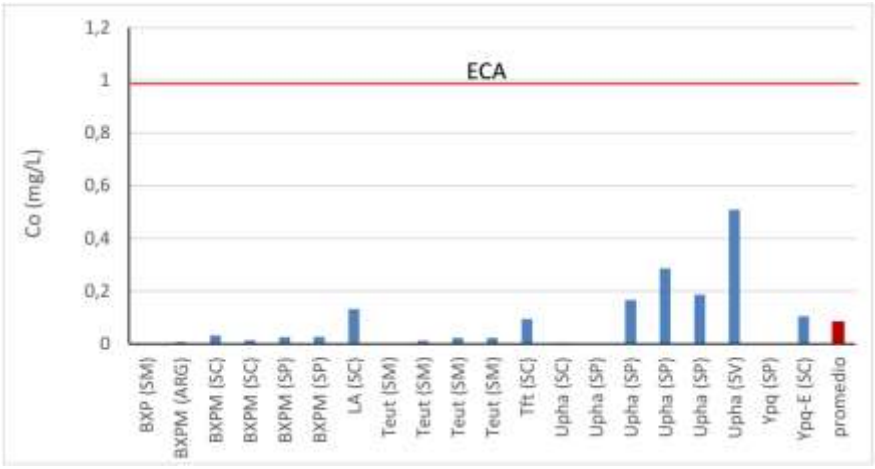
Comparación de los valores del lixiviado de SPLP con los LMP y ECA

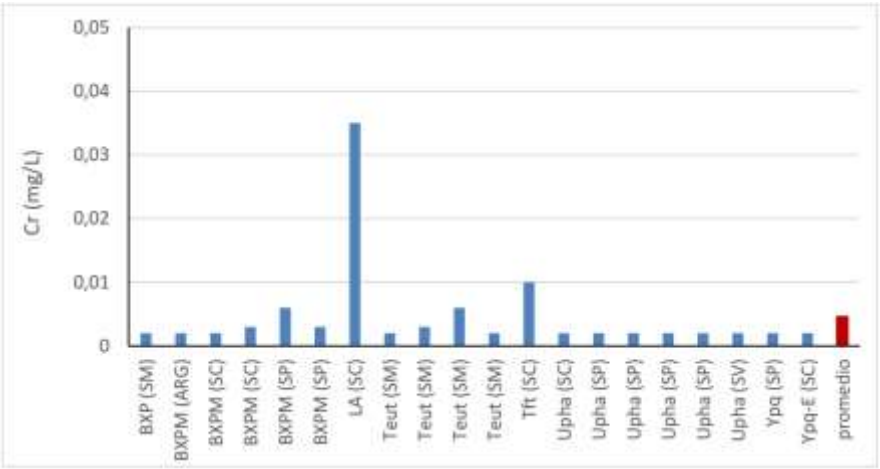


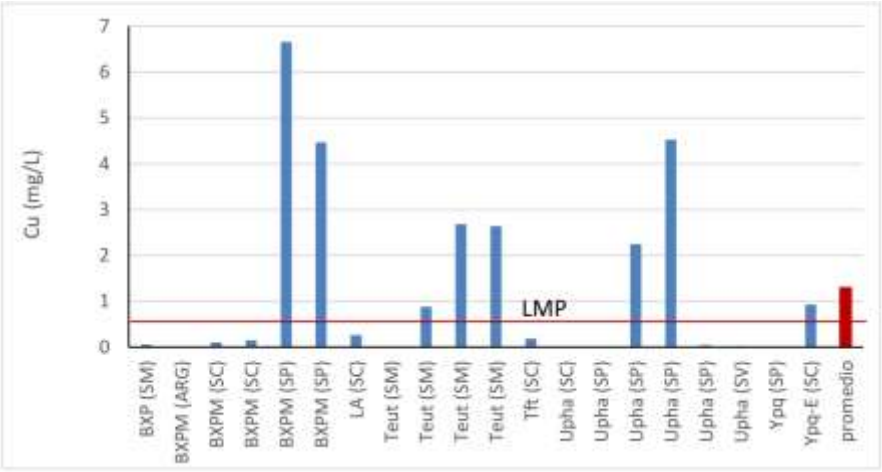


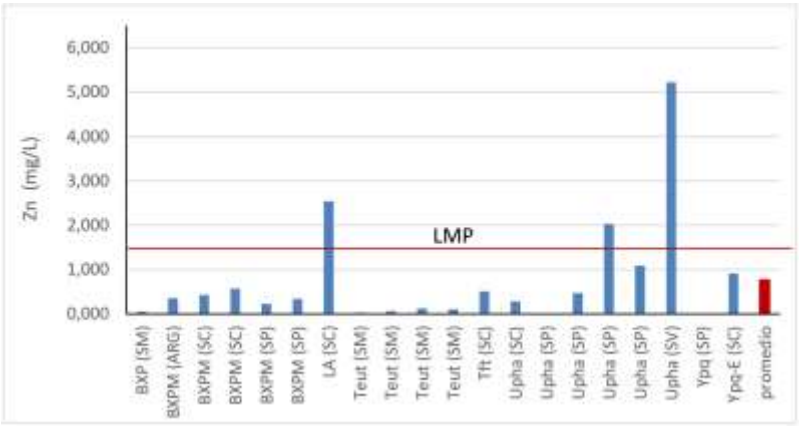


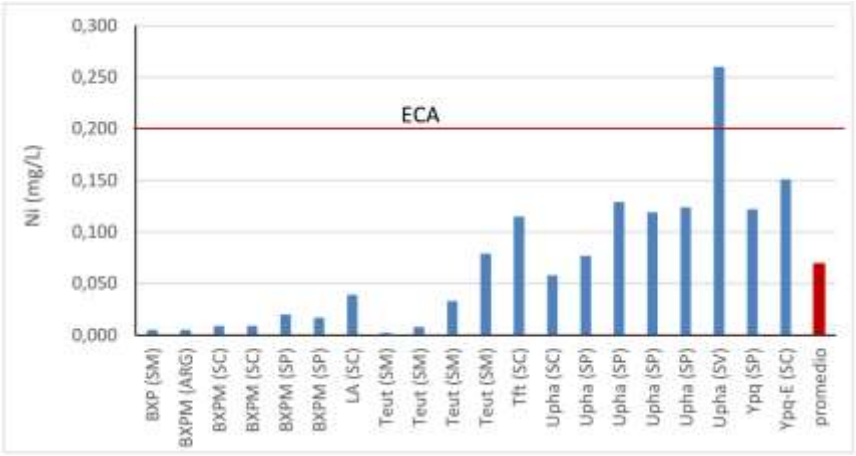

Cd (mg/L)
0,16
0,14
0,12
0,1
0,08
0,06
0,04
0,02
0
LMP
BXP (SM)
BXPM (ARG)
BXPM (SC)
BXPM (SC)
BXPM (SP)
BXPM (SP)
LA (SC)
Teut (SM)
Teut (SM)
Teut (SM)
Teut (SM)
Tft (SC)
Upha (SC)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SV)
Ypq (SP)
Ypq-E (SC)
promedio


Co (mg/L)
1,2
1
0,8
0,6
0,4
0,2
0
ECA
BXP (SM)
BXPM (ARG)
BXPM (SC)
BXPM (SC)
BXPM (SP)
BXPM (SP)
LA (SC)
Teut (SM)
Teut (SM)
Teut (SM)
Teut (SM)
Tft (SC)
Upha (SC)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SV)
Ypq (SP)
Ypq-E (SC)
promedio


Cr (mg/L)
0,05
0,04
0,03
0,02
0,01
0
BXP (SM)
BXPM (ARG)
BXPM (SC)
BXPM (SC)
BXPM (SP)
BXPM (SP)
LA (SC)
Teut (SM)
Teut (SM)
Teut (SM)
Teut (SM)
Tft (SC)
Upha (SC)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SV)
Ypq (SP)
Ypq-E (SC)
promedio







Fuente: MYSLR

Yanacocha | Laboratorio Metalúrgico

CENTRO DE INVESTIGACIONES METALÚRGICAS
"DON ALBERTO BENAVIDES"
MINERA YANACOCHA S.R.L

M E M O R A N D U M

PARA: H. Arevalo / F. Roberto

DE: I. Morales / F. Loyola

FECHA: 23 de Marzo del 2016

COPIA: G. Guzman / S. Vicuña

REPORTE: LM-R-009-16

ASUNTO: RESULTADOS DE LAS PRUEBAS DE PRODUCCIÓN DE ÁCIDO POR POTENCIAL BIOLÓGICO (BAPP) Y POTENCIAL DE GENERACIÓN ÁCIDA POR PERÓXIDO (PAG) PARA EL PROYECTO YANACOCHA VERDE

INTRODUCCIÓN

La prueba de producción de ácido por potencial biológico (BAPP) está basado en la oxidación de minerales sulfurados por acción de la bacteria Acidithiobacilus Ferrroxidans. El objetivo de la prueba es determinar si la bacteria puede generar suficiente ácido sulfúrico de la oxidación de los sulfuros para superar la capacidad de neutralización de las muestras y mantener condiciones ácidas. La presencia de minerales con carbonatos neutraliza el ácido producido por la oxidación del sulfuro, de esta manera se mantienen las condiciones no favorables para el crecimiento de las bacterias acidofílicas, oxidación de hierro y sulfuros. Poca o ninguna mineralización de carbonatos da como resultado condiciones ácidas que favorecen el crecimiento microbiano, creando condiciones para la oxidación auto sostenida y la lixiviación de metales. La solución resultante se somete a análisis de metales para determinar la lixiviabilidad en estas condiciones (Hall B., 2012).

MUESTRAS Y PROCEDIMIENTO

Un total de 20 compósitos del desmonte de Proyecto Yanacocha Verde fueron sometidos a la prueba BAPP. De acuerdo a los resultados obtenidos 18 muestras fueron clasificadas como generadoras de acidez y dos muestras como no generadoras. Los resultados de las pruebas de Potencial de Generación Ácida por Peróxido (PAG) clasificaron a todas las pruebas como generadoras de acidez. Debido a la ausencia de especies de carbonatos en las muestras de desmonte del Proyecto Yanacocha Verde, las muestras tienen el potencial para comportarse como generadoras de acidez cuando son sometidas a condiciones ácidas (basados en los resultados PAG).

El procedimiento para BAPP consistió en agregar Ácido Sulfúrico (0.1 N) para establecer un rango de pH entre 2.5 y 2.8. Se inoculó bacterias de Acidithiobacillus Ferroxidans a una muestra de 30 gramos de cada muestra a ser evaluada, se adicionó 70 mL de solución MKM (Medio Modificado de Kelly) y se puso en agitación en un incubador a una temperatura de 35 °C. La concentración del metal de hierro disuelto en la solución fue usada como indicador de la actividad bacteriana. Los matraces de prueba fueron controlados dos veces por semana hasta que cese la actividad microbiológica, es decir cuando el pH, ORP y la concentración de hierro permanecen constantes.

Cuando la actividad bacteriana terminó, 15 g de muestra finamente molida se añadió y se incubó por 24 horas adicionales. El criterio para terminar la prueba está en función al pH, si este excede a 3.5, la prueba finaliza y es negativa, en cambio si el pH es 3.5 o menos se agrega la mitad del peso de la muestra (15 g) y la incubación continúa durante 24 horas; después de este tiempo si el pH es menor que 3.5 o mayor que 4 la incubación continua durante 18 horas adicionales y se registra el pH final.

El procedimiento de Generación Ácida por Peróxido (PAG) consiste en agregar 50 mL de Peróxido de Hidrógeno (H_2O_2) al 15% a 0.25 g de muestra y dejarlo en agitación por 24 horas a temperatura ambiente, luego se coloca en una plancha caliente a 90°C por 80 minutos para asegurar una reacción completa, posteriormente se afora a 25 mL con agua desionizada para luego medir el pH.

Tabla I. Número de muestras e Identificación de Compósitos de muestras de Yanacocha Verde

Comp.	Sample ID	Descripción*	Lith	Alt	length
1	50229	YS-1140(50-62); YS-1160(4.7-13.6)	BXP	SM	20.9
2	50230	YS-1048(32-42)	BXPM	ARG	10
3	50231	YS-1089(84.2-86.8); YS-1125(64-72); YS-1187(118-126)	BXPM	SC	28.6
4	50232	YS-1027(80-86); YS-1027(100-110); YS-1027(110-122)	BXPM	SC	28
5	50233	YS-1111(150.5-157.95)	BXPM	SP	7.45
6	50234	YS-1111(100-107.1); YS-1111(90-100)	BXPM	SP	17.1
7	50235	YS-1112(138-148); YS-1154(190-203.5); YS-1112(123.9-130)	LA	SC	29.6
8	50236	YS-1103(160-168.45); YS-1160(30-40); YS-1160(40-50); YS-1160(50-60); YS-1140(100.7-114); YS-1140(85.4-92)	Teut	SM	58.35
9	50237	YS-1160(13.6-20); YS-1160(60-76); YS-1103(148-160); YS-1160(20-30); YS-1140(76-85.4); YS-1140(66.85-74)	Teut	SM	60.95
10	50238	YS-1093(11.7-20); YS-1132(86-94)	Teut	SM	16.3
11	50239	YS-1140(92-100.7); YS-1132(94-104.25)	Teut	SM	18.95
12	50240	YS-1105(116.8-128); YS-1105(106-116.8); YS-1105(128-142)	Tft	SC	36
13	50241	YS-1048(3.15-10); YS-1048(10-20)	Upha	SC	16.85
14	50242	YS-1132(251.55-264); YS-1132(234.2-251.55)	Upha	SP	29.8
15	50243	YS-994(143.35-147.95); YS-1162(178-191.2)	Upha	SP	17.8
16	50244	YS-994(154-160.15); YS-1162(166.75-178)	Upha	SP	17.4
17	50245	YS-1143(88-100);YS-1099(169.15-178.2); YS-1143(100-114); YS-1143(81.4-88)	Upha	SP	41.65
18	50246	YS-994(147.95-154)	Upha	SV	6.05
19	50247	YS-1153(70-82); YS-1134(238.55-248)	Ypq	SP	21.45
20	50248	YS-1155(179.1-186)	Ypq-E	SC	6.9
*X(Y-Z); X=Taladro, Y=From, X=To					

RESULTADOS

Las 20 muestras se cultivaron con bacterias generadoras de ácido, Las pulpas fueron sometidas a desafíos para determinar si la reacción de generación de ácido bacteriano podría mantenerse en la muestra de prueba. La caracterización de la solución de lixiviación se resume en la tabla V.

Dieciocho de las 20 muestras fueron determinadas como generadoras de ácido debido a la presencia de las bacterias acidofílicas según la clasificación BAPP. Esto es probablemente debido a la presencia de especies de generación de ácido respaldadas por el resultado NCV (Valor Neto de Carbonatos). Sin embargo se determinó que dos muestras 50241 y 50247 son muestras que no son potenciales para generar acidez sin en caso fueran expuestas a la acción de las bacterias Acidithiobacillus Ferroxidans.

Las siguientes clasificaciones no deben usarse exclusivamente como resultados individuales, sino deben usarse juntas y compararse para generar una decisión sólida sobre el tipo de mineral que es generador o no de ácido.

Criterio de Clasificación BAPP:

pH < 3.5	positivo, generados de ácido.
pH ≥ 3.5	negativo, no generador de ácido.

Criterio de Clasificación PAG:

pH < 4.5	generador de ácido.
pH ≥ 4.5	no generador de ácido.

Table II. BAPP vs NCV Comparison

Sample Name	Sample ID	BAPP pH	Result	NCV	Result	Overall
Compósito 1	50229	3.06	Acid Generating	0.02	Inert/Neutral	Undetermined
Compósito 2	50230	3.23	Acid Generating	-3.23	Moderately Acidic	Acid Generating
Compósito 3	50231	1.7	Acid Generating	-5.18	Highly Acidic	Acid Generating
Compósito 4	50232	1.56	Acid Generating	-9.42	Highly Acidic	Acid Generating
Compósito 5	50233	1.7	Acid Generating	-5.68	Highly Acidic	Acid Generating
Compósito 6	50234	1.53	Acid Generating	-9.15	Highly Acidic	Acid Generating
Compósito 7	50235	1.52	Acid Generating	-7.02	Highly Acidic	Acid Generating
Compósito 8	50236	3.15	Acid Generating	0.01	Inert/Neutral	Acid Generating
Compósito 9	50237	2.32	Acid Generating	-0.14	Slightly Acidic	Acid Generating
Compósito 10	50238	1.98	Acid Generating	-0.47	Slightly Acidic	Acid Generating
Compósito 11	50239	1.92	Acid Generating	-0.87	Slightly Acidic	Acid Generating
Compósito 12	50240	1.61	Acid Generating	-6.08	Highly Acidic	Acid Generating
Compósito 13	50241	4.12	Non Acid Generating	-3.10	Moderately Acidic	Undetermined
Compósito 14	50242	3.4	Acid Generating	-1.60	Moderately Acidic	Acid Generating
Compósito 15	50243	1.7	Acid Generating	-3.57	Moderately Acidic	Acid Generating
Compósito 16	50244	1.71	Acid Generating	-4.72	Moderately Acidic	Acid Generating
Compósito 17	50245	1.66	Acid Generating	-7.84	Highly Acidic	Acid Generating
Compósito 18	50246	1.83	Acid Generating	-4.86	Moderately Acidic	Acid Generating
Compósito 19	50247	3.58	Non Acid Generating	-2.45	Moderately Acidic	Undetermined
Compósito 20	50248	1.7	Acid Generating	-5.11	Highly Acidic	Acid Generating

La prueba BAPP representa el potencial microbiano del mineral para generar ácido. Si las bacterias se mantienen en la muestra, existe una gran posibilidad de que se genere un drenaje ácido en la unidad de desmonte que se está caracterizando. Si se produce ácido insuficiente, el pH de la solución se aproximará al pH natural (por encima de 3.5) y se determina que la muestra no produce ácido. Sin la solución permanece por debajo de 3.5, entonces existe una gran posibilidad de que la muestra sea un productor de ácido. En cambio la prueba PAG representa la capacidad total de la muestra para generar o no acidez en condiciones oxidantes, generalmente se utiliza para corroborar la prueba BAPP detectando falsos positivos.

Tabla III. Comparación BAPP vs. PAG

Sample Name	Sample ID	BAPP pH	Result	PAG pH	Result	Overall
Compósito 1	50229	3.06	Acid Generating	2.43	Acid Generating	Acid Generating
Compósito 2	50230	3.23	Acid Generating	2.22	Acid Generating	Acid Generating
Compósito 3	50231	1.7	Acid Generating	2.12	Acid Generating	Acid Generating
Compósito 4	50232	1.56	Acid Generating	2.01	Acid Generating	Acid Generating
Compósito 5	50233	1.7	Acid Generating	2.11	Acid Generating	Acid Generating
Compósito 6	50234	1.53	Acid Generating	2.01	Acid Generating	Acid Generating
Compósito 7	50235	1.52	Acid Generating	2.05	Acid Generating	Acid Generating
Compósito 8	50236	3.15	Acid Generating	2.33	Acid Generating	Acid Generating
Compósito 9	50237	2.32	Acid Generating	2.49	Acid Generating	Acid Generating
Compósito 10	50238	1.98	Acid Generating	2.61	Acid Generating	Acid Generating
Compósito 11	50239	1.92	Acid Generating	2.44	Acid Generating	Acid Generating
Compósito 12	50240	1.61	Acid Generating	2.04	Acid Generating	Acid Generating
Compósito 13	50241	4.12	Non Acid Generating	2.23	Acid Generating	Undetermined
Compósito 14	50242	3.4	Acid Generating	2.53	Acid Generating	Acid Generating
Compósito 15	50243	1.7	Acid Generating	2.20	Acid Generating	Acid Generating
Compósito 16	50244	1.71	Acid Generating	2.17	Acid Generating	Acid Generating
Compósito 17	50245	1.66	Acid Generating	2.18	Acid Generating	Acid Generating
Compósito 18	50246	1.83	Acid Generating	2.07	Acid Generating	Acid Generating
Compósito 19	50247	3.58	Non Acid Generating	2.17	Acid Generating	Undetermined
Compósito 20	50248	1.7	Acid Generating	2.47	Acid Generating	Acid Generating

Los resultados de BAPP, PAG y NCV son presentados en la tabla IV; también se pueden ver los resultados del análisis de la solución en la tabla V y la data de las hojas de trabajo de BAPP en el Apéndice A.

Se han realizado pruebas cinéticas (PAG y BAPP) en muestras de desmonte de Yanacocha Verde usando una prueba de Generación Ácida por Peróxido (PAG) y también fueron evaluadas usando el método de Producción de Ácido por Potencial Biológico (BAPP) para investigar más el potencial de neutralización. La prueba BAPP mide el potencial de las

bacterias generadoras de acidez para producir una generación sostenida de ácido. Debido a que el ácido se agrega inicialmente al matraz de incubación, puede producirse un falso positivo si el pH se mantiene en 3.5 o por debajo del mismo. La prueba PAG para las muestras se usó junto con la prueba BAPP para eliminar los resultados falsos positivos midiendo todos los sulfuros reactivos (es decir, el peróxido oxida la pirita y libera la acidez); si el pH es <4.5, la muestra tiene un bajo potencial de neutralización. Si la prueba BAPP muestra un pH <3.5, mientras que el pH PAG es >4.5, la muestra da como resultado un falso positivo para el potencial de generación ácido.

Table IV. PAG, BAPP and NCV Comparison

Sample Name	Sample ID	BAPP pH	Result	PAG pH	Result	NCV	Result	Overall
Compósito 1	50229	3.06	Acid Generating	2.43	Acid Generating	0.02	Inert/Neutral	Acid Generating
Compósito 2	50230	3.23	Acid Generating	2.22	Acid Generating	-3.23	Moderately Acidic	Acid Generating
Compósito 3	50231	1.7	Acid Generating	2.12	Acid Generating	-5.18	Highly Acidic	Acid Generating
Compósito 4	50232	1.56	Acid Generating	2.01	Acid Generating	-9.42	Highly Acidic	Acid Generating
Compósito 5	50233	1.7	Acid Generating	2.11	Acid Generating	-5.68	Highly Acidic	Acid Generating
Compósito 6	50234	1.53	Acid Generating	2.01	Acid Generating	-9.15	Highly Acidic	Acid Generating
Compósito 7	50235	1.52	Acid Generating	2.05	Acid Generating	-7.02	Highly Acidic	Acid Generating
Compósito 8	50236	3.15	Acid Generating	2.33	Acid Generating	0.01	Inert/Neutral	Acid Generating
Compósito 9	50237	2.32	Acid Generating	2.49	Acid Generating	-0.14	Slightly Acidic	Acid Generating
Compósito 10	50238	1.98	Acid Generating	2.61	Acid Generating	-0.47	Slightly Acidic	Acid Generating
Compósito 11	50239	1.92	Acid Generating	2.44	Acid Generating	-0.87	Slightly Acidic	Acid Generating
Compósito 12	50240	1.61	Acid Generating	2.04	Acid Generating	-6.08	Highly Acidic	Acid Generating
Compósito 13	50241	4.12	Non Acid Generating	2.23	Acid Generating	-3.10	Moderately Acidic	Undetermined
Compósito 14	50242	3.4	Acid Generating	2.53	Acid Generating	-1.60	Moderately Acidic	Acid Generating
Compósito 15	50243	1.7	Acid Generating	2.20	Acid Generating	-3.57	Moderately Acidic	Acid Generating
Compósito 16	50244	1.71	Acid Generating	2.17	Acid Generating	-4.72	Moderately Acidic	Acid Generating
Compósito 17	50245	1.66	Acid Generating	2.18	Acid Generating	-7.84	Highly Acidic	Acid Generating
Compósito 18	50246	1.83	Acid Generating	2.07	Acid Generating	-4.86	Moderately Acidic	Acid Generating
Compósito 19	50247	3.58	Non Acid Generating	2.17	Acid Generating	-2.45	Moderately Acidic	Undetermined
Compósito 20	50248	1.7	Acid Generating	2.47	Acid Generating	-5.11	Highly Acidic	Acid Generating

Los resultados de pH final en la Figura de BAPP vs PAG muestra la generación ácida de las muestras; sin embargo las muestras 50247 y 50241 mostraron valores de pH BAPP de 3.58 y 4.12, con valores de pH PAG de 2.17 y 2.23, lo que confirma el bajo pH de PAG (los valores debajo de 4.5) se deben a la falta de capacidad de neutralización y no a un alto potencial de neutralización ácido. Con los resultados BAPP se concluye que estas muestras en condiciones ambientales oxidantes con un alto pH natural las muestras (50247 y 50241) no se comportarían como generadoras de acidez.

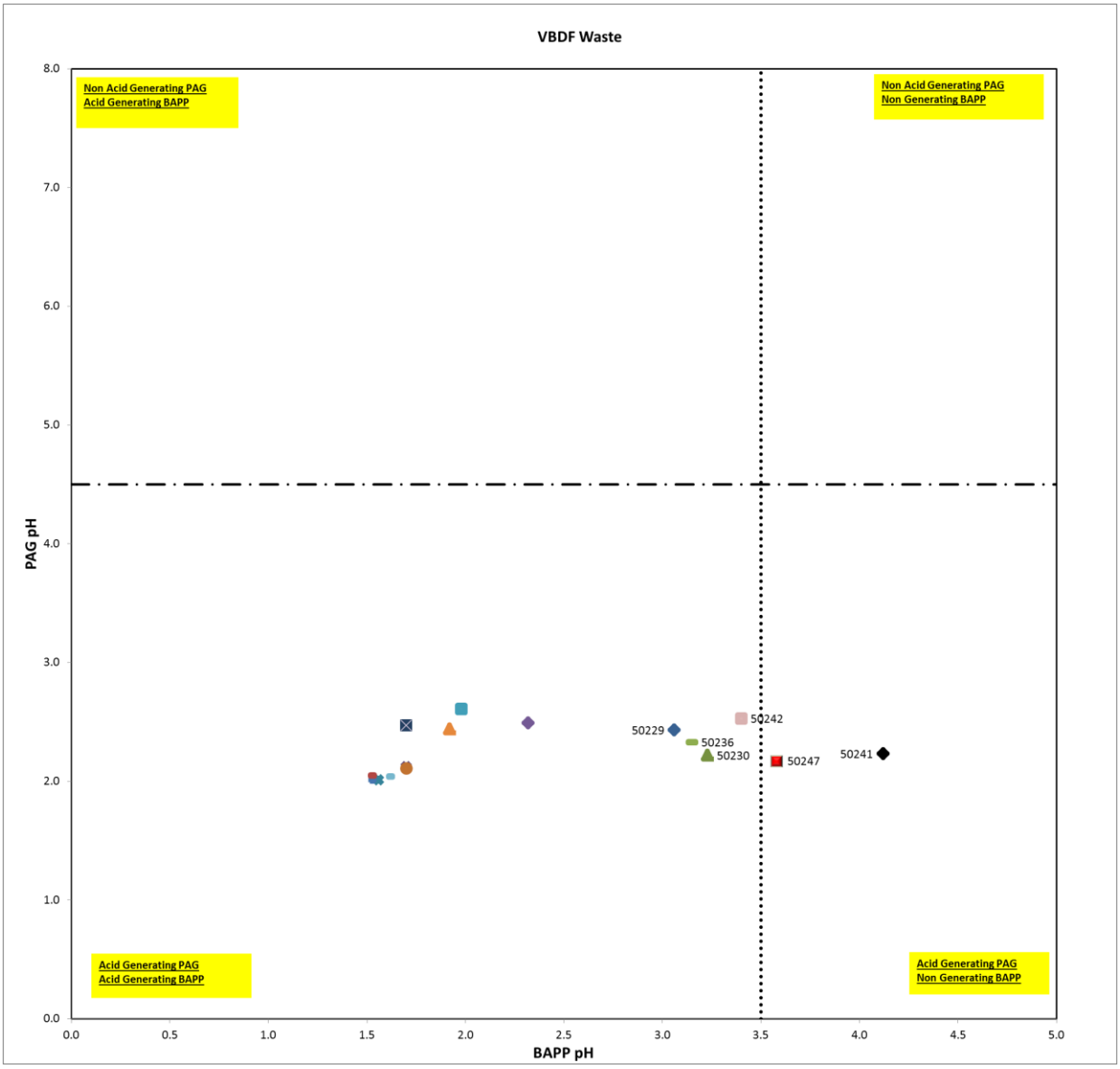


Figure 1 BAPP vs. PAG Final pH

Table V. BAPP Solution Results (1/2)

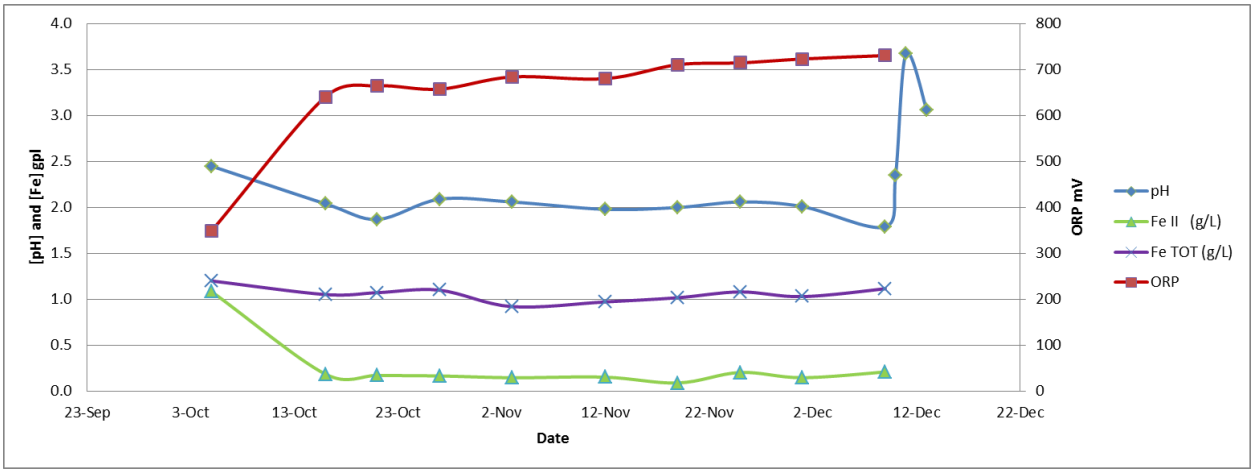
Analysis	50229	50230	50231	50232	50233	50234	50235	50236	50237	50238
Hg, ppb	0.043	0.034	0.15	0.037	0	0.065	0	0	0.049	0.035
Ag, ppm	0	0.389	0	0	0	0	0	0	0	0
Al, ppm	21.304	376.246	323.794	215.638	236.832	252.701	372.365	10.984	20.611	14.894
As, ppm	0.407	0.137	13.145	12.792	47.43	17.373	40.738	0.453	2.103	16.049
B, ppm	4.657	0.275	0	0	0	0	0	3.157	2.943	0.936
Ba, ppm	0.039	0.015	0.076	0.168	0.131	0.224	0.17	0.029	0.037	0.06
Be, ppm	0.003	0.31	0.162	0.015	0.003	0.006	0.002	0.001	0.002	0.002
Bi, ppm	0.084	0.374	0.294	0.143	0.095	0.478	0.174	0.118	0.149	0
Ca, ppm	39.464	505.581	251.366	81.367	26.813	112.393	63.652	49.211	26.013	66.475
Cd, ppm	0.026	0.879	0.674	0.275	0.015	0.04	2.926	0.016	0.032	0.047
Co, ppm	0.375	1.133	1.873	1.002	0.765	1.171	3.021	0.336	0.489	0.6
Cr, ppm	1.746	11.728	12.226	14.935	20.211	14.845	19.699	11.517	22.296	23.115
Cu, ppm	28.374	23.255	125.802	46.456	248.045	121.591	169.04	12.664	60.742	123.485
Fe, ppm	591.33	132.006	2021.28	3820.12	3205.12	4385.47	3987.25	319.82	490.4	1071.48
Ga, ppm	0	0	0.197	0.461	0.411	0.556	0.923	0	0.034	0.068
K, ppm	2.069	3.566	62.222	0.804	1.705	1.764	2.272	1.587	1.252	1.347
Li, ppm	0.027	0.114	0.054	0.091	0.061	0.098	0.053	0.031	0.029	0.025
Mg, ppm	29.413	122.489	43.816	34.236	29.517	36.456	31.323	27.822	28.254	33.456
Mn, ppm	29.595	3600.97	33.46	11.352	14.966	12.036	10.64	13.544	24.455	21.123
Mo, ppm	0	0	0.052	0.496	1.216	0.892	0.595	0.019	0.075	2.956
Na, ppm	21.156	18.818	23.685	5.603	14.34	13.358	14.576	12.305	8.205	10.631
Nb, ppm	0.008	0	0	0	0	0	0	0	0	0
Ni, ppm	3.002	1.542	1.452	1.416	1.506	1.452	2.314	1.633	1.915	2.21
Pb, ppm	0.019	0.288	0.687	2.083	0	0.162	3.2	0	0.01	0.024
Sb, ppm	0	0	0	0	0	0	0	0.016	0.121	0
Sc, ppm	0	0.046	0.078	0.014	0.013	0.01	0.083	0.001	0.006	0.003
Se, ppm	0	0.626	0	0	0	0	0	0	0	0
Sn, ppm	0.062	0	0	0	0	0	0	0.026	0.046	0
Sr, ppm	0.085	5.732	2.03	1.409	1.399	1.497	1.497	0.139	0.152	0.527
Te, ppm	0	0	0.978	0.53	0.577	0.996	0.819	0	0	0.22
Ti, ppm	0.008	0.004	0.018	0.098	0.071	0.102	0.14	0.009	0.031	0.104
Tl, ppm	0.063	0	0	0	0	0.092	0.246	0	0	0
V, ppm	0	0	0.855	0.445	0.226	0.512	0.734	0	0	0
W, ppm	0	0	0	0	0	0	0	0	0	0
Zn, ppm	4.249	232.434	194.435	86.348	7.631	11.304	193.18	3.459	7.037	6.068

Table V. BAPP Solution Results (2/2)

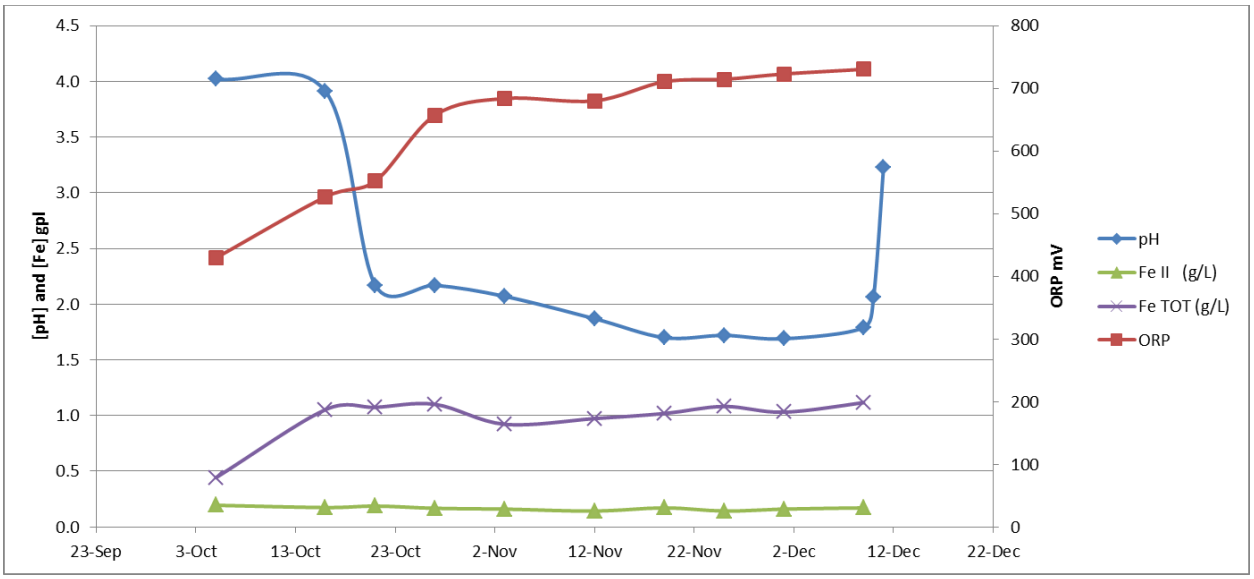
Analysis	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Hg, ppb	0.007	0	0.01	0	0	0	0	0	0	0.001
Ag, ppm	0	0	0.371	0.044	0	0	0	0	0.005	0
Al, ppm	55.114	265.31	73.448	143.54	249.42	194.87	441.1	349.92	99.64	463.51
As, ppm	30.674	12.277	0	0.304	17.945	27.156	10.045	19.681	0.237	8.652
B, ppm	0	0	5.051	5.311	0	0	0	0.797	5.266	0
Ba, ppm	0.067	0.128	0.014	0.013	0.1	0.09	0.087	0.056	0.015	0.056
Be, ppm	0.003	0.003	0.146	0.121	0.005	0.003	0.004	0.005	0.045	0.003
Bi, ppm	0.081	0.277	0.338	0.123	0.427	0.352	0.169	0.235	0.114	0.179
Ca, ppm	157.65	51.65	461.21	514.21	52.079	47.832	255.4	57.769	526.42	16.842
Cd, ppm	0.046	0.241	0.452	0.293	0.363	1.121	1.792	30.206	1.598	0.306
Co, ppm	0.524	1.88	0.498	0.442	2.347	3.207	2.911	7.472	1.428	2.007
Cr, ppm	16.051	11.724	0.078	0.332	9.892	12.522	14.443	17.765	0.124	10.981
Cu, ppm	193.88	35.031	5.56	5.258	119.2	193.6	28.2	76.718	19.125	91.041
Fe, ppm	1404.4	3294.7	1.049	12.365	2124.6	2042.3	2297.1	1466.1	2.996	1582.6
Ga, ppm	0.144	0.491	0	0	0.531	1.702	0.585	5.755	0	0.415
K, ppm	1.269	2.756	71.478	84.771	15.51	2.565	19.496	29.28	32.022	68.081
Li, ppm	0.027	0.03	0.044	0.028	0.038	0.037	0.259	0.11	0.079	0.049
Mg, ppm	28.765	27.943	118.77	90.659	30.719	30.75	38.069	55.092	146.15	44.336
Mn, ppm	13.76	6.065	3458	588.72	9.358	7.986	5.121	7.059	145.29	7.075
Mo, ppm	1.251	1.261	0	0.021	0.133	0.282	0.392	0.014	0.009	0.071
Na, ppm	10.466	16.029	26.114	19.998	20.257	15.478	25.446	30.684	39.962	33.335
Nb, ppm	0	0	0.018	0	0	0	0	0.003	0	0
Ni, ppm	1.422	1.455	0.524	0.496	1.214	1.375	1.782	2.634	0.752	1.321
Pb, ppm	0.039	0.297	0.245	0.134	2.271	0.958	3.263	3.048	0.018	1.682
Sb, ppm	0	0	0	0.039	0	0	0	0	0	0
Sc, ppm	0.012	0.075	0	0.007	0.074	0.06	0.089	0.062	0.006	0.13
Se, ppm	0	0	0.602	0.059	0	0	0.038	0	0.201	0.029
Sn, ppm	0	0	0	0.075	0	0	0	0	0	0
Sr, ppm	0.575	0.281	1.478	4.027	2.303	1.534	1.71	0.05	13.546	2.546
Te, ppm	0.193	0.573	0	0	0.409	0.427	0.404	0	0	0.205
Ti, ppm	0.137	0.04	0.005	0.008	0.034	0.048	0.022	0.025	0.007	0.019
Tl, ppm	0.135	0.201	0	0	0.046	0.206	0.133	1.39	0	0.128
V, ppm	0.111	0.461	0	0	0.732	0.862	0.396	1.802	0	1.089
W, ppm	0	0	0	0	0	0	0	0	0	0
Zn, ppm	6.127	35.058	121.23	141.64	76.389	191.38	249.48	788.51	176.5	102.16

APÉNDICE A
BAPP Data Sheets

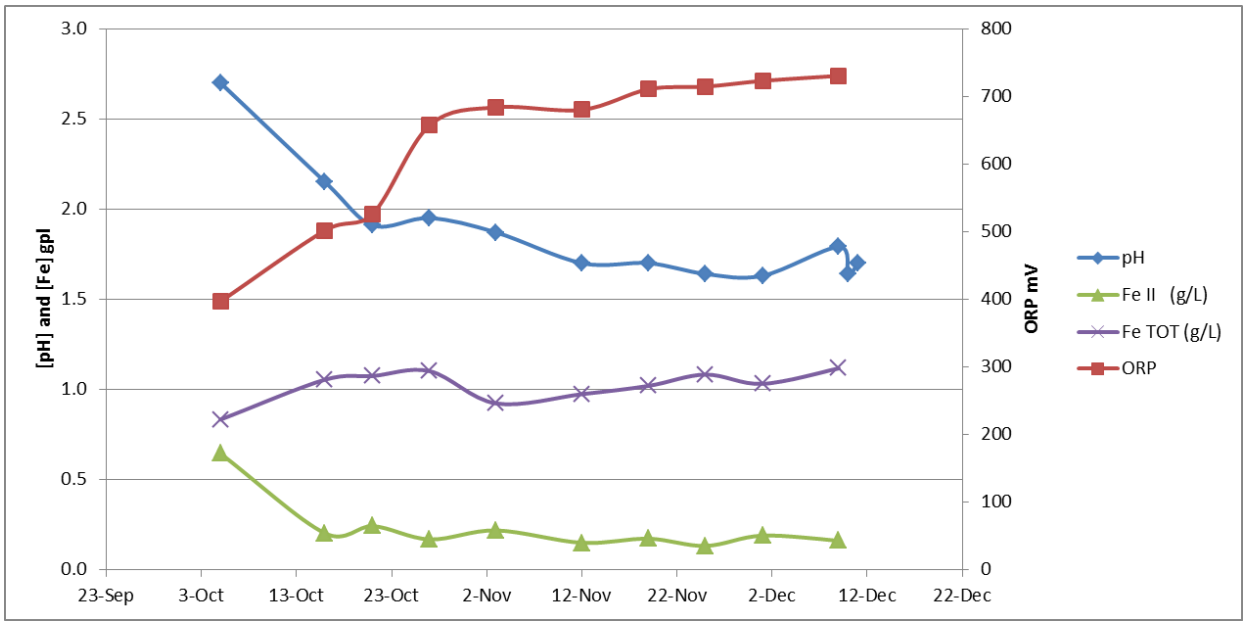
Sample Description		50229			
				Inert/Neutral	
Sample Weight, g		30.03		ÁC CONSUM	0.0
Sample Weight, g		15.01	1st Challenge	NCV	0.024
Sample Weight, g		15.00	2nd Challenge	PAG	2.43
Soln Volume, mls		68.97			
Incoulated with 5mls *		4.93			
Initial Flask Weight		148.21			
Final Flask Weight g		282.15			
Initial pH	2.69	2.69			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.45	348.50	1.09	1.20	
10/16/2015	2.04	640.70	0.19	1.05	
10/21/2015	1.87	664.50	0.17	1.07	
10/27/2015	2.09	657.30	0.17	1.10	
11/3/2015	2.06	683.90	0.15	0.92	
11/12/2015	1.98	680.10	0.15	0.97	
11/19/2015	2.00	710.60	0.09	1.02	
11/25/2015	2.06	714.40	0.21	1.08	
12/1/2015	2.01	722.90	0.15	1.03	
12/9/2015	1.79	730.40	0.21	1.12	
12/10/2015	2.35				Challenge
12/11/2015	3.67				15grams
12/13/2015	3.06				Stopped



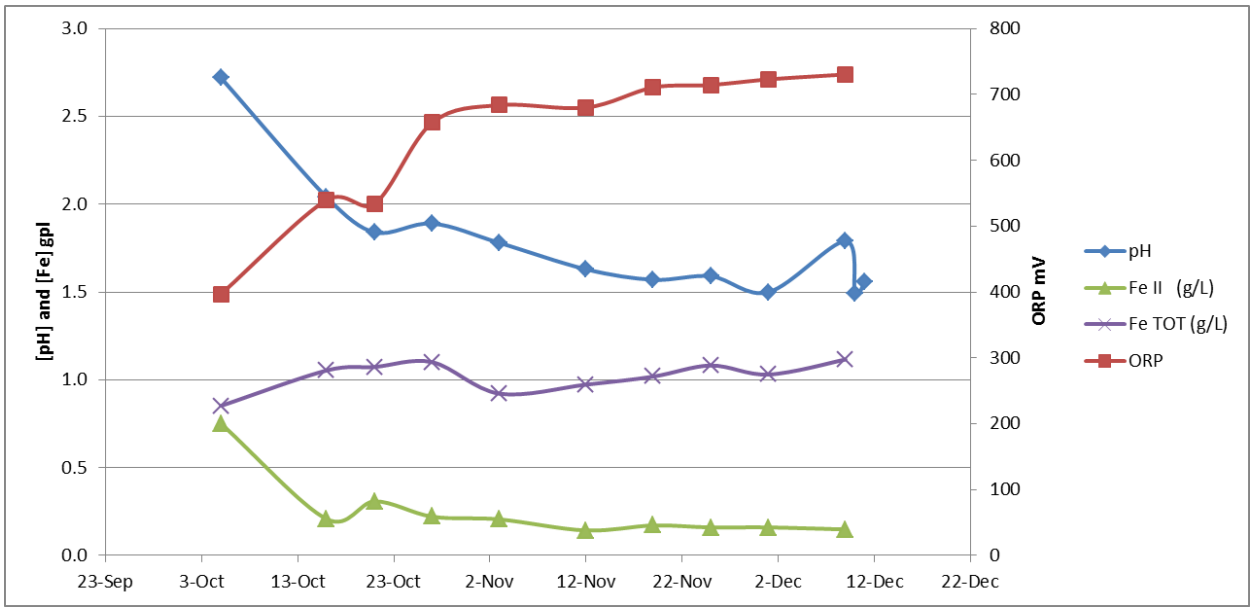
Sample Description		50230			
				Moderately Acidic	
Sample Weight, g		30.04			20.0
Sample Weight, g		15.03	1st Challenge	NCV	-3.234
Sample Weight, g		15.01	2nd Challenge	PAG	2.22
Soln Volume, mls		68.78			
Incoulated with 5mls *		4.94			
Initial Flask Weight		141.91			
Final Flask Weight		275.71			
Initial pH	2.15	2.15			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	4.02	429.50	0.19	0.44	20
10/16/2015	3.91	526.9	0.174512	1.053784	
10/21/2015	2.17	552.1	0.187936	1.07392	
10/27/2015	2.17	657.3	0.1678	1.100768	
11/3/2015	2.07	683.9	0.1603	0.921725	
11/12/2015	1.87	680.1	0.143125	0.97325	
11/19/2015	1.7	710.6	0.17175	1.01905	
11/25/2015	1.72	714.4	0.143125	1.082025	
12/1/2015	1.69	722.9	0.1603	1.0305	
12/9/2015	1.79	730.4	0.17175	1.116375	Challenge
12/10/2015	2.06				15grams
12/11/2015	3.23				Stopped



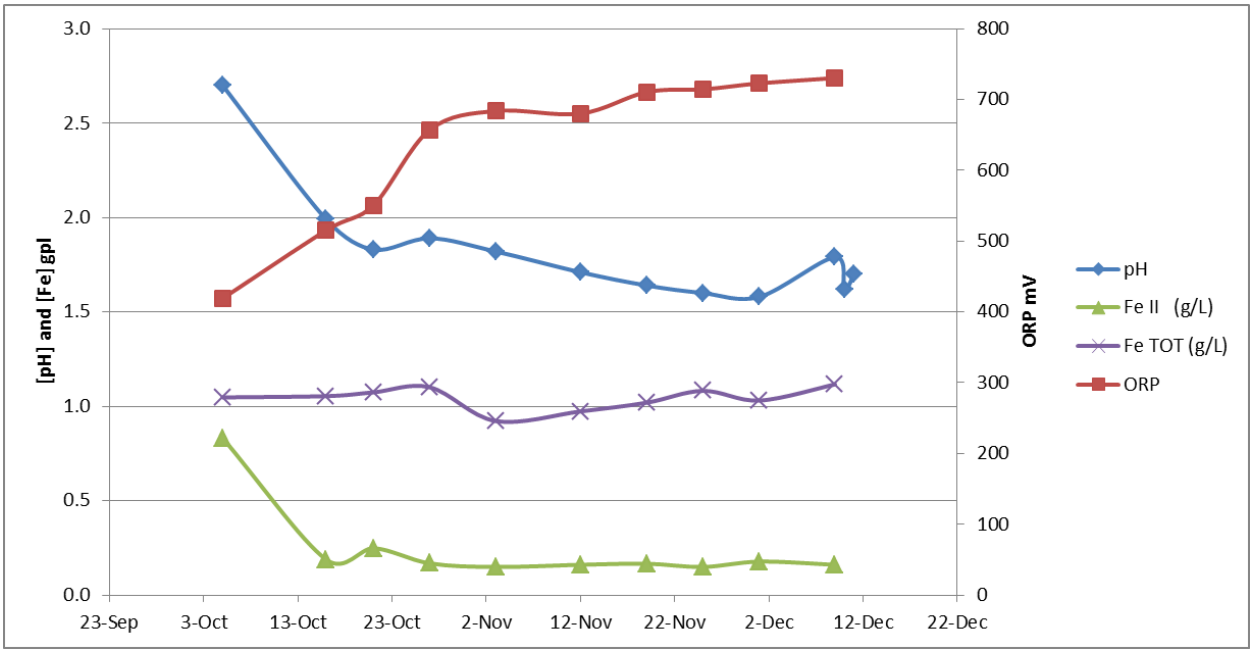
Sample Description		50231			
				Highly Acidic	
Sample Weight, g		30.00			0.0
Sample Weight, g		15.00	1st Challenge	NCV	-5.179
Sample Weight, g		15.00	2nd Challenge	PAG	2.12
Soln Volume, mls		69.71			
Incoculated with 5mls *		4.92			
Initial Flask Weight		136.38			
Final Flask Weight		271.01			
Initial pH	2.33	2.33			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.70	396.50	0.64	0.83	
10/16/2015	2.15	501.7	0.20	1.05	
10/21/2015	1.91	526.1	0.24	1.07	
10/27/2015	1.95	657.3	0.17	1.10	
11/3/2015	1.87	683.9	0.22	0.92	
11/12/2015	1.7	680.1	0.15	0.97	
11/19/2015	1.7	710.6	0.17	1.02	
11/25/2015	1.64	714.4	0.13	1.08	
12/1/2015	1.63	722.9	0.19	1.03	
12/9/2015	1.79	730.4	0.16	1.12	Challenge
12/10/2015	1.64				15grams
12/11/2015	1.7				Stopped



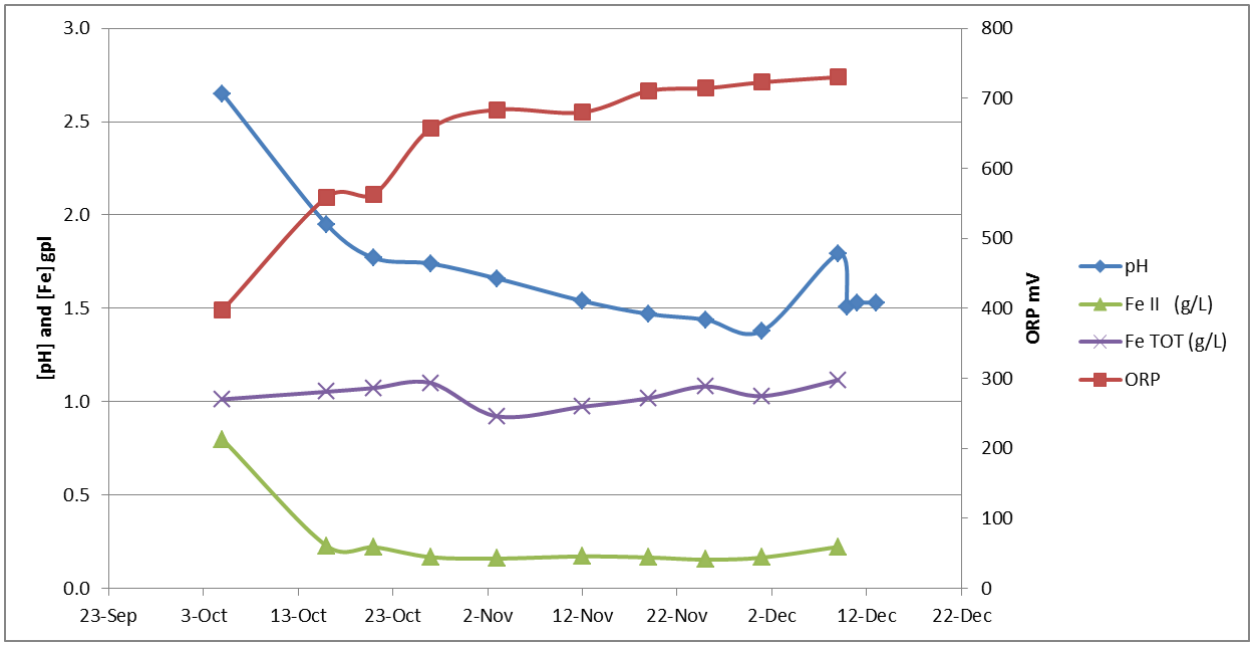
Sample Description		50232			
				Highly Acidic	
Sample Weight, g		30.02			0.0
Sample Weight, g		15.19	1st Challenge	NCV	-9.417
Sample Weight, g		15.00	2nd Challenge	PAG	2.01
Soln Volume, mls		69.46			
Incoulated with 5mls *		4.94			
Initial Flask Weight		140.15			
Final Flask Weight		274.76			
Initial pH	2.81	2.81			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.72	396.90	0.75	0.85	
10/16/2015	2.04	539.7	0.21	1.05	
10/21/2015	1.84	534	0.31	1.07	
10/27/2015	1.89	657.3	0.22	1.10	
11/3/2015	1.78	683.9	0.21	0.92	
11/12/2015	1.63	680.1	0.14	0.97	
11/19/2015	1.57	710.6	0.17	1.02	
11/25/2015	1.59	714.4	0.16	1.08	
12/1/2015	1.5	722.9	0.16	1.03	
12/9/2015	1.79	730.4	0.15	1.12	Challenge
12/10/2015	1.49				15grams
12/11/2015	1.56				Stopped



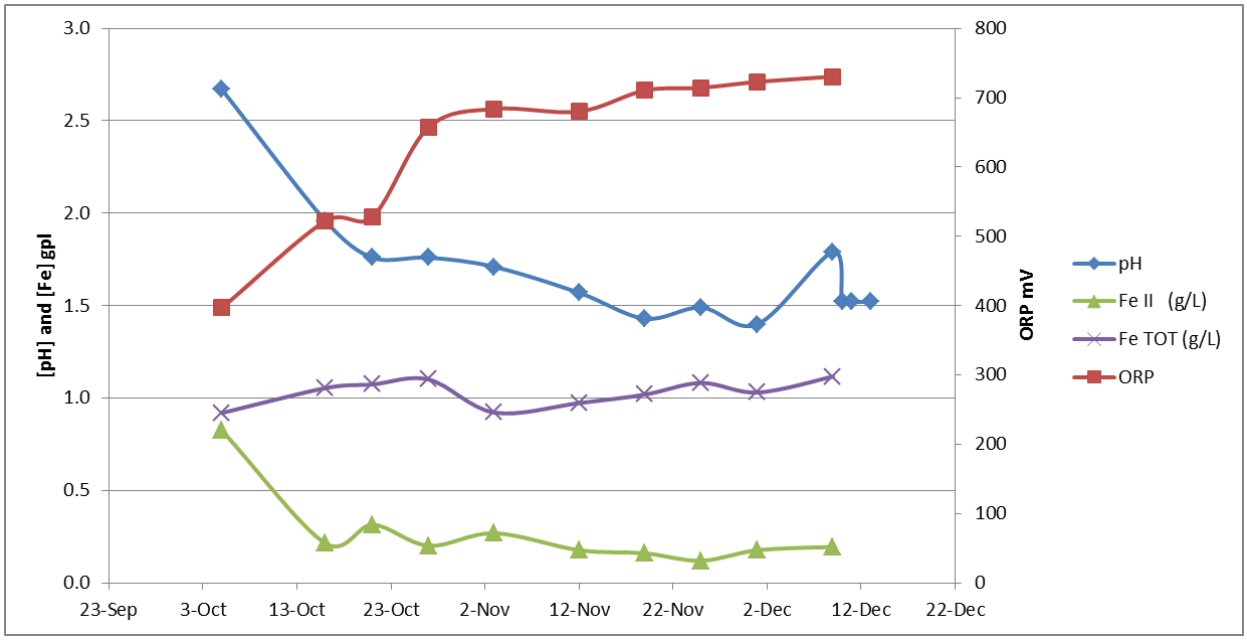
Sample Description		50233			
				Highly Acidic	
Sample Weight, g		30.07			0.0
Sample Weight, g		15.24	1st Challenge	NCV	-5.685
Sample Weight, g		15.02	2nd Challenge	PAG	2.11
Soln Volume, mls		69.28			
Incoculated with 5mls *		4.92			
Initial Flask Weight		138.84			
Final Flask Weight		273.37			
Initial pH	2.47	2.47			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.70	418.90	0.83	1.05	
10/16/2015	1.99	515.3	0.19	1.05	
10/21/2015	1.83	550.4	0.25	1.07	
10/27/2015	1.89	657.3	0.17	1.10	
11/3/2015	1.82	683.9	0.15	0.92	
11/12/2015	1.71	680.1	0.16	0.97	
11/19/2015	1.64	710.6	0.17	1.02	
11/25/2015	1.6	714.4	0.15	1.08	
12/1/2015	1.58	722.9	0.18	1.03	
12/9/2015	1.79	730.4	0.16	1.12	Challenge
12/10/2015	1.62				15grams
12/11/2015	1.7				Stopped



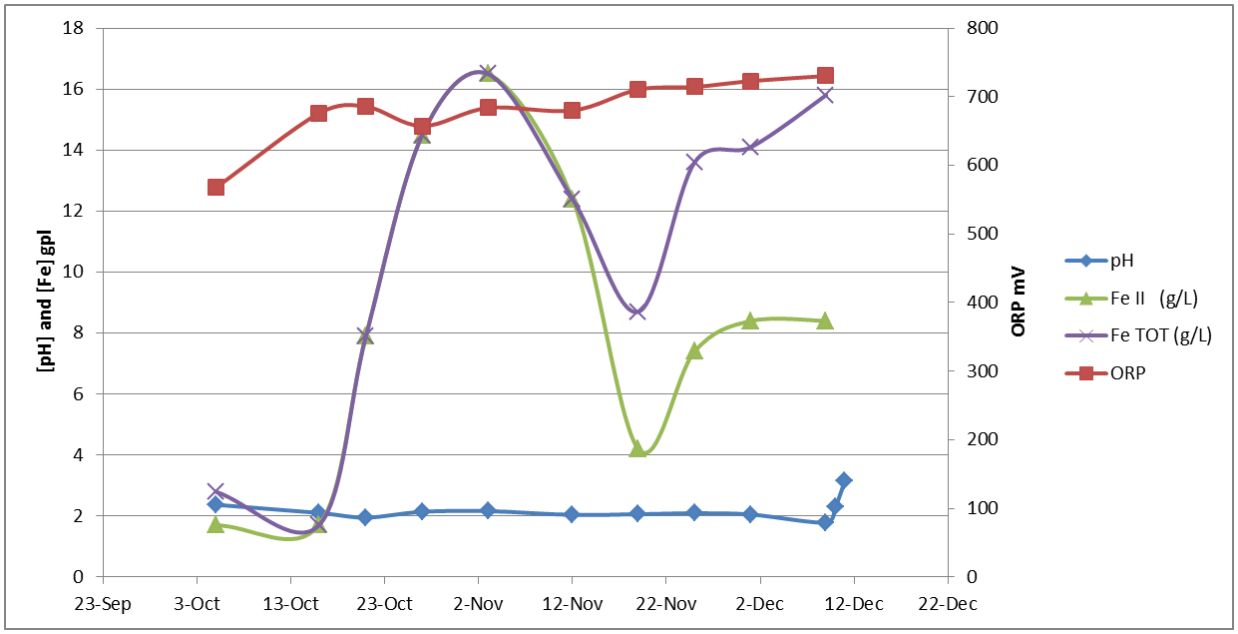
Sample Description		50234			
				Highly Acidic	
Sample Weight, g		30.06			0.0
Sample Weight, g		15.07	1st Challenge	NCV	-9.155
Sample Weight, g		15.01	2nd Challenge	PAG	2.01
Soln Volume, mls		69.27			
Incoculated with 5mls *		4.93			
Initial Flask Weight		126.69			
Final Flask Weight		261.03			
Initial pH	2.50	2.50			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.65	397.50	0.80	1.01	
10/16/2015	1.95	558.9	0.23	1.05	
10/21/2015	1.77	562.9	0.22	1.07	
10/27/2015	1.74	657.3	0.17	1.10	
11/3/2015	1.66	683.9	0.16	0.92	
11/12/2015	1.54	680.1	0.17	0.97	
11/19/2015	1.47	710.6	0.17	1.02	
11/25/2015	1.44	714.4	0.15	1.08	
12/1/2015	1.38	722.9	0.17	1.03	
12/9/2015	1.79	730.4	0.22	1.12	Challenge
12/10/2015	1.51				15grams
12/11/2015	1.53				Stopped



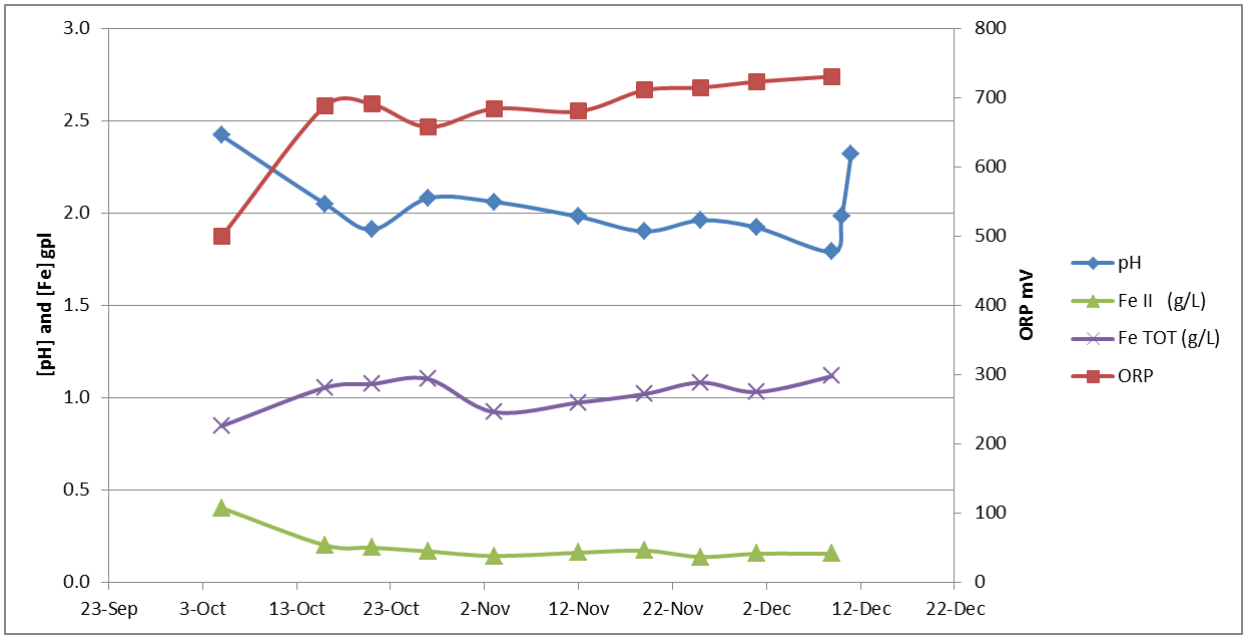
Sample Description		50235			
				Highly Acidic	
Sample Weight, g					0.0
Sample Weight, g			1st Challenge	NCV	-7.019
Sample Weight, g			2nd Challenge	PAG	2.05
Soln Volume, mls					
Incoulated with 5mls *					
Initial Flask Weight					
Final Flask Weight					
Initial pH	2.39				
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.67	396.70	0.83	0.92	
10/16/2015	1.96	521.9	0.21	1.05	
10/21/2015	1.76	527.3	0.32	1.07	
10/27/2015	1.76	657.3	0.20	1.10	
11/3/2015	1.71	683.9	0.27	0.92	
11/12/2015	1.57	680.1	0.18	0.97	
11/19/2015	1.43	710.6	0.16	1.02	
11/25/2015	1.49	714.4	0.12	1.08	
12/1/2015	1.4	722.9	0.18	1.03	
12/9/2015	1.79	730.4	0.19	1.12	Challenge
12/10/2015	1.52				15grams
12/11/2015	1.52				Stopped



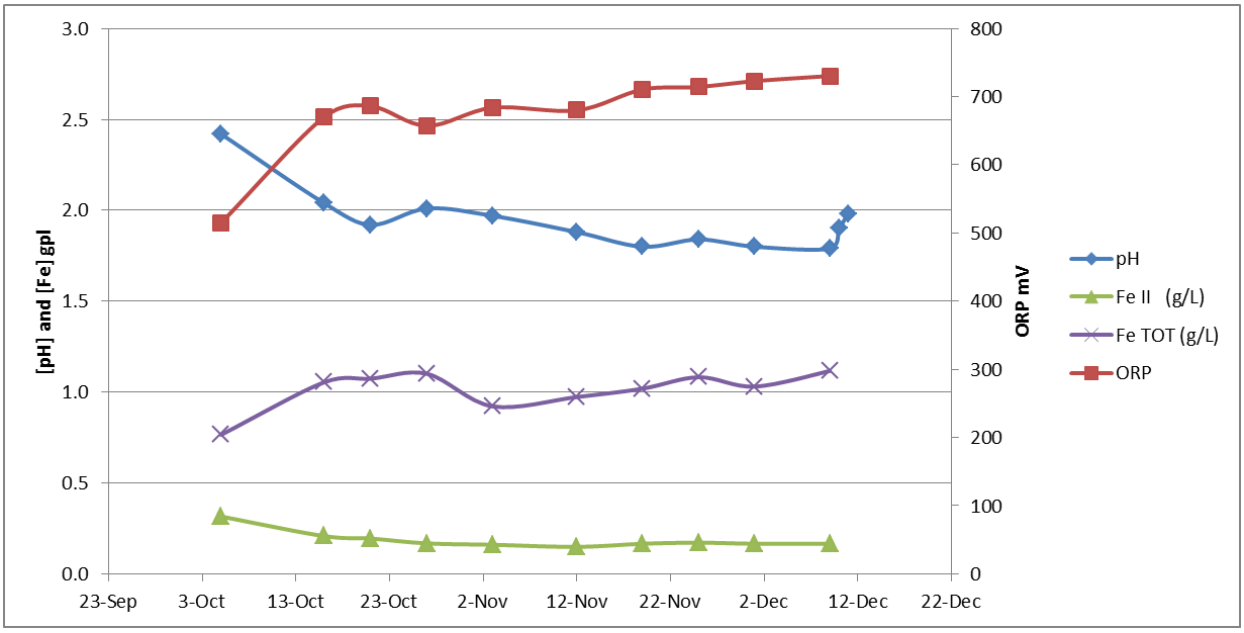
Sample Description		50236			
				Inert/Neutral	
Sample Weight, g		30.03			0.0
Sample Weight, g		15.63	1st Challenge	NCV	0.010
Sample Weight, g		15.01	2nd Challenge	PAG	2.33
Soln Volume, mls		70.15			
Incoulated with 5mls *		4.95			
Initial Flask Weight		124.88			
Final Flask Weight		260.65			
Initial pH	2.56	2.56			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.37	567.40	1.70	2.80	
10/16/2015	2.1	675.9	1.7	1.7	
10/21/2015	1.95	685.8	7.9	7.9	
10/27/2015	2.14	657.3	14.5	14.5	
11/3/2015	2.16	683.9	16.5	16.5	
11/12/2015	2.04	680.1	12.4	12.4	
11/19/2015	2.06	710.6	4.2	8.7	
11/25/2015	2.09	714.4	7.4	13.6	
12/1/2015	2.05	722.9	8.4	14.1	
12/9/2015	1.79	730.4	8.4	15.8	Challenge
12/10/2015	2.3				15grams
12/11/2015	3.15				Stopped



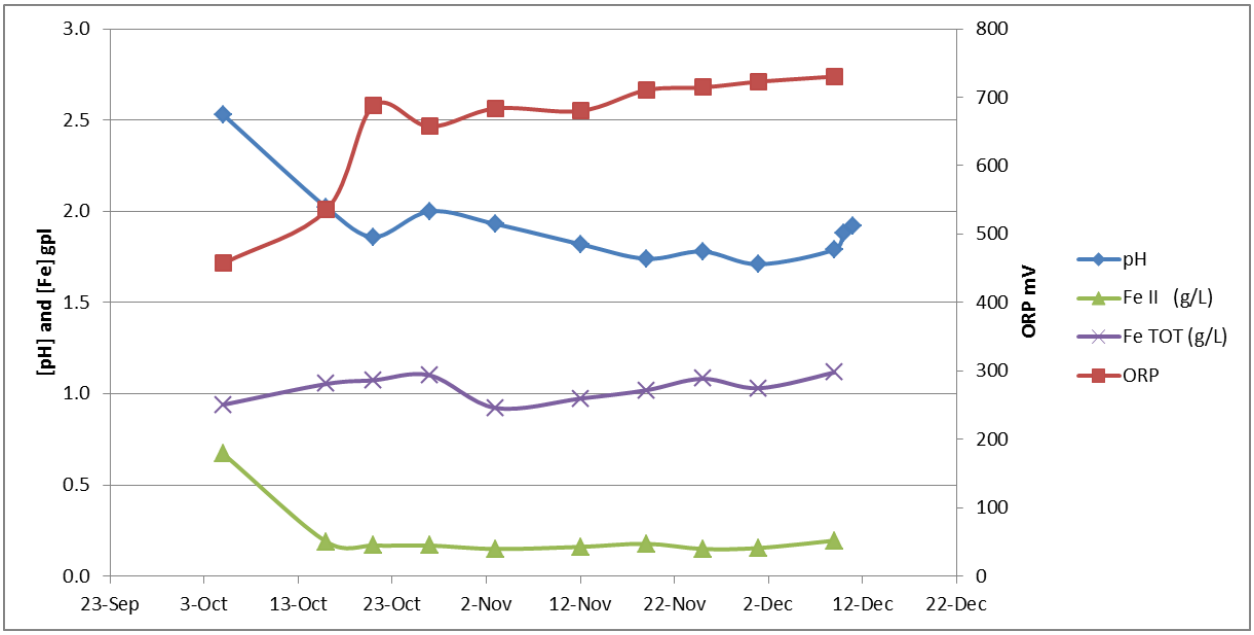
Sample Description		50237			
				Slightly Acidic	
Sample Weight, g		30.07			0.0
Sample Weight, g		15.93	1st Challenge	NCV	-0.136
Sample Weight, g		15.01	2nd Challenge	PAG	2.49
Soln Volume, mls		69.90			
Incoulated with 5mls *		4.91			
Initial Flask Weight		135.85			
Final Flask Weight		271.67			
Initial pH	2.50	2.50			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.42	499.00	0.40	0.85	
10/16/2015	2.05	687.4	0.20	1.05	
10/21/2015	1.91	690.4	0.19	1.07	
10/27/2015	2.08	657.3	0.17	1.10	
11/3/2015	2.06	683.9	0.14	0.92	
11/12/2015	1.98	680.1	0.16	0.97	
11/19/2015	1.9	710.6	0.17	1.02	
11/25/2015	1.96	714.4	0.14	1.08	
12/1/2015	1.92	722.9	0.15	1.03	
12/9/2015	1.79	730.4	0.15	1.12	Challenge
12/10/2015	1.98				15grams
12/11/2015	2.32				Stopped



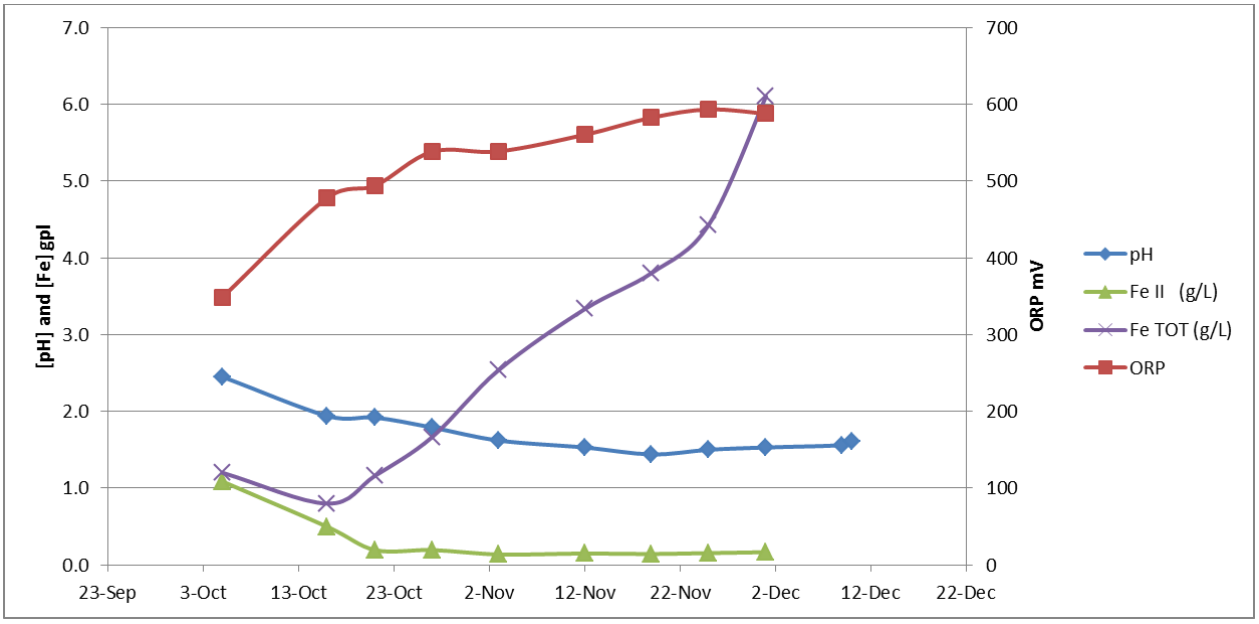
Sample Description		50238			
				Slightly Acidic	
Sample Weight, g		30.05			0.0
Sample Weight, g		15.03	1st Challenge	NCV	-0.469
Sample Weight, g		15.00	2nd Challenge	PAG	2.61
Soln Volume, mls		69.11			
Incoulated with 5mls *		4.93			
Initial Flask Weight		139.85			
Final Flask Weight		273.97			
Initial pH	2.59	2.59			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.42	514.80	0.32	0.77	
10/16/2015	2.04	670.1	0.21	1.05	
10/21/2015	1.92	686.1	0.19	1.07	
10/27/2015	2.01	657.3	0.17	1.10	
11/3/2015	1.97	683.9	0.16	0.92	
11/12/2015	1.88	680.1	0.15	0.97	
11/19/2015	1.8	710.6	0.17	1.02	
11/25/2015	1.84	714.4	0.17	1.08	
12/1/2015	1.8	722.9	0.17	1.03	
12/9/2015	1.79	730.4	0.17	1.12	Challenge
12/10/2015	1.9				15grams
12/11/2015	1.98				Stopped



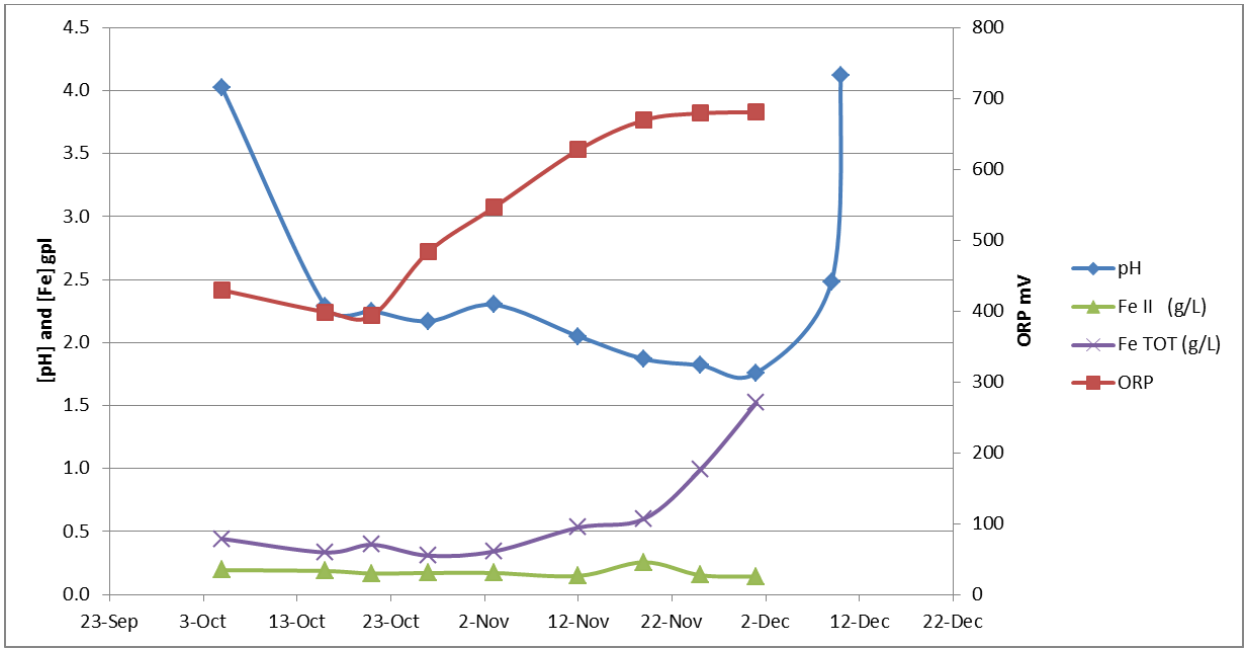
Sample Description		50239			
				Slightly Acidic	
Sample Weight, g		30.05			0.0
Sample Weight, g		15.07	1st Challenge	NCV	-0.871
Sample Weight, g		15.00	2nd Challenge	PAG	2.44
Soln Volume, mls		69.86			
Incoulated with 5mls *		4.92			
Initial Flask Weight		131.05			
Final Flask Weight		265.95			
Initial pH	2.34	2.34			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/5/2015	2.53	457.00	0.67	0.94	
10/16/2015	2.02	535.6	0.19	1.05	
10/21/2015	1.86	687.8	0.17	1.07	
10/27/2015	2	657.3	0.17	1.10	
11/3/2015	1.93	683.9	0.15	0.92	
11/12/2015	1.82	680.1	0.16	0.97	
11/19/2015	1.74	710.6	0.18	1.02	
11/25/2015	1.78	714.4	0.15	1.08	
12/1/2015	1.71	722.9	0.15	1.03	
12/9/2015	1.79	730.4	0.19	1.12	Challenge
12/10/2015	1.88				15grams
12/11/2015	1.92				Stopped



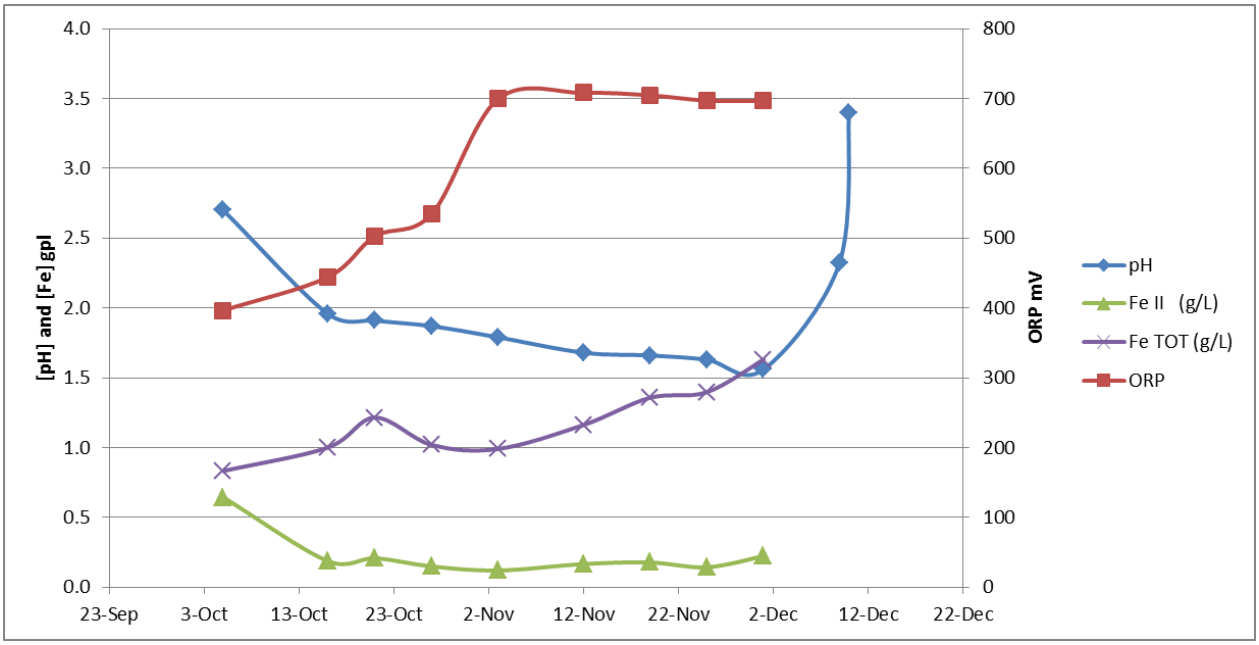
Sample Description		50240			
				Highly Acidic	
Sample Weight, g		30.00			0.0
Sample Weight, g		15.16	1st Challenge	NCV	-6.078
Sample Weight, g		15.03	2nd Challenge	PAG	2.04
Soln Volume, mls		70.81			
Incoulated with 5mls *		4.97			
Initial Flask Weight		143.74			
Final Flask Weight		279.71			
Initial pH	2.14	2.14			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/19/2015	2.45	348.50	1.09	1.20	
10/21/2015	1.94	478	0.496688	0.798728	
10/27/2015	1.92	493.7	0.194648	1.161176	
11/6/2015	1.79	538.2	0.19465	1.665975	
11/12/2015	1.62	538.6	0.1374	2.5419	
11/19/2015	1.53	560.3	0.14885	3.33195	
11/25/2015	1.44	582.5	0.143125	3.8014	
12/1/2015	1.5	593.2	0.154575	4.43115	
12/9/2015	1.53	587.5	0.166025	6.10285	Challenge
12/10/2015	1.56				15grams
12/11/2015	1.61				Stopped



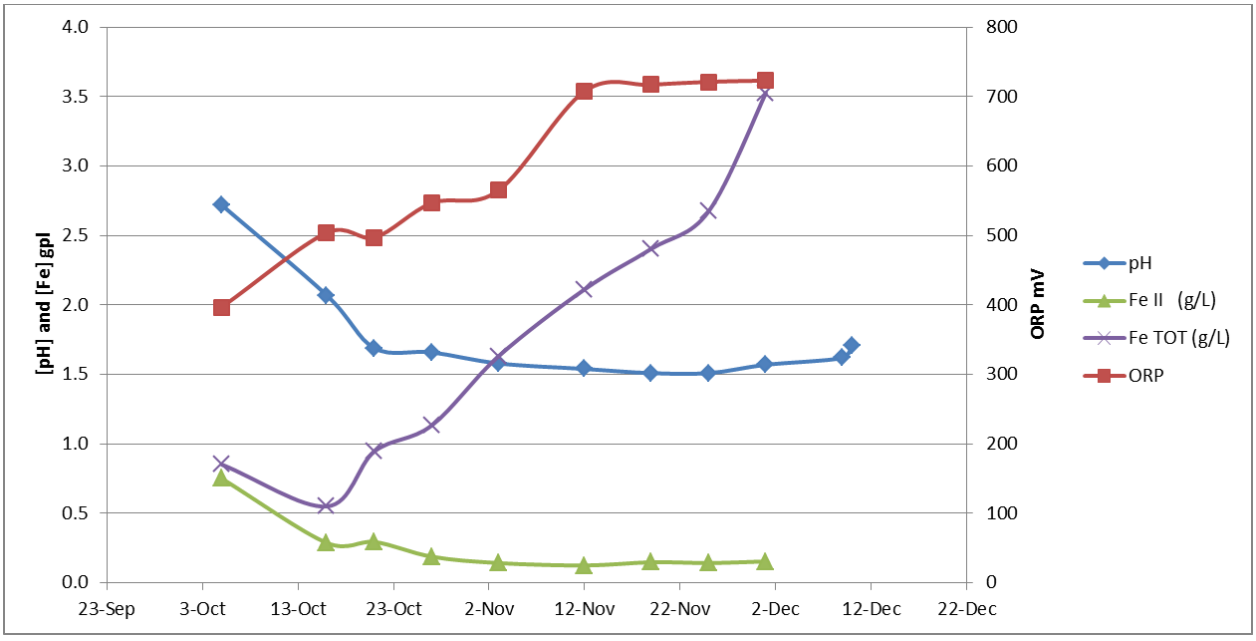
Sample Description		50241			
				Moderately Acidic	
Sample Weight, g		30.0			0.0
Sample Weight, g		15.1	1st Challenge	NCV	-3.102
Sample Weight, g		15.0	2nd Challenge	PAG	2.23
Soln Volume, mls		70.5			
Incoculated with 5mls *		4.99			
Initial Flask Weight		144.15			
Final Flask Weight		279.8			
Initial pH	4.49	4.49			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/19/2015	4.02	429.50	0.19	0.44	
10/21/2015	2.29	398.8	0.19	0.34	
10/27/2015	2.25	393.7	0.17	0.40	
11/6/2015	2.17	483.7	0.17	0.31	
11/12/2015	2.3	546.3	0.17	0.34	
11/19/2015	2.05	627.4	0.15	0.53	
11/25/2015	1.87	669.3	0.26	0.60	
12/1/2015	1.82	678.9	0.15	0.99	
12/9/2015	1.76	680.6	0.14	1.52	Challenge
12/10/2015	2.48				15grams
12/11/2015	4.12				Stopped



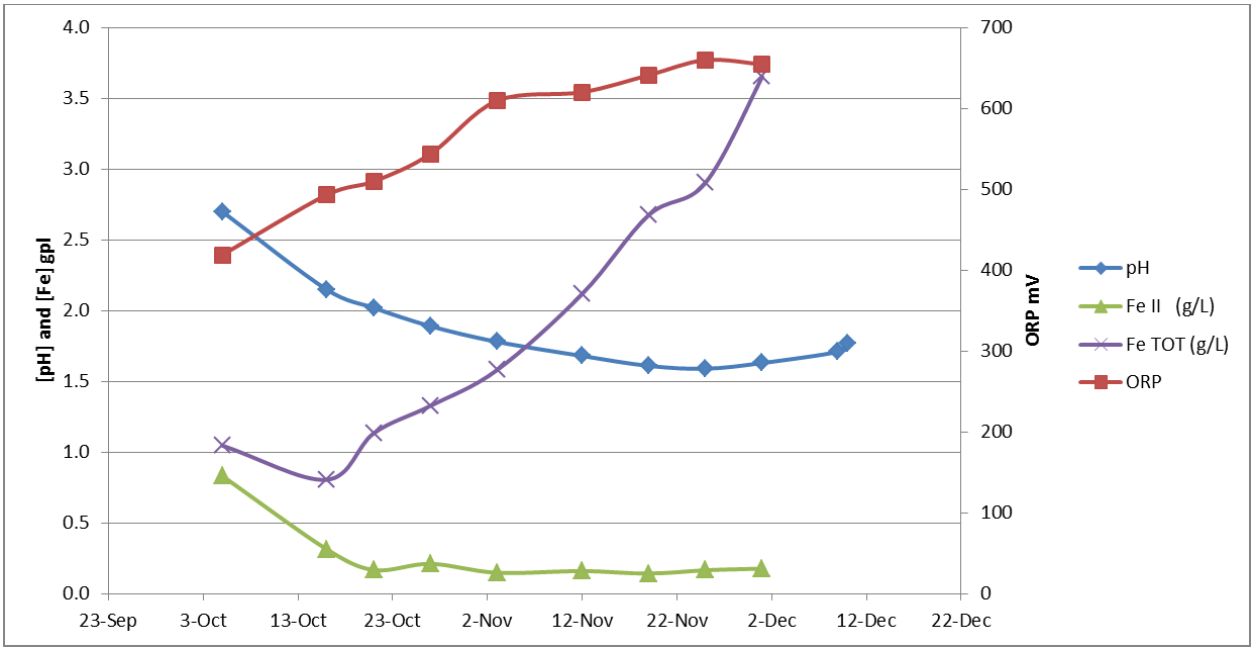
Sample Description		50242			
				Moderately Acidic	
Sample Weight, g		30.04			0.0
Sample Weight, g		15.11	1st Challenge	NCV	-1.604
Sample Weight, g		15.01	2nd Challenge	PAG	2.53
Soln Volume, mls		70.17			
Incoulated with 5mls *		4.96			
Initial Flask Weight		143.37			
Final Flask Weight		278.66			
Initial pH	3.96	3.96			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/19/2015	2.70	396.50	0.64	0.83	
10/21/2015	1.96	444.1	0.19	1.00	
10/27/2015	1.91	502.8	0.21	1.21	
11/6/2015	1.87	534.9	0.15	1.02	
11/12/2015	1.79	699.5	0.12	0.99	
11/19/2015	1.68	708.1	0.17	1.16	
11/25/2015	1.66	704.6	0.18	1.36	
12/1/2015	1.63	697.1	0.14	1.40	
12/9/2015	1.56	696.6	0.22	1.63	
12/10/2015	2.32				
12/11/2015	3.4				Challenge
					Stopped



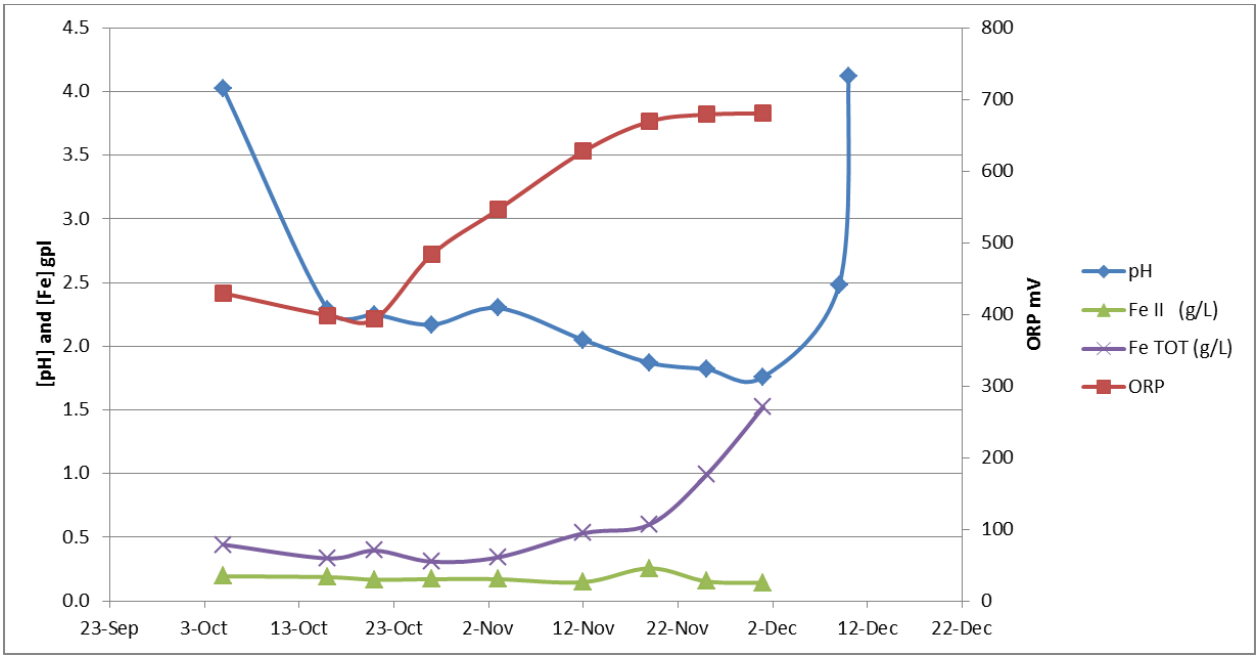
Sample Description		50243			
				Moderately Acidic	
Sample Weight, g		30.05			0.0
Sample Weight, g		15.17	1st Challenge	NCV	-3.568
Sample Weight, g		15.00	2nd Challenge	PAG	2.2
Soln Volume, mls		70.89			
Incoulated with 5mls *		5.00			
Initial Flask Weight		142.84			
Final Flask Weight		278.95			
Initial pH	2.69	2.69			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/19/2015	2.72	396.90	0.75	0.85	
10/21/2015	2.07	504.10	0.29	0.55	
10/27/2015	1.69	497.10	0.30	0.95	
11/6/2015	1.66	546.90	0.19	1.13	
11/12/2015	1.58	565.00	0.14	1.63	
11/19/2015	1.54	707.70	0.13	2.11	
11/25/2015	1.51	717.00	0.15	2.40	
12/1/2015	1.51	721.20	0.14	2.67	
12/9/2015	1.57	723.20	0.15	3.53	Challenge
12/10/2015	1.62				15grams
12/11/2015	1.71				Stopped



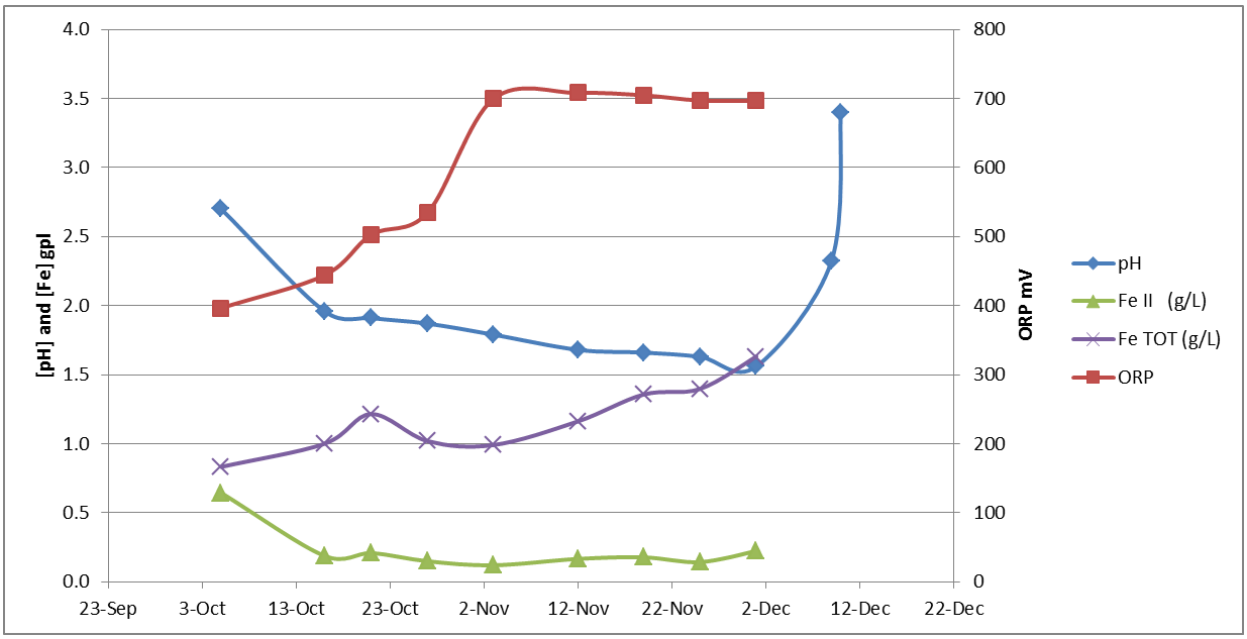
Sample Description		50244			
				Moderately Acidic	
Sample Weight, g		30.10			0.0
Sample Weight, g		15.02	1st Challenge	NCV	-4.719
Sample Weight, g		15.01	2nd Challenge	PAG	2.17
Soln Volume, mls		70.46			
Incoulated with 5mls *		4.98			
Initial Flask Weight		139.93			
Final Flask Weight		275.50			
Initial pH	2.50	2.50			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/19/2015	2.70	418.90	0.83	1.05	
10/21/2015	2.15	492.9	0.32	0.81	
10/27/2015	2.02	509.8	0.17	1.13	
11/6/2015	1.89	543.8	0.21	1.33	
11/12/2015	1.78	609.4	0.15	1.58	
11/19/2015	1.68	620.1	0.16	2.12	
11/25/2015	1.61	641.1	0.14	2.67	
12/1/2015	1.59	659.8	0.17	2.90	
12/9/2015	1.63	654.2	0.18	3.65	Challenge
12/10/2015	1.71				15grams
12/11/2015	1.77				Stopped



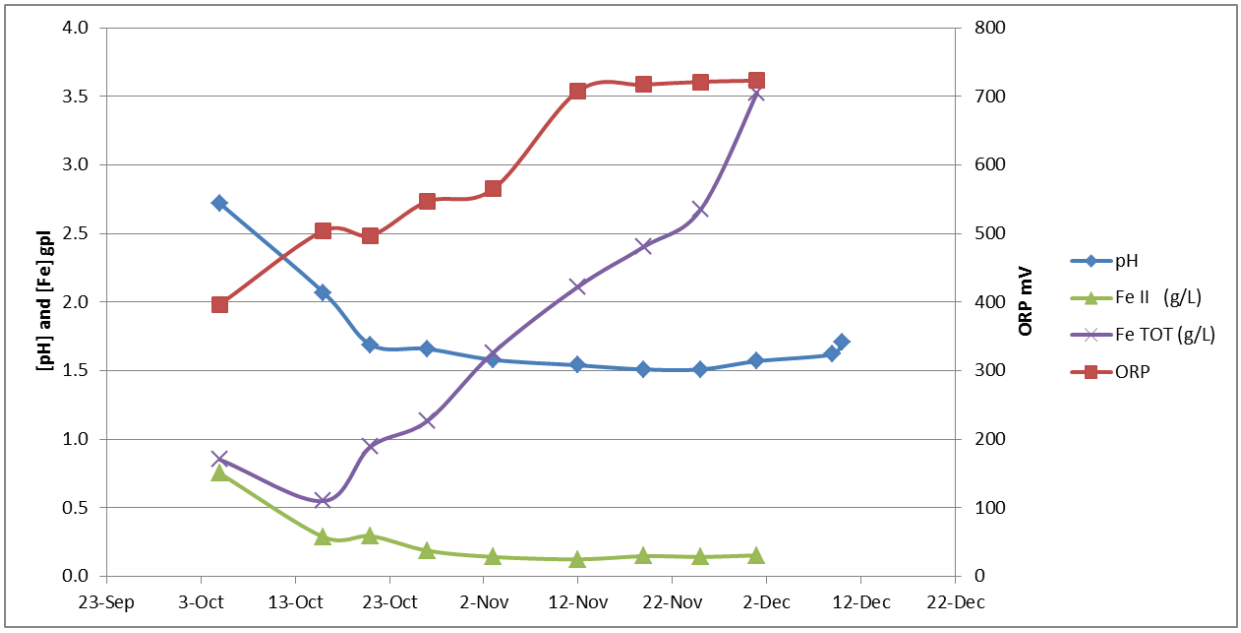
Sample Description		50245			
				Highly Acidic	
Sample Weight, g		30.06			0.0
Sample Weight, g		15.10	1st Challenge	NCV	-7.844
Sample Weight, g		15.02	2nd Challenge	PAG	2.18
Soln Volume, mls		75.44			
Incoculated with 5mls *		4.99			
Initial Flask Weight		147.34			
Final Flask Weight		287.95			
Initial pH	2.72	2.72			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/19/2015	2.65	397.50	0.80	1.01	
10/21/2015	2.09	468.10	0.31	0.51	
10/27/2015	1.98	480.00	0.21	0.75	
11/6/2015	1.81	513.40	0.22	0.89	
11/12/2015	1.65	507.60	0.14	1.20	
11/19/2015	1.57	516.60	0.14	1.62	
11/25/2015	1.49	558.40	0.14	2.20	
12/1/2015	1.45	576.50	0.17	2.36	
12/9/2015	1.40	586.40	0.17	3.45	Challenge
12/10/2015	1.58				15grams
12/11/2015	1.66				Stopped



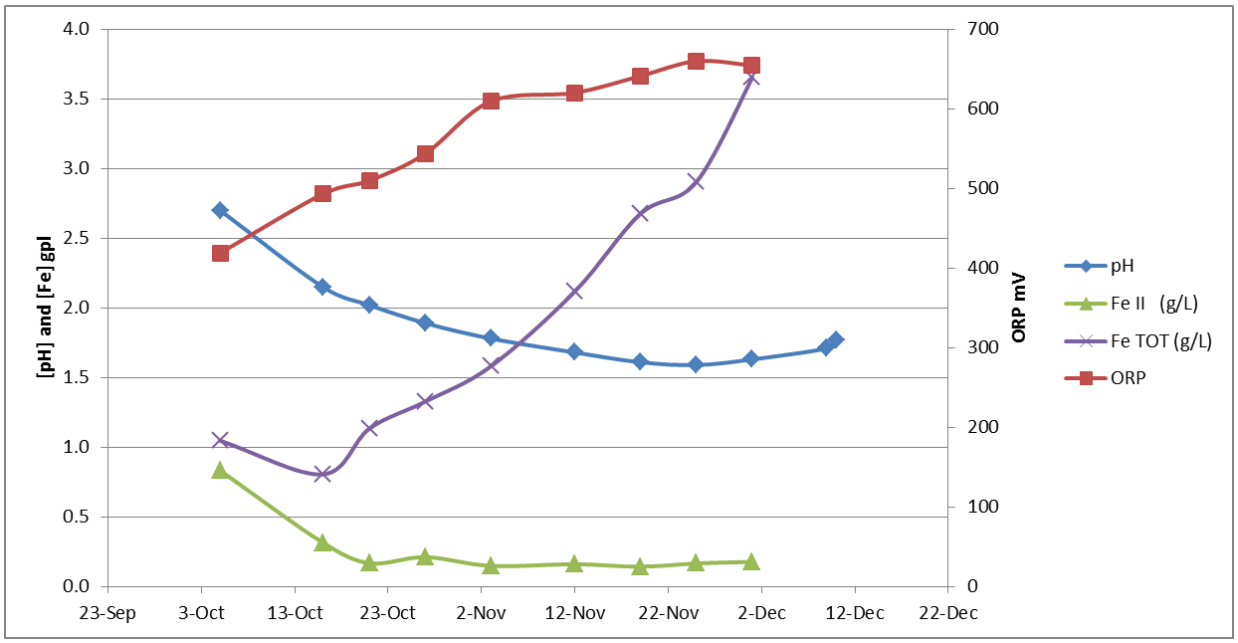
Sample Description		50246			
				Moderately Acidic	
Sample Weight, g		30.00			0.0
Sample Weight, g		15.20	1st Challenge	NCV	-4.860
Sample Weight, g		15.01	2nd Challenge	PAG	2.07
Soln Volume, mls		70.28			
Incoculated with 5mls *		4.95			
Initial Flask Weight		129.38			
Final Flask Weight		264.82			
Initial pH	1.82	1.82			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/19/2015	1.86	458.50	0.58	0.88	
10/21/2015	1.97	462.30	0.68	0.78	
10/27/2015	1.81	516.80	0.22	0.83	
11/6/2015	1.68	521.40	0.22	1.37	
11/12/2015	1.59	524.20	0.25	1.39	
11/19/2015	1.58	529.50	0.19	1.99	Challenge
11/25/2015	1.70				15grams
12/1/2015	1.83				Stopped



Sample Description		50247			
				Moderately Acidic	
Sample Weight, g		30.00			0.0
Sample Weight, g			1st Challenge	**NCV**	**-2.452**
Sample Weight, g			2nd Challenge	**PAG**	**2.17**
Soln Volume, mls		70.46			
Incoulated with 5mls *		4.95			
Initial Flask Weight		131.61			
Final Flask Weight		237.02			
Initial pH	2.12	2.12			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/19/2015	2.12	463.3	0.32	0.48	
10/21/2015	2.18	536.2	0.17	0.37	
10/27/2015	1.93	521.4	0.16	0.65	
11/6/2015	1.82	585.0	0.21	0.96	
11/12/2015	1.74	665.5	0.20	1.09	
11/19/2015	1.70	686.5	0.15	1.31	Challenge
11/25/2015	3.58				Stopped



Sample Description		50248			
				Highly Acidic	
Sample Weight, g		30.02			0.0
Sample Weight, g		15.16	1st Challenge	NCV	-5.107
Sample Weight, g		15.02	2nd Challenge	PAG	2.47
Soln Volume, mls		71.79			
Incoculated with 5mls *		4.91			
Initial Flask Weight		125.81			
Final Flask Weight		262.71			
Initial pH	1.84	1.84			
MONITORING DATA					Added 1N H2SO4 (uL)
DATE	pH	ORP	Fe II (g/L)	Fe TOT (g/L)	
10/19/2015	1.90	467.20	0.45	0.67	
10/21/2015	1.83	405.30	0.62	0.78	
10/27/2015	1.66	535.60	0.20	1.05	
11/6/2015	1.64	538.60	0.22	1.15	
11/12/2015	1.56	550.80	0.21	1.41	
11/19/2015	1.67	563.60	0.15	2.10	Challenge
11/25/2015	1.69				15grams
1/0/1900	1.70				Stopped



APÉNDICE B

Yanacocha Laboratorio Metalúrgico	INSTRUCCIÓN	Código: SMLM-IN-PE035 Página 1 de 7 Versión: 1.0 Fecha de publicación: 31 Octubre 2013
POTENCIAL BIOLÓGICO DE PRODUCCIÓN DE ACIDEZ		

POTENCIAL BIOLÓGICO DE PRODUCCIÓN DE ÁCIDO (BAPP)

Detalle	Elaborado :	Revisado:	Control:	Aprobado:
Nombre y Apellido	Fabio Loyola M.	Gustavo Escobar C.	Luis Saenz C.	Isabel Morales V.
Fecha	09 Octubre 2013	14 Octubre 2013	31 Octubre 2013	31 Octubre 2013

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1. OBJETIVOS

1.1. Dar a conocer los pasos que se deben seguir para determinar el Potencial Biológico de Producción de Ácido (BAPP) cumpliendo con los estándares de MYSRL para el cuidado del medio ambiente, seguridad y salud de sus empleados.

1.2. Dar a conocer los riesgos asociados a esta instrucción y las precauciones de seguridad a tomar.

2. ALCANCE

Debe ser aplicado por todo el personal de Laboratorio Metalúrgico.

3. DEFINICIONES

3.1. BAPP

Por sus siglas en inglés: Bilogical Acid Production Potential. Es una prueba basada en la oxidación de minerales sulfurados por la acción de la bacteria Acidithiobacillus ferrooxidans. El objetivo de la prueba es determinar si las bacterias pueden generar suficiente ácido sulfúrico a partir de la oxidación de los sulfuros superando la capacidad de neutralización de la muestra y manteniendo condiciones ácidas.

4. RESPONSABILIDADES

4.1. DE TODO EL PERSONAL

- Aplicar las directivas descritas en esta instrucción.

4.2. DEL SUPERVISOR

- Asegurar que el personal conozca y ejecute este instructivo, firmando la hoja de trabajo específico SMLM-FO-PG001.

5. SEGURIDAD E HIGIENE INDUSTRIAL

El desarrollo de esta tarea se rige por el Manual Interno de Prevención de Pérdidas Nº PP-P 18.01, 31.01.

5.1. EQUIPO DE PROTECCIÓN PERSONAL (EPP)

- Mandil anti ácido.
- Anteojos de seguridad.
- Zapatos de seguridad.
- Guantes de nitrilo.
- Mascara con filtros para polvo.

5.2. PRECAUCIONES DE SEGURIDAD ANTES, DURANTE Y DESPUÉS DE LA PRUEBA

- Mantener orden y limpieza.
- Leer las hojas MSDS de los reactivos a usar.
- Tener la hoja de trabajo específico firmada.
- Conocer la ubicación de la ducha, lava ojos y botiquín en caso de algún accidente.

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- Si el equipo se encuentra con Lock Out y Tag Out, no manipularlo.
- No introducir las manos ni objetos cuando está funcionando el equipo.
- No intentar arreglar problemas mecánicos ni eléctricos.
- Consultar al supervisor ante cualquier duda.

6. EQUIPOS, HERRAMIENTAS, MATERIALES Y REACTIVOS

6.1. EQUIPOS

- Incubador giratorio (elíptico).
- Equipo para pH y Eh
- Balanza analítica.

6.2. HERRAMIENTAS

- Espátula de plástico o de metal.
- Pizeta.

6.3. MATERIALES

- Matraz de 250mL.
- Micropipetas
- Punta de pipetas

6.4. REACTIVOS

- Ácido Sulfúrico al 98%
- Inóculo de bacterias.
- Reactivos para la titulación de Fe+2 y Fe total.
- Solución de MKM

7. DESCRIPCION

7.1. RECEPCIONAR LA MUESTRA

- El personal recibe la muestra de acuerdo al protocolo de recepción de muestras del laboratorio metalúrgico.
- Se procede a registrar en el sistema LIMS la muestra, de manera que la muestra recibida tenga un código del laboratorio (Código metalúrgico).

7.2. PREPARAR LA MUESTRA SÓLIDA

- De ser necesario la muestra es secada a 50°C.
- La muestra es reducida de tamaño hasta P80 -10M.
- Se realiza un homogenizado y cuarteo para obtener dos cargas de 500 g y lo demás guardar como sobrante.
- Una de las muestras de 500 g es pulverizada a P80 -100M (150 micras).

7.3. INOCULACIÓN

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- Pesar una porción de 30 g de mineral y colocarlo en un matraz de 250 mL con 70 mL de MKM.
- Ajustar el pH de la pulpa con ácido sulfúrico (1 a 10N) hasta llevarlo a un pH de 2.5.
- Dejar el matraz en el incubador giratorio por 24 horas para la estabilización de pH. Si es necesario agregar más ácido para mantener el pH entre 2.5 y 2.8.
- Una vez que ya ha sido ajustado el pH en la solución agregar 5 mL de cultura activa de Acidithiobacillus ferrooxidans.
- El peso del matraz así como los datos iniciales de pH, ORP y Fe total son registrados en una hoja de cálculo. El peso es importante para más adelante compensar las pérdidas de volumen por evaporación.
- El matraz es colocado en el incubador programado a una temperatura de 35 °C y 100 RPM.

7.4. MONITOREOS SEMANALES

- La solución del matraz es monitoreada dos veces por semana hasta que la actividad bacteriana termine.
- La solución es monitoreada por volumen, pH, ORP, Fe2+ y Fe total.
- El agua evaporada es compensada con agua ultra pura y de ser necesario el pH es regulado con ácido sulfúrico 0.10N. Registrar los consumos.

7.5. DESAFIOS

- Cuando la actividad bacteriana termine, 15 g de la muestra pulverizada es agregada al matraz y se continua incubando por 24 horas.
- Si el pH excede a 3.5 la prueba termina.
- Si el pH es menor o igual a 3.5 g otros 15 g de muestra pulverizada es agregada al matraz y se continúa incubando por 24 horas más.
- Después de las 24 horas si el pH es menor que 3.5 o mayor 4 se termina la prueba.
- Si el pH se encuentra entre 3.5 y 4 se continúa incubando por 48 horas adicionales. Se registra el pH final.

7.6. FILTRADO Y ANÁLISIS

- Cuando la prueba termine la pulpa es filtrada en un papel filtro de 0.45 µm.
- La solución filtrada es enviada a analizar al laboratorio analítico por ICP y Hg.
- De ser necesario se puede preservar la solución con dos gotas de ácido nítrico.

7.7. REPORTE DE RESULTADOS

- Obtenido los resultados de ICP y Hg, son adicionados a la hoja de cálculo.
- Los resultados de BAPP son corroborados en la medida de lo posible con resultados de NCV (determinados por análisis LECO) y pruebas NAG.
- La hoja de cálculo completa es enviada al supervisor para su análisis y posterior reporte.

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8. CONTROLES AMBIENTALES

- Al lavar todos los materiales usados durante la prueba hacerlo en el lavatorio para soluciones ácidas.
- Si se produjera un vertido accidental de solución, limpiar la zona afectada de acuerdo a lo indicado en la instrucción SMLM-IN-LX005"Limpieza de residuos químicos".
- Si se produjera un vertido accidental de pulpa, limpiar la zona afectada con trapos industriales y desechar los trapos en el cilindro de color rojo.
- Disponer materiales impregnados con productos químicos (Trapos industriales, papel toalla, etc.) en el contenedor de color rojo, tal lo indicado en el procedimiento ambiental MA-PA-039 "Etiquetado y señalización de contenedores de residuos".
- En caso de producirse una emergencia llamar al Centro de Control de Seguridad (Anexo 22222).

9. FORMATOS / REGISTROS

No aplica

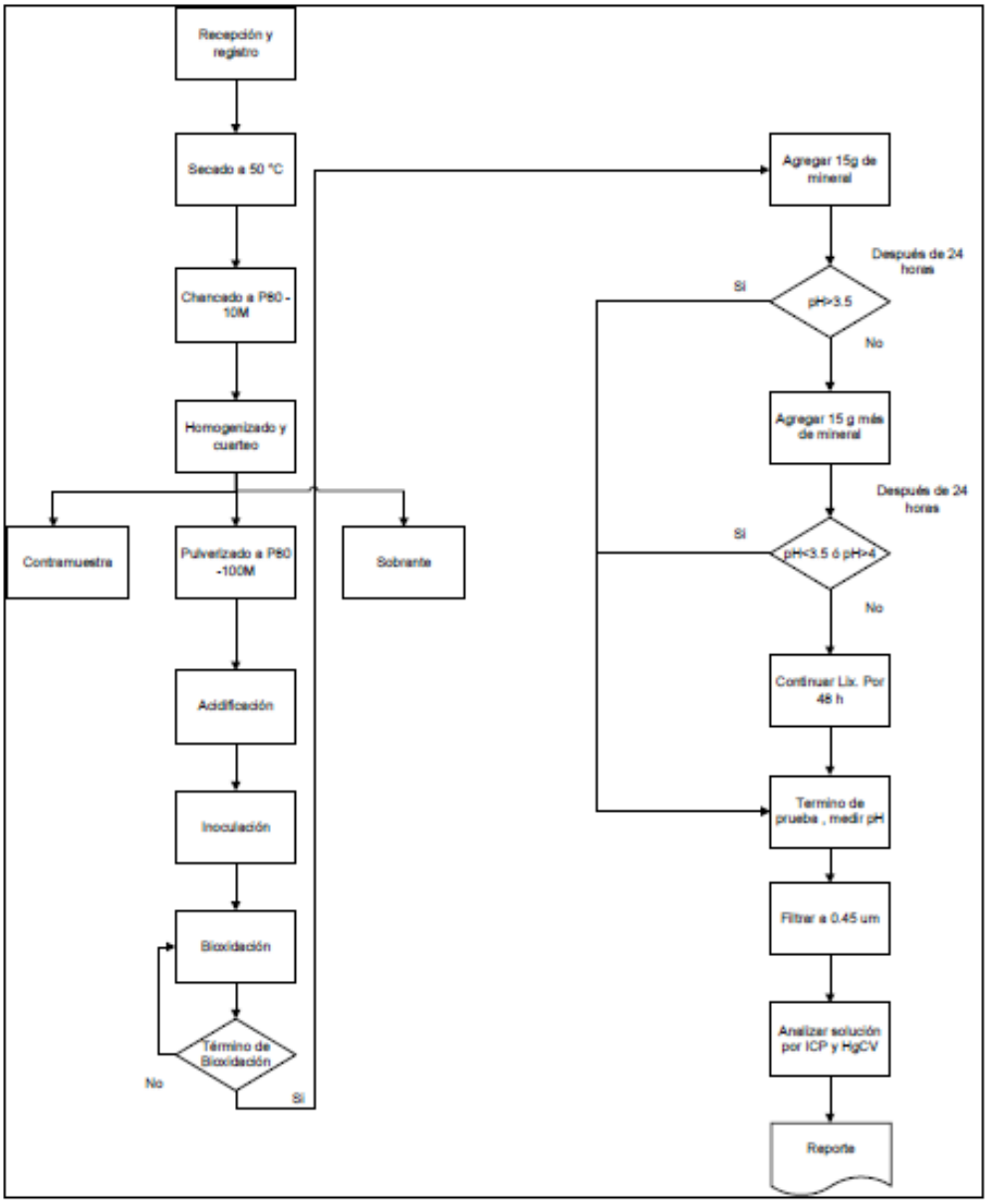
10. DOCUMENTOS ASOCIADOS Y/O DE REFERENCIA

- Manual Interno de Prevención de Pérdidas Nº PP-P 18.01, 31.01.
- Procedimiento ambiental MA-PA-039 "Etiquetado y señalización de contenedores de residuos".
- Instrucción SMLM-IN-LX005"Limpieza de residuos químicos".
- Instrucción SMLM-IN-PM002"Secado de muestras".
- Hoja de Trabajo específico SMLM-FO-PG001.
- MSDS de los reactivos a manipular.

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11. ANEXOS

Anexo 1: Diagrama de flujo de la prueba de Potencial Producción de Ácido Biológico



DETERMINACIÓN DE LA GENERACIÓN ÁCIDA POR PERÓXIDO (PAG)

Detalle	Elaborado:	Revisado:	Control:	Aprobado:
Nombre y Apellido	Eder Gomez R.	Fabio Loyola M.	Luis Saenz C.	Isabel Morales V.
Fecha	20 Noviembre 2014	23 Noviembre 2014	25 Noviembre 2014	24 Noviembre 2014

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Determinación de la Generación Ácida por Peróxido (PAG)

1. OBJETIVOS

1.1 Dar a conocer los pasos que se deben seguir para realizar la prueba de determinación de Generación Ácida por Peróxido (PAG) de MYSRL para el cuidado del medio ambiente, seguridad y salud de sus empleados.

1.2 Dar a conocer los riesgos asociados a esta instrucción y las precauciones de seguridad a tomar.

2. ALCANCE

Debe ser aplicado por todo el personal involucrado en el área de Pruebas y Análisis Especiales del Laboratorio Metalúrgico.

3. DEFINICIONES

3.1 PAG

Representa la capacidad total de la muestra para generar o no acidez en condiciones oxidantes, generalmente se utiliza para corroborar la prueba BAPP detectando falsos positivos

4. RESPONSABILIDADES

4.1 DE TODO EL PERSONAL

- Aplicar las directivas descritas en esta instrucción.

4.2 DEL SUPERVISOR

- Asegurar que el personal conozca y ejecute este instructivo.

5. SEGURIDAD E HIGIENE INDUSTRIAL

Para el desarrollo de esta tarea nos regimos al Manual Interno de Prevención de Pérdidas Nº PP-P 18.01, 30.03, 31.01.

5.1 Equipo de protección personal

- Mameluco o mandil, chequear que no esté deteriorado o tenga algún defecto que impida cumplir su función.
- Anteojos de seguridad, chequear que estén limpios y sin ralladuras.
- Zapatos de seguridad, verificar que estén en buen estado, sin cortes ni hoyos, de lo contrario pedir su cambio.
- Guantes de quirúrgicos, nitrilo, domésticos o neopreno, revisar que estén en buen estado y sean de la talla correcta.

5.2 Precauciones de seguridad antes, durante y después de la prueba

- Mantener orden y limpieza.
- Conocer el uso y la ubicación de ducha, lavaojos, botiquín y kit de cianuro en caso de algún accidente.
- Verificar el perfecto funcionamiento de la campana extractora de gases.
- Verificar fecha de caducidad de reactivos.

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- Verificar que todos los reactivos tengan sus hojas MSDS y etiqueta HMIS III.
- Consultar al supervisor ante cualquier duda.

6. CONTROLES AMBIENTALES

- Al retirar los reactivos a usar del almacén de productos químicos hacia el área de trabajo, hacerlo de acuerdo a la instrucción SMLM-IN-PG002"Control y almacenamiento de reactivos químicos".
- Al lavar todos los materiales usados durante la prueba (Vasos, probetas, etc.) hacerlo en el respectivo lavatorio (ácido o cianurado).
- Si se produjera un vertido accidental de algún producto químico, limpiar el área de trabajo de acuerdo a lo indicado en la instrucción SMLM-IN-LX005"Limpieza de residuos químicos".
- Disponer materiales impregnados con productos químicos (Trapos industriales, papel toalla, etc.) en el contenedor de color rojo, tal lo indicado en el procedimiento ambiental MA-PA-039 "Etiquetado y señalización de contenedores de residuos".
- En caso de producirse una emergencia que no pueda ser controlada por el Laboratorio Metalúrgico llamar al Centro de Control de Seguridad Anexo: 22222, RPC: 976222222 y Canal 1.

7. REACTIVOS

- Peróxido de hidrógeno (H_2O_2), 30%.
- El ácido nítrico (HNO3), de alta pureza.
- pH 2,0 Estandarizado Buffer.
- pH 4,0 Estandarizado Buffer.
- pH 7,0 Estandarizado Buffer.

8. MATERIALES Y EQUIPOS

8.1 Equipos

- Balanza analítica de 120 gr.
- Orbital Shaker.
- Medidor de pH

8.2 Materiales

- Embudo de 500ml
- Probeta de 100ml
- Filtro de celulosa de 0.45µm.
- Papel toalla.
- Hilo de nailon.
- Plumón indeleble.
- Espátula.
- Kitasato de 1800ml.
- Frascos de 50ml.
- Matraz de 50ml.

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Determinación de la Generación Ácida por Peróxido (PAG)

9. DESCRIPCIÓN

9.1 REVISAR Y CONOCER LOS SIGUIENTES ÍTEMS

- Documentos asociados y/o de referencia (Ítem 10).
- Equipo de protección personal (Ítem 5.1.).
- Precauciones de seguridad antes, durante y después de la prueba (Ítem 5.2.).
- Equipos, y materiales a usar (Ítem 8).

9.2 PLANIFICAR LAS PRUEBAS

- Realizarlo en coordinación con el supervisor, esta dependen de los objetivos de las pruebas y necesidades del cliente.
- Definir la cantidad y tipos de mineral a evaluar.
- La dosis y tipos reactivos químicos a usar.

9.3 MUESTREO DE MINERAL

- El muestreo de este mineral generalmente es realizado por personal del área de geología de exploraciones, quienes se regirán a sus estándares de muestreo establecidos..

9.4 RECEPCIONAR Y CODIFICAR MUESTRAS

- Recepcionar las muestras e identificar procedencia, peso, características, fecha de recepción, persona responsable de la muestra, y otros que se considere de importancia.
- Todas estas muestras son recepcionadas y codificadas en el sistema, el código obtenido de cada muestra es único y éste identifica a la muestra hasta el informe final.

9.5 LIMPIAR ÁREA DE TRABAJO Y PREPARAR MATERIALES Y EQUIPOS

- Tener en perfectas condiciones y limpios todos los materiales y reactivos a usar.
- Calibrar el equipo de medición de pH.

9.6 DESARROLLO DE LA PRUEBA

- Pesar 0.25g de muestra en un frasco de 50ml DigiTUBE.
- Añadir 25.0ml de peróxido de hidrogeno (H_2O_2) al 15%.
- Colocar en un agitador orbital (Shaker) a 150rpm dejar agitando toda una noche.
- Colocar en una plancha caliente a 90°C durante 80 minutos.
- Dejar enfriar a temperatura de ambiente y enrasar a los 25 ml utilizando agua des ionizada.
- Medir y registrar el pH.
- Filtrar la muestra utilizando el filtro de celulosa 0.45µm.
- Enviar a analizar la solución filtrada por ICP-34 multielementos.

10. DOCUMENTOS ASOCIADOS Y/O DE REFERENCIA

- Manual Interno de Prevención de Pérdidas Nº PP 18.01, 30.03, 31.01.
- Procedimiento ambiental MA-PA-039 "Etiquetado y señalización de contenedores de residuos".

Este documento no será controlado en formato físico

- Instruoción SMLM-IN-PG002"Control y almacenamiento de los reactivos químicos".
- Instrucción SMLM-IN-LX005"Limpieza de residuos químicos".
- Hoja de Trabajo Específico SMLM-FO-PG001.
- Hojas MSDS de los reactivos a manipular.

Este documento no será controlado en formato físico

Yanacocha | Laboratorio Metalúrgico

APÉNDICE C
Reporte de Análisis del Laboratorio Analítico de MYSRL

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Ag	ppm	0	0.389	0	0	0	0	0	0	0	0	0	0	0.371	0.044	0	0	0	0	0.005	0
Al	ppm	21.304	376.246	323.794	215.638	236.832	252.701	372.365	10.984	20.611	14.894	55.114	265.31	73.448	143.54	249.42	194.87	441.1	349.92	99.64	463.51
As	ppm	0.407	0.137	13.145	12.792	47.43	17.373	40.738	0.453	2.103	16.049	30.674	12.277	0	0.304	17.945	27.156	10.045	19.681	0.237	8.652
B	ppm	4.657	0.275	0	0	0	0	0	3.157	2.943	0.936	0	0	5.051	5.311	0	0	0	0.797	5.266	0
Ba	ppm	0.039	0.015	0.076	0.168	0.131	0.224	0.17	0.029	0.037	0.06	0.067	0.128	0.014	0.013	0.1	0.09	0.087	0.056	0.015	0.056
Be	ppm	0.003	0.31	0.162	0.015	0.003	0.006	0.002	0.001	0.002	0.002	0.003	0.003	0.146	0.121	0.005	0.003	0.004	0.005	0.045	0.003
Bi	ppm	0.084	0.374	0.294	0.143	0.095	0.478	0.174	0.118	0.149	0	0.081	0.277	0.338	0.123	0.427	0.352	0.169	0.235	0.114	0.179
Ca	ppm	39.464	505.581	251.366	81.367	26.813	112.393	63.652	49.211	26.013	66.475	157.65	51.65	461.21	514.21	52.079	47.832	255.4	57.769	526.42	16.842
Cd	ppm	0.026	0.879	0.674	0.275	0.015	0.04	2.926	0.016	0.032	0.047	0.046	0.241	0.452	0.293	0.363	1.121	1.792	30.206	1.598	0.306
Co	ppm	0.375	1.133	1.873	1.002	0.765	1.171	3.021	0.336	0.489	0.6	0.524	1.88	0.498	0.442	2.347	3.207	2.911	7.472	1.428	2.007
Cr	ppm	1.746	11.728	12.226	14.935	20.211	14.845	19.699	11.517	22.296	23.115	16.051	11.724	0.078	0.332	9.892	12.522	14.443	17.765	0.124	10.981
Cu	ppm	28.374	23.255	125.802	46.456	248.045	121.591	169.04	12.664	60.742	123.485	193.88	35.031	5.56	5.258	119.2	193.6	28.2	76.718	19.125	91.041
Fe	ppm	591.33	132.006	2021.28	3820.12	3205.12	4385.47	3987.25	319.82	490.4	1071.48	1404.4	3294.7	1.049	12.365	2124.6	2042.3	2297.1	1466.1	2.996	1582.6
Ga	ppm	0	0	0.197	0.461	0.411	0.556	0.923	0	0.034	0.068	0.144	0.491	0	0	0.531	1.702	0.585	5.755	0	0.415
Hg	ppb	0.043	0.034	0.15	0.037	0	0.065	0	0	0.049	0.035	0.007	0	0.01	0	0	0	0	0	0	0.001
K	ppm	2.069	3.566	62.222	0.804	1.705	1.764	2.272	1.587	1.252	1.347	1.269	2.756	71.478	84.771	15.51	2.565	19.496	29.28	32.022	68.081
Li	ppm	0.027	0.114	0.054	0.091	0.061	0.098	0.053	0.031	0.029	0.025	0.027	0.03	0.044	0.028	0.038	0.037	0.259	0.11	0.079	0.049
Mg	ppm	29.413	122.489	43.816	34.236	29.517	36.456	31.323	27.822	28.254	33.456	28.765	27.943	118.77	90.659	30.719	30.75	38.069	55.092	146.15	44.336
Mn	ppm	29.595	3600.97	33.46	11.352	14.966	12.036	10.64	13.544	24.455	21.123	13.76	6.065	3458	588.72	9.358	7.986	5.121	7.059	145.29	7.075
Mo	ppm	0	0	0.052	0.496	1.216	0.892	0.595	0.019	0.075	2.956	1.251	1.261	0	0.021	0.133	0.282	0.392	0.014	0.009	0.071
Na	ppm	21.156	18.818	23.685	5.603	14.34	13.358	14.576	12.305	8.205	10.631	10.466	16.029	26.114	19.998	20.257	15.478	25.446	30.684	39.962	33.335
Nb	ppm	0.008	0	0	0	0	0	0	0	0	0	0	0	0.018	0	0	0	0	0.003	0	0

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Ni	ppm	3.002	1.542	1.452	1.416	1.506	1.452	2.314	1.633	1.915	2.21	1.422	1.455	0.524	0.496	1.214	1.375	1.782	2.634	0.752	1.321
Pb	ppm	0.019	0.288	0.687	2.083	0	0.162	3.2	0	0.01	0.024	0.039	0.297	0.245	0.134	2.271	0.958	3.263	3.048	0.018	1.682
Sb	ppm	0	0	0	0	0	0	0	0.016	0.121	0	0	0	0	0.039	0	0	0	0	0	0
Sc	ppm	0	0.046	0.078	0.014	0.013	0.01	0.083	0.001	0.006	0.003	0.012	0.075	0	0.007	0.074	0.06	0.089	0.062	0.006	0.13
Se	ppm	0	0.626	0	0	0	0	0	0	0	0	0	0	0.602	0.059	0	0	0.038	0	0.201	0.029
Sn	ppm	0.062	0	0	0	0	0	0	0.026	0.046	0	0	0	0	0.075	0	0	0	0	0	0
Sr	ppm	0.085	5.732	2.03	1.409	1.399	1.497	1.497	0.139	0.152	0.527	0.575	0.281	1.478	4.027	2.303	1.534	1.71	0.05	13.546	2.546
Te	ppm	0	0	0.978	0.53	0.577	0.996	0.819	0	0	0.22	0.193	0.573	0	0	0.409	0.427	0.404	0	0	0.205
Tl	ppm	0.008	0.004	0.018	0.098	0.071	0.102	0.14	0.009	0.031	0.104	0.137	0.04	0.005	0.008	0.034	0.048	0.022	0.025	0.007	0.019
Tl	ppm	0.063	0	0	0	0	0.092	0.246	0	0	0	0.135	0.201	0	0	0.045	0.206	0.133	1.39	0	0.128
V	ppm	0	0	0.855	0.445	0.226	0.512	0.734	0	0	0	0.111	0.461	0	0	0.732	0.862	0.396	1.802	0	1.089
W	ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	ppm	4.249	232.434	194.435	86.348	7.631	11.304	193.18	3.459	7.037	6.068	6.127	35.058	121.23	141.64	76.389	191.38	249.48	788.51	176.5	102.16

Yanacocha | Laboratorio Metalúrgico

APÉNDICE D

Reporte de Análisis de Monitoreo BAPP del Laboratorio Analítico de MYSRL

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239
Fe II	g/L	1.09	0.19	0.64	0.75	0.83	0.80	0.83	1.70	0.40	0.32	0.67
Fe III	g/L	1.20	0.44	0.83	0.85	1.05	1.01	0.92	2.80	0.85	0.77	0.94
H2SO4 1N	µL	0	20.00	0	0	0	0	0	0	0	0	0
ORP	mV	348.50	429.50	396.50	396.90	418.90	397.50	396.70	567.40	499.00	514.80	457.00
pH		2.45	4.02	2.70	2.72	2.70	2.65	2.67	2.37	2.42	2.42	2.53

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239
Fe II	g/L	0.19	0.17	0.20	0.21	0.19	0.23	0.21	1.70	0.20	0.21	0.19
Fe III	g/L	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.70	1.05	1.05	1.05
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0	0	0
ORP	mV	640.70	526.90	501.70	539.70	515.30	558.90	521.90	675.90	687.40	670.10	535.60
pH		2.04	3.91	2.15	2.04	1.99	1.95	1.96	2.10	2.05	2.04	2.02

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	1.09	0.19	0.64	0.75	0.83	0.80	0.58	0.32	0.45
Fe III	g/L	1.20	0.44	0.83	0.85	1.05	1.01	0.88	0.48	0.67
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0
ORP	mV	348.50	429.50	396.50	396.90	418.90	397.50	458.50	463.30	467.20
pH		2.45	4.02	2.70	2.72	2.70	2.65	1.86	2.12	1.90

Yanacocha

Fecha de Reporte:
21/10/2015

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	0.17	0.19	0.24	0.31	0.25	0.22	0.32	7.90	0.19	0.19	0.17	0.50	0.19	0.19	0.29	0.32	0.31	0.68	0.17	0.62
Fe III	g/L	1.07	1.07	1.07	1.07	1.07	1.07	1.07	7.90	1.07	1.07	1.07	0.80	0.34	1.00	0.55	0.81	0.51	0.78	0.37	0.78
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORP	mV	664.50	552.10	526.10	534.00	550.40	562.90	527.30	685.80	690.40	686.10	687.80	478.00	398.80	444.10	504.10	492.90	468.10	462.30	536.20	405.30
pH		1.87	2.17	1.91	1.84	1.83	1.77	1.76	1.95	1.91	1.92	1.86	1.94	2.29	1.96	2.07	2.15	2.09	1.97	2.18	1.83

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	0.17	0.17	0.17	0.22	0.17	0.17	0.20	14.50	0.17	0.17	0.17	0.19	0.17	0.21	0.30	0.17	0.21	0.22	0.16	0.20
Fe III	g/L	1.10	1.10	1.10	1.10	1.10	1.10	1.10	14.50	1.10	1.10	1.10	1.16	0.40	1.21	0.95	1.13	0.75	0.83	0.65	1.05
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORP	mV	657.30	657.30	657.30	657.30	657.30	657.30	657.30	657.30	657.30	657.30	657.30	493.70	393.70	502.80	497.10	509.80	480.00	516.80	521.40	535.60
pH		2.09	2.17	1.95	1.89	1.89	1.74	1.76	2.14	2.08	2.01	2.00	1.92	2.25	1.91	1.69	2.02	1.98	1.81	1.93	1.66

Yanacocha

Fecha de Reporte:
03/11/2015

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	0.15	0.16	0.22	0.21	0.15	0.16	0.27	16.50	0.14	0.16	0.15	0.19	0.17	0.15	0.19	0.21	0.22	0.22	0.21	6.00
Fe III	g/L	0.92	0.92	0.92	0.92	0.92	0.92	0.92	16.50	0.92	0.92	0.92	1.67	0.31	1.02	1.13	1.33	0.89	1.37	0.96	0.22
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORP	mV	683.90	683.90	683.90	683.90	683.90	683.90	683.90	683.90	683.90	683.90	683.90	538.20	483.70	534.90	546.90	543.80	513.40	521.40	585.00	538.00
pH		2.06	2.07	1.87	1.78	1.82	1.66	1.71	2.16	2.06	1.97	1.93	1.79	2.17	1.87	1.66	1.89	1.81	1.68	1.82	1.64

Yanacocha

Fecha de Reporte:
12/11/2015

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	0.15	0.14	0.15	0.14	0.16	0.17	0.18	12.40	0.16	0.15	0.16	0.14	0.17	0.12	0.14	0.15	0.14	0.25	0.20	0.21
Fe III	g/L	0.97	0.97	0.97	0.97	0.97	0.97	0.97	12.40	0.97	0.97	0.97	2.54	0.34	0.99	1.63	1.58	1.20	1.39	1.09	1.41
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0	0.00	0	0	0	0	0	0	0	0	0	0
ORP	mV	680.10	680.10	680.10	680.10	680.10	680.10	680.10	680.10	680.10	680.10	680.10	538.60	546.30	699.50	565.00	609.40	507.60	524.20	665.50	550.80
pH		1.98	1.87	1.70	1.63	1.71	1.54	1.57	2.04	1.98	1.88	1.82	1.62	2.30	1.79	1.58	1.78	1.65	1.59	1.74	1.56

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	0.09	0.17	0.17	0.17	0.17	0.17	0.16	4.20	0.17	0.17	0.18	0.15	0.15	0.17	0.13	0.16	0.14	0.19	0.15	0.15
Fe III	g/L	1.02	1.02	1.02	1.02	1.02	1.02	1.02	8.70	1.02	1.02	1.02	3.33	0.53	1.16	2.11	2.12	1.62	1.99	1.31	2.10
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORP	mV	710.60	710.60	710.60	710.60	710.60	710.60	710.60	710.60	710.60	710.60	710.60	560.30	627.40	708.10	707.70	620.10	516.60	529.50	686.50	563.60
pH		2.00	1.70	1.70	1.57	1.64	1.47	1.43	2.06	1.90	1.80	1.74	1.53	2.05	1.68	1.54	1.68	1.57	1.58	1.70	1.67

Yanacocha

Fecha de Reporte:
25/11/2015

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	0.21	0.14	0.13	0.16	0.15	0.15	0.12	7.40	0.14	0.17	0.15	0.14	0.26	0.18	0.15	0.14	0.14	N/A	N/A	N/A
Fe III	g/L	1.08	1.08	1.08	1.08	1.08	1.08	1.08	13.60	1.08	1.08	1.08	3.80	0.60	1.36	2.40	2.67	2.20	N/A	N/A	N/A
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A
ORP	mV	714.40	714.40	714.40	714.40	714.40	714.40	714.40	714.40	714.40	714.40	714.40	582.50	669.30	704.60	717.00	641.10	558.40	N/A	N/A	N/A
pH		2.06	1.72	1.64	1.59	1.60	1.44	1.49	2.09	1.96	1.84	1.78	1.44	1.87	1.66	1.51	1.61	1.49	1.70	3.58	1.69

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	0.15	0.16	0.19	0.16	0.18	0.17	0.18	8.40	0.15	0.17	0.15	0.15	0.15	0.14	0.14	0.17	0.17	N/A	N/A	N/A
Fe III	g/L	1.03	1.03	1.03	1.03	1.03	1.03	1.03	14.10	1.03	1.03	1.03	4.43	0.99	1.40	2.67	2.90	2.36	N/A	N/A	N/A
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A
ORP	mV	722.90	722.90	722.90	722.90	722.90	722.90	722.90	722.90	722.90	722.90	722.90	593.20	678.90	697.10	721.20	659.80	576.50	N/A	N/A	N/A
pH		2.01	1.69	1.63	1.50	1.58	1.38	1.40	2.05	1.92	1.80	1.71	1.50	1.82	1.63	1.51	1.59	1.45	1.83	N/A	1.70

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	0.21	0.17	0.16	0.15	0.16	0.22	0.19	8.40	0.15	0.17	0.19	0.17	0.14	0.22	0.15	0.18	0.17	N/A	N/A	N/A
Fe III	g/L	1.12	1.12	1.12	1.12	1.12	1.12	1.12	15.80	1.12	1.12	1.12	6.10	1.52	1.63	3.53	3.65	3.45	N/A	N/A	N/A
H2SO4 1N	µL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A
ORP	mV	730.40	730.40	730.40	730.40	730.40	730.40	730.40	730.40	730.40	730.40	730.40	587.50	680.60	696.60	723.20	654.20	586.40	N/A	N/A	N/A
pH		1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.53	1.76	1.56	1.57	1.63	1.40	N/A	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe III	g/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H2SO4 1N	µL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ORP	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		2.35	2.06	1.64	1.49	1.62	1.51	1.52	2.30	1.98	1.90	1.88	1.56	2.48	2.32	1.62	1.71	1.58	N/A	N/A	N/A

Yanacocha

Fecha de Reporte:
11/12/2015

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240	50241	50242	50243	50244	50245	50246	50247	50248
Fe II	g/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe III	g/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H2SO4 1N	µL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ORP	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		3.67	3.23	1.70	1.56	1.70	1.53	1.52	3.15	2.32	1.98	1.92	1.61	4.12	3.40	1.71	1.77	1.66	N/A	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data

Laboratory name:	LABORATORIO QUIMICO MYSRL
Samples submitted at:	LA QUINUA - MYSRL
X-ref. bat ID:	MYSRL

		50229
Fe II	g/L	N/A
Fe III	g/L	N/A
H2SO4 1N	µL	N/A
ORP	mV	N/A
pH		3.06

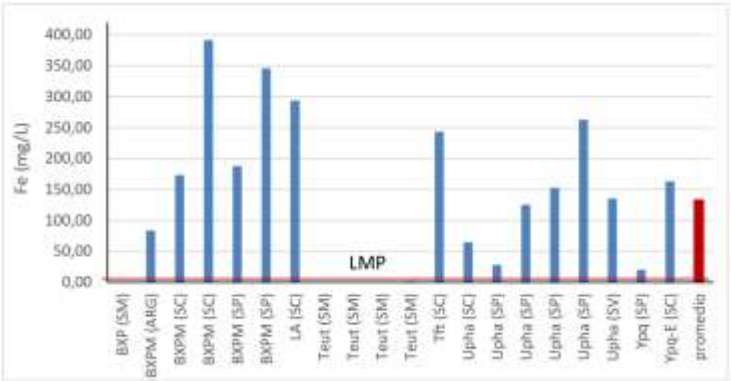
Resultados de prueba NAG

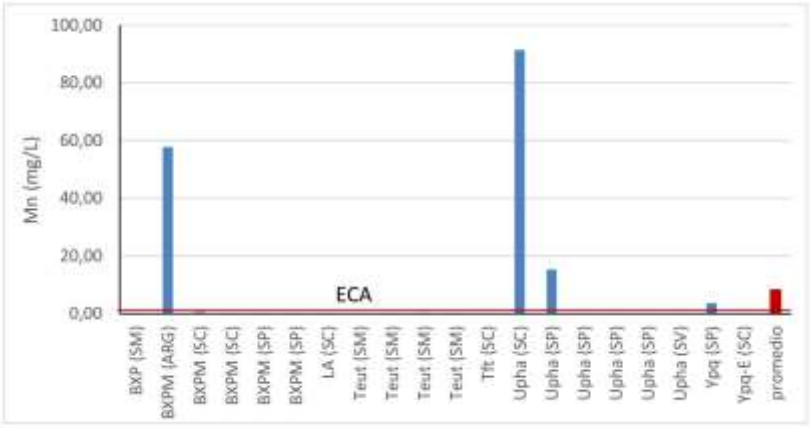
CODIGO LIMS	CODIGO CLIENTE	pH	Hg	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	K
			ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
50229_GE1	Compósito 1	2,43	1,11	0,10	3,27	1,43	7,19	1,35	0,00	0,05	2,99	0,00	0,01	0,10	1,28	0,60	0,00	2,14
50230_GE1	Compósito 2	2,22	0,55	0,10	12,68	0,00	7,60	0,14	0,01	0,05	15,59	0,03	0,06	0,11	3,13	83,76	0,00	10,78
50231_GE1	Compósito 3	2,12	0,17	0,03	9,38	0,12	6,68	0,09	0,01	0,02	6,05	0,01	0,09	0,14	3,99	173,26	0,01	6,90
50232_GE1	Compósito 4	2,01	0,21	0,08	6,49	0,22	5,48	0,04	0,00	0,01	3,73	0,00	0,07	0,25	2,22	391,47	0,01	1,75
50233_GE1	Compósito 5	2,11	0,16	0,07	6,19	0,27	5,99	0,06	0,00	0,04	2,99	0,00	0,04	0,16	3,97	187,78	0,00	1,67
50234_GE1	Compósito 6	2,01	0,13	0,05	6,32	0,21	5,28	0,03	0,00	0,01	4,28	0,00	0,05	0,24	3,76	345,97	0,00	1,97
50235_GE1	Compósito 7	2,05	0,13	0,04	7,23	0,30	6,01	0,03	0,00	0,06	3,62	0,04	0,09	0,25	2,40	293,74	0,01	1,72
50236_GE1	Compósito 8	2,33	1,20	0,14	2,86	0,34	5,69	1,31	0,00	0,05	3,10	0,00	0,01	0,08	0,68	0,80	0,00	1,31
50237_GE1	Compósito 9	2,49	0,00	0,12	2,53	0,77	5,42	0,70	0,00	0,04	2,78	0,00	0,00	0,12	2,25	0,31	0,00	2,33
50238_GE1	Compósito 10	2,61	0,00	0,20	3,00	0,96	6,01	0,24	0,00	0,01	3,34	0,00	0,01	0,13	4,77	0,22	0,01	1,79
50239_GE1	Compósito 11	2,44	0,43	0,14	3,49	0,68	6,05	0,28	0,00	0,03	5,11	0,00	0,01	0,12	5,57	1,89	0,00	1,67
50240_GE1	Compósito 12	2,04	0,12	0,06	8,45	0,25	5,84	0,02	0,00	0,03	6,97	0,00	0,09	0,18	1,34	243,32	0,00	2,05
50241_GE1	Compósito 13	2,23	0,22	0,12	10,58	0,00	5,68	0,08	0,01	0,05	32,35	0,02	0,09	0,10	1,16	64,88	0,00	12,45
50242_GE1	Compósito 14	2,53	0,33	0,13	11,48	0,09	6,25	0,15	0,01	0,03	79,40	0,01	0,03	0,09	1,09	28,16	0,00	10,62
50243_GE1	Compósito 15	2,20	0,20	0,11	7,61	0,13	5,38	0,12	0,00	0,01	3,28	0,00	0,09	0,13	2,89	125,26	0,00	3,42
50244_GE1	Compósito 16	2,17	0,14	0,06	6,83	0,17	5,70	0,06	0,00	0,03	7,60	0,03	0,09	0,19	4,64	152,77	0,04	2,52
50245_GE1	Compósito 17	2,18	0,06	0,01	8,94	0,21	5,41	0,03	0,00	0,05	13,23	0,02	0,10	0,24	1,98	263,03	0,01	4,92
50246_GE1	Compósito 18	2,07	0,16	0,01	8,62	0,00	6,40	0,02	0,00	0,05	3,36	0,52	0,13	0,15	4,83	135,39	0,05	5,16
50247_GE1	Compósito 19	2,17	0,26	0,11	9,47	0,23	6,78	0,10	0,01	0,03	104,98	0,04	0,07	0,11	2,00	20,11	0,01	7,64
50248_GE1	Compósito 20	2,47	0,10	0,05	9,84	0,05	5,44	0,05	0,00	0,05	2,97	0,00	0,11	0,14	2,99	163,20	0,01	4,66
50243_GE2	Compósito 15	2,16	0,23	0,10	7,89	0,00	6,09	0,11	0,00	0,03	3,48	0,01	0,06	0,13	2,95	117,46	0,01	3,16

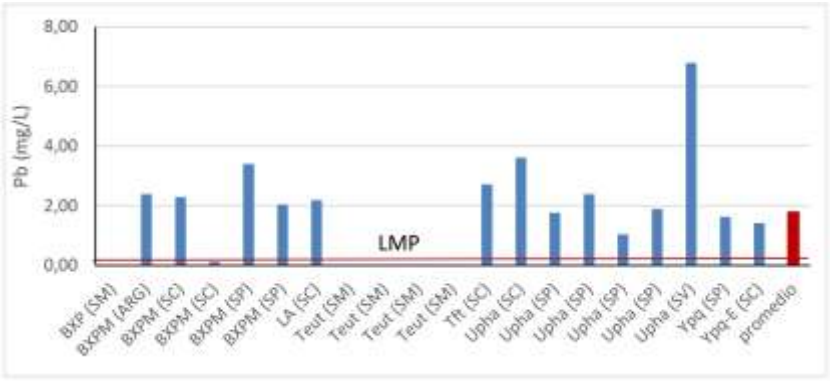
Li	Mg	Mn	Mo	Na	Nb	Ni	Pb	Sb	Sc	Se	Sn	Sr	Te	Ti	Tl	V	W	Zn
ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
0,02	0,61	0,27	0,15	19,56	0,09	0,06	0,01	0,00	0,00	0,01	0,00	0,04	0,00	0,05	0,02	0,00	0,00	0,00
0,03	2,06	57,74	0,00	22,00	0,03	0,08	2,40	0,01	0,00	0,07	0,00	0,16	0,03	0,01	0,04	0,00	0,00	9,74
0,02	0,85	0,66	0,02	21,86	0,03	0,09	2,30	0,00	0,00	0,01	0,01	0,08	0,02	0,01	0,01	0,00	0,00	2,86
0,03	0,60	0,32	0,07	21,57	0,01	0,08	0,11	0,00	0,00	0,00	0,00	0,04	0,00	0,01	0,00	0,00	0,00	1,26
0,02	0,59	0,30	0,07	20,82	0,02	0,06	3,41	0,00	0,00	0,00	0,03	0,05	0,02	0,01	0,02	0,00	0,00	0,00
0,02	0,67	0,32	0,02	20,47	0,03	0,08	2,05	0,00	0,00	0,00	0,00	0,04	0,00	0,01	0,05	0,00	0,00	0,00
0,02	0,59	0,26	0,05	21,66	0,01	0,10	2,19	0,00	0,00	0,08	0,00	0,06	0,01	0,01	0,08	0,00	0,00	2,18
0,02	0,56	0,19	0,05	18,98	0,07	0,05	0,00	0,00	0,00	0,10	0,04	0,03	0,00	0,04	0,00	0,00	0,00	0,00
0,02	0,57	0,31	0,24	18,91	0,02	0,04	0,00	0,00	0,00	0,08	0,02	0,03	0,00	0,03	0,05	0,00	0,00	0,00
0,02	0,67	0,33	0,77	20,12	0,06	0,06	0,00	0,00	0,00	0,12	0,00	0,04	0,00	0,02	0,00	0,00	0,00	0,00
0,02	0,63	0,24	0,36	20,33	0,02	0,06	0,00	0,00	0,00	0,00	0,03	0,04	0,00	0,01	0,00	0,00	0,00	0,00
0,02	0,63	0,22	0,06	20,53	0,01	0,11	2,72	0,00	0,00	0,00	0,00	0,05	0,01	0,01	0,04	0,00	0,00	0,17
0,02	2,67	91,45	0,00	20,97	0,00	0,07	3,62	0,00	0,00	0,05	0,02	0,17	0,00	0,01	0,04	0,00	0,00	8,95
0,03	2,35	15,34	0,01	21,65	0,01	0,07	1,77	0,00	0,00	0,08	0,00	0,30	0,00	0,01	0,07	0,00	0,00	7,47
0,02	0,65	0,21	0,04	20,18	0,02	0,08	2,40	0,00	0,00	0,00	0,00	0,08	0,02	0,01	0,00	0,00	0,00	1,77
0,02	0,70	0,22	0,07	20,41	0,00	0,07	1,05	0,00	0,00	0,01	0,00	0,08	0,00	0,01	0,04	0,00	0,00	4,79
0,02	0,70	0,21	0,02	19,53	0,03	0,09	1,89	0,00	0,00	0,01	0,00	0,08	0,04	0,01	0,00	0,00	0,00	3,08
0,02	0,65	0,17	0,00	19,68	0,03	0,09	6,80	0,00	0,00	0,00	0,07	0,04	0,04	0,01	0,03	0,00	0,00	23,24
0,02	3,01	3,63	0,00	20,59	0,00	0,07	1,63	0,04	0,00	0,01	0,05	1,18	0,02	0,01	0,02	0,00	0,00	6,85
0,02	0,56	0,21	0,04	20,25	0,00	0,10	1,42	0,00	0,00	0,04	0,03	0,08	0,00	0,01	0,00	0,00	0,00	1,12
0,02	0,66	0,23	0,04	19,64	0,02	0,08	1,72	0,01	0,00	0,00	0,05	0,08	0,00	0,01	0,00	0,00	0,00	1,69

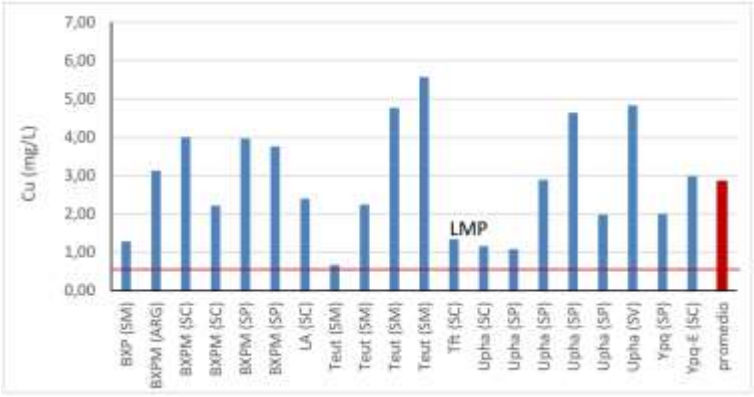
Fuente: MYSLR

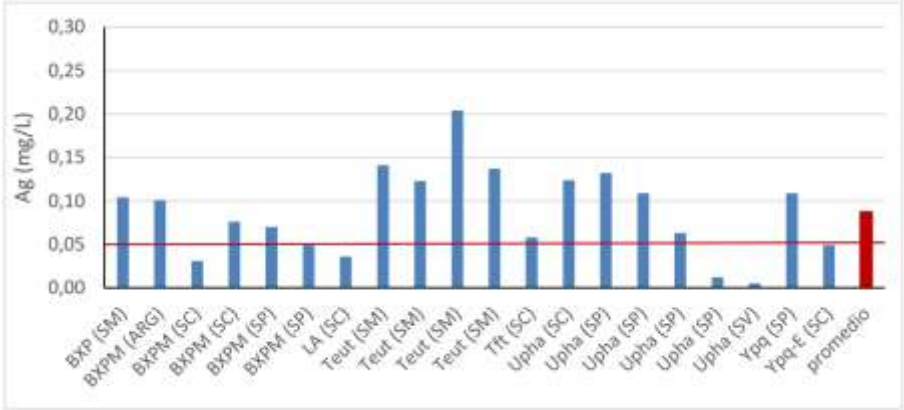
Comparación de los valores del lixiviado de NAG con los LMP y ECA

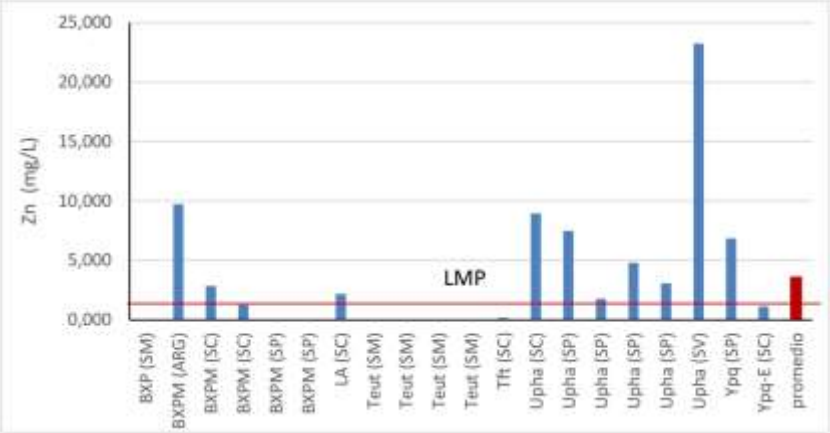


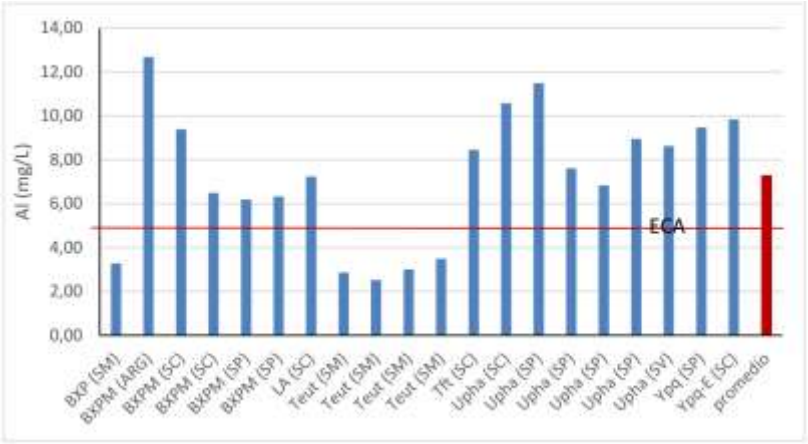

Mn (mg/L)
100,00
80,00
60,00
40,00
20,00
0,00
ECA
BXP (SM)
BXPM (ARG)
BXPM (SC)
BXPM (SC)
BXPM (SP)
BXPM (SP)
LA (SC)
Teut (SM)
Teut (SM)
Teut (SM)
Teut (SM)
Tft (SC)
Upha (SC)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SV)
Ypq (SP)
Ypq-E (SC)
promedio

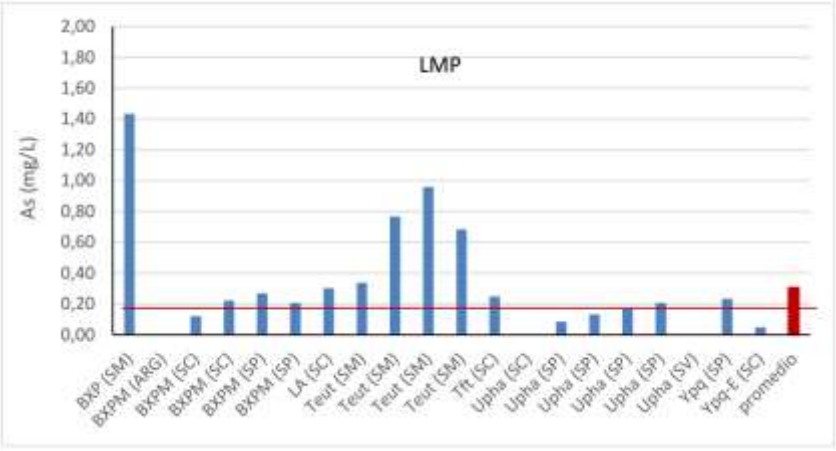

Pb (mg/L)
8,00
6,00
4,00
2,00
0,00
LMP
BXP (SM)
BXPM (ARG)
BXPM (SC)
BXPM (SC)
BXPM (SP)
BXPM (SP)
LA (SC)
Teut (SM)
Teut (SM)
Teut (SM)
Teut (SM)
Tft (SC)
Upha (SC)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SV)
Ypq (SP)
Ypq-E (SC)
promedio


Cu (mg/L)
7,00
6,00
5,00
4,00
3,00
2,00
1,00
0,00
LMP
BXP (SM)
BXPM (ARG)
BXPM (SC)
BXPM (SC)
BXPM (SP)
BXPM (SP)
LA (SC)
Teut (SM)
Teut (SM)
Teut (SM)
Teut (SM)
Tft (SC)
Upha (SC)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SV)
Ypq (SP)
Ypq-E (SC)
promedio


Ag (mg/L)
0,30
0,25
0,20
0,15
0,10
0,05
0,00
BXP (SM)
BXPM (ARG)
BXPM (SC)
BXPM (SC)
BXPM (SP)
BXPM (SP)
LA (SC)
Teut (SM)
Teut (SM)
Teut (SM)
Teut (SM)
Tft (SC)
Upha (SC)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SP)
Upha (SV)
Ypq (SP)
Ypq-E (SC)
promedio







Fuente: MYSLR

Yanacocha | Laboratorio Metalúrgico

CENTRO DE INVESTIGACIONES METALÚRGICAS
"DON ALBERTO BENAVIDES"
MINERA YANACOCHA S.R.L

M E M O R A N D U M

PARA: H. Arevalo / F. Roberto

DE: I. Morales / F. Loyola

FECHA: 18 de Mayo del 2016

COPIA: G. Guzman / S. Vicuña

REPORTE: LM-R-032-16

SUBJECT: RESULTADOS DE CELDAS DE HUMEDAD PARA EL PROYECTO YANACOCHA VERDE

INTRODUCCIÓN

El Laboratorio Metalúrgico realizó 12 pruebas de Celdas de Humedad para el mineral de desmonte del proyecto de Yanacocha Verde. Estas 12 muestras forman parte de 20 compósitos representativos del desmonte del proyecto, las ocho muestras restantes fueron enviadas a un laboratorio externo en la ciudad de Lima; el objetivo de las pruebas fue realizar la caracterización química y predecir el potencial de generación o neutralización ácida de las muestras. La prueba cinética de celdas de humedad corresponde a un ensayo ambiental aplicado de acuerdo a la norma ASTM D5744. Esta prueba está diseñada para producir un aceleramiento de la degradación natural de las muestras sólidas potencialmente generadoras de ácido y de esta manera disminuir el tiempo necesario para obtener los parámetros requeridos de las soluciones generadoras producto de esta meteorización. Los análisis de metales en la solución lixiviada fueron analizados en el Laboratorio de QC de Medio Ambiente de MYSR con equipo de ICP-MS (Espectrometría de Masas con Plasma Acoplado Inductivamente) en cambio las cabeza y colas de las muestras evaluadas fueron analizadas en el Laboratorio Analítico de MYSRL con lecturas finales en un equipo de ICP-OES (Espectrometría de Emisión Óptica).

RESUMEN

El Laboratorio Metalúrgico realizó 12 pruebas de Celdas de Humedad para el mineral de desmonte del proyecto de Yanacocha Verde. Las muestras fueron sometidas a la prueba cinética de celdas de humedad correspondiente a un ensayo ambiental aplicado de acuerdo a la norma ASTM D5744. Esta prueba está diseñada para producir un aceleramiento de la degradación natural de las muestras sólidas potencialmente generadoras de ácido y de esta manera disminuir el tiempo necesario para obtener los parámetros requeridos de las soluciones generadoras producto de esta meteorización.

Los resultados de la prueba HCT mostraron que todas las muestras evaluadas podrían generar acidez en el corto tiempo, los resultados de pH de la muestra 50230 comprados con los de CaCO3 revelan que los carbonatos presentes son insuficientes para neutralizar la generación de acidez producto de la oxidación de los sulfuros, lo que significa que esta muestra también tiene potencial de generar acidez en el tiempo, aunque en menor proporción que las demás. De la misma manera las gráficas de cínetica mostraron que en general la disolución de metales se da en las primeras 10 semanas, luego del cual van bajando ligeramente. La elevada disolución del Mg en la muestra 50230 es atribuido a que el mineral contiene carbonatos que están siendo disueltos por el ácido sulfúrico.

MUESTRAS Y PROCEDIMIENTO

Las muestras provienen del material de desmonte del Proyecto Yanacocha Verde. Las 12 muestras sometidas a la prueba HCT estuvieron reducidas a un tamaño de partícula de P80 menos 2000 micrones (-10M), los compósitos habían sido formados en función de la litología y alteración geológica, tal como se aprecia en la tabla I.

La prueba cinética de celdas de humedad corresponde a un ensayo ambiental aplicado de acuerdo a la norma ASTM D5744. Esta prueba está diseñada para producir un aceleramiento de la degradación natural de las muestras sólidas potencialmente generadoras de ácido y de esta manera disminuir el tiempo necesario para obtener los parámetros requeridos de las soluciones generadas producto de esta meteorización.

Para producir a esta degradación, las muestras son sometidas a ciclos de aire seco y húmedo, semanalmente se colectan soluciones producto de las inundaciones, las cuales fueron a analizadas para observar la evolución de los parámetros de interés (pH, metales, acidez, alcalinidad, etc.). En comparación con el terreno esta prueba utiliza una granulometría más fina sumado al volumen de agua aplicado permiten maximizar la humidificación de la muestra, con

la cual no ocurre en la degradación natural de la muestra. De esta manera los resultados obtenidos durante la aplicación de la prueba son más extremos en un comparación a un proceso natural, lo que también se extiende a los metales disueltos en la soluciones lixiviadas que tendrán una mayor concentración que las aguas generadas en terreno.

Tabla I. Identificación y número de compósito de las muestras

Comp.	Sample ID	Descripción*	Lith	Alt	length
1	50229	YS-1140(50-62); YS-1160(4.7-13.6)	BXP	SM	20.9
2	50230	YS-1048(32-42)	BXPM	ARG	10
3	50231	YS-1089(84.2-86.8); YS-1125(64-72); YS-1187(118-126)	BXPM	SC	28.6
4	50232	YS-1027(80-86); YS-1027(100-110); YS-1027(110-122)	BXPM	SC	28
5	50233	YS-1111(150.5-157.95)	BXPM	SP	7.45
6	50234	YS-1111(100-107.1); YS-1111(90-100)	BXPM	SP	17.1
7	50235	YS-1112(138-148); YS-1154(190-203.5); YS-1112(123.9-130)	LA	SC	29.6
8	50236	YS-1103(160-168.45); YS-1160(30-40); YS-1160(40-50); YS-1160(50-60); YS-1140(100.7-114); YS-1140(85.4-92)	Teut	SM	58.35
9	50237	YS-1160(13.6-20); YS-1160(60-76); YS-1103(148-160); YS-1160(20-30); YS-1140(76-85.4); YS-1140(66.85-74)	Teut	SM	60.95
10	50238	YS-1093(11.7-20); YS-1132(86-94)	Teut	SM	16.3
11	50239	YS-1140(92-100.7); YS-1132(94-104.25)	Teut	SM	18.95
12	50240	YS-1105(116.8-128); YS-1105(106-116.8); YS-1105(128-142)	Tft	SC	36
13	50241	YS-1048(3.15-10); YS-1048(10-20)	Upha	SC	16.85
14	50242	YS-1132(251.55-264); YS-1132(234.2-251.55)	Upha	SP	29.8
15	50243	YS-994(143.35-147.95); YS-1162(178-191.2)	Upha	SP	17.8
16	50244	YS-994(154-160.15); YS-1162(166.75-178)	Upha	SP	17.4
17	50245	YS-1143(88-100);YS-1099(169.15-178.2); YS-1143(100-114); YS-1143(81.4-88)	Upha	SP	41.65
18	50246	YS-994(147.95-154)	Upha	SV	6.05
19	50247	YS-1153(70-82); YS-1134(238.55-248)	Ypq	SP	21.45
20	50248	YS-1155(179.1-186)	Ypq-E	SC	6.9
*X(Y-Z); X=Taladro, Y=From, X=To					



Figura 1. Equipo de celdas de humedad

RESULTADOS

El rango de los muestreos semanales de las celdas de humedad es presentado en la tabla II, en ella se puede notar que todas las muestras evaluadas podrían generar acidez en el tiempo, los resultados de pH de la muestra 50230 comprados con los de CaCO3 revelan que los carbonatos presentes son insuficientes para neutralizar la generación de acidez producto de la oxidación de los sulfuros, lo que significa que esta muestra también tiene potencial de generar acidez en el tiempo, aunque en menor proporción que las demás.

Tabla II. Resumen de los rangos de concentración de las soluciones

	Site Limit	50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240
pH, s.u.	6-9	4.5-7	5.2-6.9	3.6-5.2	3.5-4.3	2.9-4.8	3.2-4.5	2.9-3.9	5.3-7.1	2.9-4.6	3.2-4.5	3.7-6.1	3.1-4
Cond. uS/cm		9-146	16-463	17-1337	62-410	50-1161	42-279	110-529	7-81	15-782	17-404	25-305	40-731
Acidity, mg/L		3-23	5-23	7-1041	4-588	22-2316	8-96	30-230	<2-14	5-238	13-175	3-143	17-463
Alk_CaCO3, mg/L		<2-6.2	3-10.4	<2-11	<2-4	<2-3	<2	<2	<2-9.2	<2	<2	<2	<2
SO4, mg/L		4-208	18-417	14-50.1	26-109	24-98	23-92	28-109	3-323	11-130	14-88	21-219	24-307
Ca, mg/L		0.2-12	0.1-117	0.3-136	0.2-47	0.2-18	0.3-67	0.3-23.1	0.2-38	0.2-18	0.2-36	0.3-66	0.2-31
Mg, mg/L		0.2-1.3	0.1-12.5	0.2-11	0.1-3.8	0-2.5	0.1-6.9	0.1-1.5	0.1-2.2	0.1-0.9	0.1-4.3	0-2.1	0-1.2
Fe, mg/L	2	<0.3	<0.3-1	<0.3-24	<0.3-27	<0.3-135	<0.3-68	<0.3-273	<0.3-4	<0.3-58	<0.3-32	<0.3-28	<0.3-98

En general los resultados de los análisis de metales y de otros parámetros como los sulfatos tienden a aumentar en las primeras 10 semanas, para luego ir bajando ligeramente en el tiempo como se muestra en las gráficas de cinética. Las cargas semanales de sulfato y calcio en la solución lixiviada fueron significativas para las muestras. Las cargas fueron calculadas

multiplicando el efluente por la concentración semanal. Las cargas semanales fueron acumuladas y graficadas en función de las semanas de tal manera que los ratios de liberación podrían ser calculados de la pendiente del rango lineal. Los ratios de liberación semanal final calculados para los principales analitos son resumidos en la tabla III.

Tabla III. Resumen de los principales ratios de liberación

	50229	50230	50231	50232	50233	50234	50235	50236	50237	50238	50239	50240
SO4, %	29.6	25.6	39.0	22.8	12.6	19.2	4.4	59.6	56.1	62.3	24.6	3.0
Avg. SO4 Release, mg/week	44.1	103.8	155.8	74.1	63.1	54.6	79.0	39.0	44.8	49.1	59.0	81.5
SO4 Week Linear Range	11-20	14-20	11-20	11-20	9-20	11-20	11-20	11-20	11-20	11-20	12-20	8-20
Ca, %	29.0	11.7	22.5	53.0	34.5	40.9	25.1	44.1	37.9	43.5	29.8	23.1
Avg. Ca Release, mg/week	1.3	16.4	12.1	6.4	1.4	6.9	2.6	3.6	1.5	3.1	7.1	3.0
Ca Week Linear Range	2-20	8-20	15-20	15-20	6-20	2-20	2-20	2-20	2-20	13-20	2-20	2-20
Mg, %	88.2	15.0	12.9	77.9	39.6	51.2	57.7	58.6	74.3	86.0	72.5	39.0
Avg. Mg Release, mg/week	0.3	1.9	0.8	0.6	0.3	0.7	0.2	0.3	0.2	0.4	0.3	0.2
Mg Week Linear Range	2-20	8-20	15-20	2-20	2-20	7-20	2-20	2-20	2-20	2-20	2-20	2-20

Las gráficas 2-4 muestran la tendencia de la carga acumulada usa para identificar los rangos lineales para los principales analitos liberados. En la figura 2 se observa una tendencia lineal constante de generar sulfatos, también se observa que en la muestra 50231 hay una disolución significativa de sulfatos a partir de la semana 12. Al analizar el calcio de la figura 3 se observa una liberación rápida durante las primeras semanas, para luego tener un comportamiento lineal, en este caso la muestra 50230 fue la que liberó mayor cantidad de Ca lo que corrobora el pH más alto del grupo, dato que también se puede observar en la figura 4 con el incremento de disolución de Mg lo cual es atribuido al mineral con carbonatos que está siendo disuelto por el ácido sulfúrico.

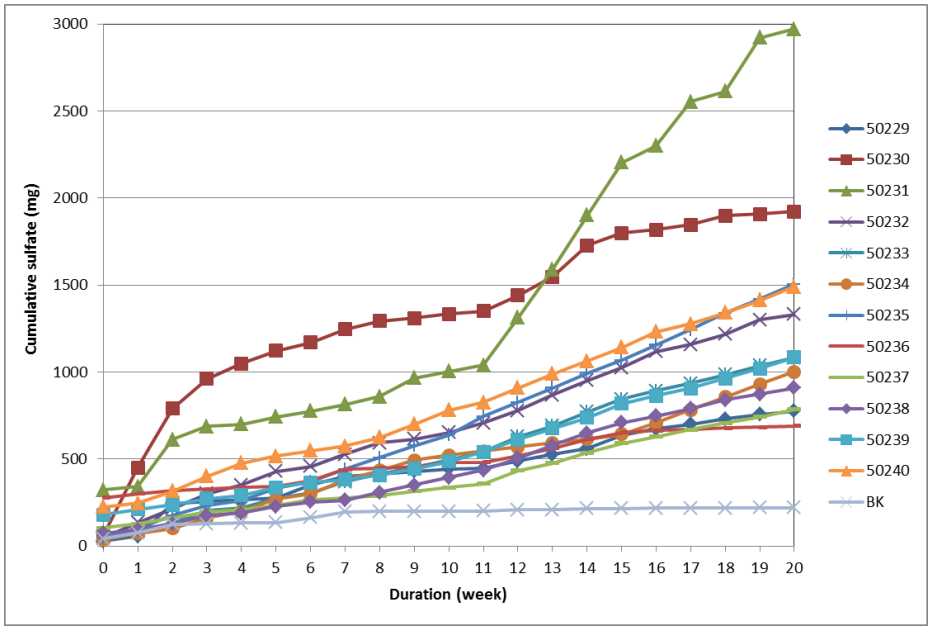


Figura 2. Carga acumulada semanal de Sulfato liberado

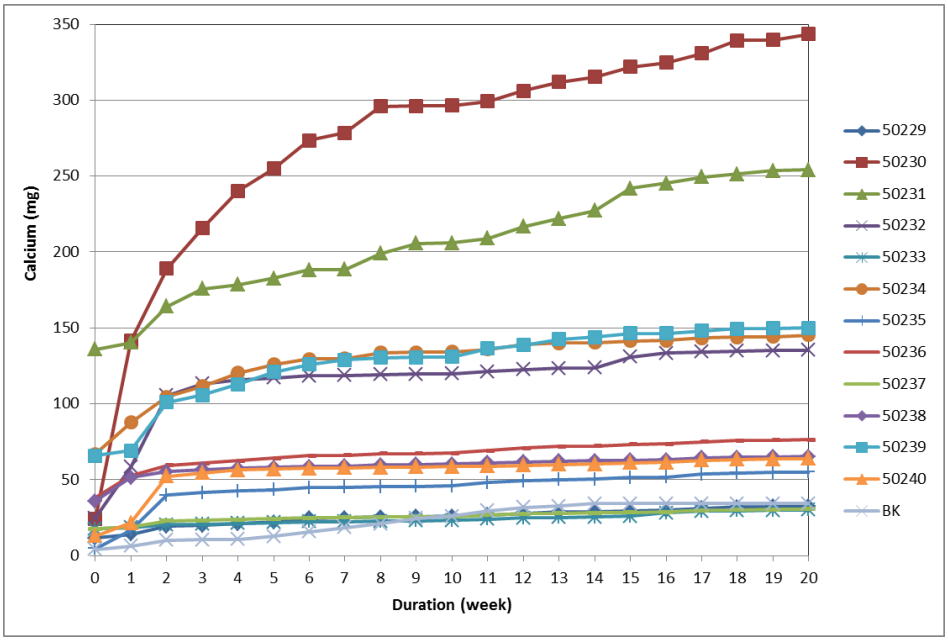


Figura 3. Carga acumulada semanal de Calcio liberado

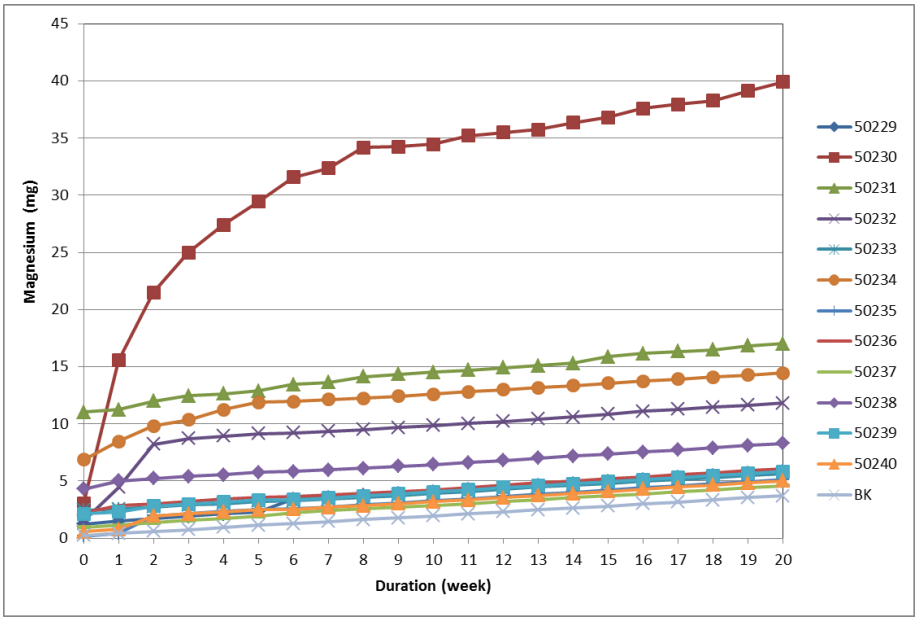
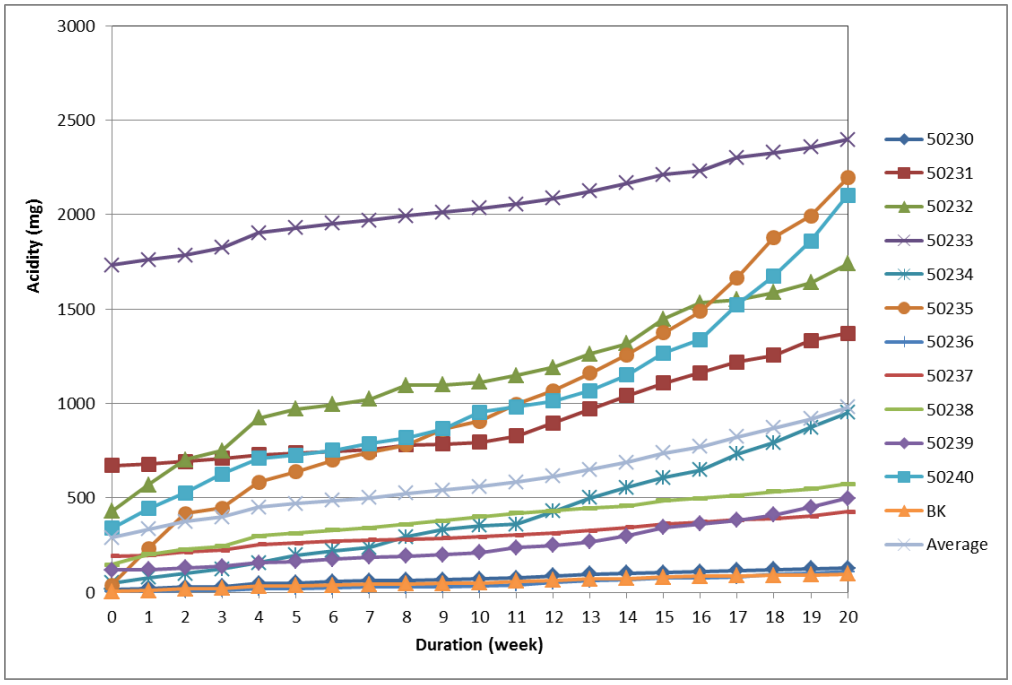
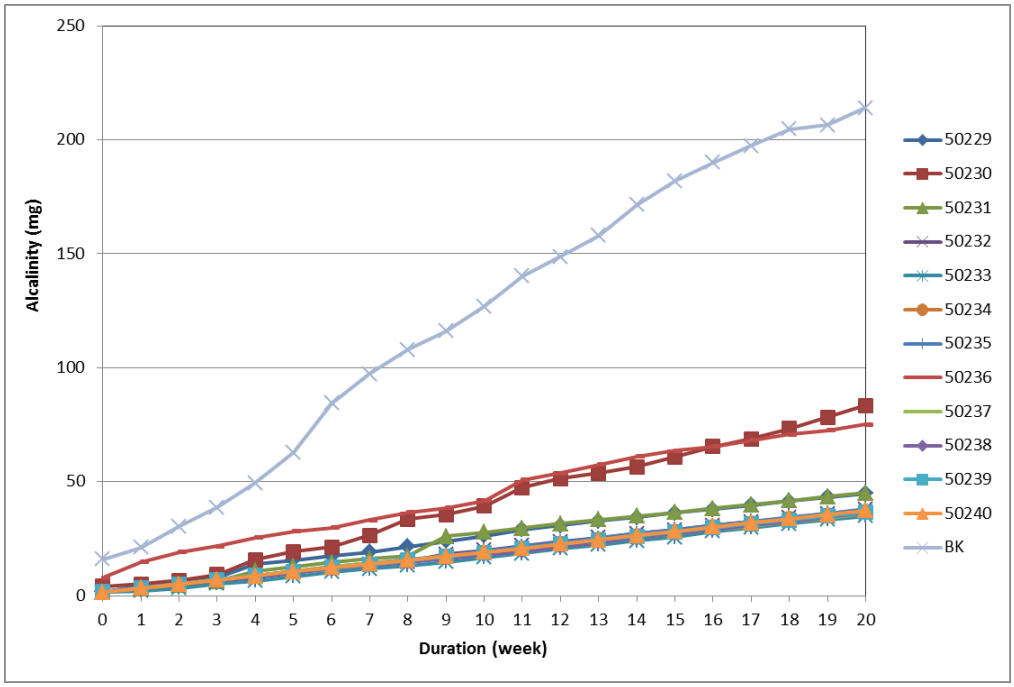
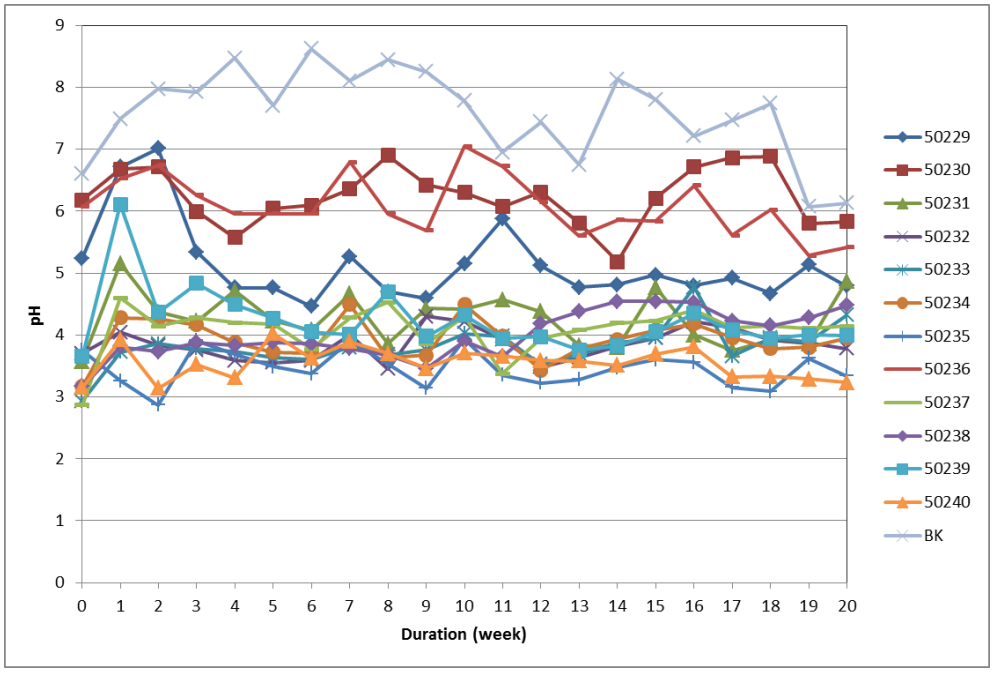


Figura 4. Carga acumulada semanal de Magnesio liberado

APÉNDICE A
Gráficas de Cinética






pH
Duration (week)
0
1
2
3
4
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50229
50230
50231
50232
50233
50234
50235
50236
50237
50238
50239
50240
BK

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APÉNDICE B

Head Assay

Elemento	Au	SCIS	Hg	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Li
Unidad	g/t	%	g/t	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
50229_HA	0.15	0.103	0.94	11.836	216.736	1043.397	9.617	2038.735	0	0.116	56.404	0	0.461	157.024	281.115	15701.194	2.83	0.386
50230_HA	0.078	2.463	0.325	4.708	2381.166	152.634	8.116	191.721	0.606	3.03	1464.144	4.584	7.589	88.957	379.242	24082.037	0	1.106
50231_HA	0.126	3.946	0.65	3.506	1375.241	114.231	0	153.866	0.303	4.958	564.279	1.552	11.507	88.994	585.082	33049.795	0.537	0.938
50232_HA	0.115	6.27	0.255	0.948	509.88	155.486	0	20.812	0.011	0	127.559	0	10.755	100.912	436.064	54323.423	0	0.827
50233_HA	0.131	3.627	0.15	7.689	383.356	317.534	0	94.23	0	1.321	43.626	0	3.79	84.945	635.336	37267.71	1.216	0.596
50234_HA	0.097	6.1	0.154	1.123	467.037	232.417	0	21.456	0	0	177.833	0	7.627	109.185	691.859	53066.228	0	0.806
50235_HA	0.086	6.649	0.853	5.536	737.111	164.849	0	16.76	0	0.28	109.407	3.398	12.614	89.124	445.911	40469.379	2.947	0.72
50236_HA	0.112	0.029	0.794	6.072	71.187	380.231	9.602	1241.511	0	0.52	86.506	0	0.948	186.204	156.05	9354.15	2.358	0.438
50237_HA	0.136	0.156	0.656	9.732	69.801	484.945	11.175	876.709	0	0.777	40.29	0	1.081	170.238	316.997	9420.364	2.304	0.368
50238_HA	0.147	0.595	0.315	11.373	76.571	379.429	12.298	260.509	0	3.157	75.164	0	1.171	183.547	514.226	9489.948	0	0.415
50239_HA	0.11	0.828	0.345	18.894	256.599	484.274	9.13	648.375	0	1.374	251.872	0	1.734	170.206	670.765	15054.795	1.801	0.574
50240_HA	0.126	5.95	0.538	0.655	911.474	82.489	0	13.981	0	0	138.067	0	10.456	83.138	205.666	29884.315	0	0.747

Elemento	Mg	Mn	Mo	Na	Nb	Ni	Pb	Sb	Sc	Se	Sn	Sr	Te	Ti	Tl	V	W	Zn
Unidad	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
50229_HA	3.296	97.968	105.728	65.861	0.589	5.896	533.149	32.737	0.073	2.273	2.363	5.782	3.583	5.668	0.153	1.187	0	16.312
50230_HA	133.017	6221.257	8.01	78.677	1.218	5.74	470.184	4.147	0.177	7.435	0.42	21.267	3.822	9.004	2.898	3.972	0	1880.897
50231_HA	66.008	101.342	6.996	76.398	0.761	8.304	293.777	6.419	0.214	5.853	1.371	10.322	7.558	5.288	0.195	5.42	0	903.431
50232_HA	7.577	52.996	8.369	206.521	0.821	7.665	45.224	5.64	0	8.596	1.421	8.4	6.263	4.189	0	2.291	0	345.076
50233_HA	7.14	46.971	13.99	253.195	0	4.351	57.14	10.542	0	6.245	1.045	11.563	5.457	2.8	0	1.231	0	10.791
50234_HA	14.091	52.72	9.184	1525.447	0.689	7.556	41.591	4.771	0	5.426	1.1	13.912	6.994	3.717	0	2.27	0	23.478
50235_HA	4.435	38.5	5.424	222.885	0.216	7.796	444.673	7.305	0.106	5.911	1.321	12.415	5.145	5.092	2.063	3.33	0	653.89
50236_HA	5.17	42.031	38.21	45.08	2.779	6.379	315.404	11.95	0.03	2.111	1.926	2.091	2.558	5.422	0.092	1.384	0	11.246
50237_HA	3.08	53.63	85.412	45.868	0.625	5.891	355.144	12.905	0.018	3.408	1.812	2.384	2.74	6.041	0.141	1.101	0	8.289
50238_HA	4.809	50.282	118.617	55.573	2.379	7.271	27.983	10.394	0.021	3.918	2.115	4.629	5.088	9.452	0.668	1.57	0	5.997
50239_HA	4.018	44.257	93.079	52.492	0.658	6.631	63.386	16.911	0.047	2.255	3.075	9.501	4.924	11.687	0.513	3.663	0	6.774
50240_HA	6.43	31.656	15.64	3598.267	0.542	6.692	50.019	2.224	0.171	3.031	0.558	8.843	3.55	4.119	1.547	2.652	0	82.389

APÉNDICE C

Tail Assay

Elemento	Au	SCIS	Hg	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Li
Unidad	g/t	%	g/t	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
50229_T	0.166	0.154	0.939	11.741	224.591	1042.876	10.129	2097.383	0.019	1.903	36.078	0	0.147	162.644	283.955	16120.221	2.796	0.52
50230_T	0.096	2.425	0.266	4.231	2358.141	156.913	4.202	206.762	0.599	6.744	1052.944	4.252	7.39	79.943	381.219	26902.961	0	0.444
50231_T	0.154	4.006	0.556	3.552	1735.539	116.936	0	123.19	0.159	7.492	295.727	1.307	10.505	150.491	538.707	38084.129	2.4	0.611
50232_T	0.128	6.586	0.151	0.646	441.471	139.411	0	13.194	0.023	2.525	35.696	0	9.373	40.622	381.493	59310.929	3.684	0.353
50233_T	0.117	4.419	0.195	7.308	391.47	308.259	0	62.323	0.021	4.164	19.621	0	2.948	57.36	446.552	43423.279	2.284	0.099
50234_T	0.105	6.317	0.116	0.973	394.636	204.684	0	12.836	0.031	3.107	29.497	0	6.31	34.997	504.864	57344.263	5.425	0.288
50235_T	0.102	6.444	0.751	4.671	1215.681	151.299	0	17.904	0.016	4.131	61.447	0	8.758	65.573	398.086	44612.638	4.602	0.146
50236_T	0.101	0.35	0.674	5.19	72.017	379.809	6.34	1341.346	0.023	1.358	57.515	0	0.67	124.712	149.003	10066	2.994	0.462
50237_T	0.147	0.15	0.849	10.239	86.088	525.432	6.605	1093.464	0.026	2.368	21.57	0	0.343	173.84	314.464	12157.514	4.091	0.481
50238_T	0.134	0.308	0.405	9.327	71.907	349.703	10.563	281.674	0.007	2.869	14.521	0	0.742	141.355	428.996	10800.685	0.802	0.358
50239_T	0.115	0.876	0.839	18.357	281.195	501.453	6.98	729.706	0.013	1.488	23.765	0	0.896	142.484	610.719	18406.541	2.357	0.348
50240_T	0.125	6.517	0.501	0.786	1349.772	79.616	0	14.678	0.03	0.842	68.869	0	8.197	67.095	182.247	36180.724	3.51	0.233
50241_T*	0.02	0.033	0.02	0	23.353	0.482	10.436	2.765	0.023	0.321	183.189	0.139	0.724	309.987	0	5265.599	0	0.342

*Muestra blanco

Elemento	Mg	Mn	Mo	Na	Nb	Ni	Pb	Sb	Sc	Se	Sn	Sr	Te	Ti	Tl	V	W	Zn
Unidad	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
50229_T	5.138	46.102	102.047	41.609	0.904	7.313	546.656	30.33	0	0	2.639	6.047	18.8	6.884	0	1.322	4.77	15.512
50230_T	203.299	5916.021	8.811	185.39	2.259	9.458	499.461	2.331	0.103	0	0.164	14.075	29.36	8.493	4.489	3.81	2.95	1844.498
50231_T	63.091	78.743	6.136	115.886	0.84	13.2	291.308	7.635	0.05	0	1.64	6.016	44.17	6.388	1.135	6.993	0	795.989
50232_T	4.457	36.61	4.95	783.434	0.069	7.496	54.92	4.079	0	0	0.207	6.654	63.96	3.743	1.112	3.672	0	192.921
50233_T	0.945	29.194	13.673	405.73	0.103	5.957	57.267	9.917	0	0	0.572	12.069	47.52	2.625	0	2.589	0	2.997
50234_T	4.045	33.569	6.965	3263.181	0.23	5.835	37.305	3.765	0	0	0	8.617	61.91	2.819	0.268	3.475	0	12.689
50235_T	6.95	31.484	3.394	599.32	0.127	7.235	372.967	6.562	0	0	0.695	16.016	47.76	4.291	2.042	4.621	0	365.148
50236_T	2.06	32.422	33.821	40.634	2.697	6.967	325.762	11.484	0	0	1.846	2.026	11.63	5.329	0	1.072	0	10.39
50237_T	0.995	32.748	91.991	46.01	1.005	8.155	398.926	14.028	0	0.121	2.134	2.72	13.74	7.044	0	1.119	0	8.186
50238_T	1.39	20.232	109.594	68.898	2.66	17.68	28.893	9.332	0	0.047	1.999	3.695	14.85	8.604	0.422	1.215	6.85	3.239
50239_T	1.597	26.541	92.045	47.755	1.001	7.681	72.463	16.866	0	0	3.72	8.606	22.18	11.61	0.606	3.858	0.14	7.128
50240_T	16.884	27.353	16.12	8468.193	0.182	7.676	51.475	1.797	0	0	0.65	10.61	38.55	3.911	1.375	3.665	0	29.203
50241_T*	0	40.377	1.37	83.268	1.308	12.6	4.303	0.619	0	0	5.891	0.321	5.414	0.563	0.35	0.558	0	0

APÉNDICE D

Spreadsheets

Muestra: 50229		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	843.24	845.35	905.47	893.33	959.19	873.23	952.98	836.60	786.90	775.50	791.23	932.90	954.67	910.88	882.75	908.25	836.85	857.60	892.24	875	833
pH a 25° C	u pH	5.24	6.71	7.01	5.34	4.76	4.76	4.46	5.27	4.70	4.59	5.15	5.87	5.12	4.77	4.81	4.97	4.8	4.92	4.67	5.13	4.79
Conductividad a 25°C	uS/cm	90.60	145.90	90.70	14.89	20.27	21.05	12.28	26.073	19.21	20.14	21.57	9.46	11.58	15.39	16.62	33.2	71.1	20.7	22.36	19.58	17.28
Potencial Redox Abs.	mv	557.30	610.20	516.80	495.6	538.3	473.40	487.1	<537.000	557.4	531.4	640.6	564.8	569	555.8	654.2	617.9	684.2	649	704.8	488	574.6
Oxigeno Disuelto	mg/L	6.30	6.34	6.32	5.91	6.51	6.00	6.83	<5.890	5.01	6.25	5.88	5.12	5.68	5.02	6.69	6.35	6.22	6.32	5.9	6.15	6.15
Cloruros	mg/L	14	15.3	0.5	0.7	3.56	<0.250	15.1	11.5	<0.250	<0.250	<0.250	<0.250	4.44	3.26	2.60	2.82	0.6	0.5	0.3	0.4	<0.250
Fluoruros	mg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	2.8	<0.100	0.5	<0.100	1.08	<0.100	<0.100	2.6	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.1	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	0.48	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	32.7	33.0	208	13.1	8.8	11.2	80	59	19.3	18.9	17.7	3.55	43.40	41.2	39.7	86	41.9	28.9	35.5	29.8	24.4
Alcalinidad Total (CaCO3)	mg/L	2	3	2	2	6.2	2	<2.0	<2.0	3	3	3	3	2	<2.0	<2.0	2	<2.0	<2.0	2	2	<2.0
Acidez (H2SO4)	mg/L	23.2	3	5	3	23.4	3	9.0	4	6	4	7.3	12.4	7.4	7.8	7.6	6	13.3	6.8	10.0	6	13.6
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata (Ag)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.003	<0.002	<0.002	0.073	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	0.075	<0.005	<0.005	0.022	<0.015	0.036	0.015	0.202	0.028	<0.005	<0.005	0.077	0.018	0.043	0.028	0.012	0.037	0.008	0.019	0.084	0.031
Arsénico	mg/L	0.027	0.03	0.029	0.01	0.019	0.048	0.014	0.064	0.021	0.042	<0.003	0.039	0.015	0.017	0.018	0.01	0.019	0.006	0.008	0.01	0.008
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.024	0.134	0.26	0.482	0.462	0.547	0.237	0.412	0.585	0.761	0.228	0.488	0.562	0.572	0.474	0.537	0.677	0.517	0.482	0.468	0.459
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	13.811	2.797	5.754	0.637	1.34	1.104	2.676	<0.3	0.668	<0.3	<0.3	1.12	1.004	0.851	<0.3	0.782	<0.3	1.649	1.005	<0.3	<0.3
Cadmio	mg/L	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.376	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalto	mg/L	0.02	0.01	0.011	0.002	0.006	0.005	0.008	0.005	0.005	0.002	<0.002	<0.002	0.002	0.003	0.002	0.005	0.002	0.003	0.005	0.003	0.004
Cromo	mg/L	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.017	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobre	mg/L	0.108	0.053	0.075	0.05	0.093	0.094	0.143	0.191	0.143	0.107	0.014	0.041	0.06	0.107	0.09	0.147	0.094	0.105	0.16	0.148	0.207
Hierro	mg/L	<0.3	<0.3	0.83	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.32	<0.3	<0.3	<0.3	<0.3
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	1.873	0.545	6.137	0.929	<0.2	0.312	<0.2	<0.2	<0.2	<0.2	<0.2	2.688	0.412	<0.2	<0.2	2.41	<0.2	1.053	0.475	<0.2	<0.2
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	1.484	0.274	0.285	<0.2	<0.2	<0.2	1.168	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganeso	mg/L	3.402	1.473	1.492	0.284	0.87	0.706	<0.2	0.909	0.642	0.447	<0.002	0.228	0.238	0.387	0.313	0.544	0.338	0.485	0.586	0.427	0.534
Molibdeno	mg/L	<0.003	0.003	0.003	<0.003	<0.003	0.005	<0.003	<0.003	0.004	<0.003	0.275	0.003	<0.003	0.003	<0.003	<0.003	0.004	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	23.511	0.588	1.451	0.539	0.203	<0.2	1.013	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.357	0.23
Niobio (Nb)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Níquel	mg/L	0.042	0.021	0.022	0.006	0.019	0.012	0.015	0.01	0.009	0.004	0.012	0.002	0.003	0.006	0.03	0.028	0.007	0.007	0.008	0.007	0.008
Plomo	mg/L	<0.002	0.003	<0.002	0.004	<0.0040	<0.002	0.002	0.053	0.009	0.008	<0.002	0.019	0.004	0.004	0.007	0.004	0.011	0.002	0.004	0.003	0.003
Antimonio (Sb)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.155	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio (Sc)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.02	0.388	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Estaño (Sn)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio (Sr)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro (Te)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio (Tl)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.021	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadio (V)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	0.263	0.103	0.101	0.102	0.101	0.068	0.095	0.063	0.074	0.101	0.398	0.037	0.04	0.061	0.059	0.067	0.052	0.153	0.105	0.061	0.083
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	0.03	0.012	0.012	0.025	0.013	0.021	0.026	<0.01	0.022	0.019	0.095	<0.01	0.021	0.022	0.017	<0.01	<0.01	<0.01	0.073	0.038
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50230		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	718.00	486.99	812.27	852.02	929.61	881.21	948.54	867.80	690.30	499.50	920.72	932.90	990.87	841.47	900.19	860.06	922	857	800	810	814
pH a 25° C	u pH	6.18	6.68	6.71	5.99	5.57	6.04	6.09	6.36	6.90	6.42	6.30	6.07	6.31	5.81	5.18	6.21	6.71	6.86	6.88	5.8	5.83
Conductividad a 25°C	uS/cm	303	147.6	463	405	235.70	318	134.5	147.6	195.4	77	81.8	36.2	74.7	81.40	15.85	138.5	54.5	127.9	104	28.43	45.3
Potencial Redox Abs.	mv	376.8	532.9	561.6	484	553.80	526.2	516.5	570.9	562.9	526.8	640.1	575.3	593.9	581.50	609.6	617.5	639.3	647.3	503.7	514.1	567
Oxigeno Disuelto	mg/L	6.38	6.25	6.43	6.1	5.90	6.05	6.6	6.55	4.09	5.77	5.95	5.12	5.49	5.32	6.41	5.87	5.91	6	4.03	6.1	6.22
Cloruros	mg/L	11.2	16.1	0.6	0.6	3.56	<0.250	15.2	10.7	1	<0.250	0.4	<0.250	3.55	2.14	1.33	0.7	0.3	0.4	4.88	<0.250	1.33
Fluoruros	mg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	2.7	3.8	0.47	<0.100	1.08	<0.100	<0.100	2.4	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	0.48	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	79	810	417	201	93	85	50.6	86.1	69	32.4	26.4	17.6	91.00	127	200	82	22.6	32.4	65	11.2	18.8
Alcalinidad Total (CaCO3)	mg/L	5.8	<2.0	<2.0	3	7.0	4	<2.0	6.0	10.4	4	4	8.6	4	3	3	5	5	4	5.6	6.0	6.4
Acidez (H2SO4)	mg/L	22.6	9.0	8.8	4	15.7	5	7.0	4	5	5	4	6	12	11	5	3	5	7.6	8.0	4	4
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0008	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.064	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.02	<0.002	<0.002
Aluminio	mg/L	0.091	0.049	0.031	0.042	0.219	1.513	0.31	4.413	1.502	0.268	<0.005	11.789	0.909	1.136	8.189	3.077	14.9	2.608	0.402	13.578	7.43
Arsénico	mg/L	<0.003	0.007	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.005	0.01	<0.003	<0.003	0.007	<0.003	0.004	<0.003	0.007	<0.003	<0.003	<0.003	0.013
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.030	0.031	0.02	0.025	0.026	0.041	0.027	0.055	0.172	0.18	0.441	0.069	0.146	0.031	0.058	0.056	0.163	0.057	0.079	0.078	0.188
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	33.9	240.222	58.822	31.022	26.533	16.633	19.756	5.684	25.356	<0.3	<0.3	3.033	6.898	6.961	3.779	7.753	2.918	7.041	10.91	0.392	4.51
Cadmio	mg/L	0.013	0.055	0.013	0.012	<0.006	0.005	0.003	<0.002	0.003	<0.002	0.524	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalto	mg/L	0.026	0.17	0.039	0.026	0.016	0.015	0.009	0.003	0.01	<0.002	<0.002	<0.002	0.003	0.003	<0.002	0.004	0.002	0.002	0.002	<0.002	0.002
Cromo	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.013	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobre	mg/L	0.033	0.034	0.018	0.008	0.004	0.008	0.008	0.016	0.004	0.016	0.01	0.004	0.023	0.011	0.009	0.01	0.021	0.006	0.022	0.006	0.038
Hierro	mg/L	<0.3	0.863	1.086	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.44	<0.3	<0.3	<0.3	0.72	<0.3	<0.3	<0.3	0.627
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	10.531	65.122	30.211	13.811	7.767	7.577	6.719	5.403	10.391	<0.2	<0.2	7.449	10.362	2.938	6.069	4.753	8.032	5.317	8.996	5.264	5.84
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	4.213	25.722	7.318	4.077	2.6200	2.288	2.26	0.916	2.598	<0.2	<0.2	0.8	0.299	0.287	0.67	0.554	0.867	0.402	0.398	1.034	0.969
Manganeso	mg/L	43.9	320.556	79.678	52.144	<34.28	33.822	1.606	14.633	30.2	6.808	<0.002	2.434	9.414	9.528	5.382	12.633	5.421	7.144	5.171	1.979	4.142
Molibdeno	mg/L	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.272	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	5.018	20.844	6.723	3.283	1.347	1.025	0.662	<0.2	1.786	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	0.958	0.261	2.602
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Níquel	mg/L	0.008	0.069	0.015	0.01	0.006	0.007	0.005	<0.002	0.004	<0.002	0.013	<0.002	0.002	0.003	0.021	0.016	0.003	0.002	0.004	0.003	0.004
Plomo	mg/L	0.025	0.076	0.084	0.051	<0.0190	0.036	0.016	0.074	0.011	0.241	<0.002	0.075	0.33	0.031	0.07	0.039	0.294	0.033	0.009	0.048	0.414
Antimonio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.125	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	<0.005	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	1.532	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	<0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.016	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002
Vanadio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.002	0.002	<0.002	<0.002	0.004	<0.002	<0.002	0.006	0.003	0.008	0.003	<0.002	0.004	0.003
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	1.901	8.386	1.341	1.27	<0.7250	0.635	0.351	0.197	0.25	0.249	0.219	0.087	0.176	0.098	0.083	0.097	0.131	0.11	0.077	0.033	0.138
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	<0.01	<0.01	0.011	0.012	0.016	0.264	<0.01	<0.01	0.023	0.014	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.054	0.097	0.117
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50231		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	645.06	913.58	683.27	852.72	939.34	921.07	907.34	833.80	540.10	801.80	871.19	889.60	964.36	885.82	814.67	796.00	898	812	846	853	824
pH a 25° C	u pH	3.57	5.15	4.37	4.22	4.71	4.23	4.08	4.66	3.86	4.43	4.41	4.57	4.38	3.83	3.8	4.77	4	3.75	3.92	3.86	4.87
Conductividad a 25°C	uS/cm	1337	81.90	246.00	179.3	40.30	82.1	79.28	72.9	143.9	163	84.9	52.7	148	137.8	16.62	409	205.2	181.3	105.9	219	62.7
Potencial Redox Abs.	mv	475.8	527.30	571.70	567.3	554.50	486.2	460.6	543.4	530.6	512.2	534.1	582	590.9	603.6	619.4	626.8	625.3	627	650.6	563.4	574.7
Oxigeno Disuelto	mg/L	6.42	6.28	6.42	6.34	6.07	5.92	5.44	6.55	6.2	5.2	5.28	5.42	5	5.49	5.9	6.15	6.41	6.68	5.03	6.3	5.96
Cloruros	mg/L	12	11.4	0.4	<0.250	3.54	<0.250	15.4	11.6	<0.250	4.76	0.3	<0.250	1	0.8	0.9	18.5	<0.250	<0.250	0.4	<0.250	1.09
Fluoruros	mg/L	<0.250	<0.250	0.3	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	2.8	<0.100	0.4	<0.100	<0.100	<0.100	3.7	2.6	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.2	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	0.48	<0.100	2.14	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	501	18.8	398	88	13.50	45.10	38.60	44.20	85.00	131.00	45.6	39.10	284.00	312.00	381	382	107	312	71	362	59.6
Alcalinidad Total (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0	5.0	<2.0	<2.0	<2.0	<2.0	11	<2.0	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Acidez (H2SO4)	mg/L	1041	6	23	19.0	20.4	9.6	12.0	11.0	41.3	6.8	10.4	36.9	71.8	83	88.4	82.0	62.4	68.5	43.6	92.5	46.1
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0012	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.045	0.054	<0.002	<0.002	<0.002	<0.002	0.031	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	47.744	0.128	1.037	0.448	0.2	2.753	0.363	1.243	2.329	0.192	<0.005	0.764	1.44	1.108	4.314	1.881	7.101	1.306	1.308	6.456	3.078
Arsénico	mg/L	0.02	<0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.004	0.137	<0.003	<0.003	0.003	<0.003	0.003	0.004	0.013	<0.003	<0.003	0.003	<0.003
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.035	0.079	0.049	0.06	<0.07	0.135	0.042	0.034	0.095	0.179	0.302	0.04	0.155	0.046	0.061	0.119	0.152	0.095	0.059	0.078	0.065
Berilio	mg/L	<0.002	<0.002	0.006	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	210.444	5.102	34.867	13.378	3.0440	4.65	6.106	<0.3	19.111	8.447	<0.3	3.46	8.023	6.064	6.286	18.4	3.683	5.132	2.399	2.451	0.645
Cadmio	mg/L	0.053	0.002	0.011	0.011	<0.002	0.004	0.006	<0.002	0.034	0.01	0.173	0.005	0.017	0.018	0.022	0.036	0.022	0.018	0.009	0.021	0.008
Cobalto	mg/L	1.107	0.022	0.115	0.064	0.011	0.02	0.023	0.015	0.095	0.043	<0.002	0.009	0.032	0.034	0.031	0.073	0.029	0.023	0.012	0.026	0.009
Cromo	mg/L	0.042	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.041	<0.002	0.002	0.002	0.003	0.008	0.004	0.004	0.003	0.005	0.002
Cobre	mg/L	3.362	0.142	0.794	0.518	0.117	0.235	0.298	0.28	1.669	7.039	0.012	0.294	0.996	1.143	1.268	2.822	1.596	1.448	0.775	1.922	0.636
Hierro	mg/L	24.2	1.271	2.72	1.277	<0.3	0.828	0.859	<0.3	2.95	1.51	<0.3	<0.3	1.888	1.901	1.697	5.171	2.997	1.884	1.194	2.408	0.873
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	116.333	4.484	27.567	13.456	2.228	4.793	2.818	<0.2	7.636	<0.2	<0.2	4.593	2.881	1.537	2.882	16.556	3.543	2.828	1.933	2.312	2.532
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	17.089	0.219	1.099	0.538	<0.2	0.275	0.651	<0.2	0.894	0.296	<0.2	<0.2	<0.2	<0.2	0.267	0.718	0.33	<0.2	<0.2	0.412	<0.2
Manganeso	mg/L	28.767	0.533	2.09	1.197	<0.23	0.44	0.236	0.364	2.037	0.677	<0.002	0.221	0.748	0.781	0.686	1.529	0.708	0.591	0.269	0.584	0.231
Molibdeno	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.02	0.283	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	19.267	0.426	1.716	0.763	<0.2	<0.2	0.802	<0.2	0.258	9.922	<0.2	<0.2	<0.2	<0.2	<0.2	1.187	<0.2	<0.2	<0.2	0.457	0.26
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Níquel	mg/L	0.283	0.007	0.037	0.022	0.0040	0.008	0.009	0.004	0.04	0.026	0.017	0.003	0.014	0.016	0.046	0.701	0.175	0.141	0.062	0.106	0.047
Plomo	mg/L	1.413	0.154	0.78	0.665	<0.1220	0.255	0.246	0.133	0.873	0.11	0.046	0.143	0.314	0.222	0.179	0.272	0.358	0.195	0.065	0.111	0.053
Antimonio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.011	0.089	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	0.008	0.786	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	0.006	0.012	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	0.019	<0.002	0.003	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.024	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadio	mg/L	0.007	<0.002	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.006	<0.002	<0.002	<0.002	<0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	12.911	0.49	3.26	3.036	<0.6190	1.322	1.756	1.08	10.538	5.598	1.176	1.892	6.211	6.157	6.786	11.511	6.537	8.559	2.688	4.846	2.23
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	<0.01	<0.01	<0.01	0.01	0.012	<0.01		<0.01	0.027	0.019	0.03	<0.01	0.034	0.038	<0.01	<0.01	<0.01	<0.01	0.101	0.193
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50232		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	728.8	885.5	872.5	770.3	742.1	1003.0	998.2	754.8	734.7	767.0	922.3	982.6	907.1	934.2	888.2	756.0	949.1	864.0	858.9	859.2	895.9
pH a 25° C	u pH	3.7	4.04	3.83	3.76	3.59	3.55	3.59	4.00	3.45	4.30	4.21	3.93	3.48	3.64	3.82	3.95	4.21	4.12	3.92	3.88	3.78
Conductividad a 25°C	uS/cm	345.0	392.0	377.0	240.9	259.9	213.5	258.4	254.1	313.0	165.8	77.5	85.8	128.3	174.6	135.4	410.0	167.4	61.7	92.4	125.7	154.3
Potencial Redox Abs.	mv	464.9	500.0	568.3	550.6	541.3	575.6	538.1	560.2	593.0	517.7	638.1	584.0	584.8	612.3	607.9	641.3	606.9	620.6	633.2	543.8	584.4
Oxígeno Disuelto	mg/L	6.66	6.33	6.46	6.06	5.95	5.98	7.17	5.94	4.91	5.34	5.45	5.29	5.50	5.27	5.69	5.88	6.40	6.37	6.04	5.95	5.79
Cloruros	mg/L	11.40	11.70	1.20	0.30	1.67	<0.250	15.10	12.40	<0.250	4.14	0.300	<0.250	0.900	0.95	0.800	2.52	1.10	<0.250	<0.250	M.I.	<0.250
Fluoruros	mg/L	<0.250	<0.250	0.400	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	<0.100	<0.100	0.320	<0.100	0.440	<0.100	<0.100	4.400	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	69.0	95.0	94.0	109.0	69.0	77.0	28.1	92.0	91.0	26.2	41.5	57.2	78.0	96.0	93.0	98.0	98.0	47.3	67.0	98.0	32.8
Alcalinidad Total (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.00	<2.00	<2.00	<2.00	4.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Acidez (H2SO4)	mg/L	588	157.6	152.2	62.2	234	46.5	25.5	37.5	98.6	4.0	16.6	34.9	48.5	76	59.9	174.4	88.0	20.6	43.2	60.5	112.9
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0007	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.054	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	19.544	23.533	24.867	4.254	4.932	1.776	1.178	1.741	6.172	0.109	<0.005	1.493	1.659	2.161	1.492	3.016	1.267	0.235	0.809	2.209	2.784
Arsénico	mg/L	0.024	0.006	<0.003	<0.003	<0.0040	0.003	<0.003	<0.003	0.003	0.046	<0.003	<0.003	0.007	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.037	0.011	0.033	0.045	<0.03	0.057	0.028	0.013	0.059	0.032	0.362	0.015	0.03	0.019	0.009	0.057	0.042	0.024	0.016	0.014	0.012
Berilio	mg/L	<0.002	0.004	0.005	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	34.2	37.744	53.944	9.938	<3.8790	1.192	1.402	<0.3	0.778	<0.3	<0.3	1.516	1.443	0.918	<0.3	9.264	2.633	1.181	0.439	<0.3	<0.3
Cadmio	mg/L	0.035	0.050	0.062	0.016	0.013	0.006	0.002	<0.002	0.011	<0.002	0.213	<0.002	0.003	0.005	0.003	0.009	0.004	<0.002	<0.002	0.002	0.003
Cobalto	mg/L	0.098	0.150	0.145	0.024	0.012	0.004	0.002	<0.002	0.007	<0.002	<0.002	<0.002	0.002	0.004	<0.002	0.008	0.003	<0.002	<0.002	0.002	0.003
Cromo	mg/L	0.06	0.064	0.059	0.014	0.016	0.007	0.004	0.005	0.031	<0.002	0.015	0.005	0.014	0.023	0.01	0.047	0.012	0.002	0.007	0.01	0.02
Cobre	mg/L	1.197	1.741	2.736	1.111	1.456	0.780	0.313	0.575	1.906	0.123	0.014	0.301	0.522	0.882	0.443	2.687	0.756	0.177	0.395	0.598	0.868
Hierro	mg/L	10.55	13.00	19.28	9.40	13.30	9.73	3.46	5.61	21.64	<0.30	<0.30	0.58	7.63	11.52	5.07	26.86	11.78	2.11	5.19	6.77	11.99
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	0.275	<0.20	5.262	0.529	<0.20	<0.20	0.221	<0.20	0.22	<0.20	<0.20	3.008	0.454	<0.20	<0.20	0.69	<0.20	0.495	<0.20	<0.20	<0.20
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	2.100	3.277	4.330	0.646	0.300	<0.20	0.075	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.372	0.260	<0.20	<0.20	<0.20	<0.20
Manganeso	mg/L	1.304	2.18	2.412	0.447	0.23	0.077	0.20	0.026	0.149	<0.002	<0.002	0.014	0.025	0.039	0.013	0.077	0.036	0.008	0.01	0.012	0.016
Molibdeno	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.158	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	1.367	0.746	1.768	0.598	0.222	<0.20	0.799	<0.20	<0.20	0.574	<0.20	<0.20	<0.20	<0.20	<0.20	0.882	<0.20	<0.20	<0.20	0.277	0.257
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Níquel	mg/L	0.073	0.106	0.111	0.024	0.015	0.009	<0.002	<0.002	0.012	<0.002	0.012	0.002	0.004	0.008	0.024	0.278	0.458	0.078	0.11	0.124	0.121
Plomo	mg/L	0.218	0.083	0.081	0.086	0.068	0.063	0.033	0.025	0.099	0.006	<0.002	0.013	0.019	0.018	0.01	0.017	0.012	0.005	0.011	0.015	0.019
Antimonio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.131	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	0.005	0.015	<0.005	<0.005	0.005	0.005	<0.005	<0.005	0.007	0.029	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	0.002	<0.002	0.003	0.002	0.002	0.002	<0.002	<0.002	0.003	<0.002	0.009	<0.002	<0.002	<0.002	<0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.002
Vanadio	mg/L	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	3.79	7.40	8.49	3.77	3.68	1.63	0.56	0.72	3.87	0.47	0.68	0.81	1.41	2.29	1.12	3.91	1.59	0.47	0.55	0.65	1.23
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	<0.01	<0.01	<0.01	0.074	<0.01	0.012	<0.01	<0.01	0.013	0.014	<0.01	0.017	<0.01	0.028	<0.01	<0.01	<0.01	<0.01	0.083	0.088
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50233		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	747.5	359.6	538.6	1001.7	591.4	996.9	946.7	698.9	697.1	834.1	916.1	982.6	1012.6	851.0	901.6	782.6	818.0	802.8	886.2	892.3	854.2
pH a 25° C	u pH	2.93	3.72	3.86	3.78	3.73	3.64	3.60	3.80	3.68	3.76	4.02	3.98	3.52	3.69	3.88	3.95	4.77	3.66	3.95	3.89	4.32
Conductividad a 25°C	uS/cm	1161.0	220.1	148.1	160.1	136.1	136.4	98.1	110.7	137.6	76.7	100.7	69.9	104.8	134.5	86.6	193.2	76.4	197.1	80.7	88.7	50.2
Potencial Redox Abs.	mv	621.8	516.6	560.4	547.1	546.4	530.1	551.0	545.9	600.8	580.2	615.6	575.4	597.3	622.9	593.9	623.5	604.7	617.1	531.4	567.1	581.2
Oxígeno Disuelto	mg/L	7.07	6.28	6.25	6.05	6.29	5.96	6.91	6.64	5.05	6.34	5.81	5.28	5.02	5.45	6.14	6.06	6.08	6.67	6.14	6.07	6.10
Cloruros	mg/L	12.40	11.6	0.60	0.30	3.64	<0.250	15.1	17.8	<0.250	<0.250	<0.250	<0.250	1.130	0.86	0.7	3.60	1.81	<0.250	0.3	0.8	<0.250
Fluoruros	mg/L	8.00	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	2.7	<0.100	0.340	<0.100	1.090	<0.100	<0.100	3.0	<0.100	<0.100	<0.100	<0.100	0.1	0.1	<0.100	0.87	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	92.0	35.9	98.0	69.0	24.2	55.9	30.2	96.0	62.7	44.7	45.7	48.0	88.0	72.0	90.0	93.0	57.6	55.0	57.1	57.0	52.6
Alcalinidad Total (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.00	<2.0	<2.0	<2.0	<2.0
Acidez (H2SO4)	mg/L	2316	78.5	45.4	39.7	134.6	25.5	26	22.5	35.2	21.5	24.2	22.1	30.1	43.3	48.2	57.9	22.6	89.3	30.2	32.0	47.5
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.083	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	82.3	3.896	2.498	1.483	1.061	0.773	0.421	0.564	1.463	0.512	<0.005	0.639	0.768	1.094	0.816	0.881	1.206	2.109	0.858	1.359	1.179
Arsénico	mg/L	0.759	<0.0190	0.003	<0.003	0.006	0.004	<0.003	<0.003	<0.003	0.024	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.007	0.011	0.005	<0.003	<0.003
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.032	0.041	0.076	0.061	0.106	0.075	0.061	0.057	0.118	0.199	0.358	0.088	0.108	0.103	0.069	0.117	0.068	0.105	0.122	0.079	0.051
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	23.43	2.53	3.56	0.45	0.71	0.48	0.59	<0.3	<0.3	<0.3	<0.3	0.75	0.87	0.43	<0.3	0.59	2.67	1.40	0.37	<0.3	<0.3
Cadmio	mg/L	0.006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.385	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalto	mg/L	0.686	0.015	0.008	0.004	0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002
Cromo	mg/L	0.326	0.008	0.005	0.003	0.002	0.002	<0.002	<0.002	0.002	<0.002	0.017	<0.002	<0.002	0.002	<0.002	0.003	<0.002	0.005	0.002	<0.002	<0.002
Cobre	mg/L	163.33	8.28	5.96	4.05	3.72	2.64	1.03	1.70	3.86	1.22	0.02	1.06	2.14	3.57	1.46	3.39	1.46	4.73	1.02	1.28	1.20
Hierro	mg/L	134.67	12.93	7.97	6.70	4.32	4.36	2.52	2.75	3.98	0.47	<0.3	<0.3	2.58	4.42	1.91	4.21	2.10	8.38	2.08	2.15	2.21
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	0.360	0.289	5.982	0.588	0.273	0.294	0.537	<0.2	0.327	<0.2	<0.2	3.373	0.408	<0.2	<0.2	0.562	<0.2	0.541	0.512	<0.2	<0.2
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	3.278	0.297	0.292	<0.2	<0.2	<0.2	0.039	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.314	<0.2	<0.2	<0.2	<0.2
Manganeso	mg/L	14.411	0.432	0.235	0.184	0.098	0.056	0.200	0.026	0.097	0.010	<0.002	0.009	0.015	0.025	0.007	0.029	0.013	0.037	0.012	0.008	0.010
Molibdeno	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.510	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	3.476	1.02	1.579	0.978	0.517	0.26	0.247	<0.2	0.24	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.60	<0.2	<0.2	0.246	0.241
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Níquel	mg/L	0.489	0.015	0.007	0.008	0.005	0.004	<0.002	<0.002	0.004	<0.002	0.012	0.006	0.01	0.013	0.052	0.059	0.013	0.158	0.212	0.111	0.062
Plomo	mg/L	0.011	0.005	0.002	0.017	0.002	0.002	<0.002	<0.002	0.004	0.002	0.009	<0.002	<0.002	<0.002	<0.002	0.002	0.002	0.004	0.002	<0.002	0.006
Antimonio	mg/L	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.136	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	0.045	0.011	<0.005	<0.005	0.009	0.008	<0.005	<0.005	0.006	0.043	2.416	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadio	mg/L	0.008	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	5.02	0.64	0.54	0.52	0.37	0.21	0.07	0.07	0.21	0.10	0.30	0.05	0.07	0.10	0.05	0.06	0.04	0.11	0.04	0.03	0.05
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	0.012	0.018	0.013	0.024	<0.01	0.016	0.014	0.024	0.011	0.018	0.017	<0.01	0.024	0.033	0.030	<0.01	<0.01	0.015	0.075	0.040
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50234		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	750.7	884.0	819.1	923.6	919.8	875.5	956.4	873.3	664.5	885.7	885.7	1011.1	926.1	938.7	913.6	951.2	917.4	878.0	866.9	873.5	887.3
pH a 25° C	u pH	3.17	4.28	4.26	4.16	3.88	3.72	3.71	4.49	3.64	3.67	4.49	3.98	3.43	3.77	3.93	4.08	4.18	3.96	3.78	3.8	3.95
Conductividad a 25°C	uS/cm	67.8	195.3	154.7	120.4	169.4	185.8	161.4	158.5	278.9	130.9	42.5	69.9	202.4	121.9	94.4	151.3	109.7	216.2	154.4	178.4	109.5
Potencial Redox Abs.	mv	604.6	577.2	535.7	468.9	547.1	530.9	537.0	543.2	581.4	578.5	568.1	575.4	586.0	613.8	586.4	625.9	609.2	621.2	628.6	548.1	585.1
Oxigeno Disuelto	mg/L	6.38	6.22	6.40	6.32	6.03	6.01	6.07	6.40	5.03	6.37	5.28	5.28	5.53	5.45	6.22	6.61	6.15	6.52	6.04	6.05	6.05
Cloruros	mg/L	12.00	11.50	0.30	0.30	3.57	<0.250	15.10	13.20	0.4	<0.250	<0.250	<0.250	0.900	0.9	0.800	0.7	<0.250	<0.250	0.4	<0.250	<0.250
Fluoruros	mg/L	8.30	<0.250	0.500	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	2.8	<0.100	0.310	<0.100	1.090	<0.100	<0.100	2.300	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	49.7	39.1	37.3	64.0	41.0	80.0	32.7	92.0	78.0	69.0	32.1	22.7	26.6	24.7	23.6	28.5	71.0	87.0	83.0	84.0	81.0
Alcalinidad Total (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Acidez (H2SO4)	mg/L	64.9	34	26	24	37.3	45	25.5	18.5	86.4	41.8	25.2	7.7	73.2	75.1	60.5	53.8	46.5	95.9	68.1	93.1	86.7
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.082	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	54.167	1.493	1.344	0.832	1.497	1.778	1.259	0.639	5.502	0.994	<0.005	0.216	2.701	0.855	0.727	0.6	1.658	1.566	1.678	4.002	1.519
Arsénico	mg/L	0.01	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.051	0.041	0.031	0.035	0.025	0.026	0.014	0.004	0.039	0.072	0.334	0.009	0.025	0.02	0.011	0.016	0.015	0.013	0.008	0.01	0.012
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	89.30	23.39	20.50	7.49	9.62	6.48	3.68	<0.3	6.09	<0.3	<0.3	1.68	3.15	1.25	<0.3	1.07	<0.3	1.90	0.79	<0.3	1.30
Cadmio	mg/L	0.023	0.002	0.002	0.007	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.372	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalto	mg/L	0.679	0.042	0.028	0.014	0.011	0.009	0.003	<0.002	0.008	<0.002	<0.002	<0.002	0.003	0.002	<0.002	<0.002	<0.002	0.002	0.002	0.002	0.002
Cromo	mg/L	0.234	0.002	0.003	0.002	<0.002	0.002	<0.002	<0.002	0.005	<0.002	0.018	<0.002	0.004	0.002	<0.002	0.002	0.002	0.005	0.004	0.004	0.003
Cobre	mg/L	100.54	6.45	5.91	2.69	5.57	5.73	2.36	1.47	8.62	2.39	0.01	0.36	4.60	2.09	1.04	1.68	1.22	2.59	1.60	2.01	1.05
Hierro	mg/L	67.96	5.00	4.50	3.01	4.43	5.45	3.31	1.96	15.19	5.51	<0.3	<0.3	12.96	7.63	4.00	6.51	5.10	13.16	7.68	9.32	6.41
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	0.300	0.343	4.994	0.879	<0.2	0.212	<0.2	<0.2	<0.2	<0.2	<0.2	3.647	0.352	<0.2	<0.2	<0.2	<0.2	0.518	0.555	<0.2	<0.2
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	9.132	1.812	1.663	0.567	0.962	<0.73	0.077	<0.2	<0.66	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganeso	mg/L	9.021	0.575	0.390	0.158	0.175	0.128	0.308	0.023	0.133	0.016	<0.002	0.002	0.030	0.013	0.002	0.018	0.004	0.015	0.009	0.010	0.334
Molibdeno	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.234	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	1.283	0.484	1.214	0.547	<0.2	<0.2	0.672	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.381	0.362
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Níquel	mg/L	0.387	0.027	0.015	0.012	0.009	0.007	0.002	<0.002	0.008	0.002	0.012	<0.002	0.003	0.005	0.023	0.022	0.004	0.002	0.002	0.004	0.019
Plomo	mg/L	0.052	0.01	0.008	0.069	0.009	0.012	0.005	<0.002	0.008	0.032	0.026	0.002	0.012	0.007	0.016	0.013	0.011	0.007	0.002	0.002	0.041
Antimonio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.167	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	7.54	0.59	0.37	0.65	0.27	0.20	0.10	0.08	0.29	0.15	0.39	0.03	0.15	0.08	0.05	0.08	0.06	0.14	0.07	0.06	1.66
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	<0.01	0.020	0.019	0.014	0.013	0.028	0.019	0.020	0.028	<0.01	<0.01	0.039	0.014	<0.01	0.013	<0.01	<0.01	0.063	0.075	0.042
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50235		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	824.5	891.8	811.1	924.2	933.9	932.3	961.3	863.7	819.2	848.9	936.6	982.3	1000.5	943.3	923.9	888.9	932.5	883.2	953.7	862.5	940.3
pH a 25° C	u pH	3.75	3.26	2.87	3.91	3.69	3.49	3.37	3.91	3.54	3.14	3.93	3.35	3.22	3.28	3.47	3.6	3.56	3.15	3.09	3.62	3.34
Conductividad a 25°C	uS/cm	109.9	153.8	156.1	132.7	158.0	217.3	192.8	159.6	208.8	377.0	195.3	267.4	259.6	382.0	244.9	417.0	395.0	524.0	529.0	323.0	327.0
Potencial Redox Abs.	mv	550.6	602.9	616.2	555.1	551.5	549.7	549.7	576.9	582.5	612.7	588.5	592.4	609.1	634.4	592.9	634.8	632.0	623.6	634.5	582.7	601.9
Oxigeno Disuelto	mg/L	6.20	6.24	6.39	6.31	6.19	5.97	5.69	5.80	6.32	5.99	6.06	5.05	4.98	5.21	5.98	6.17	6.20	6.45	5.95	5.97	5.93
Cloruros	mg/L	11.60	11.70	3.17	0.50	3.7	<0.250	15.20	11.60	<0.250	0.4	0.300	<0.250	1.000	0.9	0.800	0.7	<0.250	0.3	0.3	0.4	<0.250
Fluoruros	mg/L	<0.250	<0.250	0.400	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	3.5	3.1	0.590	0.23	1.210	<0.100	<0.100	2.100	0.1	<0.240	0.1	<0.100	<0.100	0.1	0.1	0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	55.1	62.0	92.0	62.9	27.8	81.0	36.4	81.0	83.0	79.0	67.0	109.0	81.0	87	93.0	82.0	96.0	98.0	101.0	93.0	91.0
Alcalinidad Total (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Acidez (H2SO4)	mg/L	44.6	217.6	230.3	30.3	148.5	58	64	45.5	49.2	99.6	45	90.9	71.9	98.2	105.7	131.6	122.2	201.4	224	129.7	215.3
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.083	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	2.751	12.544	11.711	1.603	1.37	2.033	2.02	0.967	0.967	1.836	<0.005	2.148	0.629	0.798	0.59	0.401	2.467	0.733	1.404	1.262	1.579
Arsénico	mg/L	0.004	<0.0300	1.946	<0.003	0.003	0.009	<0.0080	<0.003	0.006	0.037	<0.003	<0.0060	0.013	<0.0240	0.007	0.014	0.029	0.038	0.036	0.014	0.021
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.02	0.023	0.01	0.047	0.037	0.045	0.037	0.02	0.044	0.106	0.317	0.015	0.021	0.016	0.008	0.015	0.029	0.012	0.013	0.013	0.015
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	5.51	13.70	28.48	1.61	1.36	0.91	1.36	0.30	0.46	0.30	0.30	2.09	1.16	1.09	0.30	1.21	<0.3	2.06	0.80	0.30	0.30
Cadmio	mg/L	0.029	0.379	1.51	0.047	0.054	0.077	0.081	0.024	0.056	<0.096	0.255	<0.079	0.043	0.067	0.033	0.037	0.044	0.069	0.065	0.036	0.041
Cobalto	mg/L	0.052	0.293	1.827	0.025	0.012	0.014	0.01	<0.002	0.005	0.007	<0.002	0.002	0.003	0.005	0.002	0.004	0.003	0.006	0.006	0.003	0.004
Cromo	mg/L	0.014	0.127	0.809	0.011	0.009	0.012	0.011	0.003	0.008	0.01	0.017	0.012	0.007	0.009	0.004	0.006	0.006	0.01	0.012	0.005	0.008
Cobre	mg/L	0.26	1.03	4.51	0.20	0.31	0.54	0.63	0.37	0.61	1.11	0.01	0.66	0.62	1.13	0.54	0.98	0.98	2.03	1.92	1.22	1.64
Hierro	mg/L	6.63	42.16	273.11	5.69	6.62	10.97	13.38	7.06	10.11	19.64	<0.3	12.66	12.61	22.68	9.60	15.52	17.17	34.06	31.40	16.32	24.79
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	0.639	0.352	5.576	0.667	<0.2	0.210	0.284	0.814	0.208	<0.2	<0.2	3.338	0.499	<0.2	<0.2	0.206	<0.2	0.691	0.664	<0.2	<0.2
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	<0.2	0.283	1.891	<0.2	<0.2	<0.2	0.053	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganeso	mg/L	0.080	0.568	2.661	0.047	0.029	0.031	0.200	0.011	0.035	0.003	<0.002	0.010	0.004	0.006	<0.002	0.011	<0.002	0.006	0.005	0.003	0.004
Molibdeno	mg/L	<0.003	<0.003	0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.204	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	0.477	0.512	2.041	0.278	<0.2	<0.2	0.607	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.277	0.292
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Niquel	mg/L	0.017	0.099	0.522	0.011	0.007	0.01	0.005	0.005	0.004	0.004	0.013	0.002	0.002	0.007	0.025	0.02	0.005	0.004	0.005	0.004	0.004
Plomo	mg/L	0.53	0.455	3.047	0.566	0.671	0.362	0.275	0.157	0.493	0.509	0.024	0.155	0.293	0.436	0.151	0.327	0.251	0.53	0.255	0.209	0.191
Antimonio	mg/L	<0.002	0.00	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.106	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	<0.005	0.01	0.074	<0.005	<0.005	0.007	0.006	<0.005	0.005	0.016	1.457	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	0.009	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	0.016	0.038	0.202	0.011	0.013	0.011	0.014	0.003	0.013	0.016	0.021	0.009	0.01	0.017	0.006	0.014	0.011	0.021	0.017	0.011	0.014
Vanadio	mg/L	<0.002	0.007	0.11	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	0.004	0.002	0.003	<0.002	0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	1.49	11.54	88.47	1.79	3.02	4.75	6.01	2.00	4.47	15.14	1.49	7.14	4.96	7.72	3.40	4.00	4.48	13.86	7.03	3.02	4.35
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	<0.01	<0.01	0.013	0.149	<0.01	0.030	0.026	0.033	0.021	<0.01	0.019	0.016	0.023	<0.01	<0.01	<0.01	<0.01	<0.01	0.070	0.197
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50236		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	854.8	818.7	868.7	891.1	917.7	922.7	842.2	664.5	828.1	655.4	805.2	981.4	1020.6	903.1	892.4	882.6	936.1	863.2	902.9	856.8	864.0
pH a 25° C	u pH	6.07	6.53	6.74	6.26	5.96	5.96	5.96	6.79	5.96	5.69	7.05	6.73	6.15	5.6	5.86	5.84	6.41	5.61	6.02	5.28	5.42
Conductividad a 25°C	uS/cm	81.3	68.9	45.4	17.9	16.1	25.2	7.2	14.5	19.1	15.6	16.5	16.2	9.9	14.5	18.8	14.9	9.8	9.9	9.6	9.3	8.1
Potencial Redox Abs.	mv	571.5	564.2	492.2	532.6	542.2	548.7	479.6	517.8	537.6	565.7	561.2	559.6	536.3	599.8	572.3	626.4	588.0	603.6	620.7	577.3	555.6
Oxigeno Disuelto	mg/L	6.70	6.33	6.30	6.10	6.05	5.97	6.08	6.29	4.85	5.36	6.00	4.74	5.02	5.43	6.23	6.11	6.06	6.61	5.94	6.02	6.17
Cloruros	mg/L	25.12	14.50	0.40	<0.250	3.56	<0.250	15.10	10.70	1.53	<0.250	1.100	<0.250	0.800	0.9	0.600	1.48	0.30	<0.250	0.3	<0.250	<0.250
Fluoruros	mg/L	0.25	<8.100	0.300	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	3	3.1	0.740	0.1	1.080	0.1	<0.100	0.100	0.1	<0.100	0.24	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1
Nitritos	mg/L	3	<0.100	<0.100	<0.100	0.48	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	323.1	29.1	22.1	9.4	8.8	7.7	38.9	98.0	8.5	13.3	27.5	2.7	36.3	48.2	59.4	42.1	12.4	7.0	10.5	5.5	8.3
Alcalinidad Total (CaCO3)	mg/L	9.2	8.4	5	3	4	3	2	5	4	3	4	9.2	3	4	4	3	<2	3	3	2	3
Acidez (H2SO4)	mg/L	4	3	3	3	7.3	3	4	4	2	<2	3	7	12.4	11.6	7.8	6	4.0	3	14.4	6	10
Mercurio	µg/L	0.00226	0.00213	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.008	0.0006	0.0006	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.0030	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	<0.002	0.055	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	1.724	0.019	0.215	0.024	0.071	0.061	0.07	0.256	0.194	0.038	<0.005	0.117	0.052	0.024	0.029	0.021	0.043	0.024	0.062	0.039	0.038
Arsénico	mg/L	0.017	<0.0200	0.047	0.032	0.097	0.072	<0.0810	0.122	0.265	0.27	0.491	<0.1400	0.083	<0.0500	0.038	0.036	0.041	0.048	0.066	0.024	0.03
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.099	0.054	0.288	0.399	0.479	0.48	0.402	4.562	0.946	1.31	0.373	0.677	0.623	0.591	0.471	0.573	0.548	0.631	0.606	0.601	0.643
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	44.70	17.67	7.90	1.37	1.91	1.82	1.98	<0.3	1.26	<0.3	<0.3	1.68	1.57	1.12	<0.3	1.24	<0.3	1.81	0.90	<0.3	<0.3
Cadmio	mg/L	0	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.452	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalto	mg/L	0.009	0.003	0.006	0.003	0.003	0.003	0.002	0.009	0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.002	0.002	0.002	0.002	0.002	0.002
Cromo	mg/L	0	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	0.005	0.002	<0.002	0.018	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobre	mg/L	0.48	0.07	0.02	0.01	0.03	0.04	0.05	0.25	0.10	0.08	0.01	0.02	0.03	0.04	0.03	0.06	0.05	0.04	0.04	0.03	0.03
Hierro	mg/L	0.11	<0.3	2.58	<0.3	1.30	0.93	1.28	0.34	4.27	<0.3	<0.3	<0.3	1.16	0.64	0.31	0.59	0.47	0.63	1.04	<0.3	0.37
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	4.218	1.504	6.268	0.479	<0.2	0.280	0.351	<0.2	1.821	<0.2	<0.2	1.272	0.296	<0.2	<0.2	0.984	<0.2	0.486	0.305	<0.2	<0.2
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	2.556	0.811	0.212	<0.2	<0.2	<0.2	0.076	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganeso	mg/L	1.375	0.512	0.149	0.085	0.085	0.083	0.200	0.341	0.071	0.074	<0.002	0.027	0.045	0.056	0.034	0.068	0.051	0.056	0.054	0.051	0.063
Molibdeno	mg/L	0.025	<0.003	0.014	0.009	0.0120	0.013	0.006	0.004	<0.0300	0.02	0.225	0.014	<0.0090	0.006	<0.003	<0.003	0.005	0.003	0.007	0.003	0.004
Sodio	mg/L	26.834	6.561	0.753	0.283	<0.2	<0.2	0.402	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Niquel	mg/L	0.021	0.004	0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.012	<0.002	<0.002	0.002	0.02	0.019	0.005	<0.002	<0.002	0.002	0.002
Plomo	mg/L	0	0.002	0.025	0.013	0.063	0.041	0.058	0.175	0.214	0.146	0.05	0.094	0.055	0.027	0.023	0.024	0.03	0.027	0.053	0.014	0.016
Antimonio	mg/L	0.003	0.00	0.002	<0.002	0.00	0.003	0.003	<0.002	0.011	0.009	0.132	0.005	0.003	0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	0.171	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.036	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadio	mg/L	0	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	0.00	0.02	0.05	0.01	0.02	0.03	0.04	0.04	0.04	0.06	0.42	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.01	0.02
Cromo (VI)	mg/L	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	NA	0.018	0.017	0.014	0.024	0.051	0.262	0.091	0.014	0.066	0.053	0.024	0.033	0.022	0.017	<0.01	<0.01	<0.01	0.081	0.085
Sulfuros	mg/L	NA	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50237		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	806.4	878.4	861.4	938.0	937.4	922.7	918.0	813.8	699.7	738.9	716.7	905.1	819.1	879.7	870.0	877.3	876.5	873.6	833.0	902.3	868.9
pH a 25° C	u pH	2.87	4.6	4.14	4.28	4.20	4.18	3.77	4.28	4.53	3.86	4.30	3.37	3.95	4.08	4.19	4.23	4.4	4.12	4.15	4.11	4.14
Conductividad a 25°C	uS/cm	782.0	50.0	95.3	58.0	46.8	30.9	25.7	52.9	15.2	51.1	45.5	49.8	45.1	38.6	63.5	79.2	45.0	46.6	42.2	48.0	46.9
Potencial Redox Abs.	mv	635.3	514.5	481.7	460.4	561.6	542.2	555.8	578.0	565.3	603.1	557.2	609.3	577.4	631.9	570.0	634.5	609.4	604.8	623.6	532.8	595.8
Oxigeno Disuelto	mg/L	6.43	6.38	6.37	6.23	6.13	5.99	6.65	6.13	4.94	6.04	5.60	5.33	5.31	5.43	6.17	6.16	6.21	6.67	6.01	6.10	5.87
Cloruros	mg/L	15.20	11.4	0.70	0.50	3.61	<0.250	1.74	6.34	<0.250	<0.250	<0.250	<0.250	0.900	1.12	1.260	0.7	<0.250	<0.250	0.5	<0.250	<0.250
Fluoruros	mg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	3.1	<0.100	0.430	<0.100	1.080	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	130.0	27.1	37.7	38.2	11.3	29.6	32.1	13.8	20.3	33.2	30.1	24.0	93.0	49	68.0	63.0	43.4	43.8	47.0	39.9	49.5
Alcalinidad Total (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Acidez (H2SO4)	mg/L	238.1	6	18.3	10	32	7.5	10.5	8.5	5	8.3	9.8	12	10	17	20.3	20.5	10.6	13	10.2	11.8	28.8
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	<0.002	0.072	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	2.212	0.013	0.134	0.032	0.045	0.049	0.065	0.068	0.057	0.011	<0.005	0.061	0.051	0.055	0.074	0.063	0.059	0.034	0.044	0.09	0.075
Arsénico	mg/L	0.042	<0.003	<0.003	0.004	0.005	0.004	<0.003	<0.003	0.004	0.018	<0.003	<0.0050	0.016	<0.0070	0.007	<0.003	0.007	0.003	0.006	0.004	0.006
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.044	0.174	0.052	0.257	0.478	0.504	0.386	0.279	0.27	0.849	0.359	0.333	0.578	0.553	0.473	0.5	0.5	0.433	0.395	0.423	0.401
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	22.01	1.04	4.83	<0.3	0.73	0.39	0.77	<0.3	<0.3	<0.3	<0.3	1.08	0.95	0.39	<0.3	0.46	<0.3	1.16	<0.3	<0.3	<0.3
Cadmio	mg/L	0.01	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.36	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalto	mg/L	0.301	0.016	0.061	0.019	0.008	0.004	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.002	<0.002	0.003	<0.002	<0.002	0.002	<0.002	<0.002
Cromo	mg/L	0.204	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.013	<0.002	<0.002	0.002	<0.002	0.004	0.002	<0.002	0.002	<0.002	0.002
Cobre	mg/L	21.08	0.29	1.96	1.16	1.09	1.03	0.93	1.36	0.43	0.97	0.01	0.57	0.76	1.03	0.86	1.54	0.78	0.68	0.78	0.68	0.92
Hierro	mg/L	57.52	0.95	2.42	0.67	0.38	<0.3	0.35	0.43	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.47	<0.3	0.47	0.31	<0.3	0.41
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	0.656	0.357	6.122	0.676	<0.2	0.383	6.669	0.395	<0.2	<0.2	<0.2	3.472	0.338	<0.2	<0.2	<0.2	<0.2	0.520	0.620	<0.2	<0.2
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	1.174	<0.2	0.269	<0.2	<0.2	<0.2	0.36	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganeso	mg/L	15.767	1.070	4.990	1.831	0.969	0.463	<0.2	0.396	0.110	0.211	<0.002	0.155	0.183	0.193	0.123	0.187	0.084	0.108	0.121	0.082	0.108
Molibdeno	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.252	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	6.932	0.244	1.107	0.415	0.255	<0.2	0.369	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.22	0.94	0.304
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Niquel	mg/L	0.164	0.012	0.061	0.024	0.014	0.007	0.005	0.002	<0.002	<0.002	0.01	0.002	0.003	0.004	0.026	0.024	0.007	0.003	0.004	0.003	0.003
Plomo	mg/L	0.029	0.002	0.004	0.002	0.002	0.003	0.003	<0.002	0.003	0.003	<0.002	0.005	0.005	0.003	0.006	0.004	0.004	0.002	0.005	0.002	0.003
Antimonio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.164	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.044	0.823	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.012	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	1.19	0.07	0.21	0.14	0.08	0.05	0.06	0.03	0.04	0.06	0.27	0.04	0.05	0.05	0.04	0.05	0.04	0.04	0.06	0.05	0.03	0.04
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	<0.01	<0.01	<0.01	0.011	0.015	0.015	0.021	0.012	0.018	0.027	0.056	0.014	0.014	<0.01	0.033	<0.01	0.012	<0.01	0.073	0.040
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50238		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	833.8	902.8	826.4	861.4	669.5	1005.6	857.9	598.5	829.4	781.6	815.8	818.3	986.5	947.1	925.7	950.3	909.5	903.9	901.6	906.8	905.6
pH a 25° C	u pH	3.17	3.81	3.73	3.88	3.83	3.88	3.86	3.78	3.68	3.46	3.90	3.65	4.18	4.38	4.54	4.54	4.53	4.23	4.15	4.28	4.48
Conductividad a 25°C	uS/cm	404.0	270.9	163.1	122.9	105.5	72.6	82.6	115.5	130.5	142.2	147.8	101.1	24.9	17.4	48.6	40.7	35.9	45.8	55.7	31.1	27.8
Potencial Redox Abs.	mv	606.7	550.9	520.5	532.4	563.8	516.8	518.7	550.7	612.1	614.1	554.6	599.0	561.4	619.2	564.1	598.7	596.6	603.6	617.7	536.5	578.9
Oxigeno Disuelto	mg/L	6.81	6.39	6.37	6.19	5.98	5.93	6.49	6.50	5.25	6.06	8.75	5.26	4.81	5.11	6.32	6.28	6.22	6.35	5.92	6.15	5.58
Cloruros	mg/L	14.10	11.8	0.70	0.40	3.65	<0.250	5.10	6.37	<0.250	<0.250	0.300	<0.250	0.900	0.7	0.800	5.71	<0.250	<0.250	0.3	<0.250	<0.250
Fluoruros	mg/L	8.00	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	<0.100	<0.100	0.410	<0.100	1.090	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	88.0	22.8	40.0	56.2	19.0	38.3	31.3	13.5	54.9	55.7	53.3	50.7	71.0	76	79.0	61.2	42.3	46.6	55.5	35.5	41.0
Alcalinidad Total (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Acidez (H2SO4)	mg/L	175.1	60.0	33.6	17.3	83.4	14	18.5	19.5	23.5	24.6	26	22.7	13.4	14.6	12.7	30.1	12.6	16.2	23	16	28
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.062	<0.002	0.007	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	2.672	0.413	0.121	0.062	0.05	0.025	0.037	0.089	0.097	0.017	2.288	0.11	0.015	0.025	<0.005	0.036	0.109	0.117	0.322	0.183	0.148
Arsénico	mg/L	0.038	0.029	0.003	0.018	0.017	0.007	<0.0080	0.047	0.016	0.049	0.004	<0.0200	0.012	<0.0120	<0.003	0.012	0.026	0.003	0.007	<0.003	0.003
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.034	0.07	0.059	0.174	0.197	0.227	0.195	0.18	0.132	0.256	0.011	0.097	0.431	0.347	0.228	0.315	0.163	0.144	0.116	0.145	0.141
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	43.16	16.978	4.82	1.71	1.21	0.50	0.75	<0.3	1.01	<0.3	<0.3	0.99	0.75	0.52	<0.3	<0.3	<0.3	1.44	0.50	<0.3	<0.3
Cadmio	mg/L	0.011	0.008	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	<0.002	0.425	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalto	mg/L	0.451	0.076	0.062	0.008	0.006	0.002	0.002	<0.002	0.003	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.003	<0.002	<0.002
Cromo	mg/L	0.312	0.065	0.003	0.014	0.01	0.003	0.004	0.008	0.007	0.004	0.012	0.003	<0.002	<0.002	0.014	<0.002	0.005	0.01	0.016	0.004	0.005
Cobre	mg/L	37.48	11.76	1.95	3.00	2.67	1.12	0.97	1.68	1.90	1.54	0.50	0.71	0.10	0.19	0.01	0.18	0.64	1.10	1.71	0.59	0.64
Hierro	mg/L	31.79	12.04	2.41	4.07	2.66	1.01	1.41	3.07	3.02	<0.3	<6.44	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	1.19	2.26	0.68	1.06
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	0.238	<0.2	6.191	0.453	0.224	0.285	0.662	1.561	0.310	<0.2	0.200	3.250	0.297	<0.2	<0.2	<0.2	<0.2	0.577	0.291	<0.2	<0.2
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	5.164	0.783	0.267	<0.2	<0.2	<0.2	0.113	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganeso	mg/L	11.889	2.837	1.039	0.443	0.350	0.139	<0.2	0.133	0.187	0.068	0.021	0.112	0.028	0.027	<0.002	0.011	0.035	0.072	0.106	0.029	0.033
Molibdeno	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.199	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	9.953	1.28	1.076	0.699	0.478	0.26	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.243	<0.2
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Níquel	mg/L	0.631	0.226	0.061	0.032	0.023	0.009	0.007	0.007	0.014	0.005	0.003	0.052	0.029	0.005	0.008	0.024	0.008	0.007	0.012	0.005	0.005
Plomo	mg/L	0.002	0.006	0.003	<0.002	0.002	0.003	<0.002	0.007	0.003	<0.002	0.017	0.002	0.002	0.003	<0.002	0.002	0.003	<0.002	0.002	<0.002	<0.002
Antimonio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.13	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	0.019	0.01	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	0.005	0.02	<0.005	<0.005	<0.005	<0.005	0.696	<0.005	0.009	<0.005	<0.005	<0.005	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.021	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	1.53	0.52	0.21	0.12	0.09	0.06	0.04	0.03	0.09	0.09	1.07	0.13	0.04	0.02	0.27	0.01	0.02	0.05	0.05	0.02	0.02
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	<0.01	0.019	<0.01	0.034	0.012	0.011	0.025	0.015	0.022	-	0.038	0.034	0.053	0.063	<0.01	<0.01	0.085	<0.01	0.093	0.038
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50239		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	24-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	823.2	914.7	831.5	947.0	890.1	893.7	879.9	616.1	970.7	847.9	885.4	911.2	970.7	836.0	834.5	971.8	863.1	877.4	860.1	879.0	895.0
pH a 25° C	u pH	3.65	6.11	4.36	4.83	4.49	4.27	4.05	4.01	4.70	3.98	4.32	3.94	3.97	3.76	3.82	4.05	4.35	4.08	3.94	4	3.99
Conductividad a 25°C	uS/cm	305.0	53.3	92.0	54.9	68.4	97.1	67.8	78.0	25.5	66.9	93.1	93.0	54.0	96.0	89.0	87.0	56.7	71.5	85.6	103.7	86.6
Potencial Redox Abs.	mv	588.8	532.1	470.3	547.7	558.8	519.1	513.7	544.4	555.7	589.4	559.5	564.7	562.6	632.4	568.3	626.7	600.7	602.3	615.8	541.8	594.3
Oxigeno Disuelto	mg/L	6.55	6.35	6.28	6.35	6.15	6.00	6.80	6.85	4.58	6.39	5.49	5.34	4.91	4.76	6.04	6.26	6.01	6.49	6.13	5.80	6.07
Cloruros	mg/L	14.20	11.30	0.90	<0.250	3.61	<0.250	15.10	6.33	<0.250	<0.250	0.500	<0.250	0.800	0.800	0.700	0.4	<0.250	<0.250	<0.250	<0.250	<0.250
Fluoruros	mg/L	8.20	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	3.1	<0.100	0.500	<0.100	1.090	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	0.48	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	219.0	31.8	32.1	38.2	21.2	49.5	34.1	26.2	26.1	44.0	46.3	61.1	72.0	77.0	76.0	82.0	51.0	51.2	66.0	65.0	70.0
Alcalinidad Total (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Acidez (H2SO4)	mg/L	142.7	3	12.7	7.3	21	7	13.5	19.5	5	7.6	13.3	29.1	12.4	22.6	37.2	46.2	23.6	21.6	32	46.9	50.9
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.016	<0.002	<0.002	0.062	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	4.902	0.029	0.214	0.025	0.063	0.129	0.179	0.672	0.068	0.171	<0.005	0.789	0.225	0.648	0.641	0.376	0.407	0.213	0.56	1.105	0.707
Arsénico	mg/L	0.01	<0.0050	0.003	<0.003	0.003	0.004	<0.003	0.027	<0.003	0.043	<0.003	<0.003	0.007	<0.003	<0.003	<0.003	0.009	<0.003	<0.003	<0.003	0.003
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.012	0.132	0.074	0.153	0.230	0.265	0.232	0.363	0.232	0.632	0.454	0.201	0.376	0.269	0.29	0.305	0.372	0.273	0.298	0.332	0.355
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	80.10	3.63	38.24	4.83	8.23	8.77	5.83	4.89	1.55	<0.3	<0.3	6.03	2.18	4.82	1.61	2.38	<0.3	1.80	1.46	<0.3	<0.3
Cadmio	mg/L	0.006	<0.002	0.002	0.014	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.184	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalto	mg/L	0.214	0.002	0.029	0.008	0.004	0.005	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002
Cromo	mg/L	0.043	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	0.018	<0.002	<0.002	0.002	<0.002	0.003	<0.002	<0.002	0.003	0.004	0.004
Cobre	mg/L	33.32	0.31	2.84	1.19	0.67	1.15	0.96	2.58	0.41	0.83	0.01	1.76	0.77	2.98	1.96	2.67	0.80	1.01	1.96	1.97	1.80
Hierro	mg/L	28.13	<0.3	1.59	<0.3	<0.3	<0.3	0.51	2.12	<0.3	<0.3	<0.3	<0.3	0.76	3.06	2.12	3.11	0.93	1.01	2.31	2.69	3.39
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	0.535	0.264	6.247	0.200	<0.2	<0.2	0.360	0.869	<0.2	<0.2	<0.2	3.023	0.336	<0.2	<0.2	<0.2	<0.2	0.463	0.583	<0.2	<0.2
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	2.590	<0.2	0.581	<0.2	<0.2	<0.2	0.046	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganeso	mg/L	9.728	0.042	0.449	0.062	0.058	0.077	<0.2	0.059	0.021	0.009	<0.002	0.021	0.009	0.029	0.008	0.020	0.003	0.008	0.012	0.013	0.013
Molibdeno	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.258	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	2.702	<0.2	1.14	0.489	0.348	0.49	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.229	0.235
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Níquel	mg/L	0.17	0.004	0.032	0.008	0.008	0.014	0.008	0.008	0.005	0.006	0.011	0.013	0.003	0.007	0.022	0.019	0.007	<0.002	0.003	0.006	0.008
Plomo	mg/L	0.008	0.002	0.005	0.003	0.003	0.006	0.003	0.031	0.005	0.028	<0.002	0.002	0.005	0.005	0.004	0.004	0.018	0.002	0.003	0.002	0.002
Antimonio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.189	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	0.015	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	0.024	0.521	<0.005	<0.005	0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.014	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	1.05	0.03	0.16	0.09	0.05	0.06	0.05	0.04	0.03	0.06	0.19	0.04	0.03	0.06	0.03	0.03	0.02	0.04	0.05	0.03	0.03
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	0.017	0.021	0.012	0.018	0.011	0.020	0.029	0.026	0.025	<0.01	<0.01	0.017	0.026	0.017	<0.01	<0.01	0.013	<0.01	0.068	0.034
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Muestra: 50240		29-Sep-2015	6-Oct-2015	13-Oct-2015	20-Oct-2015	27-Oct-2015	3-Nov-2015	10-Nov-2015	17-Nov-2015	24-Nov-2015	1-Dec-2015	8-Dec-2015	15-Dec-2015	22-Dec-2015	29-Dec-2015	5-Jan-2016	12-Jan-2016	19-Jan-2016	26-Jan-2016	2-Feb-2016	9-Feb-2016	16-Feb-2016
Analitos	**Unidad / Ciclos**	**Semana-0**	**Semana-1**	**Semana-2**	**Semana-3**	**Semana-4**	**Semana-5**	**Semana-6**	**Semana-7**	**Semana-8**	**Semana-9**	**Semana-10**	**Semana-11**	**Semana-12**	**Semana-13**	**Semana-14**	**Semana-15**	**Semana-16**	**Semana-17**	**Semana-18**	**Semana-19**	**Semana-20**
Volumen de solución	ml	729.4	948.1	841.4	939.1	897.5	974.7	856.0	854.8	781.0	819.4	928.8	743.6	994.4	928.0	946.3	946.7	929.3	906.8	901.2	915.9	928.0
pH a 25° C	u pH	3.15	3.92	3.14	3.52	3.31	4.02	3.62	3.89	3.70	3.46	3.71	3.66	3.59	3.58	3.51	3.69	3.81	3.32	3.33	3.29	3.23
Conductividad a 25°C	uS/cm	731.0	648.5	584.0	316.0	40.1	67.1	54.1	163.5	136.4	204.6	320.0	123.4	112.1	182.4	214.0	340.0	205.8	409.0	354.0	402.0	375.0
Potencial Redox Abs.	mv	627.1	553.3	591.2	547.4	532.5	537.1	524.8	574.2	599.1	591.6	566.1	593.7	587.0	630.3	582.1	629.0	616.8	620.4	419.6	605.9	615.5
Oxigeno Disuelto	mg/L	6.81	6.49	6.35	6.47	5.99	6.03	6.86	5.97	4.90	6.32	5.81	5.26	4.84	5.16	6.71	6.26	5.90	6.58	6.09	5.98	5.93
Cloruros	mg/L	12.60	11.30	1.11	<0.250	3.63	<0.250	15.10	6.24	<0.250	<0.250	<0.250	<0.250	0.800	0.800	1.040	0.6	<0.250	M.I.	0.3	<0.250	<0.250
Fluoruros	mg/L	8.30	<0.250	0.300	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Nitrógeno Amoniacal	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitratos	mg/L	<0.100	<0.100	0.240	<0.100	1.090	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Nitritos	mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Sulfatos	mg/L	307.0	24.3	80.0	91.0	86.0	41.9	34.6	31.2	64.0	91.0	88.0	60.3	83.0	87.0	79.0	81.0	98.0	50.1	72.0	76.0	86.0
Alcalinidad Total (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Acidez (H2SO4)	mg/L	463	110.1	101	105.7	92	17	30.5	42.5	38.1	57.5	94.6	40.1	31.4	57	88	123	76.3	205.8	168	202.8	260.5
Mercurio	µg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Plata	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.062	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aluminio	mg/L	60.1	13.567	103.522	5.631	7.731	1.653	1.409	2.057	2.288	2.32	<0.005	1.98	0.764	1.239	2.296	1.506	3.139	1.788	2.091	7.22	5.11
Arsénico	mg/L	0.018	<0.003	0.15	0.017	0.019	0.008	<0.003	<0.003	0.004	0.026	<0.003	<0.003	0.01	<0.0070	0.006	0.008	0.009	0.01	0.017	0.017	0.051
Boro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bario	mg/L	0.011	0.004	0.006	0.007	0.007	0.014	0.007	0.002	0.011	0.072	0.245	0.004	0.007	0.005	0.004	0.006	0.015	0.003	0.004	0.004	0.005
Berilio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bismuto	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcio	mg/L	17.83	8.89	36.79	2.34	2.17	0.35	0.77	<0.3	<0.3	<0.3	<0.3	<0.3	0.68	0.60	<0.3	0.78	<0.3	1.64	0.62	<0.3	<0.3
Cadmio	mg/L	0.057	0.021	0.248	0.02	0.022	0.002	0.003	<0.002	0.004	<0.006	0.321	<0.002	0.002	0.004	0.004	0.005	0.003	0.007	0.006	0.007	0.006
Cobalto	mg/L	0.591	0.149	0.902	0.043	0.026	0.002	0.002	<0.002	0.004	0.004	<0.002	<0.002	0.002	0.004	0.004	0.006	0.004	0.01	0.009	0.007	0.007
Cromo	mg/L	0.111	0.034	0.339	0.02	0.026	0.004	0.004	0.007	0.012	0.016	0.016	0.007	0.006	0.011	0.013	0.016	0.009	0.021	0.015	0.023	0.023
Cobre	mg/L	1.54	0.46	3.83	0.87	1.42	0.21	0.25	0.49	0.50	0.62	0.01	0.21	0.25	0.52	0.58	0.76	0.48	1.33	1.19	1.03	0.97
Hierro	mg/L	21.17	11.44	97.67	15.13	19.82	2.74	3.94	7.36	6.44	8.82	<0.3	0.92	4.72	10.84	12.04	14.74	9.93	29.72	25.80	21.58	23.91
Galio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potasio	mg/L	0.928	0.28	5.201	<0.2	0.552	0.465	0.357	1.018	0.200	<0.2	<0.2	3.399	0.360	<0.2	<0.2	<0.2	<0.2	0.527	0.256	<0.2	<0.2
Litio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesio	mg/L	0.784	<0.2	1.391	<0.2	<0.2	<0.2	0.022	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganeso	mg/L	0.949	0.312	2.084	0.109	0.080	0.007	<0.2	0.013	0.021	0.002	<0.002	0.004	0.003	0.005	0.002	0.013	<0.002	0.010	0.007	0.007	0.006
Molibdeno	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.189	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Sodio	mg/L	0.759	0.257	1.744	0.478	0.44	<0.2	0.353	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.368	0.345
Niobio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Níquel	mg/L	0.232	0.066	0.411	0.022	0.016	0.002	<0.002	<0.002	0.003	0.002	0.008	<0.002	<0.002	0.003	0.023	0.019	0.007	0.005	0.004	0.005	0.004
Plomo	mg/L	0.092	0.003	0.053	0.033	0.024	0.025	0.005	0.008	0.017	0.053	<0.002	0.008	0.021	0.015	0.008	0.01	0.024	0.015	0.02	0.014	0.019
Antimonio	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.101	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Escandio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenio	mg/L	<0.005	<0.005	0.008	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	0.53	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005
Estaño	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estroncio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teluro	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Talio	mg/L	0.008	<0.002	0.014	0.006	0.007	<0.002	<0.002	<0.002	0.002	0.002	0.015	<0.002	<0.002	0.002	<0.002	0.002	0.002	0.003	0.003	0.003	0.005
Vanadio	mg/L	<0.002	<0.002	0.076	0.005	0.005	0.003	<0.002	<0.002	0.002	0.004	<0.002	<0.002	0.002	0.002	0.002	0.003	0.004	0.003	0.004	0.003	0.005
Wolframio	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cinc	mg/L	3.34	1.66	20.99	2.63	4.15	0.38	0.53	0.66	1.07	2.89	0.94	0.66	0.59	1.24	1.45	1.45	0.96	4.07	2.03	1.56	1.65
Cromo (VI)	mg/L	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fosforo (Tot)	mg/L	NA	<0.01	<0.01	<0.01	0.540	<0.01	0.032	0.031	0.023	0.034	0.013	0.019	0.068	0.014	0.048	0.029	<0.01	<0.01	<0.01	0.073	0.126
Sulfuros	mg/L	NA	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Yanacocha | Laboratorio Metalúrgico

CENTRO DE INVESTIGACIONES METALÚRGICAS
"DON ALBERTO BENAVIDES"
MINERA YANACOCHA S.R.L

M E M O R A N D U M

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SUBJECT: RESULTADOS DE CELDAS DE HUMEDAD REALIZADAS EN EL LABORATORIO ALS PARA EL PROYECTO YANACOCHA VERDE

INTRODUCCIÓN

Minera Yanacocha envió al Laboratorio comercial ALS ocho muestras para pruebas en Celdas de Humedad, las muestras fueron mineral de desmonte del proyecto de Yanacocha Verde. Estas ocho muestras forman parte de 20 compósitos representativos del desmonte del proyecto, las 12 muestras restantes fueron realizadas las pruebas en el Laboratorio Metalúrgico de MYSRL; el objetivo de las pruebas fue realizar la caracterización química y predecir el potencial de generación o neutralización ácida de las muestras. La prueba cinética de celdas de humedad corresponde a un ensayo ambiental aplicado de acuerdo a la norma ASTM D5744. Esta prueba está diseñada para producir un aceleramiento de la degradación natural de las muestras sólidas potencialmente generadoras de ácido y de esta manera disminuir el tiempo necesario para obtener los parámetros requeridos de las soluciones generadoras producto de esta meteorización. Los análisis de metales en la solución lixiviada fueron analizados también en el Laboratorio ALS, con equipo de ICP-MS (Espectrometría de Masas con Plasma Acoplado Inductivamente) en cambio las cabezas de las muestras evaluadas fueron analizadas en el Laboratorio Analítico de MYSRL con lecturas finales en un equipo de ICP-OES (Espectrometría de Emisión Óptica).

RESUMEN

Minera Yanacocha envió al laboratorio comercial ALS ocho muestras correspondientes al desmonte del Proyecto Yanacocha Verde, las pruebas realizadas fueron meteorización en Celdas de Humedad. Las muestras fueron sometidas a la prueba cinética de celdas de humedad por un tiempo de 20 semanas de acuerdo a la norma ASTM D5744. Esta prueba está diseñada para producir un aceleramiento de la degradación natural de las muestras sólidas potencialmente generadoras de ácido y de esta manera disminuir el tiempo necesario para obtener los parámetros requeridos de las soluciones generadoras producto de esta meteorización.

De las pruebas realizadas cinco de las ocho muestras podrían generar acidez en el tiempo lo que no sucede con las muestras 50241, 50242 y 50247 que al comparar los resultados de pH con los resultados de alcalinidad como CaCO3 muestran que los carbonatos presentes son capaces de neutralizar la acidez generada, lo que significa que estas muestras no tienen potencial de generar acidez en el tiempo. Además la elevada disolución del Mg en las muestras 50241, 50242 y 50247 es atribuida a que el mineral contiene carbonatos que están siendo disueltos por el ácido sulfúrico. Por lo tanto comparando los diversos parámetros se tiene a la muestra 50247 como la menos probable que pueda generar acidez, y a las muestras 50244 y 50245 como las mayores generadoras de acidez. También las gráficas de cinética mostraron que en general la disolución de metales se da en las primeras 10 semanas, luego del cual van bajando ligeramente; por lo que se puede concluir que las muestras 50243, 50244, 50245, 50246, y 50248 serán generadoras acidez a un corto plazo y la persistencia para seguir generando acidez será a largo plazo.

MUESTRAS Y PROCEDIMIENTO

Las muestras provienen del material de desmonte del Proyecto Yanacocha Verde. Las ocho muestras sometidas a la prueba HCT estuvieron reducidas a un tamaño de partícula de P80 menos 2000 micrones (-10M), los compósitos habían sido formados en función de la litología y alteración geológica, tal como se aprecia en la tabla I.

La prueba cinética de celdas de humedad corresponde a un ensayo ambiental aplicado de acuerdo a la norma ASTM D5744. Esta prueba está diseñada para producir un aceleramiento de la degradación natural de las muestras sólidas potencialmente generadoras de ácido y de esta manera disminuir el tiempo necesario para obtener los parámetros requeridos de las soluciones generadas producto de esta meteorización.

Para producir a esta degradación, las muestras son sometidas a ciclos de aire seco y húmedo, semanalmente se colectan soluciones producto de las inundaciones, las cuales fueron a analizadas para observar la evolución de los parámetros de interés (pH, metales, acidez, alcalinidad, etc.). En comparación con el terreno esta prueba utiliza una granulometría más fina sumado al volumen de agua aplicado permiten maximizar la humidificación de la muestra, con la cual no ocurre en la degradación natural de la muestra. De esta manera los resultados obtenidos durante la aplicación de la prueba son más extremos en un comparación a un proceso natural, lo que también se extiende a los metales disueltos en la soluciones lixiviadas que tendrán una mayor concentración que las aguas generadas en terreno.

Tabla I. Identificación y número de compósito de las muestras

Comp.	Sample ID	Descripción*	Lith	Alt	length
1	50229	YS-1140(50-62); YS-1160(4.7-13.6)	BXP	SM	20.9
2	50230	YS-1048(32-42)	BXPM	ARG	10
3	50231	YS-1089(84.2-86.8); YS-1125(64-72); YS-1187(118-126)	BXPM	SC	28.6
4	50232	YS-1027(80-86); YS-1027(100-110); YS-1027(110-122)	BXPM	SC	28
5	50233	YS-1111(150.5-157.95)	BXPM	SP	7.45
6	50234	YS-1111(100-107.1); YS-1111(90-100)	BXPM	SP	17.1
7	50235	YS-1112(138-148); YS-1154(190-203.5); YS-1112(123.9-130)	LA	SC	29.6
8	50236	YS-1103(160-168.45); YS-1160(30-40); YS-1160(40-50); YS-1160(50-60); YS-1140(100.7-114); YS-1140(85.4-92)	Teut	SM	58.35
9	50237	YS-1160(13.6-20); YS-1160(60-76); YS-1103(148-160); YS-1160(20-30); YS-1140(76-85.4); YS-1140(66.85-74)	Teut	SM	60.95
10	50238	YS-1093(11.7-20); YS-1132(86-94)	Teut	SM	16.3
11	50239	YS-1140(92-100.7); YS-1132(94-104.25)	Teut	SM	18.95
12	50240	YS-1105(116.8-128); YS-1105(106-116.8); YS-1105(128-142)	Tft	SC	36
13	50241	YS-1048(3.15-10); YS-1048(10-20)	Upha	SC	16.85
14	50242	YS-1132(251.55-264); YS-1132(234.2-251.55)	Upha	SP	29.8
15	50243	YS-994(143.35-147.95); YS-1162(178-191.2)	Upha	SP	17.8
16	50244	YS-994(154-160.15); YS-1162(166.75-178)	Upha	SP	17.4
17	50245	YS-1143(88-100);YS-1099(169.15-178.2); YS-1143(100-114); YS-1143(81.4-88)	Upha	SP	41.65
18	50246	YS-994(147.95-154)	Upha	SV	6.05
19	50247	YS-1153(70-82); YS-1134(238.55-248)	Ypq	SP	21.45
20	50248	YS-1155(179.1-186)	Ypq-E	SC	6.9
*X(Y-Z); X=Taladro, Y=From, X=To					

RESULTADOS

El rango de los muestreos semanales de las celdas de humedad es presentado en la tabla II, en ella se puede notar que cinco de las ocho muestras evaluadas podrían generar acidez en el tiempo, los resultados de pH de las muestras 50241, 50242 y 50247 comparados con los resultados de alcalinidad como CaCO3 muestran que los carbonatos presentes son capaces de neutralizar la acidez generada, lo que significa que estas muestras no tienen potencial de generar acidez en el tiempo.

Tabla II. Resumen de los rangos de concentración de las soluciones

	Site Limit	50241	50242	50243	50244	50245	50246	50247	50248
pH, s.u.	6-9	7-7.6	7.3-8	3.2-3.8	2.6-4.1	2.9-4.1	4-4.6	7.6-8.5	2.9-3.8
Cond. uS/cm		48.9-1675	94.9-359	175.3-450	212-1233	258-857	132.5-454	46-665	113.3-605
Acidity, mg/L		1-35	1-3	41-98	47-283	44-227	28-80	1-2	50-194
Alk_CaCO3, mg/L		4-35	8-35	< 1	< 1	< 1	< 1	27-50	< 1
SO4, mg/L		9-965	18-144	33-145	71-259	70-302	37-184	10-302	23-190
Ca, mg/L		4.9-205.9	10.7-53.1	0.3-17	0.1-11.4	0.3-71	0.3-80.1	2.2-117.8	0.1-3.9
Mg, mg/L		0.2-11.1	0.3-1.7	0.1-2.8	0.1-1.2	0.1-1.4	0.1-1.8	0.1-3.3	0.1-0.4
Fe, mg/L	2	< 0.03	< 0.03	3.5-13.2	2-63	3-33	0.7-2.9	1.5-1.5	2-17.7

En general los resultados de los análisis de metales y de otros parámetros como los sulfatos tienden a aumentar en las primeras 10 a 12 semanas, para luego ir bajando ligeramente en el tiempo como se muestra en las gráficas de cinética. Las cargas semanales de sulfato y calcio en la solución lixiviada fueron significativas para las muestras. Las cargas fueron calculadas multiplicando el efluente por la concentración semanal. Para poder realizar el análisis, las cargas semanales fueron acumuladas y graficadas en función de las semanas de tal manera que los ratios de liberación podrían ser calculados de la pendiente del rango lineal. Los ratios de liberación semanal final calculados para los principales analitos son resumidos en la tabla III.

Tabla III. Resumen de los principales ratios de liberación

	50241	50242	50243	50244	50245	50246	50247	50248
SO4, %	14.2	17.4	11.2	14.3	7.1	38.2	38.6	43.6
Avg. SO4 Release, mg/week	16.1	26.2	59.7	198.9	151.7	44.6	13.9	89.1
SO4 Week Linear Range	10-20	11-20	12-20	14-20	13-20	11-20	14-20	13-20
Ca, %	4.4	2.8	20.8	20.7	35.3	54.1	2.4	15.0
Avg. Ca Release, mg/week	7.3	13.6	0.5	0.3	6.8	0.4	14.6	0.1
Ca Week Linear Range	11-20	12-20	8-20	13-20	8-20	10-20	7-20	8-20
Mg, %	2.6	2.0	19.1	15.7	18.5	6.6	1.2	28.3
Avg. Mg Release, mg/week	0.2	0.3	0.0	0.0	0.1	0.0	0.3	0.0
Mg Week Linear Range	9-20	13-20	10-20	9-20	10-20	10-20	8-20	4-20

Las gráficas del 1 al 3 muestran la tendencia de la carga acumulada usada para identificar los rangos lineales para los principales analitos liberados. En la figura 1 se observa una tendencia lineal constante de generar sulfatos, también se observa que en las muestras 50244 y 50245 hay una disolución significativa de sulfatos a partir de la semana 10, estas muestras son las mismas que presentan los pHs más bajos del grupo y además tienen un insignificante valor de alcalinidad (menor a 1 ppm); por lo que estas dos muestras son las que tienen el mayor potencial de generar acidez.

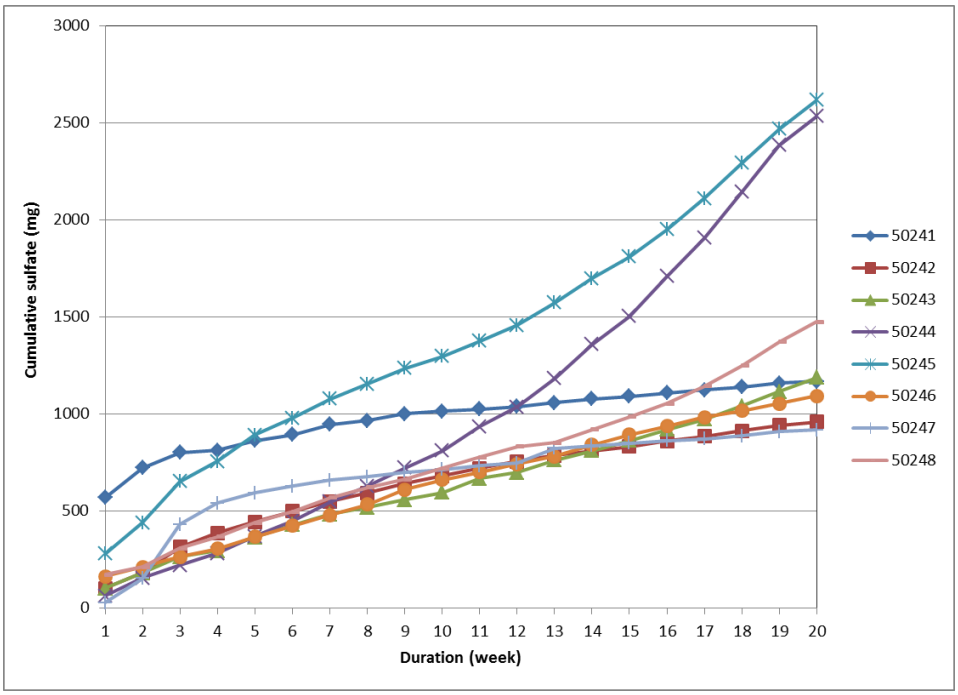


Figura 1. Carga acumulada semanal de Sulfato liberado

Al analizar el calcio de la figura 2 se observa que en las muestras 50241, 50242, 50245 y 50247 hay una liberación rápida durante las primeras seis semanas, para luego tener un comportamiento lineal; en cambio las muestras 50243, 50244, 50246, y 50248 la totalidad del calcio fue lixiviado solamente en las primeras dos semanas. También se observa que la muestra 50247 fue la que liberó mayor cantidad de Ca lo que corrobora el pH más alto del grupo, dato que también se puede observar en la figura 3 con el incremento de disolución de Mg lo cual es atribuido al mineral con carbonatos que está siendo disuelto por el ácido sulfúrico; por lo tanto la muestra 50247 puede considerarse como la menos generadora de acidez de todo el grupo evaluado

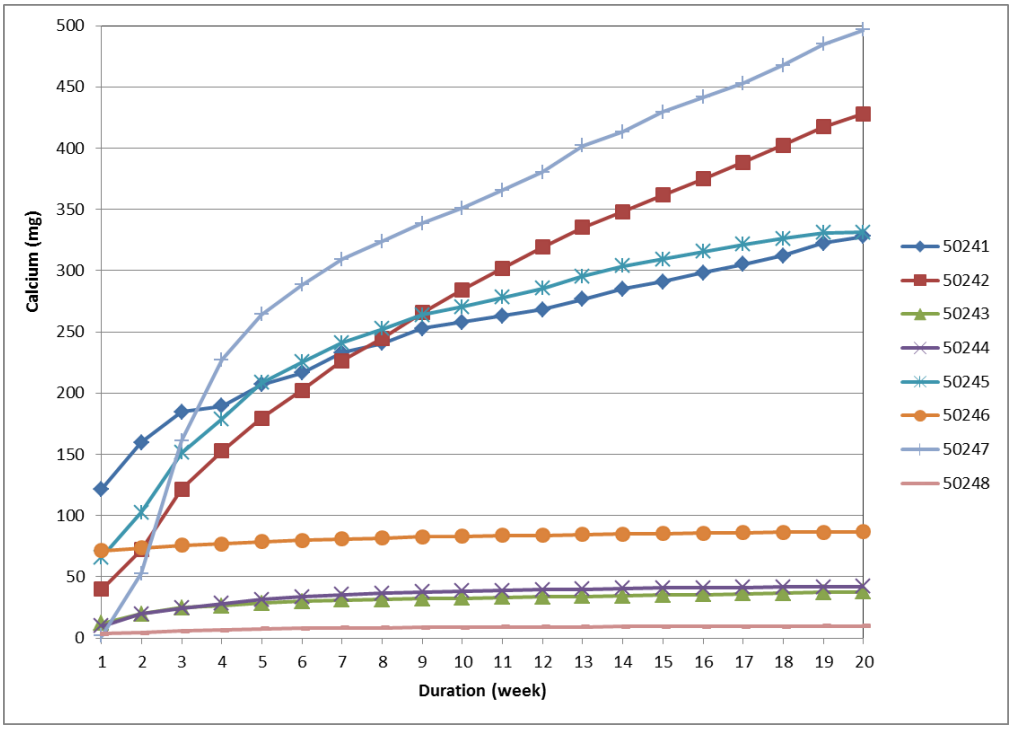


Figura 2. Carga acumulada semanal de Calcio liberado

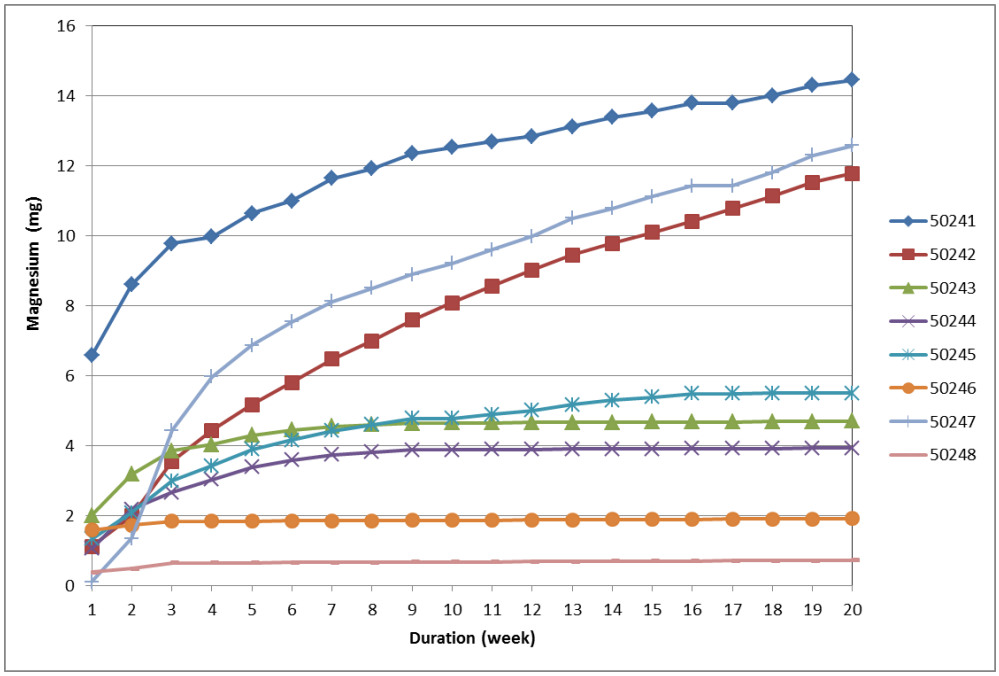
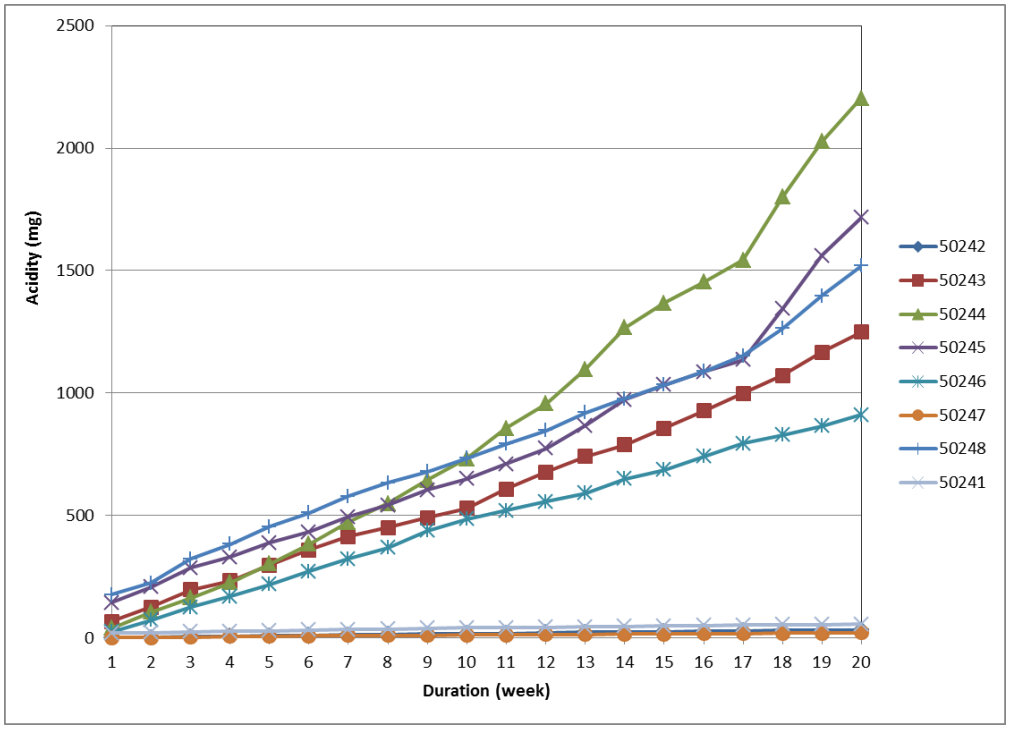
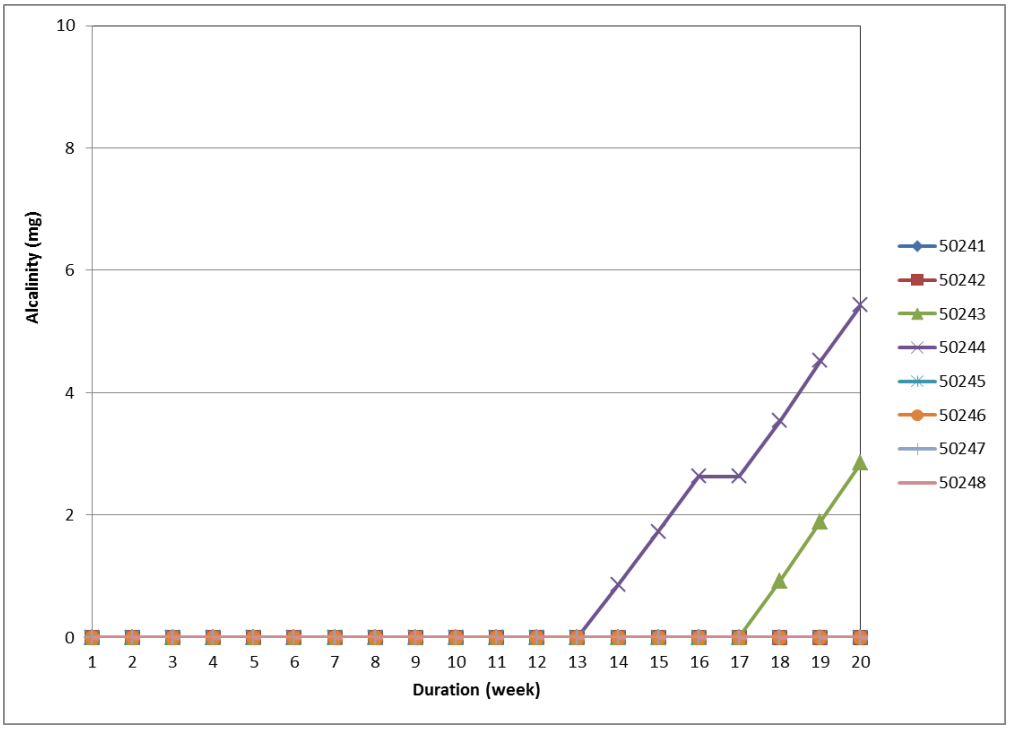
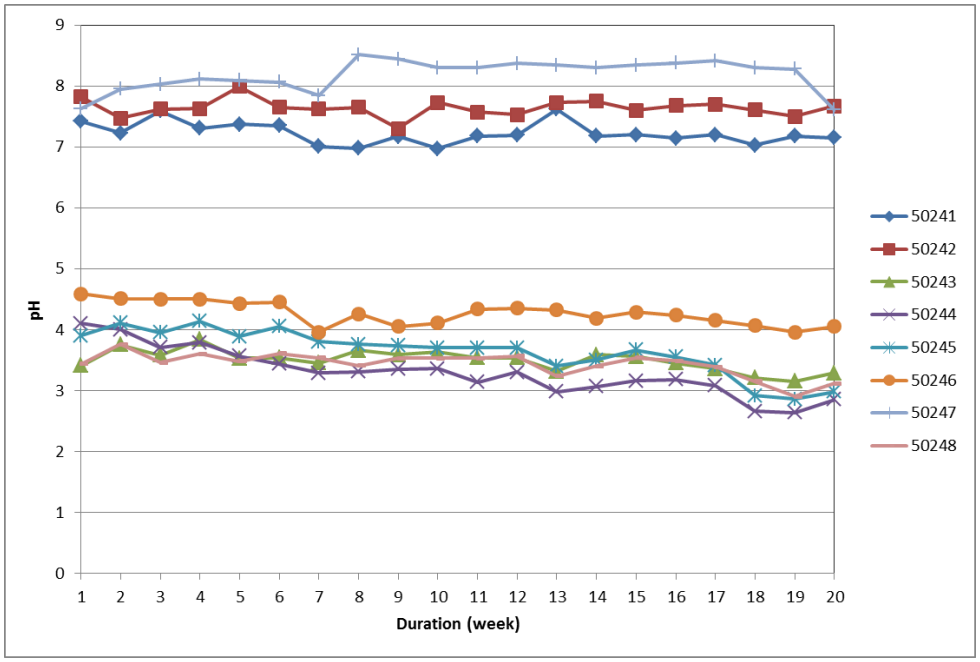


Figura 3. Carga acumulada semanal de Magnesio liberado

APÉNDICE A
Gráficas de Cinética






9
8
7
6
5
4
3
2
1
0
pH
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Duration (week)
50241
50242
50243
50244
50245
50246
50247
50248

Yanacocha | Laboratorio Metalúrgico

APÉNDICE B

Head Assay

Elemento	Au	SCIS	Hg	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Li
Unidad	g/t	%	g/t	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
50241_HA	0.069	2.767	0.505	3.693	2541.654	71.793	10.951	104.82	0.872	2.101	3720.355	4.771	7.151	54.534	111.72	18038.804	0	0.8
50242_HA	0.034	1.746	0.114	1.638	4179.484	22.327	14.897	231.813	0.635	0.289	7535.791	2.806	4.102	62.539	93.891	12177.838	1.64	0.804
50243_HA	0.068	2.885	0.279	11.635	841.216	619.53	0	126.757	0.009	0	90.769	0	7.705	82.409	499.762	31650.472	4.165	0.549
50244_HA	0.101	4.377	0.247	7.43	701.579	434.94	0	97.369	0	0	101.583	0	11.221	105.587	748.588	31412.309	6.325	0.761
50245_HA	0.117	7.057	0.605	1.48	1246.97	138.819	0	68.522	0.003	0	469.03	2.323	12.851	86.006	352.639	32752.427	0.683	1.145
50246_HA	0.14	3.411	0.425	2.255	943.115	211.473	0	191.414	0	2.899	80.195	53.98	13.991	101.708	542.065	20702.826	17.17	0.622
50247_HA	0.038	2.146	0.115	2.074	2805.126	52.748	8.201	242.873	0.231	0.385	10261.11	5.613	6.135	50.319	202.571	13916.121	8.63	1.02
50248_HA	0.059	4.121	0.096	1.552	1313.407	131.285	0.343	13.604	0	0	32.756	0	12.507	73.464	482.439	22548.422	1.552	0.413

Elemento	Mg	Mn	Mo	Na	Nb	Ni	Pb	Sb	Sc	Se	Sn	Sr	Te	Ti	Tl	V	W	Zn
Unidad	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
50241_HA	282.297	8815.234	7.122	86.611	1.38	3.46	532.803	0.895	0.284	7.818	0.293	22.101	3.188	12.341	5.747	4.741	0	1675.522
50242_HA	299.231	1421.805	1.606	77.309	0.446	3.023	491.037	0.896	0.428	2.317	0.307	34.298	3.871	12.37	1.391	3.093	0	1318.98
50243_HA	12.271	39.826	33.185	215.574	0.199	6.04	203.617	28.185	0.16	6.593	2.882	14.419	11.45	5.476	0.269	7.964	0	431.291
50244_HA	12.503	41.095	29.652	534.492	1.352	6.907	196.909	11.81	0.135	5.753	2.041	15.017	8.372	7.082	1.52	6.656	0	759.136
50245_HA	14.876	32.205	8.829	250.984	0.123	7.903	285.929	4.395	0.158	1.298	1.13	16.431	4.916	5.686	1.006	3.535	0	682.198
50246_HA	14.349	31.027	2.815	173.488	2.111	7.41	3934.52	5.117	0.133	3.701	2.348	5.351	6.082	6.678	5.454	10.7	0	3877.662
50247_HA	522.205	380.416	2.792	172.095	0.191	3.763	436.184	1.658	0.456	3.812	0.555	115.12	3.072	9.177	1.349	5.44	0	1135.736
50248_HA	1.266	29.08	10.192	86.482	1.132	6.359	133.875	9.571	0.326	3.566	1.906	9.471	3.494	4.291	0.465	4.555	0	272.072

APÉNDICE C

Spreadsheets

Muestra: 50241

Analitos	Unidad / Ciclos	Semana-1	Semana-2	Semana-3	Semana-4	Semana-5	Semana-6	Semana-7	Semana-8	Semana-9	Semana-10	Semana-11	Semana-12	Semana-13	Semana-14	Semana-15	Semana-16	Semana-17	Semana-18	Semana-19	Semana-20
Volumen de solución	ml	590	910	740	950	870	990	880	940	890	920	900	900	880	890	890	920	890	890	930	990
pH a 25° C	u pH	7.42	7.23	7.59	7.31	7.37	7.35	7.01	6.98	7.17	6.97	7.18	7.19	7.62	7.18	7.20	7.14	7.20	7.03	7.18	7.15
Conductividad a 25°C	uS/cm	1675.0	428.0	294.0	48.9	159.2	89.4	161.0	92.6	140.7	97.4	85.1	71.0	80.4	80.1	58.6	68.6	66.7	62.0	78.5	91.8
Potencial Redox Abs.	mv																				
Oxigeno Disuelto	mg/L	8.550	8.290	8.020	8.570	8.480	8.370	8.180	8.290	8.300	8.620	8.190	8.530	8.670	8.800	8.150	8.170	8.120	8.030	8.430	8.930
Cloruros	mg/L	3.800	0.800	0.500	0.400	0.600	0.700	0.300	0.300	0.300	0.300	0.444	0.262	1.343	0.611	0.483	0.300	0.369	0.236	0.418	0.989
Fluoruros	mg/L	0.290	0.750	0.520	0.060	0.240	0.130	0.220	0.120	0.140	0.170	0.118	0.096	0.160	0.139	0.059	0.098	0.097	0.104	0.089	0.037
Nitrógeno Amoniacal	mg/L	0.951	0.252	0.050	0.117	0.125	0.101	0.067	0.157	0.064	<0.006	0.035	0.006	<0.006	<0.006	<0.006	0.024	<0.006	<0.006	<0.006	0.008
Nitratos	mg/L	3.289	0.390	0.052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.024
Nitritos	mg/L	0.025	0.008	0.008	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.006	<0.001	<0.001
Sulfatos	mg/L	965.3	168.2	107.1	11.3	58.9	30.7	59.0	21.0	38.6	14.2	14.2	12.7	23.3	21.9	14.9	19.1	18.2	17.5	19.8	9.1
Alcalinidad Total (CaCO3)	mg/L	35.000	14.000	13.000	9.000	10.000	10.000	8.000	4.000	8.000	5.000	7.000	7.000	9.000	10.000	6.000	6.000	6.000	7.000	12.000	9.000
Acidez (H2SO4)	mg/L	35.000	2.000	5.000	2.000	2.000	2.000	4.000	2.000	3.000	2.000	1.000	2.000	2.000	2.000	1.000	2.000	2.000	2.000	1.000	2.000
Mercurio	µg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Plata (Ag)	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Aluminio	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Arsénico	mg/L	<0.0001	0.001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Boro	mg/L	0.100	0.040	0.050	<0.01	<0.01	<0.01	0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bario	mg/L	0.037	0.024	0.058	0.007	0.027	0.016	0.031	0.013	0.019	0.012	0.008	0.008	0.017	0.016	0.011	0.014	0.015	0.015	0.024	0.013
Berilio	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuto	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Calcio	mg/L	205.900	42.270	33.480	4.910	20.120	9.660	18.830	8.120	13.780	5.670	5.530	5.530	9.630	9.430	6.690	8.100	7.710	8.070	10.720	5.560
Cadmio	mg/L	0.018	0.002	0.001	0.000	0.001	0.000	<0.00005	<0.00005	<0.00005	<0.00005	0.000	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cobalto	mg/L	0.025	0.002	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Cromo	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cobre	mg/L	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0001	<0.0001	<0.0001
Hierro	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Galio	mg/L																				
Potasio	mg/L	51.640	19.230	15.630	2.960	6.640	3.690	6.150	3.120	4.220	2.170	1.970	1.970	3.360	3.110	2.150	2.460	2.800	2.390	2.910	1.550
Litio	mg/L	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesio	mg/L	11.140	2.220	1.598	0.193	0.765	0.367	0.731	0.293	0.488	0.194	0.180	0.175	0.313	0.292	0.205	0.246	<0.005	0.237	0.315	0.150
Manganeso	mg/L	145.700	20.750	13.820	2.217	5.834	2.913	4.783	2.225	3.189	1.513	1.543	1.541	1.862	1.598	1.454	1.287	1.060	0.969	0.766	0.681
Molibdeno	mg/L	0.005	0.006	0.006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.002	0.002	0.002	0.002	0.002	0.003	0.001
Sodio	mg/L	7.430	1.920	1.040	0.100	0.240	0.130	0.250	0.100	0.140	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Niobio (Nb)	mg/L																				
Níquel	mg/L	0.012	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plomo	mg/L	0.016	0.003	0.006	0.002	0.009	0.008	0.003	0.009	0.011	0.006	0.005	0.005	0.008	0.007	0.007	0.005	0.004	0.004	0.005	0.004
Antimonio (Sb)	mg/L	0.066	0.019	0.021	0.001	0.004	0.002	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.001	<0.0001	0.001	<0.0001
Escandio (Sc)	mg/L																				
Selenio	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Estaño (Sn)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Estroncio (Sr)	mg/L	3.090	0.714	0.565	0.069	0.278	0.133	0.245	0.099	0.154	0.065	0.060	0.058	0.107	0.103	0.063	0.085	0.079	0.080	0.106	0.056
Teluro (Te)	mg/L																				
Titanio	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Talio (Tl)	mg/L	0.031	0.009	0.007	0.001	0.003	0.002	0.003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.002	0.002	0.001	<0.0001	0.001	0.002	<0.0001
Vanadio (V)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Wolframio	mg/L																				
Cinc	mg/L	2.853	0.145	0.080	0.047	0.069	0.051	0.055	0.053	0.060	0.038	0.038	0.035	0.049	0.047	0.046	0.035	0.034	0.028	0.021	0.027
Cromo (VI)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fosforo (Tot)	mg/L	0.087	0.021	0.026	0.019	0.011	<0.010	0.025	<0.010	0.181	<0.010	<0.010	<0.010	0.038	0.122	0.048	0.193	0.016	0.018	0.101	<0.010
Sulfuros	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Muestra: 50242

Analitos	Unidad / Ciclos	Semana-1	Semana-2	Semana-3	Semana-4	Semana-5	Semana-6	Semana-7	Semana-8	Semana-9	Semana-10	Semana-11	Semana-12	Semana-13	Semana-14	Semana-15	Semana-16	Semana-17	Semana-18	Semana-19	Semana-20
Volumen de solución	ml	760	880	930	930	960	940	1000	960	900	910	840	850	840	860	920	930	970	970	960	990
pH a 25° C	u pH	7.82	7.47	7.62	7.63	7.99	7.65	7.62	7.65	7.30	7.73	7.57	7.53	7.73	7.75	7.60	7.68	7.70	7.61	7.50	7.67
Conductividad a 25°C	uS/cm	335.0	254.0	359.0	248.0	172.9	179.0	168.1	150.9	152.4	138.2	132.1	120.7	116.5	104.1	98.2	105.1	101.5	94.9	111.1	104.3
Potencial Redox Abs.	mv																				
Oxigeno Disuelto	mg/L	8.590	8.360	8.750	9.300	8.450	8.910	7.970	8.430	8.360	8.690	8.260	8.450	8.760	9.170	7.980	7.980	8.350	8.270	8.310	8.710
Cloruros	mg/L	0.200	<0.2	<0.2	<0.2	<0.2	0.200	<0.2	<0.2	<0.2	<0.2	<0.200	0.205	1.045	0.581	0.415	<0.200	<0.200	0.681	<0.200	0.434
Fluoruros	mg/L	0.150	0.120	0.250	0.270	0.210	0.220	0.210	0.170	0.210	0.180	0.146	0.178	0.187	0.114	0.063	0.098	0.111	0.146	0.075	0.024
Nitrógeno Amoniacal	mg/L	<0.006	0.040	0.036	0.079	0.088	0.038	0.061	0.135	0.037	<0.006	0.006	0.015	0.049	<0.006	<0.006	0.107	<0.006	<0.006	<0.006	0.024
Nitratos	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	0.006	0.018
Nitritos	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sulfatos	mg/L	136.0	88.6	144.4	77.7	59.6	57.4	51.3	44.4	54.0	44.2	46.7	40.8	35.8	27.9	24.4	30.0	24.9	29.7	29.3	17.8
Alcalinidad Total (CaCO3)	mg/L	35.000	15.000	25.000	27.000	25.000	24.000	32.000	25.000	24.000	17.000	18.000	22.000	17.000	20.000	20.000	20.000	19.000	<1	22.000	8.000
Acidez (H2SO4)	mg/L	1.000	<1	3.000	3.000	<1	2.000	2.000	2.000	2.000	2.000	1.000	3.000	2.000	1.000	2.000	2.000	1.000	2.000	1.000	2.000
Mercurio	µg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Plata (Ag)	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Aluminio	mg/L	0.016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.016	<0.001	0.015	0.014
Arsénico	mg/L	0.001	0.001	0.001	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001
Boro	mg/L	<0.01	<0.01	0.020	0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bario	mg/L	0.045	0.046	0.030	0.035	0.042	0.040	0.045	0.038	0.042	0.035	0.036	0.036	0.040	0.038	0.043	0.038	0.037	0.035	0.032	0.030
Berilio	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuto	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Calcio	mg/L	52.480	36.850	53.130	33.570	27.840	24.150	24.090	18.950	23.190	20.860	20.700	20.540	19.150	14.950	14.440	14.370	14.110	14.230	15.680	10.740
Cadmio	mg/L	<0.00005	<0.00005	<0.00005	0.000	0.000	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Cobalto	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Cromo	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cobre	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Hierro	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Galio	mg/L																				
Potasio	mg/L	8.580	5.790	10.320	8.080	5.560	5.230	5.040	3.710	4.430	3.420	3.610	3.610	3.460	2.620	2.110	2.110	2.820	2.170	2.350	1.600
Litio	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesio	mg/L	1.459	1.002	1.667	0.950	0.768	0.674	0.673	0.539	0.658	0.538	0.583	0.539	0.505	0.380	0.349	0.341	0.382	0.354	0.413	0.253
Manganeso	mg/L	2.637	1.591	2.439	1.506	1.281	1.089	1.131	0.888	0.977	0.824	0.918	0.909	0.906	0.737	0.760	0.760	0.648	0.707	0.692	0.529
Molibdeno	mg/L	0.007	0.003	0.006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Sodio	mg/L	0.760	0.580	0.840	0.370	0.210	0.150	0.130	0.090	0.100	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Niobio (Nb)	mg/L																				
Níquel	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plomo	mg/L	0.002	0.002	0.003	0.003	0.002	0.003	0.004	0.003	0.005	0.003	0.003	0.003	0.004	0.003	0.005	0.004	0.004	0.004	0.004	0.003
Antimonio (Sb)	mg/L	0.004	0.004	0.011	0.013	0.009	0.008	0.008	0.006	0.007	0.005	0.006	0.005	0.006	0.005	0.004	0.004	0.004	0.004	0.005	0.003
Escandio (Sc)	mg/L																				
Selenio	mg/L	<0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001
Estaño (Sn)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Estroncio (Sr)	mg/L	0.163	0.123	0.173	0.115	0.098	0.089	0.094	0.075	0.089	0.074	0.079	0.072	0.067	0.057	0.051	0.051	0.054	0.054	0.061	0.042
Teluro (Te)	mg/L																				
Titanio	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Talio (Tl)	mg/L	<0.0001	<0.0001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Vanadio (V)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Wolframio	mg/L																				
Cinc	mg/L	0.010	0.005	0.014	0.009	0.007	0.006	0.007	0.006	0.007	0.007	0.006	0.005	0.008	0.006	0.008	0.007	0.007	0.007	0.008	0.009
Cromo (VI)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fosforo (Tot)	mg/L	0.075	0.061	0.016	0.064	0.036	0.017	0.046	0.053	0.083	<0.010	0.046	0.091	0.105	0.107	0.065	0.217	0.034	0.132	0.138	0.078
Sulfuros	mg/L	0.008	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Muestra: 50243

Analitos	Unidad / Ciclos	Semana-1	Semana-2	Semana-3	Semana-4	Semana-5	Semana-6	Semana-7	Semana-8	Semana-9	Semana-10	Semana-11	Semana-12	Semana-13	Semana-14	Semana-15	Semana-16	Semana-17	Semana-18	Semana-19	Semana-20
Volumen de solución	ml	710	880	830	890	910	840	830	880	830	820	930	930	920	920	940	970	920	920	970	960
pH a 25° C	u pH	3.41	3.75	3.58	3.84	3.53	3.54	3.45	3.66	3.59	3.63	3.54	3.54	3.32	3.59	3.56	3.45	3.36	3.21	3.15	3.29
Conductividad a 25°C	uS/cm	372.0	300.0	307.0	175.5	278.0	296.0	285.0	210.0	216.0	236.0	304.0	175.3	326.0	222.0	243.0	259.0	244.0	343.0	450.0	370.0
Potencial Redox Abs.	mv																				
Oxigeno Disuelto	mg/L	8.550	8.310	8.690	8.770	8.540	9.260	8.540	8.360	8.910	8.750	8.330	8.970	8.770	9.400	8.140	7.970	8.210	8.180	8.190	8.920
Cloruros	mg/L	1.200	0.700	0.400	<0.2	0.700	0.600	0.200	0.800	<0.2	<0.2	<0.200	<0.200	0.581	0.363	0.326	<0.200	<0.200	<0.200	0.288	0.315
Fluoruros	mg/L	0.320	0.170	0.210	0.060	0.150	0.130	0.080	0.040	0.020	0.120	0.059	0.030	0.057	0.025	0.021	<0.020	0.023	0.041	0.031	0.023
Nitrógeno Amoniacal	mg/L	0.172	0.160	0.109	0.071	0.068	0.089	0.064	0.138	0.043	<0.006	0.026	<0.006	<0.006	<0.006	<0.006	0.391	<0.006	<0.006	<0.006	0.007
Nitratos	mg/L	0.075	0.028	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	0.020	0.005
Nitritos	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Sulfatos	mg/L	144.8	90.8	98.2	36.3	76.9	74.4	66.9	39.5	46.0	46.2	77.9	33.3	70.2	51.9	54.2	60.6	57.1	73.9	76.2	75.7
Alcalinidad Total (CaCO3)	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acidez (H2SO4)	mg/L	95.000	67.000	84.000	41.000	72.000	72.000	67.000	41.000	48.000	48.000	84.000	74.000	71.000	51.000	71.000	75.000	76.000	79.000	98.000	86.000
Mercurio	µg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Plata (Ag)	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00093	0.00157	0.00092
Aluminio	mg/L	7.520	5.230	5.652	1.850	4.284	3.897	3.386	1.778	2.754	2.728	4.320	1.446	3.196	1.962	2.257	2.242	2.381	3.578	4.188	3.377
Arsénico	mg/L	0.005	0.004	0.007	0.003	0.005	0.006	0.006	0.005	0.004	0.004	0.006	0.004	0.009	0.008	0.009	0.009	0.017	0.030	0.056	0.040
Boro	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bario	mg/L	0.049	0.060	0.066	0.088	0.071	0.061	0.047	0.054	0.058	0.053	0.059	0.054	0.043	0.039	0.037	0.035	0.037	0.034	0.030	0.026
Berilio	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuto	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Calcio	mg/L	17.000	8.670	6.130	1.750	2.620	1.460	1.310	0.660	0.600	0.560	0.690	0.330	0.650	0.460	0.540	0.540	0.560	0.610	0.650	0.570
Cadmio	mg/L	0.029	0.027	0.037	0.014	0.026	0.021	0.020	0.010	0.011	0.011	0.018	0.007	0.015	0.008	0.010	0.009	0.008	0.010	0.011	0.009
Cobalto	mg/L	0.505	0.202	0.103	0.023	0.029	0.016	0.013	0.006	0.008	0.008	0.012	0.004	0.010	0.005	0.006	0.006	0.006	0.008	0.010	0.009
Cromo	mg/L	0.004	0.003	0.003	0.002	0.003	0.003	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.004	0.002	0.003	0.003	0.003	0.005	0.007	0.007
Cobre	mg/L	8.207	6.923	8.566	3.533	6.950	5.642	5.461	2.603	3.072	3.108	5.127	2.030	4.520	2.424	2.604	2.602	2.360	3.646	4.214	3.669
Hierro	mg/L	3.530	3.600	7.240	3.560	7.020	7.270	9.390	4.990	5.170	5.080	11.930	5.430	13.170	8.330	9.040	8.930	7.210	8.940	12.270	9.870
Galio	mg/L																				
Potasio	mg/L	2.880	2.040	1.710	0.780	1.070	1.130	1.020	0.530	0.760	0.550	0.640	0.330	0.660	0.390	0.370	0.350	0.350	0.340	0.370	0.220
Litio	mg/L	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesio	mg/L	2.812	1.333	0.816	0.196	0.295	0.173	0.126	0.059	0.055	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganeso	mg/L	1.648	0.809	0.482	0.120	0.157	0.090	0.071	0.031	0.037	0.036	0.055	0.017	0.040	0.019	0.021	0.021	0.018	0.022	0.031	0.025
Molibdeno	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Sodio	mg/L	2.120	0.830	0.390	0.110	0.120	0.110	0.120	0.090	0.090	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Niobio (Nb)	mg/L																				
Níquel	mg/L	0.141	0.065	0.038	0.010	0.013	0.008	0.008	0.003	0.005	0.004	0.006	0.003	0.005	0.003	0.003	0.003	0.003	0.003	0.004	0.004
Plomo	mg/L	0.075	0.100	0.160	0.097	0.189	0.185	0.214	0.125	0.122	0.119	0.204	0.117	0.245	0.177	0.186	0.184	0.170	0.224	0.256	0.187
Antimonio (Sb)	mg/L	0.013	0.003	0.005	0.002	0.002	0.002	0.002	0.001	0.001	<0.0001	<0.0001	<0.0001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Escandio (Sc)	mg/L																				
Selenio	mg/L	0.005	0.005	0.006	0.003	0.005	0.004	0.004	0.002	0.003	0.003	0.004	<0.001	0.004	0.002	0.003	0.003	0.002	0.002	0.002	0.001
Estaño (Sn)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Estroncio (Sr)	mg/L	0.341	0.223	0.207	0.068	0.100	0.074	0.061	0.027	0.027	0.023	0.033	0.012	0.026	0.015	0.013	0.013	0.012	0.013	0.014	0.010
Teluro (Te)	mg/L																				
Titanio	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Talio (Tl)	mg/L	0.013	0.007	0.006	<0.0001	0.004	0.004	0.003	0.002	0.003	0.002	0.002	<0.0001	0.002	0.002	0.002	0.001	<0.0001	0.001	0.002	0.001
Vanadio (V)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Wolframio	mg/L																				
Cinc	mg/L	4.729	2.898	2.503	0.922	1.619	1.061	0.924	0.454	0.546	0.534	0.994	0.345	0.869	0.458	0.615	0.522	0.590	0.738	0.865	0.788
Cromo (VI)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fosforo (Tot)	mg/L	2.390	0.044	0.057	0.035	0.031	<0.010	0.047	0.058	0.027	0.019	<0.010	<0.010	<0.010	0.036	0.011	0.238	<0.010	0.103	0.189	0.046
Sulfuros	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Muestra: 50244

Analitos	Unidad / Ciclos	Semana-1	Semana-2	Semana-3	Semana-4	Semana-5	Semana-6	Semana-7	Semana-8	Semana-9	Semana-10	Semana-11	Semana-12	Semana-13	Semana-14	Semana-15	Semana-16	Semana-17	Semana-18	Semana-19	Semana-20
Volumen de solución	ml	860	970	920	870	960	920	920	900	820	890	870	880	880	860	870	900	910	910	980	910
pH a 25° C	u pH	4.10	4.00	3.71	3.79	3.57	3.44	3.29	3.31	3.35	3.36	3.14	3.30	2.98	3.07	3.16	3.18	3.08	2.66	2.64	2.85
Conductividad a 25°C	uS/cm	212.0	299.0	243.0	258.0	285.0	307.0	399.0	380.0	415.0	456.0	503.0	477.0	816.0	778.0	688.0	889.0	916.0	1068.0	1233.0	843.0
Potencial Redox Abs.	mv																				
Oxigeno Disuelto	mg/L	8.740	8.440	8.560	8.630	8.690	8.670	8.080	8.570	8.880	8.630	8.140	8.860	9.060	9.550	8.020	8.060	7.900	7.950	8.040	8.640
Cloruros	mg/L	3.400	2.000	0.800	0.300	0.600	0.400	<0.2	0.600	<0.2	<0.2	0.247	0.413	1.188	0.602	0.415	<0.200	0.240	0.350	0.559	0.506
Fluoruros	mg/L	0.050	0.060	0.050	0.040	0.080	0.080	0.050	0.040	<0.02	0.090	0.036	0.030	0.035	0.025	<0.020	<0.020	<0.020	0.021	<0.020	<0.020
Nitrógeno Amoniacal	mg/L	0.023	0.118	0.051	0.085	0.267	0.100	0.044	0.110	0.053	<0.006	0.032	0.033	<0.006	<0.006	0.021	0.008	<0.006	<0.006	<0.006	0.019
Nitratos	mg/L	0.028	0.018	0.006	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	0.013	0.008	<0.005	0.007	<0.005	0.005	0.037	0.008
Nitritos	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sulfatos	mg/L	74.7	94.8	71.1	70.6	90.2	89.3	103.7	90.8	115.1	99.1	142.5	114.6	166.4	203.4	166.2	230.2	217.2	258.5	246.7	164.1
Alcalinidad Total (CaCO3)	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acidez (H2SO4)	mg/L	47.000	68.000	62.000	73.000	79.000	87.000	97.000	86.000	115.000	100.000	142.000	113.000	161.000	198.000	115.000	96.000	97.000	283.000	231.000	194.000
Mercurio	µg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Plata (Ag)	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00103	0.00107	0.00113	<0.00001	0.00149	0.00103	0.00104
Aluminio	mg/L	1.720	2.828	1.798	2.162	3.486	3.915	4.742	4.526	6.618	5.056	5.766	3.902	4.760	4.533	3.448	3.380	2.534	3.020	3.048	1.505
Arsénico	mg/L	0.006	0.010	0.019	0.010	0.012	0.016	0.058	0.041	0.033	0.040	0.057	0.064	0.092	0.092	0.059	0.033	0.070	0.065	0.120	0.043
Boro	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bario	mg/L	0.040	0.031	0.038	0.036	0.034	0.027	0.031	0.030	0.033	0.029	0.021	0.020	0.018	0.018	0.023	0.015	0.018	0.016	0.014	0.018
Berilio	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuto	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Calcio	mg/L	11.420	10.170	5.210	4.070	3.740	2.120	2.160	1.220	1.170	0.770	0.670	0.660	0.640	0.590	0.420	0.270	0.290	0.270	0.290	0.120
Cadmio	mg/L	0.060	0.102	0.084	0.104	0.119	0.096	0.098	0.071	0.076	0.066	0.086	0.067	0.080	0.078	0.064	0.063	0.045	0.051	0.052	0.027
Cobalto	mg/L	0.223	0.231	0.097	0.085	0.074	0.041	0.032	0.021	0.022	0.014	0.018	0.014	0.022	0.021	0.015	0.017	0.015	0.016	0.017	0.010
Cromo	mg/L	0.002	0.002	0.001	0.002	0.004	0.004	0.005	0.006	0.007	0.006	0.016	0.012	0.020	0.021	0.015	0.015	0.014	0.016	0.016	0.008
Cobre	mg/L	3.885	5.543	4.327	5.493	6.578	5.402	6.549	5.432	6.189	6.020	8.174	6.518	8.979	8.403	6.205	7.512	5.157	6.608	7.041	4.102
Hierro	mg/L	2.020	2.550	3.440	3.990	6.860	6.840	5.670	5.650	9.100	5.620	17.570	14.210	24.450	24.360	21.560	18.260	33.830	44.390	63.010	34.040
Galio	mg/L																				
Potasio	mg/L	0.320	0.290	0.360	0.280	0.270	0.250	0.260	0.180	0.170	0.100	0.110	0.100	0.090	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Litio	mg/L	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesio	mg/L	1.215	1.162	0.530	0.425	0.367	0.219	0.159	0.087	0.080	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganeso	mg/L	0.346	0.375	0.182	0.161	0.147	0.090	0.080	0.047	0.049	0.038	0.040	0.036	0.044	0.041	0.027	0.025	0.019	0.019	0.020	0.009
Molibdeno	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Sodio	mg/L	1.690	1.310	0.610	0.270	0.230	0.160	0.170	0.100	0.080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.180	<0.05	<0.05	<0.05
Niobio (Nb)	mg/L																				
Níquel	mg/L	0.045	0.051	0.023	0.023	0.020	0.012	0.011	0.007	0.007	0.006	0.007	0.006	0.008	0.007	0.005	0.006	0.006	0.006	0.007	0.004
Plomo	mg/L	0.028	0.044	0.090	0.072	0.104	0.111	0.131	0.084	0.045	0.039	0.044	0.041	0.052	0.041	0.014	0.014	0.006	0.007	0.006	0.004
Antimonio (Sb)	mg/L	0.004	0.001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Escandio (Sc)	mg/L																				
Selenio	mg/L	0.004	0.008	0.006	0.006	0.006	0.004	0.004	0.003	0.003	0.003	0.003	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Estaño (Sn)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Estroncio (Sr)	mg/L	0.118	0.121	0.100	0.094	0.103	0.089	0.083	0.051	0.042	0.031	0.037	0.028	0.039	0.038	0.023	0.026	0.019	0.019	0.022	0.010
Teluro (Te)	mg/L																				
Titanio	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Talio (Tl)	mg/L	0.009	0.009	0.012	0.009	0.012	0.012	0.013	0.011	0.011	0.008	0.011	0.011	0.012	0.012	0.011	0.010	0.010	0.009	0.010	0.006
Vanadio (V)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.004	0.016	0.004
Wolframio	mg/L																				
Cinc	mg/L	12.910	17.890	12.890	17.430	18.210	11.730	11.200	8.307	9.279	9.095	12.040	8.061	11.870	10.230	9.522	8.964	7.352	9.025	9.716	5.905
Cromo (VI)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fosforo (Tot)	mg/L	2.830	0.030	<0.010	0.036	0.014	<0.010	0.045	0.021	0.052	<0.010	0.023	<0.010	0.038	0.089	0.061	0.072	0.039	0.122	0.219	0.039
Sulfuros	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Muestra: 50245

Analitos	Unidad / Ciclos	Semana-1	Semana-2	Semana-3	Semana-4	Semana-5	Semana-6	Semana-7	Semana-8	Semana-9	Semana-10	Semana-11	Semana-12	Semana-13	Semana-14	Semana-15	Semana-16	Semana-17	Semana-18	Semana-19	Semana-20
Volumen de solución	ml	930	930	910	940	990	1000	970	990	940	900	930	950	930	920	910	980	940	940	960	940
pH a 25° C	u pH	3.90	4.11	3.95	4.14	3.89	4.05	3.80	3.76	3.74	3.70	3.70	3.70	3.40	3.50	3.67	3.55	3.42	2.92	2.86	2.98
Conductividad a 25°C	uS/cm	606.0	408.0	521.0	330.0	347.0	258.0	313.0	273.0	284.0	279.0	312.0	288.0	398.0	393.0	389.0	454.0	565.0	730.0	857.0	669.0
Potencial Redox Abs.	mv																				
Oxigeno Disuelto	mg/L	8.610	8.610	8.370	8.660	8.730	9.360	8.440	8.560	8.810	8.680	8.010	8.340	8.670	9.200	7.690	7.710	7.850	7.240	7.910	8.500
Cloruros	mg/L	1.500	0.600	1.300	0.400	1.000	0.600	0.300	1.000	<0.2	<0.2	0.310	<0.200	0.403	0.747	0.286	<0.200	<0.200	<0.200	0.522	0.904
Fluoruros	mg/L	0.310	0.180	0.200	0.070	0.120	0.070	0.090	0.070	<0.02	0.140	0.069	0.074	0.096	0.067	0.041	0.034	0.066	0.073	0.063	0.048
Nitrógeno Amoniacal	mg/L	0.024	0.105	0.073	0.108	0.050	0.079	0.136	0.082	0.038	<0.006	<0.006	0.007	<0.006	<0.006	<0.006	0.010	<0.006	<0.006	0.011	<0.006
Nitratos	mg/L	0.035	0.019	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	0.005	0.006
Nitritos	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sulfatos	mg/L	302.3	171.0	232.8	110.5	137.5	86.4	103.1	76.0	86.9	69.6	84.1	84.9	125.0	136.5	121.6	144.0	170.5	192.0	182.7	159.0
Alcalinidad Total (CaCO3)	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acidez (H2SO4)	mg/L	154.000	69.000	87.000	47.000	58.000	44.000	64.000	48.000	66.000	52.000	64.000	68.000	100.000	115.000	66.000	54.000	52.000	221.000	227.000	166.000
Mercurio	µg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Plata (Ag)	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Aluminio	mg/L	17.190	6.204	5.483	1.810	2.137	1.218	1.939	1.828	2.965	2.842	3.202	3.175	5.486	5.094	5.678	5.586	7.469	10.100	11.080	0.459
Arsénico	mg/L	0.020	0.029	0.031	0.017	0.025	0.025	0.026	0.032	0.020	0.014	0.024	0.024	0.033	0.051	0.052	0.052	0.067	0.068	0.087	0.032
Boro	mg/L	<0.01	<0.01	0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bario	mg/L	0.018	0.019	0.019	0.025	0.025	0.024	0.027	0.032	0.026	0.025	0.028	0.028	0.021	0.021	0.025	0.022	0.019	0.019	0.017	0.063
Berilio	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuto	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Calcio	mg/L	71.010	39.270	53.600	29.350	30.020	16.610	16.250	11.630	12.120	7.300	8.090	7.710	10.980	8.820	6.300	6.290	6.260	4.920	5.240	0.310
Cadmio	mg/L	0.132	0.081	0.121	0.080	0.094	0.057	0.082	0.058	0.079	0.056	0.063	0.061	0.087	0.069	0.059	0.048	0.050	0.050	0.062	0.552
Cobalto	mg/L	0.829	0.388	0.428	0.205	0.186	0.081	0.078	0.046	0.045	0.025	0.023	0.021	0.027	0.018	0.013	0.013	0.015	0.015	0.018	0.013
Cromo	mg/L	0.011	0.003	0.003	0.002	0.002	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.007	0.010	0.010	0.021	0.029	0.035	<0.0005
Cobre	mg/L	0.153	0.115	0.195	0.151	0.179	0.119	0.282	0.222	0.234	0.223	0.325	0.323	0.513	0.489	0.483	0.540	0.624	0.900	0.976	0.303
Hierro	mg/L	9.910	5.450	8.370	5.910	8.430	7.140	9.950	7.530	9.510	7.300	10.580	10.550	17.390	17.190	18.370	19.600	22.350	24.270	33.030	2.990
Galio	mg/L																				
Potasio	mg/L	0.990	0.710	1.190	0.770	0.850	0.870	1.070	0.780	0.820	0.530	0.550	0.530	0.790	0.780	0.890	1.100	1.440	0.860	1.030	0.570
Litio	mg/L	0.030	0.016	0.018	0.006	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesio	mg/L	1.432	0.798	0.999	0.462	0.470	0.268	0.275	0.180	0.184	<0.005	0.121	0.118	0.171	0.139	0.102	0.101	<0.005	<0.005	<0.005	<0.005
Manganeso	mg/L	0.204	0.101	0.130	0.063	0.063	0.030	0.036	0.023	0.020	0.013	0.012	0.011	0.014	0.011	0.010	0.010	0.011	0.009	0.012	0.012
Molibdeno	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Sodio	mg/L	1.230	0.980	0.910	0.340	0.310	0.190	0.190	0.140	0.120	<0.05	0.090	<0.05	0.230	0.320	0.390	0.500	0.600	0.470	0.690	<0.05
Niobio (Nb)	mg/L																				
Níquel	mg/L	0.246	0.118	0.128	0.064	0.057	0.026	0.026	0.016	0.015	0.009	0.008	0.008	0.010	0.007	0.006	0.006	0.006	0.006	0.007	0.006
Plomo	mg/L	0.140	0.149	0.148	0.097	0.114	0.099	0.110	0.142	0.130	0.095	0.100	0.100	0.199	0.202	0.211	0.211	0.218	0.129	0.273	4.551
Antimonio (Sb)	mg/L	0.003	0.002	0.003	<0.0001	0.002	0.002	0.002	0.002	0.001	<0.0001	0.001	0.001	0.001	<0.0001	<0.0001	<0.0001	0.000	<0.0001	<0.0001	0.001
Escandio (Sc)	mg/L																				
Selenio	mg/L	<0.001	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Estaño (Sn)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Estroncio (Sr)	mg/L	0.148	0.090	0.131	0.081	0.099	0.074	0.093	0.064	0.076	0.042	0.044	0.042	0.063	0.070	0.056	0.055	0.067	0.047	0.052	0.005
Teluro (Te)	mg/L																				
Titanio	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Talio (Tl)	mg/L	0.004	0.002	0.003	<0.0001	0.003	0.003	0.004	0.003	0.003	0.002	0.002	0.002	0.003	0.004	0.004	0.004	0.007	0.005	0.006	0.017
Vanadio (V)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Wolframio	mg/L																				
Cinc	mg/L	13.530	9.684	15.990	12.930	15.140	8.121	11.210	7.909	10.120	7.827	8.752	8.435	12.900	9.245	8.397	6.295	6.459	6.409	7.743	19.070
Cromo (VI)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fosforo (Tot)	mg/L	0.119	0.018	<0.010	0.032	0.027	<0.010	0.047	0.018	0.058	<0.010	<0.010	<0.010	0.028	0.074	0.056	0.046	0.031	0.129	0.270	0.073
Sulfuros	mg/L	0.002	<0.001	0.003	0.020	<0.001	<0.001	0.005	0.004	<0.001	0.006	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Muestra: 50246

Analitos	Unidad / Ciclos	Semana-1	Semana-2	Semana-3	Semana-4	Semana-5	Semana-6	Semana-7	Semana-8	Semana-9	Semana-10	Semana-11	Semana-12	Semana-13	Semana-14	Semana-15	Semana-16	Semana-17	Semana-18	Semana-19	Semana-20
Volumen de solución	ml	890	750	920	910	870	930	840	880	870	820	920	930	940	940	970	960	930	930	950	930
pH a 25° C	u pH	4.59	4.51	4.50	4.50	4.43	4.45	3.96	4.26	4.05	4.11	4.34	4.35	4.32	4.19	4.29	4.24	4.15	4.07	3.96	4.05
Conductividad a 25°C	uS/cm	454.0	209.0	170.5	163.6	202.0	187.4	203.0	228.0	268.0	228.0	148.4	155.1	157.4	170.6	157.7	132.5	145.9	138.0	144.9	143.4
Potencial Redox Abs.	mv																				
Oxigeno Disuelto	mg/L	8.760	8.330	8.440	8.480	8.560	9.100	8.490	8.040	8.430	8.670	8.260	8.620	9.030	9.150	7.970	8.130	8.290	8.180	8.400	8.700
Cloruros	mg/L	0.900	0.900	0.500	0.300	0.400	0.500	0.200	1.600	0.300	<0.2	<0.200	<0.200	<0.200	0.386	0.319	<0.200	<0.200	<0.200	<0.200	0.245
Fluoruros	mg/L	0.090	0.070	0.040	0.020	0.050	0.040	0.040	0.020	<0.02	0.100	<0.020	0.025	0.027	0.029	<0.020	<0.020	0.023	0.026	<0.020	0.022
Nitrógeno Amoniacal	mg/L	<0.006	0.192	0.171	0.211	0.047	0.058	0.205	0.082	0.070	0.044	0.038	0.052	0.100	0.018	0.035	0.044	<0.006	<0.006	<0.006	<0.006
Nitratos	mg/L	0.017	0.068	0.020	0.016	0.012	<0.005	0.010	0.007	0.011	<0.005	0.012	0.012	0.015	0.018	0.007	0.011	0.010	<0.005	<0.005	0.007
Nitritos	mg/L	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001
Sulfatos	mg/L	184.2	65.0	57.3	45.4	69.5	60.9	66.4	62.0	89.3	61.6	41.6	44.0	42.5	64.0	54.6	45.6	47.9	36.5	38.5	43.1
Alcalinidad Total (CaCO3)	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acidez (H2SO4)	mg/L	28.000	63.000	58.000	48.000	57.000	58.000	59.000	52.000	80.000	59.000	38.000	38.000	38.000	62.000	37.000	57.000	58.000	36.000	39.000	49.000
Mercurio	µg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Plata (Ag)	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Aluminio	mg/L	<0.001	0.319	0.209	0.139	0.235	0.210	0.259	0.224	0.256	0.214	0.168	0.153	0.184	0.129	0.191	0.177	0.198	<0.001	0.275	0.454
Arsénico	mg/L	0.005	0.047	0.050	0.025	0.025	0.025	0.029	0.023	0.029	0.022	0.017	0.016	0.021	0.020	0.027	0.023	0.030	0.024	0.036	0.031
Boro	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bario	mg/L	0.042	0.048	0.050	0.081	0.066	0.065	0.048	0.051	0.034	0.025	0.027	0.087	0.082	0.037	0.034	0.033	0.031	0.051	0.060	0.061
Berilio	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuto	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Calcio	mg/L	80.100	3.170	2.180	1.530	1.860	1.190	1.200	0.960	1.240	0.730	0.440	0.380	0.410	0.510	0.470	0.320	0.380	0.260	0.250	0.310
Cadmio	mg/L	0.009	0.490	0.449	0.400	0.636	0.488	0.558	0.539	0.584	0.566	0.373	0.417	0.454	0.438	0.563	0.444	0.479	0.365	0.408	0.541
Cobalto	mg/L	0.006	0.433	0.287	0.206	0.250	0.137	0.140	0.106	0.140	0.079	0.042	0.038	0.037	0.036	0.032	0.022	0.022	0.014	0.012	0.013
Cromo	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cobre	mg/L	<0.0001	0.024	0.018	0.043	0.102	0.071	0.120	0.141	0.153	0.260	0.130	0.203	0.148	0.143	0.156	0.147	0.190	0.169	0.212	0.294
Hierro	mg/L	<0.03	1.250	1.120	0.700	0.890	0.880	1.100	0.950	1.940	1.220	1.060	0.960	1.300	1.580	1.790	1.290	1.650	1.500	2.080	2.900
Galio	mg/L																				
Potasio	mg/L	8.010	3.450	2.370	1.550	1.430	1.290	1.260	1.130	3.310	1.620	0.970	0.840	0.770	0.850	0.890	0.790	0.980	0.690	0.660	0.560
Litio	mg/L	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesio	mg/L	1.782	0.176	0.122	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganeso	mg/L	0.576	0.146	0.099	0.074	0.093	0.055	0.058	0.045	0.060	0.036	0.021	0.020	0.020	0.021	0.021	0.015	0.016	0.010	0.010	0.012
Molibdeno	mg/L	0.005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Sodio	mg/L	4.680	1.210	0.510	0.150	0.120	0.070	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Niobio (Nb)	mg/L																				
Níquel	mg/L	<0.0005	0.115	0.080	0.061	0.078	0.045	0.048	0.037	0.052	0.030	0.017	0.016	0.016	0.016	0.014	0.010	0.010	0.006	0.005	0.006
Plomo	mg/L	0.012	10.540	10.500	9.166	9.064	8.836	8.949	8.463	8.216	8.116	8.034	8.732	7.881	6.826	8.648	8.639	8.432	7.588	7.263	4.400
Antimonio (Sb)	mg/L	0.002	0.015	0.012	0.008	0.008	0.006	0.005	0.005	0.006	0.004	0.002	0.002	0.002	0.002	0.002	<0.0001	0.002	<0.0001	0.001	0.001
Escandio (Sc)	mg/L																				
Selenio	mg/L	<0.001	0.002	0.002	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Estaño (Sn)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Estroncio (Sr)	mg/L	3.660	0.019	0.017	0.014	0.015	0.011	0.011	0.009	0.010	0.009	0.006	0.006	0.005	0.006	0.006	0.005	0.006	0.004	0.005	0.004
Teluro (Te)	mg/L																				
Titanio	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Talio (Tl)	mg/L	0.002	0.046	0.037	0.027	0.036	0.028	0.028	0.025	0.025	0.034	0.025	0.025	0.024	0.028	0.031	0.026	0.033	0.020	0.020	0.016
Vanadio (V)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Wolframio	mg/L																				
Cinc	mg/L	0.023	25.940	24.550	25.660	42.720	27.120	32.840	29.530	43.920	30.520	20.080	21.520	23.830	23.820	30.560	18.550	19.080	14.000	14.270	18.600
Cromo (VI)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fosforo (Tot)	mg/L	0.184	0.023	0.017	0.031	0.016	<0.010	0.038	<0.010	0.117	<0.010	<0.010	<0.010	0.021	0.044	<0.010	0.014	<0.010	0.054	0.118	0.024
Sulfuros	mg/L	<0.001	<0.001	0.016	0.154	0.010	<0.001	0.044	0.033	0.017	0.054	0.010	0.016	<0.001	<0.001	0.020	<0.001	<0.001	<0.001	<0.001	<0.001

Muestra: 50247

Analitos	Unidad / Ciclos	Semana-1	Semana-2	Semana-3	Semana-4	Semana-5	Semana-6	Semana-7	Semana-8	Semana-9	Semana-10	Semana-11	Semana-12	Semana-13	Semana-14	Semana-15	Semana-16	Semana-17	Semana-18	Semana-19	Semana-20
Volumen de solución	ml	800	880	920	940	900	970	860	880	820	800	900	910	890	890	870	910	930	930	940	920
pH a 25° C	u pH	7.63	7.95	8.03	8.11	8.09	8.06	7.84	8.51	8.44	8.30	8.30	8.37	8.34	8.30	8.34	8.38	8.41	8.30	8.28	7.61
Conductividad a 25°C	uS/cm	108.8	360.0	665.0	386.0	230.7	159.1	147.1	96.6	90.5	70.7	65.7	58.7	380.0	85.5	92.2	75.9	62.4	82.5	123.4	46.0
Potencial Redox Abs.	mv																				
Oxigeno Disuelto	mg/L	8.460	8.600	8.560	8.610	8.590	8.540	7.950	8.120	7.840	8.520	8.060	8.390	8.620	8.800	7.940	7.940	8.320	8.200	8.540	8.810
Cloruros	mg/L	1.100	0.500	1.400	0.400	0.500	0.400	0.300	0.700	0.200	0.200	0.448	<0.200	0.223	1.691	0.435	<0.200	<0.200	<0.200	<0.200	0.343
Fluoruros	mg/L	0.030	0.060	0.190	0.240	0.240	0.150	0.120	0.060	<0.02	0.120	0.055	0.060	0.062	0.034	0.027	<0.020	<0.020	0.035	0.029	<0.020
Nitrógeno Amoniacal	mg/L	0.052	0.114	0.036	0.080	0.021	0.054	0.279	0.101	0.081	0.027	<0.006	0.024	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.065
Nitratos	mg/L	0.082	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	0.008	0.016
Nitritos	mg/L	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.003	<0.001	0.005	0.002	<0.001	<0.001
Sulfatos	mg/L	35.9	141.5	301.9	116.1	59.4	36.1	34.9	20.7	26.2	20.0	21.1	16.3	85.2	14.1	15.9	13.6	10.2	17.2	21.4	11.3
Alcalinidad Total (CaCO3)	mg/L	28.000	43.000	47.000	50.000	46.000	42.000	44.000	38.000	38.000	32.000	32.000	32.000	31.000	27.000	31.000	31.000	31.000	37.000	31.000	29.000
Acidez (H2SO4)	mg/L	2.000	<1	2.000	2.000	<1	2.000	1.000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.000
Mercurio	µg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Plata (Ag)	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Aluminio	mg/L	0.496	0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.030	0.041	<0.001	0.013	0.029
Arsénico	mg/L	0.047	0.004	0.008	0.011	0.013	0.012	0.015	0.012	0.012	0.012	0.014	0.013	0.020	0.015	0.018	0.015	0.012	0.016	0.018	0.015
Boro	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bario	mg/L	0.054	0.041	0.027	0.041	0.055	0.053	0.072	0.077	0.075	0.071	0.084	0.083	0.106	0.099	0.096	0.094	0.127	0.104	0.086	0.087
Berilio	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuto	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Calcio	mg/L	2.160	58.140	117.800	70.270	41.120	24.880	24.050	16.770	17.840	15.740	16.170	16.070	24.240	13.040	18.370	13.180	12.390	15.970	18.170	12.700
Cadmio	mg/L	0.205	0.005	0.016	0.010	0.006	0.004	0.004	0.003	0.004	0.002	0.002	0.002	0.003	0.002	0.003	0.001	<0.00005	0.003	0.004	0.002
Cobalto	mg/L	0.317	0.002	0.012	0.007	0.004	0.002	0.002	0.001	0.001	<0.0001	<0.0001	<0.0001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Cromo	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cobre	mg/L	0.019	0.001	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	<0.0001	0.001	<0.0001
Hierro	mg/L	1.450	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Galio	mg/L																				
Potasio	mg/L	1.990	5.260	13.150	9.010	5.540	4.280	3.730	2.480	2.570	2.030	2.060	1.910	2.620	1.550	1.670	1.340	1.210	1.580	1.830	1.180
Litio	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesio	mg/L	0.127	1.412	3.348	1.631	0.999	0.694	0.671	0.437	0.474	0.401	0.439	0.409	0.581	0.321	0.397	0.325	<0.005	0.408	0.522	0.300
Manganeso	mg/L	0.089	0.414	0.889	0.538	0.316	0.203	0.190	0.160	0.176	0.148	0.118	0.118	0.153	0.097	0.145	0.066	0.043	0.134	0.147	0.084
Molibdeno	mg/L	<0.00005	0.003	0.010	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.003	0.005	0.006	0.004
Sodio	mg/L	0.880	3.410	10.070	4.400	1.960	1.000	0.920	0.520	0.530	0.450	0.450	0.380	0.540	0.280	0.340	0.230	0.180	0.250	0.360	0.230
Niobio (Nb)	mg/L																				
Níquel	mg/L	0.076	<0.0005	0.001	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Plomo	mg/L	6.861	0.012	0.028	0.035	0.030	0.021	0.021	0.015	0.015	0.010	0.012	0.011	0.019	0.013	0.017	0.012	0.010	0.016	0.019	0.012
Antimonio (Sb)	mg/L	0.009	0.001	0.005	0.006	0.005	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002	<0.0001	0.001	<0.0001	0.001	<0.0001	0.002	0.001
Escandio (Sc)	mg/L																				
Selenio	mg/L	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Estaño (Sn)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Estroncio (Sr)	mg/L	0.014	2.554	5.731	3.037	1.853	1.286	1.156	0.724	0.736	0.626	0.692	0.658	0.931	0.531	0.596	0.516	0.415	0.607	0.750	0.505
Teluro (Te)	mg/L																				
Titanio	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Talio (Tl)	mg/L	0.027	0.001	0.003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Vanadio (V)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Wolframio	mg/L																				
Cinc	mg/L	9.834	0.012	0.038	0.032	0.024	0.014	0.021	0.020	0.014	0.008	0.004	0.004	0.009	0.009	0.010	<0.001	0.007	0.010	0.012	0.008
Cromo (VI)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fosforo (Tot)	mg/L	0.269	<0.010	<0.010	0.038	0.023	<0.010	0.041	<0.010	0.020	<0.010	<0.010	<0.010	0.043	0.035	<0.010	<0.010	<0.010	0.056	0.073	<0.010
Sulfuros	mg/L	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.035	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Muestra: 50248

Analitos	Unidad / Ciclos	Semana-1	Semana-2	Semana-3	Semana-4	Semana-5	Semana-6	Semana-7	Semana-8	Semana-9	Semana-10	Semana-11	Semana-12	Semana-13	Semana-14	Semana-15	Semana-16	Semana-17	Semana-18	Semana-19	Semana-20
Volumen de solución	ml	910	950	930	850	910	920	960	930	850	900	900	890	870	880	890	870	990	990	960	970
pH a 25° C	u pH	3.44	3.76	3.46	3.60	3.48	3.61	3.54	3.41	3.53	3.53	3.53	3.57	3.24	3.40	3.54	3.49	3.39	3.15	2.90	3.12
Conductividad a 25°C	uS/cm	474.0	113.3	394.0	293.0	298.0	254.0	311.0	280.0	217.0	308.0	280.0	265.0	116.9	329.0	320.0	324.0	374.0	506.0	605.0	522.0
Potencial Redox Abs.	mv																				
Oxigeno Disuelto	mg/L	8.860	8.380	8.710	8.690	8.600	8.910	8.480	8.090	8.620	8.840	8.330	8.600	8.760	9.930	7.880	8.150	8.200	8.290	8.050	8.850
Cloruros	mg/L	1.900	0.500	1.100	0.600	1.100	0.700	0.400	0.900	<0.2	0.200	<0.200	0.264	0.440	0.391	0.303	<0.200	<0.200	0.228	0.203	0.695
Fluoruros	mg/L	0.190	0.070	0.150	0.080	0.120	0.100	0.090	0.060	<0.02	0.130	0.048	0.047	0.077	0.038	0.030	0.024	0.036	0.051	0.045	0.047
Nitrógeno Amoniacal	mg/L	0.082	0.046	0.075	0.102	0.069	0.118	0.079	0.080	0.046	<0.006	<0.006	0.029	<0.006	<0.006	0.020	0.020	<0.006	<0.006	<0.006	0.013
Nitratos	mg/L	0.030	0.008	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	0.019
Nitritos	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sulfatos	mg/L	189.5	40.8	105.0	69.3	80.4	62.3	73.5	58.3	47.7	62.5	65.4	60.3	23.3	76.8	74.7	78.3	89.7	107.1	127.8	104.4
Alcalinidad Total (CaCO3)	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acidez (H2SO4)	mg/L	194.000	50.000	106.000	71.000	79.000	62.000	69.000	60.000	54.000	60.000	64.000	63.000	83.000	64.000	64.000	63.000	64.000	113.000	139.000	127.000
Mercurio	µg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Plata (Ag)	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Aluminio	mg/L	18.600	4.736	8.296	4.776	4.870	3.397	3.891	2.944	2.942	4.332	3.928	3.457	4.369	3.992	3.985	4.033	4.100	5.799	6.286	5.149
Arsénico	mg/L	0.005	0.005	0.006	0.004	0.006	0.005	0.010	0.009	0.006	0.004	0.005	0.004	0.019	0.011	0.010	0.010	0.020	0.029	0.056	0.039
Boro	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bario	mg/L	0.036	0.011	0.032	0.025	0.026	0.018	0.033	0.024	0.012	0.011	0.010	0.009	0.016	0.013	0.014	0.012	0.012	0.012	0.011	0.007
Berilio	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuto	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Calcio	mg/L	3.870	0.910	1.450	1.090	0.930	0.390	0.420	0.280	0.160	0.170	0.170	<0.05	0.250	0.120	0.200	<0.05	<0.05	<0.05	<0.05	0.090
Cadmio	mg/L	0.031	0.008	0.018	0.013	0.014	0.009	0.012	0.008	0.006	0.007	0.007	0.007	0.009	0.006	0.007	0.006	0.006	0.007	0.007	0.006
Cobalto	mg/L	0.391	0.081	0.128	0.079	0.063	0.031	0.029	0.017	0.010	0.012	0.010	0.008	0.012	0.008	0.008	0.008	0.008	0.010	0.011	0.010
Cromo	mg/L	0.012	0.003	0.005	0.004	0.004	0.002	0.003	0.002	0.002	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.003	0.004	0.005	0.005
Cobre	mg/L	4.109	1.137	2.197	1.518	1.509	0.960	1.192	0.891	0.718	1.049	1.060	1.052	1.695	1.334	1.393	1.450	1.496	2.171	2.473	2.380
Hierro	mg/L	5.900	2.220	8.200	6.680	8.510	7.770	10.630	7.540	5.110	5.110	9.900	6.120	11.830	5.840	2.810	1.970	4.670	12.100	17.700	16.610
Galio	mg/L																				
Potasio	mg/L	5.890	1.890	3.370	2.400	2.150	1.640	2.060	1.550	0.850	0.940	0.880	0.760	1.150	0.840	0.760	0.690	0.820	0.800	0.760	0.590
Litio	mg/L	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Magnesio	mg/L	0.414	0.108	0.172	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Manganeso	mg/L	1.173	0.249	0.391	0.239	0.186	0.091	0.082	0.045	0.022	0.024	0.016	0.013	0.017	0.010	0.010	0.008	0.008	0.010	0.013	0.012
Molibdeno	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Sodio	mg/L	3.590	1.160	1.440	0.610	0.460	0.270	0.290	<0.05	0.080	<0.05	0.090	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Niobio (Nb)	mg/L																				
Níquel	mg/L	0.162	0.035	0.057	0.035	0.028	0.014	0.013	0.008	0.005	0.005	0.004	0.004	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Plomo	mg/L	0.971	0.318	0.897	0.622	0.755	0.563	0.748	0.562	0.253	0.262	0.213	0.180	0.255	0.181	0.160	0.117	0.124	0.110	0.074	0.047
Antimonio (Sb)	mg/L	0.005	0.001	0.002	<0.0001	<0.0001	0.001	0.001	0.001	0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Escandio (Sc)	mg/L																				
Selenio	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Estaño (Sn)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Estroncio (Sr)	mg/L	0.225	0.062	0.123	0.089	0.087	0.058	0.065	0.047	0.030	0.029	0.025	0.022	0.030	0.024	0.021	0.020	0.020	0.021	0.020	0.016
Teluro (Te)	mg/L																				
Titanio	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Talio (Tl)	mg/L	0.004	0.001	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Vanadio (V)	mg/L	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.003
Wolframio	mg/L																				
Cinc	mg/L	6.420	2.095	5.005	4.626	5.035	3.172	3.911	2.895	2.070	2.819	2.870	2.635	4.117	2.655	3.222	2.357	2.511	2.886	2.915	2.748
Cromo (VI)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fosforo (Tot)	mg/L	0.222	<0.010	0.023	0.035	0.029	0.071	<0.010	0.042	0.041	<0.010	<0.010	<0.010	0.072	0.067	<0.010	0.012	<0.010	0.108	0.073	0.059
Sulfuros	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.012	0.004	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

APÉNDICE D

Reporte de Análisis del Laboratorio Externo (ALS)

Muestras del Grupo: 40829/2015	Semana 1										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	3.8	0.2	1.2	3.4	1.5	1.1	0.9	1.9
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.29	0.15	0.32	0.05	0.31	0.03	0.09	0.19
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	3.289	<0.005	0.075	0.028	0.035	0.082	0.017	0.030
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	0.025	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	965.3	136.0	144.8	74.70	302.3	35.88	184.2	189.5
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	35	1	95	47	154	2	28	194
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	35	35	<1	<1	<1	28	<1	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	1675	335.0	372.0	212.0	606.0	108.8	454.0	474.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.087	0.075	2.39	2.83	0.119	0.269	0.184	0.222
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.951	<0.006	0.172	0.023	0.024	0.052	<0.006	0.082
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.55	8.59	8.55	8.74	8.61	8.46	8.76	8.86
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.42	7.82	3.41	4.10	3.90	7.63	4.59	3.44
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	0.008	<0.001	<0.001	0.002	0.015	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.59	0.76	0.71	0.86	0.93	0.80	0.89	0.91
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	0.016	7.520	1.720	17.19	0.496	<0.001	18.60
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	0.0656	0.0044	0.0125	0.0039	0.0026	0.0088	0.0018	0.0054
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0011	0.0049	0.0055	0.0195	0.0466	0.0051	0.0053
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.03690	0.04480	0.04930	0.03990	0.01760	0.05430	0.04240	0.03600
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	0.10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	0.01791	<0.00005	0.02938	0.06013	0.13164	0.20543	0.00898	0.03090
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	205.9	52.48	17.00	11.42	71.01	2.16	80.10	3.87
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	0.0246	<0.0001	0.5046	0.2227	0.8292	0.3169	0.0058	0.3911
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0026	<0.0001	8.207	3.885	0.1528	0.0188	<0.0001	4.109
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0037	0.0015	0.0111	<0.0005	<0.0005	0.0120
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	3.090	0.1633	0.3408	0.1180	0.1481	0.0137	3.660	0.2254
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	3.53	2.02	9.91	1.45	<0.03	5.90
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	0.007	<0.005	0.008	0.007	0.030	<0.005	<0.005	0.006
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	11.14	1.459	2.812	1.215	1.432	0.127	1.782	0.414
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	145.7	2.637	1.648	0.34630	0.20430	0.08900	0.5757	1.173
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00460	0.00680	<0.00005	<0.00005	<0.00005	<0.00005	0.00480	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	0.0122	<0.0005	0.1409	0.0454	0.2463	0.0762	<0.0005	0.1621
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.01570	0.00150	0.07470	0.02820	0.13970	6.861	0.01170	0.9707
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	51.64	8.58	2.88	0.32	0.99	1.99	8.01	5.89
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	<0.001	0.005	0.004	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	6.97	<0.05	7.20	<0.05	<0.05	<0.05	<0.05	<0.05
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	7.43	0.76	2.12	1.69	1.23	0.88	4.68	3.59
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0305	<0.0001	0.0128	0.0086	0.0041	0.0271	0.0017	0.0041
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00622	0.00348	0.03530	0.00158	0.00097	0.03476
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	2.853	0.010	4.729	12.91	13.53	9.834	0.023	6.420

Muestras del Grupo: 40829/2015	Semana 2										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.8	<0.2	0.7	2.0	0.6	0.9	0.5	0.5
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.75	0.12	0.17	0.06	0.18	0.07	0.06	0.07
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	0.390	<0.005	0.028	0.018	0.019	0.068	0.007	0.008
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	0.008	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	168.2	88.64	90.78	94.80	171.0	65.01	141.5	40.81
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	<1	67	68	69	63	<1	50
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	14	15	<1	<1	<1	<1	43	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	428.0	254.0	300.0	299.0	408.0	209.0	360.0	113.3
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.021	0.061	0.044	0.030	0.018	0.023	<0.010	<0.010
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.252	0.040	0.160	0.118	0.105	0.192	0.114	0.046
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.29	8.36	8.31	8.44	8.61	8.33	8.60	8.38
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.23	7.47	3.75	4.00	4.11	4.51	7.95	3.76
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.91	0.88	0.88	0.97	0.93	0.75	0.88	0.95
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	5.230	2.828	6.204	0.319	0.025	4.736
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	0.0193	0.0035	0.0034	0.0014	0.0021	0.0151	0.0013	0.0010
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	0.0007	0.0013	0.0044	0.0104	0.0290	0.0468	0.0038	0.0052
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.02350	0.04580	0.05990	0.03110	0.01930	0.04830	0.04050	0.01130
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	0.00158	<0.00005	0.02673	0.10231	0.08121	0.48951	0.00535	0.00831
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	42.27	36.85	8.67	10.17	39.27	3.17	58.14	0.91
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	0.0022	<0.0001	0.2015	0.2305	0.3879	0.4329	0.0020	0.0810
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0020	<0.0001	6.923	5.543	0.1145	0.0242	0.0008	1.137
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0031	0.0024	0.0034	<0.0005	<0.0005	0.0030
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.7136	0.1230	0.2229	0.1205	0.0896	0.0191	2.554	0.0617
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	3.60	2.55	5.45	1.25	<0.03	2.22
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	0.016	0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	2.220	1.002	1.333	1.162	0.798	0.176	1.412	0.108
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	20.75	1.591	0.8085	0.37530	0.10090	0.14630	0.41410	0.24940
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00630	0.00320	<0.00005	<0.00005	<0.00005	<0.00005	0.00290	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	0.0010	<0.0005	0.0646	0.0505	0.1182	0.1145	<0.0005	0.0346
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00320	0.00150	0.09970	0.04410	0.14880	10.54	0.01220	0.31780
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	19.23	5.79	2.04	0.29	0.71	3.45	5.26	1.89
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.002	0.005	0.008	0.002	0.002	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	4.05	1.07	5.04	4.61	2.83	3.05	1.13	1.59
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	1.92	0.58	0.83	1.31	0.98	1.21	3.41	1.16
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0093	<0.0001	0.0069	0.0092	0.0020	0.0464	0.0011	0.0011
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00455	0.00560	0.01455	0.00149	0.00062	0.00837
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.145	0.005	2.898	17.89	9.684	25.94	0.012	2.095

Muestras del Grupo: 40829/2015	Semana 3										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.5	<0.2	0.4	0.8	1.3	0.5	1.4	1.1
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.52	0.25	0.21	0.05	0.20	0.04	0.19	0.15
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	0.052	<0.005	0.010	0.006	0.009	0.020	<0.005	0.010
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	0.008	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	107.1	144.4	98.23	71.13	232.8	57.30	301.9	105.0
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	5	3	84	62	87	58	2	106
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	13	25	<1	<1	<1	<1	47	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	294.0	359.0	307.0	243.0	521.0	170.5	665.0	394.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.026	0.016	0.057	<0.010	<0.010	0.017	<0.010	0.023
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.050	0.036	0.109	0.051	0.073	0.171	0.036	0.075
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.02	8.75	8.69	8.56	8.37	8.44	8.56	8.71
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.59	7.62	3.58	3.71	3.95	4.50	8.03	3.46
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.016	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.74	0.93	0.83	0.92	0.91	0.92	0.92	0.93
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	5.652	1.798	5.483	0.209	<0.001	8.296
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	0.0210	0.0109	0.0049	0.0006	0.0027	0.0123	0.0053	0.0016
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	0.0010	0.0013	0.0066	0.0185	0.0314	0.0497	0.0077	0.0062
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.05780	0.03020	0.06610	0.03810	0.01910	0.04950	0.02720	0.03240
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	0.05	0.02	<0.01	<0.01	0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	0.00100	<0.00005	0.03660	0.08429	0.12141	0.44876	0.01643	0.01758
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	33.48	53.13	6.13	5.21	53.60	2.18	117.8	1.45
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	0.0015	<0.0001	0.1029	0.0971	0.4277	0.2873	0.0116	0.1280
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0009	<0.0001	8.566	4.327	0.1945	0.0183	0.0017	2.197
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0032	0.0014	0.0029	<0.0005	<0.0005	0.0052
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.5653	0.1733	0.2074	0.1004	0.1312	0.0165	5.731	0.1230
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	7.24	3.44	8.37	1.12	<0.03	8.20
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	0.018	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	1.598	1.667	0.816	0.530	0.999	0.122	3.348	0.172
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	13.82	2.439	0.48200	0.18150	0.12990	0.09920	0.8893	0.39110
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00610	0.00590	<0.00005	<0.00005	<0.00005	<0.00005	0.01020	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0377	0.0231	0.1282	0.0800	0.0011	0.0573
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00640	0.00290	0.16010	0.08960	0.14830	10.50	0.02800	0.8966
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	15.63	10.32	1.71	0.36	1.19	2.37	13.15	3.37
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.002	0.006	0.006	0.002	0.002	0.003	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	6.04	1.20	7.64	2.85	4.64	3.39	3.27	4.70
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	1.04	0.84	0.39	0.61	0.91	0.51	10.07	1.44
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0071	0.0005	0.0058	0.0121	0.0034	0.0373	0.0025	0.0022
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00524	0.00417	0.01593	0.00108	0.00247	0.01621
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.080	0.014	2.503	12.89	15.99	24.55	0.038	5.005

Muestras del Grupo: 40829/2015	Semana 4										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	0.23	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.4	<0.2	<0.2	0.3	0.4	0.3	0.4	0.6
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.06	0.27	0.06	0.04	0.07	0.02	0.24	0.08
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	0.005	<0.005	0.016	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	11.31	77.71	36.28	70.62	110.5	45.36	116.1	69.26
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	3	41	73	47	48	2	71
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	9	27	<1	<1	<1	<1	50	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	48.90	248.0	175.5	258.0	330.0	163.6	386.0	293.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.019	0.064	0.035	0.036	0.032	0.031	0.038	0.035
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.117	0.079	0.071	0.085	0.108	0.211	0.080	0.102
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.57	9.30	8.77	8.63	8.66	8.48	8.61	8.69
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.31	7.63	3.84	3.79	4.14	4.50	8.11	3.60
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	0.020	0.154	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.95	0.93	0.89	0.87	0.94	0.91	0.94	0.85
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	1.850	2.162	1.810	0.139	<0.001	4.776
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	0.0009	0.0125	0.0020	<0.0001	<0.0001	0.0077	0.0059	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0017	0.0034	0.0101	0.0171	0.0252	0.0106	0.0038
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.00730	0.03540	0.08790	0.03570	0.02520	0.08090	0.04140	0.02500
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	0.00035	0.00027	0.01379	0.10383	0.08016	0.39994	0.01020	0.01294
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	4.91	33.57	1.75	4.07	29.35	1.53	70.27	1.09
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0229	0.0847	0.2052	0.2063	0.0073	0.0789
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0010	<0.0001	3.533	5.493	0.1513	0.0425	0.0021	1.518
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0015	0.0023	0.0015	<0.0005	<0.0005	0.0037
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0688	0.1150	0.0681	0.0939	0.0812	0.0141	3.037	0.0891
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	3.56	3.99	5.91	0.70	<0.03	6.68
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.193	0.950	0.196	0.425	0.462	<0.005	1.631	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	2.217	1.506	0.11970	0.16090	0.06310	0.07410	0.5383	0.23890
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0095	0.0226	0.0635	0.0608	0.0007	0.0353
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00200	0.00260	0.09670	0.07180	0.09700	9.166	0.03520	0.6223
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	2.96	8.08	0.78	0.28	0.77	1.55	9.01	2.40
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.002	0.003	0.006	0.002	0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.44	1.77	3.16	3.22	3.27	2.81	4.34	4.33
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	0.10	0.37	0.11	0.27	0.34	0.15	4.40	0.61
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0014	<0.0001	<0.0001	0.0088	<0.0001	0.0272	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00190	0.00576	0.00819	0.00111	0.00193	0.01012
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.047	0.009	0.922	17.43	12.93	25.66	0.032	4.626

Muestras del Grupo: 40829/2015	Semana 5										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.6	<0.2	0.7	0.6	1.0	0.4	0.5	1.1
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.24	0.21	0.15	0.08	0.12	0.05	0.24	0.12
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	58.91	59.64	76.94	90.23	137.5	69.52	59.39	80.35
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	<1	72	79	58	57	<1	79
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	10	25	<1	<1	<1	<1	46	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	159.2	172.9	278.0	285.0	347.0	202.0	230.7	298.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.011	0.036	0.031	0.014	0.027	0.016	0.023	0.029
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.125	0.088	0.068	0.267	0.050	0.047	0.021	0.069
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.48	8.45	8.54	8.69	8.73	8.56	8.59	8.60
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.37	7.99	3.53	3.57	3.89	4.43	8.09	3.48
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.010	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.87	0.96	0.91	0.96	0.99	0.87	0.90	0.91
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	4.284	3.486	2.137	0.235	<0.001	4.870
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	0.0036	0.0085	0.0021	<0.0001	0.0020	0.0080	0.0049	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0016	0.0050	0.0124	0.0252	0.0251	0.0126	0.0055
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.02740	0.04240	0.07070	0.03360	0.02480	0.06640	0.05490	0.02550
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	0.00062	0.00023	0.02578	0.11942	0.09368	0.6359	0.00609	0.01387
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	20.12	27.84	2.62	3.74	30.02	1.86	41.12	0.93
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0287	0.0743	0.1856	0.2496	0.0038	0.0626
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0011	<0.0001	6.950	6.578	0.1787	0.1022	0.0015	1.509
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0032	0.0043	0.0016	<0.0005	<0.0005	0.0039
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.2775	0.0976	0.0995	0.1032	0.0987	0.0146	1.853	0.0867
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	7.02	6.86	8.43	0.89	<0.03	8.51
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.765	0.768	0.295	0.367	0.470	<0.005	0.999	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	5.834	1.281	0.15730	0.14660	0.06270	0.09290	0.31550	0.18560
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0130	0.0203	0.0570	0.0784	<0.0005	0.0280
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00930	0.00230	0.18870	0.10380	0.11370	9.064	0.02990	0.7551
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	6.64	5.56	1.07	0.27	0.85	1.43	5.54	2.15
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.001	0.005	0.006	0.002	0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	2.63	1.30	4.83	3.59	4.79	3.10	3.56	4.67
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	0.24	0.21	0.12	0.23	0.31	0.12	1.96	0.46
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0033	<0.0001	0.0044	0.0122	0.0034	0.0357	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00376	0.00871	0.00847	0.00177	0.00120	0.00958
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.069	0.007	1.619	18.21	15.14	42.72	0.024	5.035

Muestras del Grupo: 40829/2015	Semana 6										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.7	0.2	0.6	0.4	0.6	0.5	0.4	0.7
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.13	0.22	0.13	0.08	0.07	0.04	0.15	0.10
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	30.70	57.40	74.40	89.29	86.35	60.94	36.05	62.29
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	2	72	87	44	58	2	62
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	10	24	<1	<1	<1	<1	42	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	89.40	179.0	296.0	307.0	258.0	187.4	159.1	254.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	<0.010	0.017	<0.010	<0.010	<0.010	<0.010	<0.010	0.071
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.101	0.038	0.089	0.100	0.079	0.058	0.054	0.118
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.37	8.91	9.26	8.67	9.36	9.10	8.54	8.91
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.35	7.65	3.54	3.44	4.05	4.45	8.06	3.61
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.99	0.94	0.84	0.92	1.00	0.93	0.97	0.92
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	3.897	3.915	1.218	0.210	<0.001	3.397
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	0.0016	0.0078	0.0019	<0.0001	0.0016	0.0059	0.0039	0.0011
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0014	0.0058	0.0162	0.0246	0.0248	0.0121	0.0045
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01560	0.04040	0.06050	0.02730	0.02410	0.06520	0.05310	0.01820
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	0.00046	<0.00005	0.02133	0.09613	0.05730	0.48764	0.00418	0.00948
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	9.66	24.15	1.46	2.12	16.61	1.19	24.88	0.39
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0161	0.0405	0.0810	0.1373	0.0020	0.0313
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0014	<0.0001	5.642	5.402	0.1194	0.0714	0.0012	0.9596
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0027	0.0044	0.0008	<0.0005	<0.0005	0.0023
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.1333	0.0890	0.0740	0.0887	0.0742	0.0111	1.286	0.0582
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	7.27	6.84	7.14	0.88	<0.03	7.77
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.367	0.674	0.173	0.219	0.268	<0.005	0.694	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	2.913	1.089	0.08980	0.09030	0.03020	0.05450	0.20340	0.09110
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0079	0.0118	0.0256	0.0451	<0.0005	0.0140
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00790	0.00270	0.18480	0.11100	0.09910	8.836	0.02090	0.5629
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	3.69	5.23	1.13	0.25	0.87	1.29	4.28	1.64
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.001	0.004	0.004	<0.001	0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.70	1.48	4.41	3.58	3.83	3.13	2.90	3.49
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	0.13	0.15	0.11	0.16	0.19	0.07	1.00	0.27
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0020	<0.0001	0.0038	0.0120	0.0026	0.0282	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00330	0.00822	0.00468	0.00139	0.00090	0.00575
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.051	0.006	1.061	11.73	8.121	27.12	0.014	3.172

Muestras del Grupo: 40829/2015	Semana 7										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.3	<0.2	0.2	<0.2	0.3	0.2	0.3	0.4
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.22	0.21	0.08	0.05	0.09	0.04	0.12	0.09
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	0.016	<0.005	<0.005	<0.005	0.010	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.007	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	58.99	51.28	66.94	103.7	103.1	66.39	34.85	73.46
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	4	2	67	97	64	59	1	69
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	8	32	<1	<1	<1	<1	44	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	161.0	168.1	285.0	399.0	313.0	203.0	147.1	311.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.025	0.046	0.047	0.045	0.047	0.038	0.041	<0.010
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.067	0.061	0.064	0.044	0.136	0.205	0.279	0.079
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.18	7.97	8.54	8.08	8.44	8.49	7.95	8.48
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.01	7.62	3.45	3.29	3.80	3.96	7.84	3.54
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	0.005	0.044	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.88	1.00	0.83	0.92	0.97	0.84	0.86	0.96
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	3.386	4.742	1.939	0.259	<0.001	3.891
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	0.0023	0.0078	0.0015	<0.0001	0.0019	0.0051	0.0033	0.0011
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0016	0.0063	0.0582	0.0263	0.0289	0.0151	0.0101
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.03110	0.04510	0.04740	0.03080	0.02720	0.04790	0.07170	0.03290
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.01994	0.09826	0.08219	0.5581	0.00376	0.01157
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	18.83	24.09	1.31	2.16	16.25	1.20	24.05	0.42
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0129	0.0320	0.0779	0.1399	0.0017	0.0290
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0013	<0.0001	5.461	6.549	0.2822	0.1197	0.0007	1.192
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	0.0053	<0.0005	<0.0005	<0.0005	0.0025
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.2453	0.0937	0.0613	0.0831	0.0930	0.0106	1.156	0.0654
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	9.39	5.67	9.95	1.10	<0.03	10.63
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.731	0.673	0.126	0.159	0.275	<0.005	0.671	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	4.783	1.131	0.07060	0.08030	0.03620	0.05750	0.19020	0.08170
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0076	0.0107	0.0255	0.0479	<0.0005	0.0134
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00330	0.00400	0.21440	0.13070	0.10950	8.949	0.02090	0.7475
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	6.15	5.04	1.02	0.26	1.07	1.26	3.73	2.06
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.001	0.004	0.004	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	2.41	1.09	4.89	3.48	5.21	3.24	2.46	5.04
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	0.25	0.13	0.12	0.17	0.19	<0.05	0.92	0.29
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0032	<0.0001	0.0032	0.0132	0.0035	0.0277	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00262	0.01488	0.00684	0.00148	0.00070	0.00567
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.055	0.007	0.924	11.20	11.21	32.84	0.021	3.911

Muestras del Grupo: 40829/2015	Semana 8										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.3	<0.2	0.8	0.6	1.0	1.6	0.7	0.9
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.12	0.17	0.04	0.04	0.07	0.02	0.06	0.06
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	21.02	44.38	39.45	90.77	75.95	61.97	20.68	58.34
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	2	41	86	48	52	<1	60
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	4	25	<1	<1	<1	<1	38	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	92.60	150.9	210.0	380.0	273.0	228.0	96.60	280.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	<0.010	0.053	0.058	0.021	0.018	<0.010	<0.010	0.042
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.157	0.135	0.138	0.110	0.082	0.082	0.101	0.080
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.29	8.43	8.36	8.57	8.56	8.04	8.12	8.09
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	6.98	7.65	3.66	3.31	3.76	4.26	8.51	3.41
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	0.004	0.033	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.94	0.96	0.88	0.90	0.99	0.88	0.88	0.93
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	1.778	4.526	1.828	0.224	<0.001	2.944
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0063	0.0011	<0.0001	0.0016	0.0045	0.0020	0.0010
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0014	0.0049	0.0409	0.0316	0.0230	0.0124	0.0085
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01320	0.03820	0.05400	0.03030	0.03180	0.05050	0.07660	0.02370
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.00952	0.07052	0.05810	0.5389	0.00315	0.00816
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	8.12	18.95	0.66	1.22	11.63	0.96	16.77	0.28
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0060	0.0207	0.0462	0.1062	0.0013	0.0173
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0014	<0.0001	2.603	5.432	0.2222	0.1408	0.0010	0.8905
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	0.0060	<0.0005	<0.0005	<0.0005	0.0018
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0991	0.0754	0.0265	0.0509	0.0640	0.0090	0.7243	0.0469
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	4.99	5.65	7.53	0.95	<0.03	7.54
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.293	0.539	0.059	0.087	0.180	<0.005	0.437	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	2.225	0.8876	0.03120	0.04690	0.02300	0.04520	0.16030	0.04530
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0032	0.0071	0.0155	0.0374	<0.0005	0.0079
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00900	0.00330	0.12480	0.08440	0.14200	8.463	0.01540	0.5616
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	3.12	3.71	0.53	0.18	0.78	1.13	2.48	1.55
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.001	0.002	0.003	<0.001	0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.51	1.08	2.70	2.38	3.64	2.63	1.72	3.54
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	0.10	0.09	0.09	0.10	0.14	<0.05	0.52	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	<0.0001	<0.0001	0.0017	0.0106	0.0026	0.0250	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00127	0.01421	0.00474	0.00148	<0.00001	0.00375
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.053	0.006	0.454	8.307	7.909	29.53	0.020	2.895

Muestras del Grupo: 40829/2015	Semana 9										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.3	<0.2	<0.2	<0.2	<0.2	0.3	0.2	<0.2
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.14	0.21	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	38.63	54.03	45.96	115.1	86.89	89.30	26.15	47.70
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	3	2	48	115	66	80	<1	54
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	8	24	<1	<1	<1	<1	38	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	140.7	152.4	216.0	415.0	284.0	268.0	90.50	217.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.181	0.083	0.027	0.052	0.058	0.117	0.020	0.041
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.064	0.037	0.043	0.053	0.038	0.070	0.081	0.046
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.30	8.36	8.91	8.88	8.81	8.43	7.84	8.62
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.17	7.30	3.59	3.35	3.74	4.05	8.44	3.53
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.017	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.89	0.90	0.83	0.82	0.94	0.87	0.82	0.85
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	2.754	6.618	2.965	0.256	<0.001	2.942
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0069	0.0007	<0.0001	0.0014	0.0059	0.0024	0.0008
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0018	0.0044	0.0334	0.0196	0.0292	0.0122	0.0056
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01900	0.04180	0.05750	0.03260	0.02550	0.03360	0.07490	0.01200
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.01097	0.07563	0.07880	0.5840	0.00357	0.00609
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	13.78	23.19	0.60	1.17	12.12	1.24	17.84	0.16
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0081	0.0220	0.0449	0.1404	0.0011	0.0099
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0009	<0.0001	3.072	6.189	0.2336	0.1530	0.0011	0.7180
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	0.0067	<0.0005	<0.0005	<0.0005	0.0017
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.1540	0.0892	0.0267	0.0421	0.0758	0.0103	0.7356	0.0301
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	5.17	9.10	9.51	1.94	<0.03	5.11
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.488	0.658	0.055	0.080	0.184	<0.005	0.474	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	3.189	0.9769	0.03740	0.04910	0.02020	0.06000	0.17600	0.02200
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0045	0.0072	0.0151	0.0522	<0.0005	0.0045
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.01050	0.00470	0.12220	0.04500	0.12990	8.216	0.01460	0.25270
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	4.22	4.43	0.76	0.17	0.82	3.31	2.57	0.85
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.001	0.003	0.003	<0.001	0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	2.01	1.35	1.29	1.07	4.16	2.89	1.77	2.05
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	0.14	0.10	0.09	0.08	0.12	<0.05	0.53	0.08
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	<0.0001	<0.0001	0.0025	0.0111	0.0031	0.0253	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00197	0.01837	0.00701	0.00154	<0.00001	0.00382
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.060	0.007	0.546	9.279	10.12	43.92	0.014	2.070

Muestras del Grupo: 40829/2015	Semana 10										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.2
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.17	0.18	0.12	0.09	0.14	0.10	0.12	0.13
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	0.001	<0.001	<0.001	<0.001	0.001	0.002	<0.001	0.002
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	14.23	44.21	46.15	99.06	69.56	61.64	19.95	62.54
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	2	48	100	52	59	<1	60
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	5	17	<1	<1	<1	<1	32	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	97.40	138.2	236.0	456.0	279.0	228.0	70.70	308.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	<0.010	<0.010	0.019	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.044	0.027	<0.006
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.62	8.69	8.75	8.63	8.68	8.67	8.52	8.84
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	6.97	7.73	3.63	3.36	3.70	4.11	8.30	3.53
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	0.004	<0.001	0.006	0.054	<0.001	0.012
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.92	0.91	0.82	0.89	0.90	0.82	0.80	0.90
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	2.728	5.056	2.842	0.214	<0.001	4.332
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0051	<0.0001	<0.0001	<0.0001	0.0040	0.0016	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0015	0.0043	0.0400	0.0135	0.0217	0.0116	0.0044
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01170	0.03530	0.05310	0.02900	0.02490	0.02460	0.07060	0.01130
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.01093	0.06564	0.05583	0.5659	0.00235	0.00739
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	5.67	20.86	0.56	0.77	7.30	0.73	15.74	0.17
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0077	0.0143	0.0247	0.0785	<0.0001	0.0118
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0009	<0.0001	3.108	6.020	0.2228	0.2595	0.0011	1.049
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	0.0061	<0.0005	<0.0005	<0.0005	0.0019
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0654	0.0735	0.0226	0.0312	0.0416	0.0089	0.6262	0.0294
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	5.08	5.62	7.30	1.22	<0.03	5.11
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.194	0.538	<0.005	<0.005	<0.005	<0.005	0.401	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	1.513	0.8241	0.03600	0.03770	0.01250	0.03630	0.14820	0.02380
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0044	0.0058	0.0088	0.0302	<0.0005	0.0054
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00640	0.00340	0.11890	0.03930	0.09480	8.116	0.00980	0.26230
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	2.17	3.42	0.55	0.10	0.53	1.62	2.03	0.94
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	<0.001	0.003	0.003	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	0.98	0.95	2.67	1.18	2.73	2.74	1.27	2.79
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.45	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	<0.0001	<0.0001	0.0017	0.0080	0.0020	0.0335	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00186	0.01608	0.00495	0.00209	<0.00001	0.00618
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.038	0.007	0.534	9.095	7.827	30.52	0.008	2.819

Muestras del Grupo: 40829/2015	Semana 11										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.444	<0.200	<0.200	0.247	0.310	<0.200	0.448	<0.200
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.118	0.146	0.059	0.036	0.069	<0.020	0.055	0.048
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	0.006	<0.005	0.012	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	14.19	46.68	77.90	142.5	84.13	41.61	21.10	65.42
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	1	1	84	142	64	38	<1	64
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	7	18	<1	<1	<1	<1	32	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	85.10	132.1	304.0	503.0	312.0	148.4	65.70	280.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	<0.010	0.046	<0.010	0.023	<0.010	<0.010	<0.010	<0.010
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.035	0.006	0.026	0.032	<0.006	0.038	<0.006	<0.006
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.19	8.26	8.33	8.14	8.01	8.26	8.06	8.33
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.18	7.57	3.54	3.14	3.70	4.34	8.30	3.53
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.010	<0.001	0.004
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.90	0.84	0.93	0.87	0.93	0.92	0.90	0.90
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	4.320	5.766	3.202	0.168	<0.001	3.928
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0055	<0.0001	<0.0001	0.0010	0.0023	0.0015	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0014	0.0060	0.0573	0.0244	0.0166	0.0140	0.0048
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.00830	0.03580	0.05860	0.02120	0.02810	0.02720	0.08440	0.00950
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	0.00030	<0.00005	0.01823	0.08582	0.06283	0.37295	0.00224	0.00739
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	5.53	20.70	0.69	0.67	8.09	0.44	16.17	0.17
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0117	0.0177	0.0230	0.0422	<0.0001	0.0097
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0007	<0.0001	5.127	8.174	0.3252	0.1302	0.0010	1.060
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	0.0164	<0.0005	<0.0005	<0.0005	0.0026
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0597	0.0791	0.0325	0.0370	0.0438	0.0058	0.6919	0.0253
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	11.93	17.57	10.58	1.06	<0.03	9.90
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.180	0.583	<0.005	<0.005	0.121	<0.005	0.439	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	1.543	0.9179	0.05510	0.03980	0.01150	0.02120	0.11820	0.01640
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0060	0.0071	0.0082	0.0169	<0.0005	0.0044
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00480	0.00340	0.20440	0.04350	0.10040	8.034	0.01200	0.21340
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	1.97	3.61	0.64	0.11	0.55	0.97	2.06	0.88
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.001	0.004	0.003	<0.001	0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	0.75	0.94	2.36	1.36	3.22	2.11	1.38	3.04
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	0.45	0.09
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	<0.0001	<0.0001	0.0024	0.0107	0.0021	0.0253	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00322	0.01865	0.00510	0.00132	<0.00001	0.00607
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.038	0.006	0.994	12.04	8.752	20.08	0.004	2.870

Muestras del Grupo: 40829/2015	Semana 12										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.262	0.205	<0.200	0.413	<0.200	<0.200	<0.200	0.264
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.096	0.178	0.030	0.030	0.074	0.025	0.060	0.047
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	12.66	40.75	33.34	114.6	84.94	44.00	16.30	60.27
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	3	74	113	68	38	<1	63
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	7	22	<1	<1	<1	<1	32	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	71.00	120.7	175.3	477.0	288.0	155.1	58.70	265.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	<0.010	0.091	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.006	0.015	<0.006	0.033	0.007	0.052	0.024	0.029
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.53	8.45	8.97	8.86	8.34	8.62	8.39	8.60
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.19	7.53	3.54	3.30	3.70	4.35	8.37	3.57
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	0.005	0.016	<0.001	0.007
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.90	0.85	0.93	0.88	0.95	0.93	0.91	0.89
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	1.446	3.902	3.175	0.153	<0.001	3.457
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0052	<0.0001	<0.0001	0.0009	0.0020	0.0015	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0013	0.0041	0.0639	0.0243	0.0162	0.0132	0.0043
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.00800	0.03550	0.05360	0.02020	0.02750	0.08690	0.08340	0.00910
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.00749	0.06654	0.06119	0.41707	0.00215	0.00694
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	5.53	20.54	0.33	0.66	7.71	0.38	16.07	<0.05
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0042	0.0143	0.0209	0.0379	<0.0001	0.0081
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0007	<0.0001	2.030	6.518	0.3231	0.2025	0.0010	1.052
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	0.0118	<0.0005	<0.0005	<0.0005	0.0017
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0580	0.0724	0.0122	0.0280	0.0421	0.0060	0.6583	0.0215
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	5.43	14.21	10.55	0.96	<0.03	6.12
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.175	0.539	<0.005	<0.005	0.118	<0.005	0.409	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	1.541	0.9087	0.01690	0.03640	0.01100	0.01970	0.11810	0.01270
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0025	0.0058	0.0077	0.0161	<0.0005	0.0035
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00450	0.00330	0.11690	0.04130	0.10000	8.732	0.01110	0.17960
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	1.97	3.61	0.33	0.10	0.53	0.84	1.91	0.76
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	0.73	0.91	1.87	1.35	3.01	2.06	1.25	2.74
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.38	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	0.0105	0.0020	0.0252	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	0.01193	0.00469	<0.00001	<0.00001	0.00601
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.035	0.005	0.345	8.061	8.435	21.52	0.004	2.635

Muestras del Grupo: 40829/2015	Semana 13										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	1.343	1.045	0.581	1.188	0.403	<0.200	0.223	0.440
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.160	0.187	0.057	0.035	0.096	0.027	0.062	0.077
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	0.013	<0.005	0.015	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	23.28	35.81	70.21	166.4	125.0	42.46	85.22	23.31
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	2	71	161	100	38	<1	83
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	9	17	<1	<1	<1	<1	31	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	80.40	116.5	326.0	816.0	398.0	157.4	380.0	116.9
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.038	0.105	<0.010	0.038	0.028	0.021	0.043	0.072
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	<0.006	0.049	<0.006	<0.006	<0.006	0.100	<0.006	<0.006
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.67	8.76	8.77	9.06	8.67	9.03	8.62	8.76
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.62	7.73	3.32	2.98	3.40	4.32	8.34	3.24
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.035	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.88	0.84	0.92	0.88	0.93	0.94	0.89	0.87
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	3.196	4.760	5.486	0.184	<0.001	4.369
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0057	0.0005	<0.0001	0.0006	0.0017	0.0022	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0017	0.0089	0.0924	0.0333	0.0205	0.0202	0.0185
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01650	0.03960	0.04300	0.01780	0.02110	0.08200	0.10620	0.01580
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.01481	0.08010	0.08664	0.45387	0.00313	0.00891
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	9.63	19.15	0.65	0.64	10.98	0.41	24.24	0.25
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0095	0.0215	0.0271	0.0370	0.0009	0.0117
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0009	<0.0001	4.520	8.979	0.5131	0.1475	0.0016	1.695
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0039	0.0198	<0.0005	<0.0005	<0.0005	0.0033
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.1066	0.0669	0.0260	0.0392	0.0633	0.0047	0.9309	0.0301
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	13.17	24.45	17.39	1.30	<0.03	11.83
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.313	0.505	<0.005	<0.005	0.171	<0.005	0.581	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	1.862	0.9061	0.03950	0.04400	0.01440	0.01970	0.15260	0.01680
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0053	0.0079	0.0103	0.0159	<0.0005	0.0049
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00810	0.00420	0.24530	0.05150	0.19900	7.881	0.01940	0.25510
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	3.36	3.46	0.66	0.09	0.79	0.77	2.62	1.15
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.002	0.004	0.002	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	2.58	1.45	3.97	3.50	4.65	2.21	2.19	4.11
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	0.54	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	<0.0001	<0.0001	0.0021	0.0118	0.0031	0.0242	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00243	0.01340	0.00638	0.00128	<0.00001	0.00990
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.049	0.008	0.869	11.87	12.90	23.83	0.009	4.117

Muestras del Grupo: 40829/2015	Semana 14										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.611	0.581	0.363	0.602	0.747	0.386	1.691	0.391
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.139	0.114	0.025	0.025	0.067	0.029	0.034	0.038
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	0.008	0.006	0.018	0.009	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	21.89	27.94	51.87	203.4	136.5	64.03	14.07	76.81
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	1	51	198	115	62	<1	64
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	10	20	<1	<1	<1	<1	27	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	80.10	104.1	222.0	778.0	393.0	170.6	85.50	329.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.122	0.107	0.036	0.089	0.074	0.044	0.035	0.067
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.018	<0.006	<0.006
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.80	9.17	9.40	9.55	9.20	9.15	8.80	9.93
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.18	7.75	3.59	3.07	3.50	4.19	8.30	3.40
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.89	0.86	0.92	0.86	0.92	0.94	0.89	0.88
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	1.962	4.533	5.094	0.129	<0.001	3.992
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0048	<0.0001	<0.0001	<0.0001	0.0019	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0013	0.0084	0.0922	0.0508	0.0201	0.0147	0.0113
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01630	0.03750	0.03880	0.01810	0.02050	0.03680	0.09850	0.01290
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.00822	0.07766	0.06913	0.43784	0.00206	0.00649
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	9.43	14.95	0.46	0.59	8.82	0.51	13.04	0.12
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0051	0.0210	0.0181	0.0363	<0.0001	0.0080
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0009	<0.0001	2.424	8.403	0.4886	0.1431	0.0012	1.334
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0023	0.0208	0.0067	<0.0005	<0.0005	0.0023
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.1027	0.0565	0.0150	0.0384	0.0696	0.0055	0.5313	0.0241
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	8.33	24.36	17.19	1.58	<0.03	5.84
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.292	0.380	<0.005	<0.005	0.139	<0.005	0.321	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	1.598	0.7367	0.01890	0.04080	0.01100	0.02100	0.09710	0.00960
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00210	0.00190	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0027	0.0073	0.0073	0.0156	<0.0005	0.0032
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	0.00103	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00690	0.00320	0.17700	0.04080	0.20190	6.826	0.01260	0.18110
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	3.11	2.62	0.39	<0.05	0.78	0.85	1.55	0.84
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.92	1.04	2.71	3.51	4.08	2.79	1.51	3.55
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	0.32	<0.05	0.28	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0017	<0.0001	0.0015	0.0120	0.0039	0.0281	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00147	0.01123	0.00517	0.00145	<0.00001	0.00877
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.047	0.006	0.458	10.23	9.245	23.82	0.009	2.655

Muestras del Grupo: 40829/2015	Semana 15										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.483	0.415	0.326	0.415	0.286	0.319	0.435	0.303
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.059	0.063	0.021	<0.020	0.041	<0.020	0.027	0.030
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	14.90	24.37	54.22	166.2	121.6	54.59	15.89	74.67
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	1	2	71	115	66	37	<1	64
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	6	20	<1	<1	<1	<1	31	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	58.60	98.20	243.0	688.0	389.0	157.7	92.20	320.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.048	0.065	0.011	0.061	0.056	<0.010	<0.010	<0.010
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	<0.006	<0.006	<0.006	0.021	<0.006	0.035	<0.006	0.020
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.15	7.98	8.14	8.02	7.69	7.97	7.94	7.88
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.20	7.60	3.56	3.16	3.67	4.29	8.34	3.54
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.020	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.89	0.92	0.94	0.87	0.91	0.97	0.87	0.89
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	2.257	3.448	5.678	0.191	<0.001	3.985
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0040	<0.0001	<0.0001	<0.0001	0.0019	0.0012	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0014	0.0093	0.0589	0.0520	0.0273	0.0183	0.0101
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01080	0.04310	0.03710	0.02330	0.02540	0.03400	0.09560	0.01440
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.00976	0.06389	0.05911	0.5633	0.00304	0.00702
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	6.69	14.44	0.54	0.42	6.30	0.47	18.37	0.20
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0056	0.0151	0.0132	0.0320	<0.0001	0.0076
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0011	<0.0001	2.604	6.205	0.4829	0.1563	0.0014	1.393
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0027	0.0154	0.0099	<0.0005	<0.0005	0.0021
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0631	0.0509	0.0134	0.0233	0.0557	0.0059	0.5959	0.0209
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	9.04	21.56	18.37	1.79	<0.03	2.81
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.205	0.349	<0.005	<0.005	0.102	<0.005	0.397	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	1.454	0.7601	0.02060	0.02740	0.00960	0.02140	0.14520	0.00960
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00150	0.00170	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0028	0.0052	0.0056	0.0140	<0.0005	0.0029
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	0.00107	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00730	0.00460	0.18640	0.01410	0.21070	8.648	0.01700	0.15950
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	2.15	2.11	0.37	<0.05	0.89	0.89	1.67	0.76
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.18	0.82	2.65	2.49	3.75	2.51	1.23	3.32
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	0.39	<0.05	0.34	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0015	<0.0001	0.0015	0.0106	0.0043	0.0305	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00147	0.00710	0.00368	0.00151	<0.00001	0.00770
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.046	0.008	0.615	9.522	8.397	30.56	0.010	3.222

Muestras del Grupo: 40829/2015	Semana 16										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.300	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.098	0.098	<0.020	<0.020	0.034	<0.020	<0.020	0.024
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	0.007	0.005	0.007	<0.005	0.011	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	19.07	29.99	60.57	230.2	144.0	45.57	13.62	78.25
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	2	75	96	54	57	<1	63
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	6	20	<1	<1	<1	<1	31	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	68.60	105.1	259.0	889.0	454.0	132.5	75.90	324.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.193	0.217	0.238	0.072	0.046	0.014	<0.010	0.012
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.024	0.107	0.391	0.008	0.010	0.044	<0.006	0.020
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.17	7.98	7.97	8.06	7.71	8.13	7.94	8.15
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.14	7.68	3.45	3.18	3.55	4.24	8.38	3.49
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.92	0.93	0.97	0.90	0.98	0.96	0.91	0.87
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	2.242	3.380	5.586	0.177	0.030	4.033
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0039	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0011	0.0091	0.0327	0.0515	0.0225	0.0154	0.0103
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01430	0.03810	0.03500	0.01520	0.02160	0.03310	0.09420	0.01180
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.00859	0.06314	0.04829	0.44379	0.00148	0.00567
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	8.10	14.37	0.54	0.27	6.29	0.32	13.18	<0.05
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0062	0.0169	0.0132	0.0220	<0.0001	0.0075
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0008	<0.0001	2.602	7.512	0.5402	0.1466	0.0009	1.450
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0027	0.0152	0.0098	<0.0005	<0.0005	0.0020
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0845	0.0505	0.0133	0.0262	0.0553	0.0054	0.5156	0.0196
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	8.93	18.26	19.60	1.29	<0.03	1.97
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.246	0.341	<0.005	<0.005	0.101	<0.005	0.325	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	1.287	0.7600	0.02050	0.02450	0.00950	0.01500	0.06560	0.00770
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00150	0.00170	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0027	0.0061	0.0055	0.0098	<0.0005	0.0027
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	0.00113	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00470	0.00370	0.18360	0.01380	0.21070	8.639	0.01160	0.11740
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	2.46	2.11	0.35	<0.05	1.10	0.79	1.34	0.69
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.46	0.81	2.58	2.38	3.74	2.15	1.21	3.31
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	0.50	<0.05	0.23	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0014	<0.0001	0.0012	0.0104	0.0042	0.0260	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	0.00794	0.00347	<0.00001	<0.00001	0.00694
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.035	0.007	0.522	8.964	6.295	18.55	<0.001	2.357

Muestras del Grupo: 40829/2015	Semana 17										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.369	<0.200	<0.200	0.240	<0.200	<0.200	<0.200	<0.200
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.097	0.111	0.023	<0.020	0.066	0.023	<0.020	0.036
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.010	<0.005	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.002	0.005	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	18.16	24.92	57.08	217.2	170.5	47.86	10.17	89.65
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	1	76	97	52	58	<1	64
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	6	19	<1	<1	<1	<1	31	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	66.70	101.5	244.0	916.0	565.0	145.9	62.40	374.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.016	0.034	<0.010	0.039	0.031	<0.010	<0.010	<0.010
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.12	8.35	8.21	7.90	7.85	8.29	8.32	8.20
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.20	7.70	3.36	3.08	3.42	4.15	8.41	3.39
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.89	0.97	0.92	0.91	0.94	0.93	0.93	0.99
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	0.016	2.381	2.534	7.469	0.198	0.041	4.100
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	0.0008	0.0043	<0.0001	<0.0001	0.0003	0.0017	0.0008	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0015	0.0166	0.0699	0.0673	0.0297	0.0116	0.0200
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01490	0.03700	0.03710	0.01750	0.01910	0.03070	0.12650	0.01230
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.00777	0.04531	0.05038	0.47873	<0.00005	0.00583
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	7.71	14.11	0.56	0.29	6.26	0.38	12.39	<0.05
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0058	0.0147	0.0150	0.0215	<0.0001	0.0084
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	0.0008	<0.0001	2.360	5.157	0.6240	0.1901	0.0011	1.496
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0032	0.0143	0.0210	<0.0005	<0.0005	0.0027
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0787	0.0544	0.0117	0.0192	0.0672	0.0059	0.4150	0.0204
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	7.21	33.83	22.35	1.65	<0.03	4.67
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	<0.005	0.382	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	1.060	0.6477	0.01800	0.01850	0.01060	0.01550	0.04340	0.00840
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00170	0.00200	<0.00005	<0.00005	<0.00005	<0.00005	0.00260	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0028	0.0056	0.0064	0.0096	<0.0005	0.0028
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00440	0.00410	0.16960	0.00570	0.21780	8.432	0.01030	0.12420
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	2.80	2.82	0.35	<0.05	1.44	0.98	1.21	0.82
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.41	0.93	2.24	2.19	4.24	2.24	0.91	3.20
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	0.18	0.60	<0.05	0.18	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	0.0101	0.0072	0.0328	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00150	0.00515	0.00384	0.00136	0.00016	0.00713
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.034	0.007	0.590	7.352	6.459	19.08	0.007	2.511

Muestras del Grupo: 40829/2015	Semana 18										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.236	0.681	<0.200	0.350	<0.200	<0.200	<0.200	0.228
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.104	0.146	0.041	0.021	0.073	0.026	0.035	0.051
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	0.006
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	17.52	29.73	73.93	258.5	192.0	36.49	17.24	107.1
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	2	79	283	221	36	<1	113
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	7	<1	<1	<1	<1	<1	37	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	62.00	94.90	343.0	1068	730.0	138.0	82.50	506.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.018	0.132	0.103	0.122	0.129	0.054	0.056	0.108
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.03	8.27	8.18	7.95	7.24	8.18	8.20	8.29
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.03	7.61	3.21	2.66	2.92	4.07	8.30	3.15
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.89	0.97	0.92	0.91	0.94	0.93	0.93	0.99
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	<0.001	3.578	3.020	10.10	<0.001	<0.001	5.799
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0044	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0012	0.0304	0.0648	0.0681	0.0238	0.0155	0.0293
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01510	0.03450	0.03410	0.01640	0.01940	0.05110	0.10360	0.01160
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.00978	0.05068	0.04979	0.36456	0.00278	0.00658
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	8.07	14.23	0.61	0.27	4.92	0.26	15.97	<0.05
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0077	0.0158	0.0151	0.0137	<0.0001	0.0098
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	<0.0001	<0.0001	3.646	6.608	0.8998	0.1691	<0.0001	2.171
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0045	0.0159	0.0289	<0.0005	<0.0005	0.0041
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0802	0.0544	0.0126	0.0194	0.0473	0.0043	0.6065	0.0205
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	8.94	44.39	24.27	1.50	<0.03	12.10
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.237	0.354	<0.005	<0.005	<0.005	<0.005	0.408	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	0.9685	0.7065	0.02210	0.01890	0.00870	0.01040	0.13410	0.01020
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00190	0.00210	<0.00005	<0.00005	<0.00005	<0.00005	0.00480	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0031	0.0058	0.0057	0.0061	<0.0005	0.0028
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	0.00093	0.00149	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00440	0.00370	0.22370	0.00700	0.12930	7.588	0.01620	0.10960
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	2.39	2.17	0.34	<0.05	0.86	0.69	1.58	0.80
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.55	0.77	2.83	2.52	3.95	1.71	1.45	3.68
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	0.47	<0.05	0.25	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0014	<0.0001	0.0014	0.0087	0.0049	0.0195	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00207	0.00494	0.00345	0.00116	<0.00001	0.00789
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.028	0.007	0.738	9.025	6.409	14.00	0.010	2.886

Muestras del Grupo: 40829/2015	Semana 19										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.418	<0.200	0.288	0.559	0.522	<0.200	<0.200	0.203
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.089	0.075	0.031	<0.020	0.063	<0.020	0.029	0.045
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	<0.005	0.006	0.020	0.037	0.005	<0.005	0.008	<0.005
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	19.83	29.31	76.15	246.7	182.7	38.53	21.40	127.8
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	1	1	98	231	227	39	<1	139
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	12	22	<1	<1	<1	<1	31	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	78.50	111.1	450.0	1233	857.0	144.9	123.4	605.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	0.101	0.138	0.189	0.219	0.270	0.118	0.073	0.073
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	<0.006	<0.006	<0.006	<0.006	0.011	<0.006	<0.006	<0.006
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.43	8.31	8.19	8.04	7.91	8.40	8.54	8.05
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.18	7.50	3.15	2.64	2.86	3.96	8.28	2.90
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.93	0.96	0.97	0.98	0.96	0.95	0.94	0.96
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	0.015	4.188	3.048	11.08	0.275	0.013	6.286
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	0.0009	0.0050	<0.0001	<0.0001	<0.0001	0.0012	0.0017	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0014	0.0560	0.1201	0.0870	0.0360	0.0183	0.0556
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.02360	0.03210	0.02960	0.01410	0.01710	0.05950	0.08580	0.01120
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.01116	0.05226	0.06247	0.40767	0.00351	0.00712
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	10.72	15.68	0.65	0.29	5.24	0.25	18.17	<0.05
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0101	0.0172	0.0176	0.0117	<0.0001	0.0106
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	<0.0001	<0.0001	4.214	7.041	0.9760	0.2120	0.0012	2.473
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0068	0.0161	0.0353	<0.0005	<0.0005	0.0053
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.1060	0.0612	0.0140	0.0218	0.0521	0.0045	0.7497	0.0200
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	12.27	63.01	33.03	2.08	<0.03	17.70
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.315	0.413	<0.005	<0.005	<0.005	<0.005	0.522	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	0.7657	0.6916	0.03080	0.02010	0.01240	0.00990	0.14720	0.01270
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00280	0.00240	<0.00005	<0.00005	<0.00005	<0.00005	0.00610	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0043	0.0068	0.0069	0.0054	<0.0005	0.0033
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	0.00157	0.00103	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00510	0.00380	0.25580	0.00630	0.27300	7.263	0.01850	0.07440
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	2.91	2.35	0.37	<0.05	1.03	0.66	1.83	0.76
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.94	0.95	3.28	3.31	5.61	1.96	1.85	4.33
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	0.69	<0.05	0.36	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	0.0016	<0.0001	0.0015	0.0095	0.0055	0.0197	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00244	0.00469	0.00361	0.00147	<0.00001	0.00794
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	0.016	0.002	<0.001	<0.001	0.003
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.021	0.008	0.865	9.716	7.743	14.27	0.012	2.915

Muestras del Grupo: 40829/2015	Semana 20										
N° ALS - Corplab				466217/2015-1.0	466220/2015-1.0	466224/2015-1.0	466228/2015-1.0	466229/2015-1.0	466230/2015-1.0	466231/2015-1.0	466232/2015-1.0
Fecha de Muestreo				28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015	28/11/2015
Hora de Muestreo				12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00	12:00:00
Tipo de Muestra				Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación	Aguas de Lixiviación
Identificación				MYSRL - 50241	MYSRL - 50242	MYSRL - 50243	MYSRL - 50244	MYSRL - 50245	MYSRL - 50247	MYSRL - 50246	MYSRL - 50248
Método de Análisis	Parámetro	Unidad	LD								
011 ANÁLISIS EN CELDAS DE HUMEDAD - Aniones por Cromatografía Iónica											
Escaneo de Aniones en Celdas de Humedad*	Bromuro, Br-*	mg/L	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Escaneo de Aniones en Celdas de Humedad*	Cloruros, Cl-*	mg/L	0.2	0.989	0.434	0.315	0.506	0.904	0.245	0.343	0.695
Escaneo de Aniones en Celdas de Humedad*	Fluoruros, F-*	mg/L	0.02	0.037	0.024	0.023	<0.020	0.048	0.022	<0.020	0.047
Escaneo de Aniones en Celdas de Humedad*	Nitratos, (como N)*	mg/L	0.005	0.024	0.018	0.005	0.008	0.006	0.007	0.016	0.019
Escaneo de Aniones en Celdas de Humedad*	Nitritos, (como N)*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Escaneo de Aniones en Celdas de Humedad*	Sulfatos, SO4-2*	mg/L	0.2	9.095	17.76	75.74	164.1	159.0	43.07	11.32	104.4
011 ANÁLISIS EN CELDAS DE HUMEDAD - Fisicoquímicos											
Acidez en Celdas de Humedad*	Acidez*	mg/L	1	2	2	86	194	166	49	1	127
Alcalinidad Total en Celdas de Humedad*	Alcalinidad Total*	mg/L	1	9	8	<1	<1	<1	<1	29	<1
Conductividad en Celdas de Humedad*	Conductividad*	uS/cm	---	91.80	104.3	370.0	843.0	669.0	143.4	46.00	522.0
Cromo Hexavalente en Extracto HC*	Cromo Hexavalente*	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fósforo Total en Extracto HC*	Fósforo*	mg P/L	0.010	<0.010	0.078	0.046	0.039	0.073	0.024	<0.010	0.059
Nitrógeno Amoniacal en Extracto HC*	Nitrógeno Amoniacal*	mg NH3-N/L	0.006	0.008	0.024	0.007	0.019	<0.006	<0.006	0.065	0.013
Oxígeno Disuelto en Extracto HC*	Oxígeno Disuelto*	mg/L	0.20	8.93	8.71	8.92	8.64	8.50	8.70	8.81	8.85
pH en Celdas de Humedad*	pH*	Unidad pH	0.01	7.15	7.67	3.29	2.85	2.98	4.05	7.61	3.12
Sulfuros en Extracto HC*	Sulfuros*	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Volumen del Extracto en Celdas de Humedad*	Volumen del Extracto*	L	0.01	0.99	0.99	0.96	0.91	0.94	0.93	0.92	0.97
011 ANALISIS EN CELDAS DE HUMEDAD - Mercurio											
Mercurio por CVAAS en Celdas de Humedad*	Mercurio (Hg)*	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
011 ANÁLISIS EN CELDAS DE HUMEDAD - Metales por ICP-MS											
Metales por ICP-MS - Celdas de Humedad*	Aluminio (Al)*	mg/L	0.001	<0.001	0.014	3.377	1.505	0.459	0.454	0.029	5.149
Metales por ICP-MS - Celdas de Humedad*	Antimonio (Sb)*	mg/L	0.0001	<0.0001	0.0033	<0.0001	<0.0001	0.0012	0.0012	0.0009	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Arsénico (As)*	mg/L	0.0001	<0.0001	0.0013	0.0397	0.0429	0.0318	0.0314	0.0154	0.0386
Metales por ICP-MS - Celdas de Humedad*	Bario (Ba)*	mg/L	0.00005	0.01320	0.03000	0.02570	0.01770	0.06250	0.06140	0.08660	0.00700
Metales por ICP-MS - Celdas de Humedad*	Berilio (Be)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Bismuto (Bi)*	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Metales por ICP-MS - Celdas de Humedad*	Boro (B)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Cadmio (Cd)*	mg/L	0.00005	<0.00005	<0.00005	0.00931	0.02716	0.5517	0.5411	0.00213	0.00639
Metales por ICP-MS - Celdas de Humedad*	Calcio (Ca)*	mg/L	0.05	5.56	10.74	0.57	0.12	0.31	0.31	12.70	0.09
Metales por ICP-MS - Celdas de Humedad*	Cobalto (Co)*	mg/L	0.0001	<0.0001	<0.0001	0.0087	0.0102	0.0134	0.0130	<0.0001	0.0101
Metales por ICP-MS - Celdas de Humedad*	Cobre (Cu)*	mg/L	0.0001	<0.0001	<0.0001	3.669	4.102	0.3030	0.2939	<0.0001	2.380
Metales por ICP-MS - Celdas de Humedad*	Cromo (Cr)*	mg/L	0.0005	<0.0005	<0.0005	0.0071	0.0079	<0.0005	<0.0005	<0.0005	0.0051
Metales por ICP-MS - Celdas de Humedad*	Estaño (Sn)*	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Estroncio (Sr)*	mg/L	0.0001	0.0556	0.0424	0.0101	0.0097	0.0045	0.0044	0.5046	0.0163
Metales por ICP-MS - Celdas de Humedad*	Fósforo (P)*	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Metales por ICP-MS - Celdas de Humedad*	Hierro (Fe)*	mg/L	0.03	<0.03	<0.03	9.87	34.04	2.99	2.90	<0.03	16.61
Metales por ICP-MS - Celdas de Humedad*	Litio (Li)*	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Metales por ICP-MS - Celdas de Humedad*	Magnesio (Mg)*	mg/L	0.005	0.150	0.253	<0.005	<0.005	<0.005	<0.005	0.300	<0.005
Metales por ICP-MS - Celdas de Humedad*	Manganeso (Mn)*	mg/L	0.00005	0.6807	0.5285	0.02500	0.00880	0.01190	0.01150	0.08440	0.01200
Metales por ICP-MS - Celdas de Humedad*	Molibdeno (Mo)*	mg/L	0.00005	0.00140	0.00170	<0.00005	<0.00005	<0.00005	<0.00005	0.00370	<0.00005
Metales por ICP-MS - Celdas de Humedad*	Niquel (Ni)*	mg/L	0.0005	<0.0005	<0.0005	0.0036	0.0042	0.0064	0.0062	<0.0005	0.0032
Metales por ICP-MS - Celdas de Humedad*	Plata (Ag)*	mg/L	0.00001	<0.00001	<0.00001	0.00092	0.00104	<0.00001	<0.00001	<0.00001	<0.00001
Metales por ICP-MS - Celdas de Humedad*	Plomo (Pb)*	mg/L	0.00005	0.00350	0.00310	0.18690	0.00360	4.551	4.400	0.01190	0.04690
Metales por ICP-MS - Celdas de Humedad*	Potasio (K)*	mg/L	0.05	1.55	1.60	0.22	<0.05	0.57	0.56	1.18	0.59
Metales por ICP-MS - Celdas de Humedad*	Selenio (Se)*	mg/L	0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Metales por ICP-MS - Celdas de Humedad*	Silicio (Si)*	mg/L	0.05	1.01	0.64	2.33	1.60	2.07	2.00	1.12	3.98
Metales por ICP-MS - Celdas de Humedad*	Sodio (Na)*	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	<0.05
Metales por ICP-MS - Celdas de Humedad*	Talio (Tl)*	mg/L	0.0001	<0.0001	<0.0001	0.0012	0.0057	0.0167	0.0161	<0.0001	<0.0001
Metales por ICP-MS - Celdas de Humedad*	Titanio (Ti)*	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metales por ICP-MS - Celdas de Humedad*	Uranio (U)*	mg/L	0.00001	<0.00001	<0.00001	0.00199	0.00202	<0.00001	0.00206	<0.00001	0.00565
Metales por ICP-MS - Celdas de Humedad*	Vanadio (V)*	mg/L	0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	0.003
Metales por ICP-MS - Celdas de Humedad*	Zinc (Zn)*	mg/L	0.001	0.027	0.009	0.788	5.905	19.07	18.60	0.008	2.748

Tabla 1. Datos ensayo BAPP 50229

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50229	05-oct	2,45	348,5	1,09	1,2
Peso de muestra (g)	30,03	16-oct	2,04	640,7	0,19	1,05
Peso de muestra (g)	15,01	21-oct	1,87	664,5	0,17	1,07
Peso de muestra (g)	15	27-oct	2,09	657,3	0,17	1,1
V. solución (mL)	68,97	03-nov	2,06	683,9	0,15	0,92
Inoculado con 5 mL	4,93	12-nov	1,98	680,1	0,15	0,97
P. inicial matraz (g)	148,21	19-nov	2	710,6	0,09	1,02
P. final matraz (g)	282,15	25-nov	2,06	714,4	0,21	1,08
pH inicial	2,69	01-dic	2,01	722,9	0,15	1,03
		09-dic	1,79	730,4	0,21	1,12
		10-dic	2,35			
		11-dic	3,67			
		13-dic	3,06			

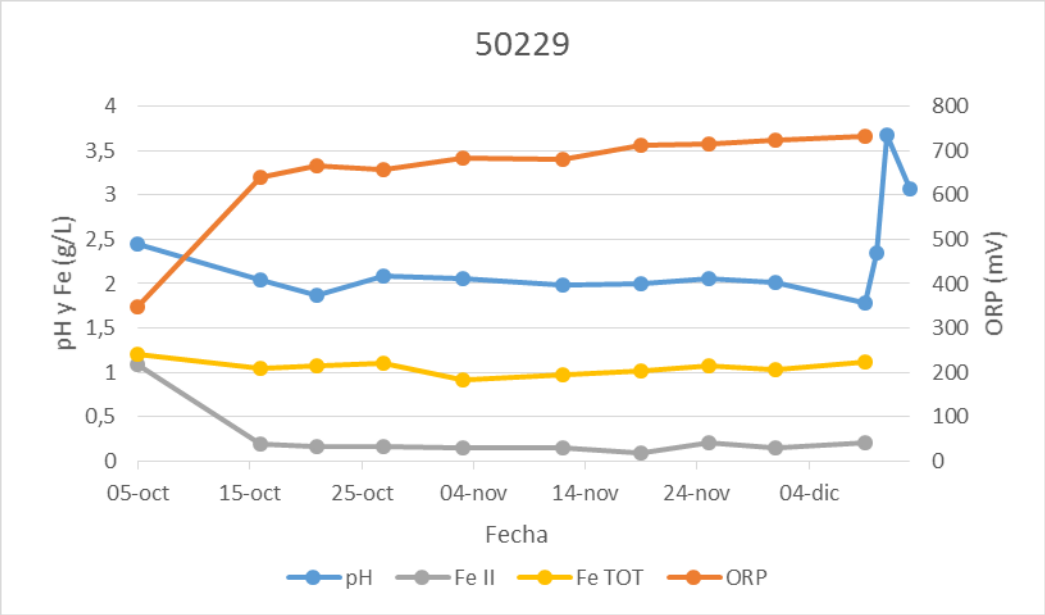


Figura 1. Progreso ensayo BAPP 50229

Tabla 2. Datos ensayo BAPP 50230

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50230	05-oct	4,02	429,5	0,19	0,44
Peso de muestra (g)	30,04	16-oct	3,91	526,9	0,174512	1,054
Peso de muestra (g)	15,03	21-oct	2,17	552,1	0,187936	1,074
Peso de muestra (g)	15,01	27-oct	2,17	657,3	0,1678	1,101
V. solución (mL)	68,78	03-nov	2,07	683,9	0,1603	0,922
Inoculado con 5 mL	4,94	12-nov	1,87	680,1	0,143125	0,973
P. inicial matraz (g)	141,91	19-nov	1,7	710,6	0,17175	1,019
P. final matraz (g)	275,71	25-nov	1,72	714,4	0,143125	1,082
pH inicial	2,15	01-dic	1,69	722,9	0,1603	1,031
		09-dic	1,79	730,4	0,17175	1,116
		10-dic	2,06			
		11-dic	3,23			



Figura 2. Progreso ensayo BAPP 50230

Tabla 3. Datos ensayo BAPP 50231

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50231	05-oct	2,7	396,5	0,64	0,83
Peso de muestra (g)	30	16-oct	2,15	501,7	0,2	1,05
Peso de muestra (g)	15	21-oct	1,91	526,1	0,24	1,07
Peso de muestra (g)	15	27-oct	1,95	657,3	0,17	1,1
V. solución (mL)	69,71	03-nov	1,87	683,9	0,22	0,92
Inoculado con 5 mL	4,92	12-nov	1,7	680,1	0,15	0,97
P. inicial matraz (g)	136,38	19-nov	1,7	710,6	0,17	1,02
P. final matraz (g)	271,01	25-nov	1,64	714,4	0,13	1,08
pH inicial	2,33	01-dic	1,63	722,9	0,19	1,03
		09-dic	1,79	730,4	0,16	1,12
		10-dic	1,64			
		11-dic	1,7			

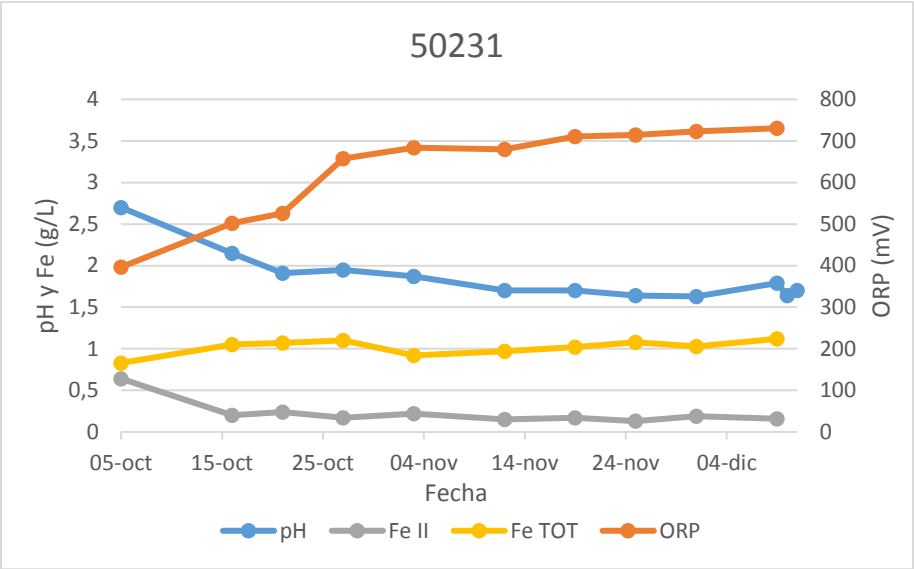


Figura 3. Progreso ensayo BAPP 50231

Tabla 4. Datos ensayo BAPP 50232

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50232	05-oct	2,72	396,9	0,75	0,85
Peso de muestra (g)	30,02	16-oct	2,04	539,7	0,21	1,05
Peso de muestra (g)	15,19	21-oct	1,84	534	0,31	1,07
Peso de muestra (g)	15	27-oct	1,89	657,3	0,22	1,1
V. solución (mL)	69,46	03-nov	1,78	683,9	0,21	0,92
Inoculado con 5 mL	4,94	12-nov	1,63	680,1	0,14	0,97
P. inicial matraz (g)	140,15	19-nov	1,57	710,6	0,17	1,02
P. final matraz (g)	274,76	25-nov	1,59	714,4	0,16	1,08
pH inicial	2,81	01-dic	1,5	722,9	0,16	1,03
		09-dic	1,79	730,4	0,15	1,12
		10-dic	1,49			
		11-dic	1,56			

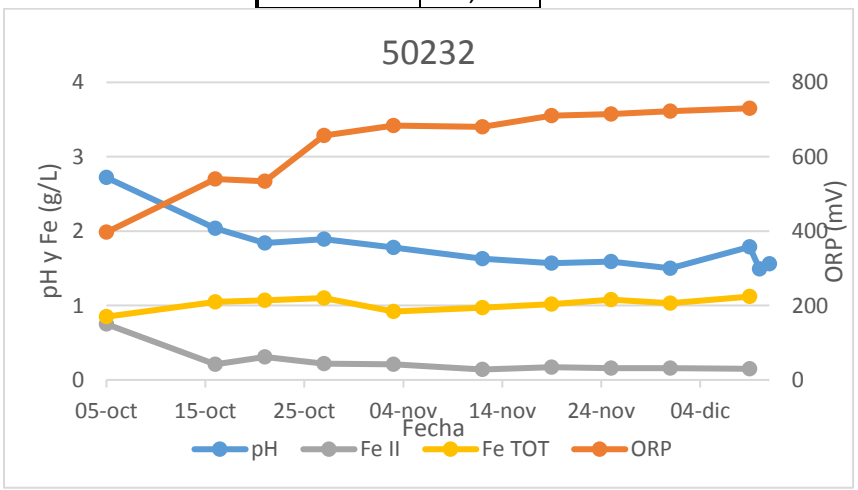


Figura 4. Progreso ensayo BAPP 50232

Tabla 5. Datos ensayo BAPP 50233

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50233	05-oct	2,7	418,9	0,83	1,05
Peso de muestra (g)	30,07	16-oct	1,99	515,3	0,19	1,05
Peso de muestra (g)	15,24	21-oct	1,83	550,4	0,25	1,07
Peso de muestra (g)	15,02	27-oct	1,89	657,3	0,17	1,1
V. solución (mL)	69,28	03-nov	1,82	683,9	0,15	0,92
Inoculado con 5 mL	4,92	12-nov	1,71	680,1	0,16	0,97
P. inicial matraz (g)	138,84	19-nov	1,64	710,6	0,17	1,02
P. final matraz (g)	273,37	25-nov	1,6	714,4	0,15	1,08
pH inicial	2,47	01-dic	1,58	722,9	0,18	1,03
		09-dic	1,79	730,4	0,16	1,12
		10-dic	1,62			
		11-dic	1,7			



Figura 5. Progreso ensayo BAPP 50233

Tabla 6. Datos ensayo BAPP 50234

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50234	05-oct	2,65	397,5	0,8	1,01
Peso de muestra (g)	30,06	16-oct	1,95	558,9	0,23	1,05
Peso de muestra (g)	15,07	21-oct	1,77	562,9	0,22	1,07
Peso de muestra (g)	15,01	27-oct	1,74	657,3	0,17	1,1
V. solución (mL)	69,27	03-nov	1,66	683,9	0,16	0,92
Inoculado con 5 mL	4,93	12-nov	1,54	680,1	0,17	0,97
P. inicial matraz (g)	126,69	19-nov	1,47	710,6	0,17	1,02
P. final matraz (g)	261,03	25-nov	1,44	714,4	0,15	1,08
pH inicial	2,5	01-dic	1,38	722,9	0,17	1,03
		09-dic	1,79	730,4	0,22	1,12
		10-dic	1,51			
		11-dic	1,53			

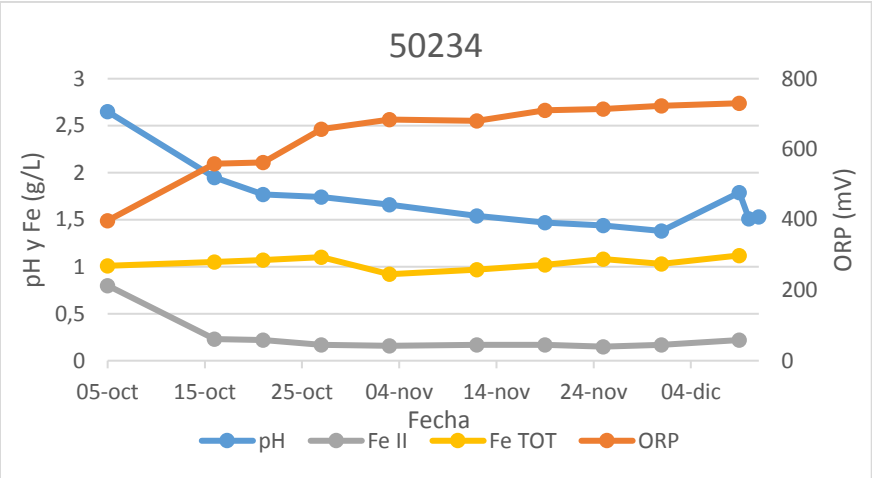


Figura 6. Progreso ensayo BAPP 50234

Tabla 7. Datos ensayo BAPP 50235

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50235	05-oct	2,67	396,7	0,83	0,92
Peso de muestra (g)		16-oct	1,96	521,9	0,21	1,05
Peso de muestra (g)		21-oct	1,76	527,3	0,32	1,07
Peso de muestra (g)		27-oct	1,76	657,3	0,2	1,1
V. solución (mL)		03-nov	1,71	683,9	0,27	0,92
Inoculado con 5 mL		12-nov	1,57	680,1	0,18	0,97
P. inicial matraz (g)		19-nov	1,43	710,6	0,16	1,02
P. final matraz (g)		25-nov	1,49	714,4	0,12	1,08
pH inicial		01-dic	1,4	722,9	0,18	1,03
		09-dic	1,79	730,4	0,19	1,12
		10-dic	1,52			
		11-dic	1,52			

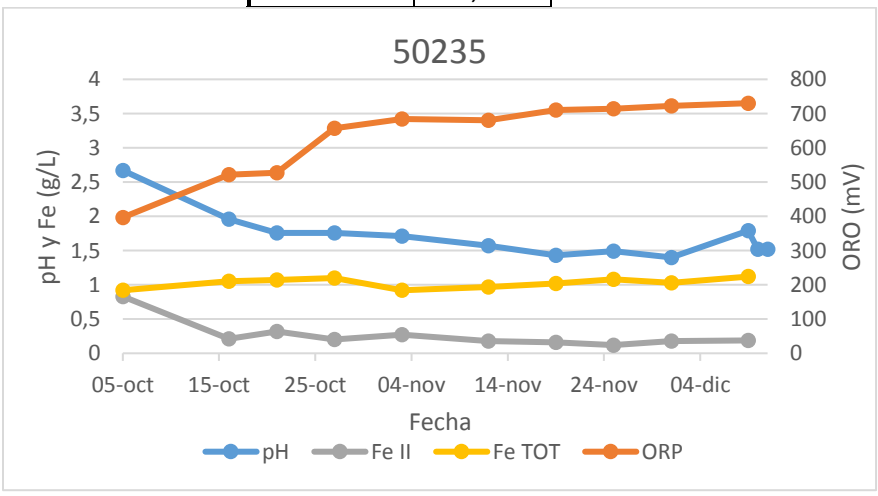


Figura 7. Progreso ensayo BAPP 50235

Tabla 8. Datos ensayo BAPP 50236

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50236	05-oct	2,37	567,4	1,7	2,8
Peso de muestra (g)	30,03	16-oct	2,1	675,9	1,7	1,7
Peso de muestra (g)	15,63	21-oct	1,95	685,8	7,9	7,9
Peso de muestra (g)	15,01	27-oct	2,14	657,3	14,5	14,5
V. solución (mL)	70,15	03-nov	2,16	683,9	16,5	16,5
Inoculado con 5 mL	4,95	12-nov	2,04	680,1	12,4	12,4
P. inicial matraz (g)	124,88	19-nov	2,06	710,6	4,2	8,7
P. final matraz (g)	260,65	25-nov	2,09	714,4	7,4	13,6
pH inicial	2,56	01-dic	2,05	722,9	8,4	14,1
		09-dic	1,79	730,4	8,4	15,8
		10-dic	2,3			
		11-dic	3,15			



Figura 8. Progreso ensayo BAPP 50236

Tabla 9. Datos ensayo BAPP 50237

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50237	05-oct	2,42	499	0,4	0,85
Peso de muestra (g)	30,07	16-oct	2,05	687,4	0,2	1,05
Peso de muestra (g)	15,93	21-oct	1,91	690,4	0,19	1,07
Peso de muestra (g)	15,01	27-oct	2,08	657,3	0,17	1,1
V. solución (mL)	69,9	03-nov	2,06	683,9	0,14	0,92
Inoculado con 5 mL	4,91	12-nov	1,98	680,1	0,16	0,97
P. inicial matraz (g)	135,85	19-nov	1,9	710,6	0,17	1,02
P. final matraz (g)	271,67	25-nov	1,96	714,4	0,14	1,08
pH inicial	2,5	01-dic	1,92	722,9	0,15	1,03
		09-dic	1,79	730,4	0,15	1,12
		10-dic	1,98			
		11-dic	2,32			



Figura 9. Progreso ensayo BAPP 50237

Tabla 10. Datos ensayo BAPP 50238

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50238	05-oct	2,42	514,8	0,32	0,77
Peso de muestra (g)	30,05	16-oct	2,04	670,1	0,21	1,05
Peso de muestra (g)	15,03	21-oct	1,92	686,1	0,19	1,07
Peso de muestra (g)	15	27-oct	2,01	657,3	0,17	1,1
V. solución (mL)	69,11	03-nov	1,97	683,9	0,16	0,92
Inoculado con 5 mL	4,93	12-nov	1,88	680,1	0,15	0,97
P. inicial matraz (g)	139,85	19-nov	1,8	710,6	0,17	1,02
P. final matraz (g)	273,97	25-nov	1,84	714,4	0,17	1,08
pH inicial	2,59	01-dic	1,8	722,9	0,17	1,03
		09-dic	1,79	730,4	0,17	1,12
		10-dic	1,9			
		11-dic	1,98			

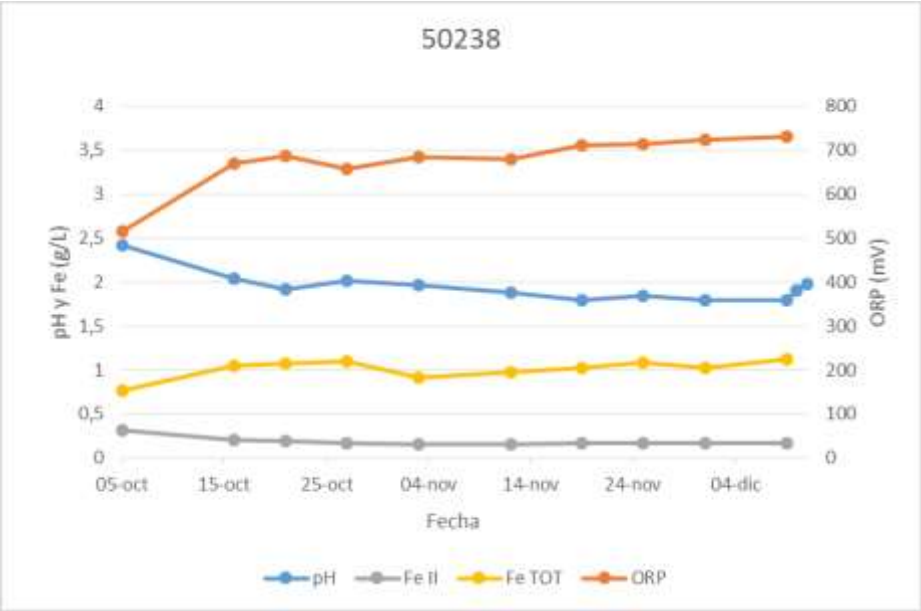


Figura 10. Progreso ensayo BAPP 50238

Tabla 11. Datos ensayo BAPP 50239

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50239	05-oct	2,53	457	0,67	0,94
Peso de muestra (g)	30,05	16-oct	2,02	535,6	0,19	1,05
Peso de muestra (g)	15,07	21-oct	1,86	687,8	0,17	1,07
Peso de muestra (g)	15	27-oct	2	657,3	0,17	1,1
V. solución (mL)	69,86	03-nov	1,93	683,9	0,15	0,92
Inoculado con 5 mL	4,92	12-nov	1,82	680,1	0,16	0,97
P. inicial matraz (g)	131,05	19-nov	1,74	710,6	0,18	1,02
P. final matraz (g)	265,95	25-nov	1,78	714,4	0,15	1,08
pH inicial	2,34	01-dic	1,71	722,9	0,15	1,03
		09-dic	1,79	730,4	0,19	1,12
		10-dic	1,88			
		11-dic	1,92			

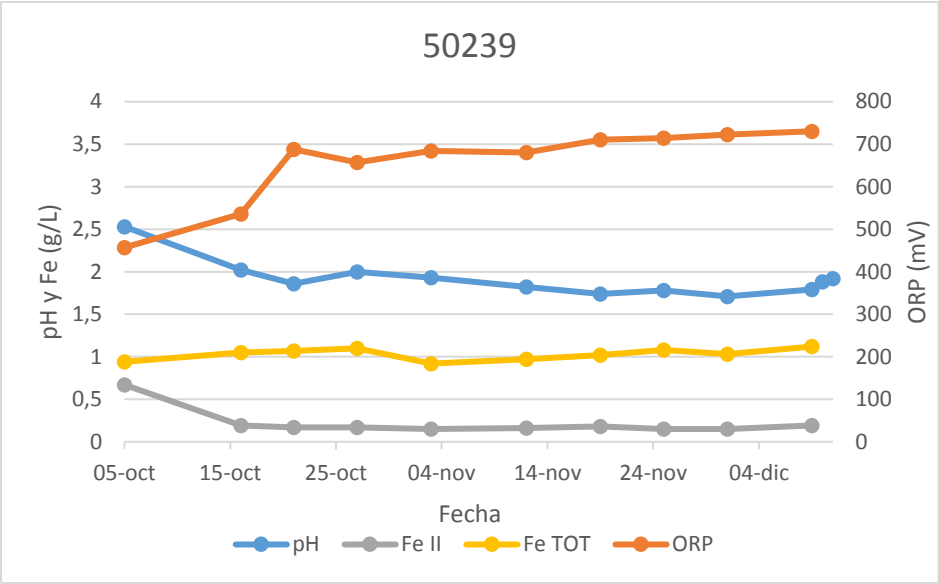


Figura 11. Progreso ensayo BAPP 50239

Tabla 12. Datos ensayo BAPP 50240

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50240	05-oct	2,45	348,5	1,09	1,2
Peso de muestra (g)	30	16-oct	1,94	478	0,496688	0,798728
Peso de muestra (g)	15,16	21-oct	1,92	493,7	0,194648	1,161
Peso de muestra (g)	15,03	27-oct	1,79	538,2	0,19465	1,666
V. solución (mL)	70,81	03-nov	1,62	538,6	0,1374	2,542
Inoculado con 5 mL	4,97	12-nov	1,53	560,3	0,14885	3,332
P. inicial matraz (g)	143,74	19-nov	1,44	582,5	0,143125	3,801
P. final matraz (g)	279,71	25-nov	1,5	593,2	0,154575	4,431
pH inicial	2,14	01-dic	1,53	587,5	0,166025	6,103
		09-dic	1,56			
		10-dic	1,61			



Figura 12. Progreso ensayo BAPP 50240

Tabla 13. Datos ensayo BAPP 50241

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50241	05-oct	4,02	429,5	0,19	0,44
Peso de muestra (g)	30	16-oct	2,29	398,8	0,19	0,34
Peso de muestra (g)	15,1	21-oct	2,25	393,7	0,17	0,4
Peso de muestra (g)	15	27-oct	2,17	483,7	0,17	0,31
V. solución (mL)	70,5	03-nov	2,3	546,3	0,17	0,34
Inoculado con 5 mL	4,99	12-nov	2,05	627,4	0,15	0,53
P. inicial matraz (g)	144,15	19-nov	1,87	669,3	0,26	0,6
P. final matraz (g)	279,8	25-nov	1,82	678,9	0,15	0,99
pH inicial	4,49	01-dic	1,76	680,6	0,14	1,52
		09-dic	2,48			
		10-dic	4,12			



Figura 13. Progreso ensayo BAPP 50241

Tabla 14. Datos ensayo BAPP 50242

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50242	05-oct	2,7	396,5	0,64	0,83
Peso de muestra (g)	30,04	16-oct	1,96	444,1	0,19	1
Peso de muestra (g)	15,11	21-oct	1,91	502,8	0,21	1,21
Peso de muestra (g)	15,01	27-oct	1,87	534,9	0,15	1,02
V. solución (mL)	70,17	03-nov	1,79	699,5	0,12	0,99
Inoculado con 5 mL	4,96	12-nov	1,68	708,1	0,17	1,16
P. inicial matraz (g)	143,37	19-nov	1,66	704,6	0,18	1,36
P. final matraz (g)	278,66	25-nov	1,63	697,1	0,14	1,4
pH inicial	3,96	01-dic	1,56	696,6	0,22	1,63
		09-dic	2,32			
		10-dic	3,4			

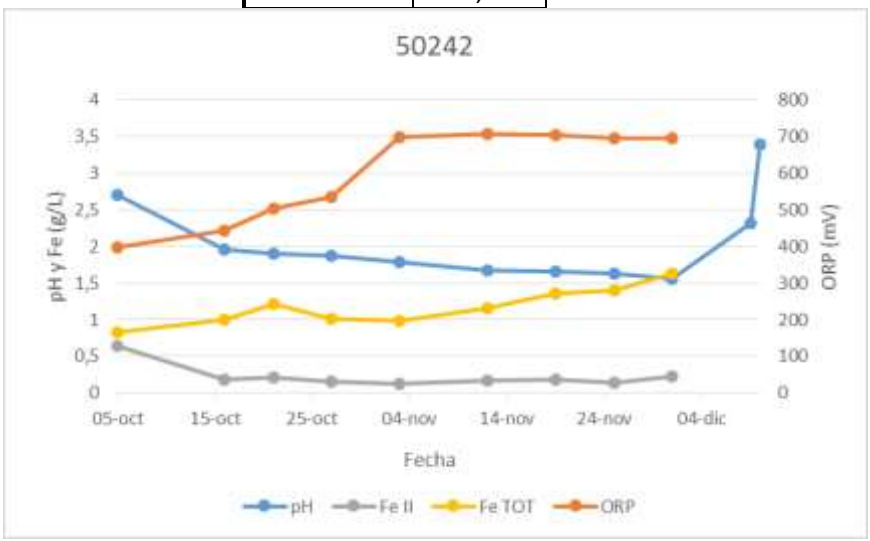


Figura 14. Progreso ensayo BAPP 50242

Tabla A.23. Datos ensayo BAPP 50243

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50243	05-oct	2,72	396,9	0,75	0,85
Peso de muestra (g)	30,05	16-oct	2,07	504,1	0,29	0,55
Peso de muestra (g)	15,17	21-oct	1,69	497,1	0,3	0,95
Peso de muestra (g)	15	27-oct	1,66	546,9	0,19	1,13
V. solución (mL)	70,89	03-nov	1,58	565	0,14	1,63
Inoculado con 5 mL	5	12-nov	1,54	707,7	0,13	2,11
P. inicial matraz (g)	142,84	19-nov	1,51	717	0,15	2,4
P. final matraz (g)	278,95	25-nov	1,51	721,2	0,14	2,67
pH inicial	2,69	01-dic	1,57	723,2	0,15	3,53
		09-dic	1,62			
		10-dic	1,71			

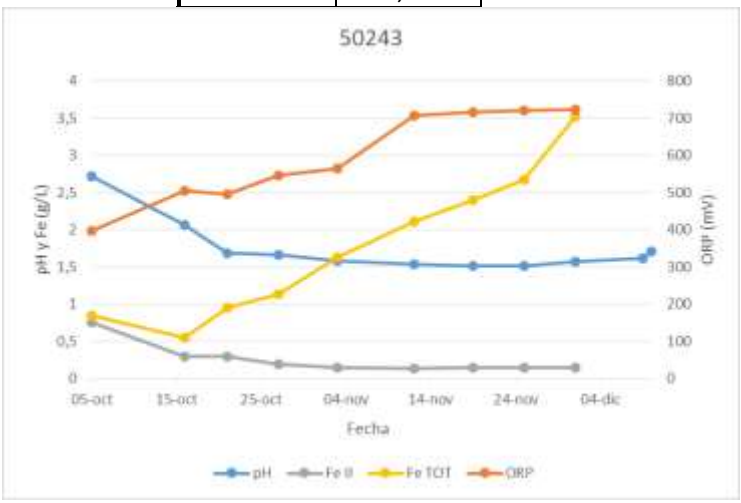


Figura 15. Progreso ensayo BAPP 50243

Tabla 16 Datos ensayo BAPP 50244

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50244	05-oct	2,7	418,9	0,83	1,05
Peso de muestra (g)	30,1	16-oct	2,15	492,9	0,32	0,81
Peso de muestra (g)	15,02	21-oct	2,02	509,8	0,17	1,13
Peso de muestra (g)	15,01	27-oct	1,89	543,8	0,21	1,33
V. solución (mL)	70,46	03-nov	1,78	609,4	0,15	1,58
Inoculado con 5 mL	4,98	12-nov	1,68	620,1	0,16	2,12
P. inicial matraz (g)	139,93	19-nov	1,61	641,1	0,14	2,67
P. final matraz (g)	275,5	25-nov	1,59	659,8	0,17	2,9
pH inicial	2,5	01-dic	1,63	654,2	0,18	3,65
		09-dic	1,71			
		10-dic	1,77			

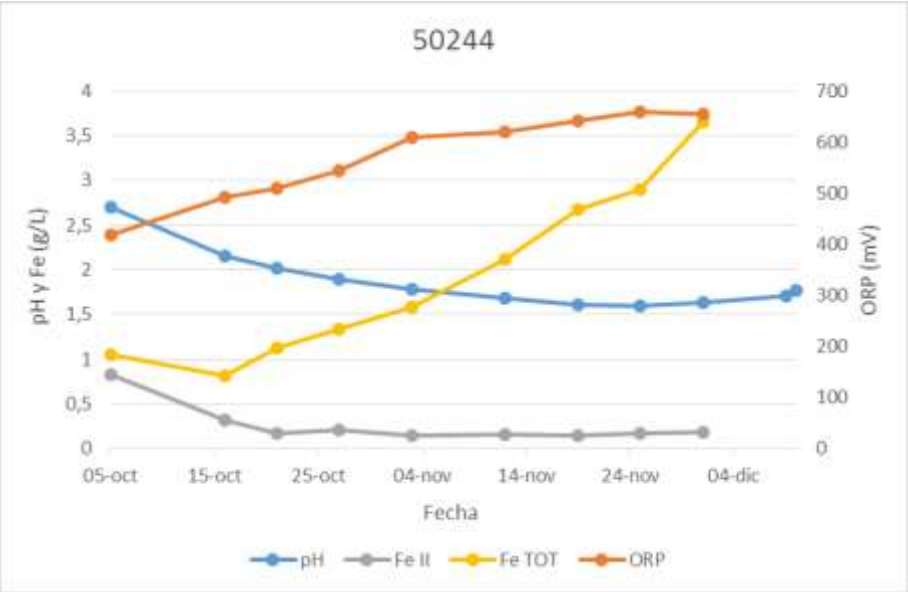


Figura 16. Progreso ensayo BAPP 50244

Tabla 17. Datos ensayo BAPP 50245

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50245	05-oct	2,65	397,5	0,8	1,01
Peso de muestra (g)	30,06	16-oct	2,09	468,1	0,31	0,51
Peso de muestra (g)	15,1	21-oct	1,98	480	0,21	0,75
Peso de muestra (g)	15,02	27-oct	1,81	513,4	0,22	0,89
V. solución (mL)	75,44	03-nov	1,65	507,6	0,14	1,2
Inoculado con 5 mL	4,99	12-nov	1,57	516,6	0,14	1,62
P. inicial matraz (g)	147,34	19-nov	1,49	558,4	0,14	2,2
P. final matraz (g)	287,95	25-nov	1,45	576,5	0,17	2,36
pH inicial	2,72	01-dic	1,4	586,4	0,17	3,45
		09-dic	1,58			
		10-dic	1,66			



Figura 17. Progreso ensayo BAPP 50245

Tabla 18. Datos ensayo BAPP 50246

		Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
# muestra	50246	19-oct	1,86	458,5	0,58	0,88
Peso de muestra (g)	30	21-oct	1,97	462,3	0,68	0,78
Peso de muestra (g)	15,2	27-oct	1,81	516,8	0,22	0,83
Peso de muestra (g)	15,01	11-nov	1,68	521,4	0,22	1,37
V. solución (mL)	70,28	12-nov	1,59	524,2	0,25	1,39
Inoculado con 5 mL	4,95	19-nov	1,58	529,5	0,19	1,99
P. inicial matraz (g)	129,38	25-nov	1,7			
P. final matraz (g)	264,82	01-dic	1,83			
pH inicial	1,82					

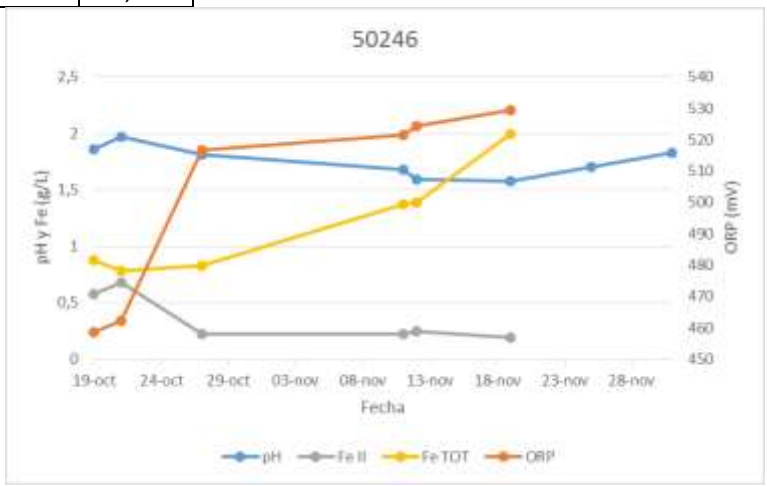


Figura 18. Progreso ensayo BAPP 50246

Tabla 19. Datos ensayo BAPP 50247

# muestra	50247	Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
Peso de muestra (g)	30	19-oct	2,12	463,3	0,32	0,48
Peso de muestra (g)		21-oct	2,18	536,2	0,17	0,37
Peso de muestra (g)		27-oct	1,93	521,4	0,16	0,65
V. solución (mL)	70,46	11-nov	1,82	585	0,21	0,96
Inoculado con 5 mL	4,95	12-nov	1,74	665,5	0,2	1,09
P. inicial matraz (g)	131,61	19-nov	1,7	686,5	0,15	1,31
P. final matraz (g)	237,02	25-nov	3,58			
pH inicial	2,12					

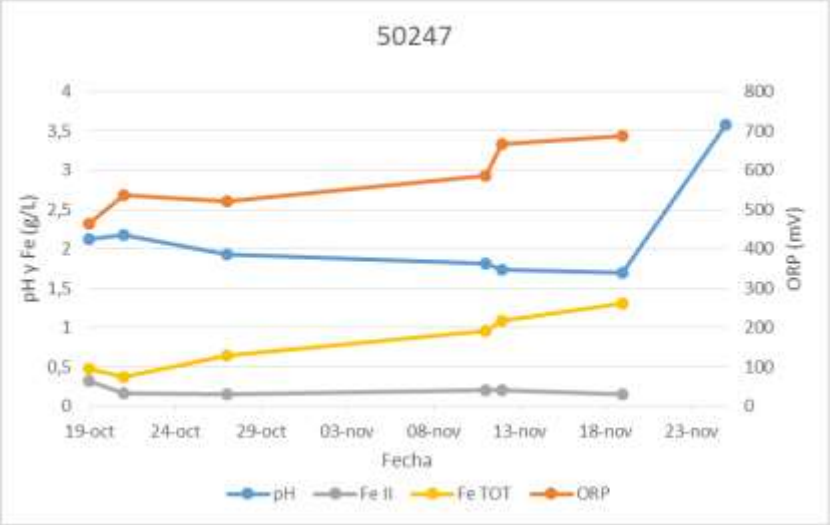


Figura 19. Progreso ensayo BAPP 50247

Tabla 20. Datos ensayo BAPP 50248

# muestra	50248	Fecha	pH	ORP (mV)	Fe II (g/L)	Fe TOT (g/L)
Peso de muestra (g)	30,02	19-oct	1,9	467,2	0,45	0,67
Peso de muestra (g)	15,16	21-oct	1,83	405,3	0,62	0,78
Peso de muestra (g)	15,02	27-oct	1,66	535,6	0,2	1,05
V. solución (mL)	71,79	11-nov	1,64	538,6	0,22	1,15
Inoculado con 5 mL	4,91	12-nov	1,56	550,8	0,21	1,41
P. inicial matraz (g)	125,81	19-nov	1,67	563,6	0,15	2,1
P. final matraz (g)	262,71	25-nov	1,69			
pH inicial	1,84	01-dic	1,7			



Figura 20. Progreso ensayo BAPP 50248

Fuente: MYSLR

TAJO YANACOCHA LAYBACK

Yanacocha **Metallurgical Services**

Memorándum

To: Carla Telles

From: Jorge Contreras

Date: Abril 27, 2012

Copy: Neil Ireland, Gilmar Guzman, Harold Camero, Lelis Abanto, Sandro Oyarce

Subject: Geoquímica de mineral y desmonte del proyecto Yanacocha Layback.

1. Introducción:

El deposito Yanacocha Layback está ubicado aproximadamente a unos 20 km al norte de la ciudad de Cajamarca y se accede mediante una carretera de 49 km conformada principalmente por asfalto y trochas carrozables.

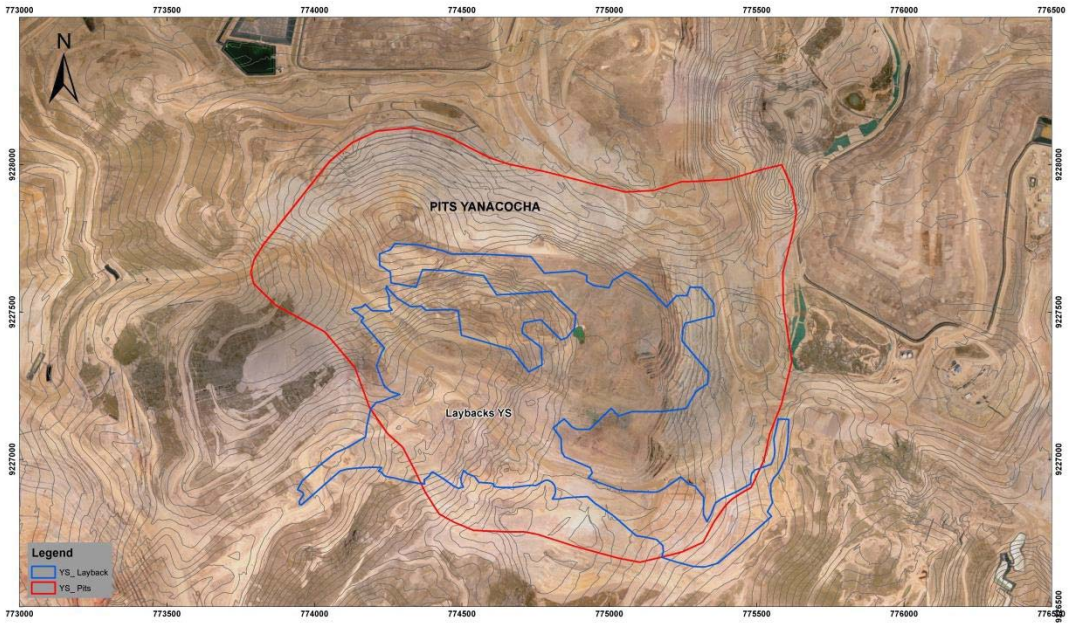


Figure 1: Ubicación YS Layback en el interior del Tajo Yanacocha Sur.

El Yanacocha Layback (YSL) forma parte del Complejo Cerro Yanacocha. El Yanacocha Layback se encuentra conformado por la pared sur del actual tajo Yanacocha Sur, y se ha clasificado como un depósito de oro de alta sulfuración que contiene 0.541 Mozs de oro como PEM (mineralización económicamente potencial).

2. Geología del Depósito

El Yanacocha Layback es un depósito de alta sulfuración de Au-Ag dominante alojado en las zonas oxidadas y de transición del depósito Cerro Yanacocha.

La mineralización de oro y plata en el Cerro Yanacocha se presenta como cuerpos tabulares y sub-verticales, la mineralización de alta ley (>1g/t Au) es controlada a lo largo de estructuras secundarias fuertemente inclinadas y brechas hidrotermales predominantemente, rodeado por un halo semi-estratiforme de baja ley (0,15 g/t Au). El mineral se deposita primariamente en las zonas más permeables de sílice porosa-granular y brechas-fracturas con sílice masiva.

Tres grupos litológicos principales se han definido en el Cerro Yanacocha. La andesita inferior está conformada por una secuencia de tufos de cristales andesíticos con hornblenda y hornblenda-biotita, tufos de cristales líticos y flujos. Por encima de la andesita inferior se tienen tres unidades líticas estratificadas y de tufo de cristal: Un tufo eutaxítico fino laminado a nivel local con aislados sedimentos epiclásticos y lacustrinos (TFT), una consecuencia de tufo de rico en cristales con débil presencia de ignimbritas (Teut), y una secuencia de tufo de cristales andesítico con hornblenda con abundantes fragmentos líticos alterados localmente (USJ). El depósito de Cerro Yanacocha Sur está cubierto por flujos de andesita rico en cristales de plagioclasa, conocido como el pórfido Yanacocha (Yp). Estas rocas volcánicas están cortadas por una múltiple serie de fases de brechas freáticas, hidrotermales e intrusivas. Además, al menos tres fases de intrusivos de andesita a tonalita cortan la secuencia volcánica. Un último evento multi-fase de brecha intrusiva (Yanacocha Diatrema) muy extensa corta todas las unidades volcánicas descritas anteriormente. El tren noroeste controlado por la falla Diablo-Pacífico controla el emplazamiento del Pórfido Yanacocha y brechas intrusivas multi-fase tardías (Yanacocha diatrema).

La alteración tipo ácido-sulfato en el Cerro Yanacocha ha generado la formación de grandes volúmenes de sílice residual, con menores cantidades de alteración argílica avanzada y argílica. La parte superior del depósito que alberga la mineralización principal está dominada por la alteración silícea, principalmente por presencia de sílice masiva, con sílice granular y sílice porosa limitado a pequeños cuerpos. Los niveles medio e inferior del depósito están dominados por la alteración argílica avanzada, incluyen sílice-alunita, sílice-pirofilita y sílice-diáspora. Las alteraciones argílica y propilítica se encuentran en los flancos del depósito.

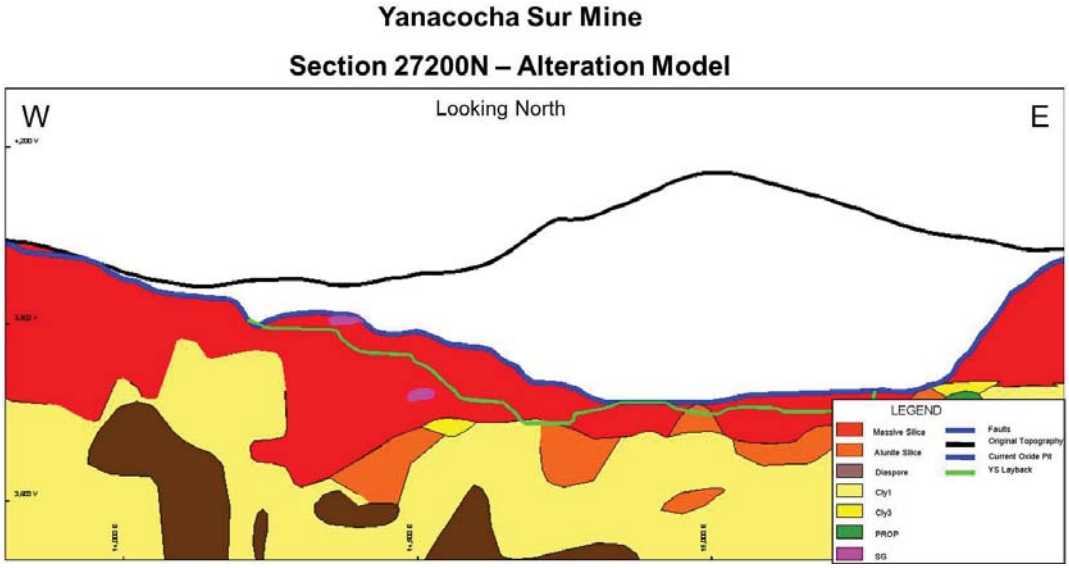


Figura 2: Corte Transversal que muestra tipos de alteración en Yanacocha Sur

3. Estudios Geoquímicos:

Los estudios geoquímicos de este depósito se orientan básicamente a ensayos de Valor de Carbonato Neto (NCV). El NCV se determina a través de ensayos químicos de muestras minerales y desmonte para la determinación del Carbón Total y Carbón Residual después de pirolisis, del mismo modo se ensaya el Azufre Total y el Azufre residual después de pirolisis, con estos resultado determinamos el Potencial de Neutralización Acida (ANP) y el Potencial de Generación de Acido (AGP).

ANP = 3.67*(Ctotal - Cresidual)

AGP = -1.37*(Stotal - Sresidual)

NCV = ANP + AGP

El valor de NCV se clasifica de acuerdo a la siguiente Tabla 1.

Tabla 1. Clasificación NCV

Clasificacion NCV	
Inerte	0.1 > NCV > -0.1 y ANP < 0.1 y AGP > -0.1
Neutral	0.1 > NCV > -0.1 y (ANP > 0.1 o AGP < -0.1)
Ligeramente Ácido	-0.1 => NCV > -1
Ácido	-1 => NCV > -5
Fuertemente Ácido	-5 => NCV
Ligeramente Básico	0.1 <= NCV < 1
Básico	1 <= NCV < 5
Altamente Básico	5 <= NCV

Se han realizado 155 ensayes de NCV cuyas muestras fueron tomadas desde 37 taladros perforados, los cuales cubren el área del depósito tanto en extensión como en profundidad. Para desmonte se realizaron 31 ensayes de NCV y para mineral se realizaron 124 ensayes.

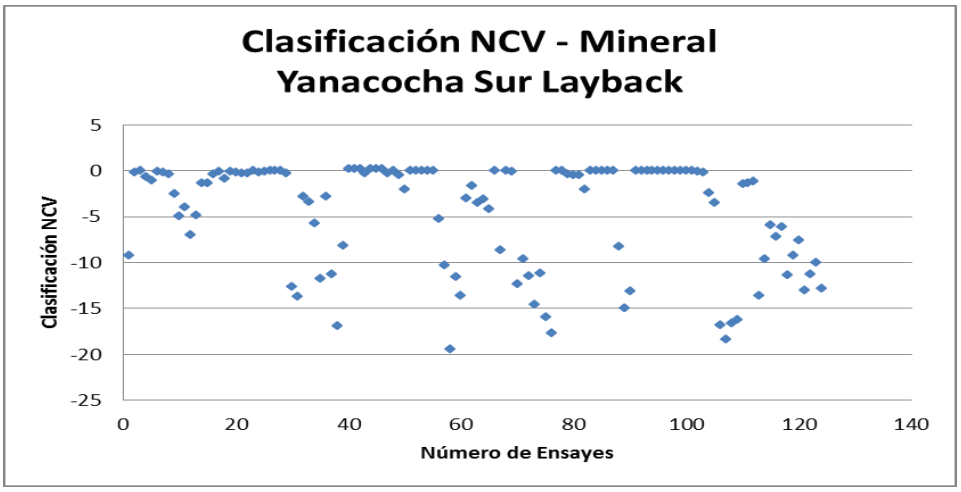
3.1 Resultados de clasificación NCV para mineral:

De acuerdo a la clasificación de NCV el mineral en general tiene predominancia a ser un material de comportamiento ácido. La Tabla 2 muestra los taladros con los intervalos desde donde se extrajeron muestras para los ensayos de Azufre y Carbono con los cuales calculamos los valores NCV.
La Figura 3 muestra los resultados de la clasificación NCV de las muestras de mineral.

Tabla 2. Taladros e intervalos usados para la determinación NCV

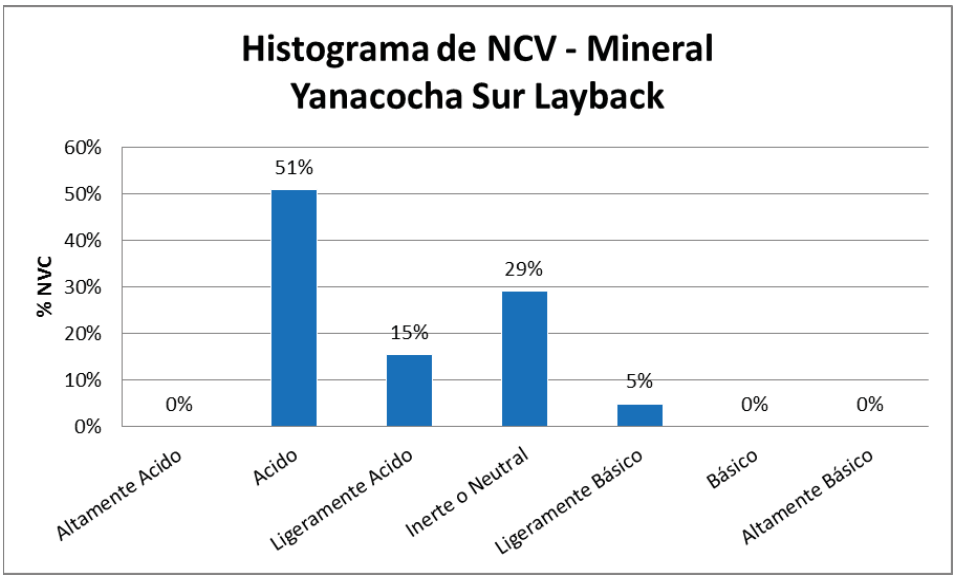
Hole_Id	From	To
YS-004	498	504
YS-035	264	302
YS-1002	0	20
YS-1004	2.7	10
YS-1011	85.35	170
YS-1017	42	80
YS-1019	30.2	80
YS-1021	40	60
YS-1022	10	50
YS-1035	30	40
YS-1038	30	50
YS-1042	27.35	33.25
YS-1058	18	50
YS-1062	12	20
YS-1066	4	50
YS-857	120	140
YS-859	79.9	100.65
YS-860	40	69.5
YS-866	136	146
YS-869	30	70.4
YS-874	20	70
YS-892	16	36
YS-904	110	128
YS-915	80.55	100
YS-917	20.6	69.55
YS-921	82	151.55
YS-922	62	142
YS-923	20	49.7
YS-924	0	70
YS-925	80.5	140
YS-940	30.7	70
YS-952	0	30
YS-955	9.65	30
YS-962	10	60
YS-967	0	10
YS-991	3	39.4

Figura 3. Resultados de la clasificación NCV para muestras de mineral



El histograma nos muestra que alrededor del 51% de las muestras ensayadas tienen comportamiento ***Acido***, 15% tiene comportamiento de ***Ligeramente ácido***, 29% se clasifica como ***Inerte o Neutral*** *y un 5%* ***Ligeramente Básico***. En la Figura 4 se observa el histograma de clasificación NCV. En general se puede decir que el mineral tiene comportamiento acido por lo que en contacto con agua meteórica puede generar soluciones acidas y si la acidez se vuelve agresiva puede disolver algunos metales presentes. Pero este mineral en contacto con cal y bajo riego con solución alcalina puede mantener el pH de las soluciones de drenaje con pH básico.

Figura 4. Histograma de la clasificación NCV para muestras de mineral



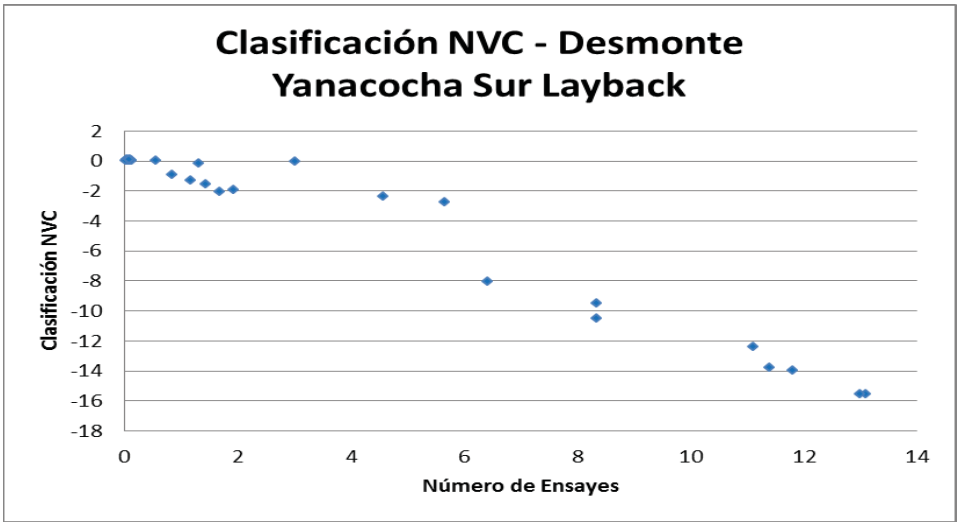
3.2 Resultados de clasificación NCV para desmonte

De acuerdo a la clasificación de NCV el desmonte en general tiene predominancia a ser un material de comportamiento entre inerte o neutral y acido. La Tabla 3 muestra los taladros e intervalos usados para la determinación de los valores NCV. La Figura 5 muestra los resultados de la clasificación NCV de las muestras de desmonte.

Tabla 3. Taladros e intervalos usados para la determinación NCV

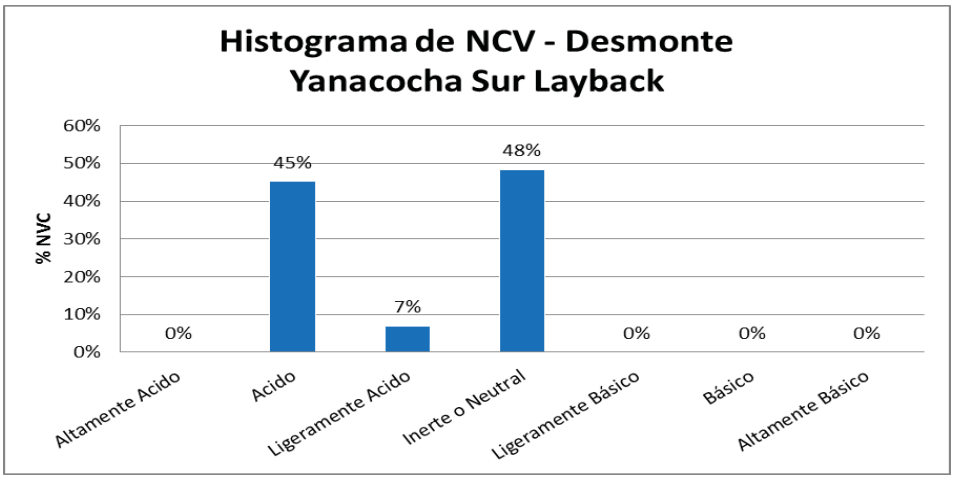
Hole_Id	From	To
YS-004	462	498
YS-1002	20	29
YS-1019	25	70
YS-1033	16.8	22
YS-1035	40	60
YS-860	0	40
YS-866	146	155.3
YS-904	100.2	110
YS-921	42	162.8
YS-923	0	20
YS-925	90	110
YS-967	10	30

Figura 5. Resultados de la clasificación NCV para muestras de desmonte



El comportamiento de este tipo de material es 48% ***Inerte o Neutral,*** 7% ***Ligeramente ácido*** y 45% tiene comportamiento ***Acido.*** Esto implica que habrá generación de acidez cuando el desmonte entre en contacto con el agua meteórica, además habrá disolución de metales presentes en el material considerado como desmonte. El depósito de desmonte está diseñado para colectar toda el agua acida que se genere y enviarla hacia la planta de tratamiento de aguas acidas de Pampa Larga.

Figura 6. Histograma de la clasificación NCV para muestras de desmonte



La Tabla 4 muestra un resumen de la clasificación NCV del material tipo mineral y tipo desmonte. Especial interés se debe tomar en la disposición de desmonte en el depósito para tal fin. La posibilidad de mezclar este material con otro de comportamiento básico se debe evaluar con el fin de minimizar la generación de acidez.

Tabla 4. Resumen de clasificación NCV del depósito Yanacocha Layback

NCV	Desmonte	Mineral
Altamente Acido	0%	0%
Acido	45%	51%
Ligeramente Acido	7%	15%
Inerte o Neutral	48%	29%
Ligeramente Básico	0%	5%
Básico	0%	0%
Altamente Básico	0%	0%

TAJO LA QUINUA 3

Memorándum

To: Carla Telles

From: Lindey Salazar

Date: 25 de Junio, 2012

Copy: Neil Ireland, Harold Camero, Lelis Abanto, Gilmar Guzmán

Subject: Geoquímica de mineral y desmonte del proyecto Tapado Oeste Layback V2.

---

1. Introducción:

El Distrito de Yanacocha se encuentra en los Andes peruanos del norte, a unos 20 km al norte de Cajamarca. El Tapado Oeste está situado a 200 metros al suroeste de El Tapado (figuras 1 y 2) y está completamente cubierto por gravas de La Quinua y finales de flujos volcánicos.

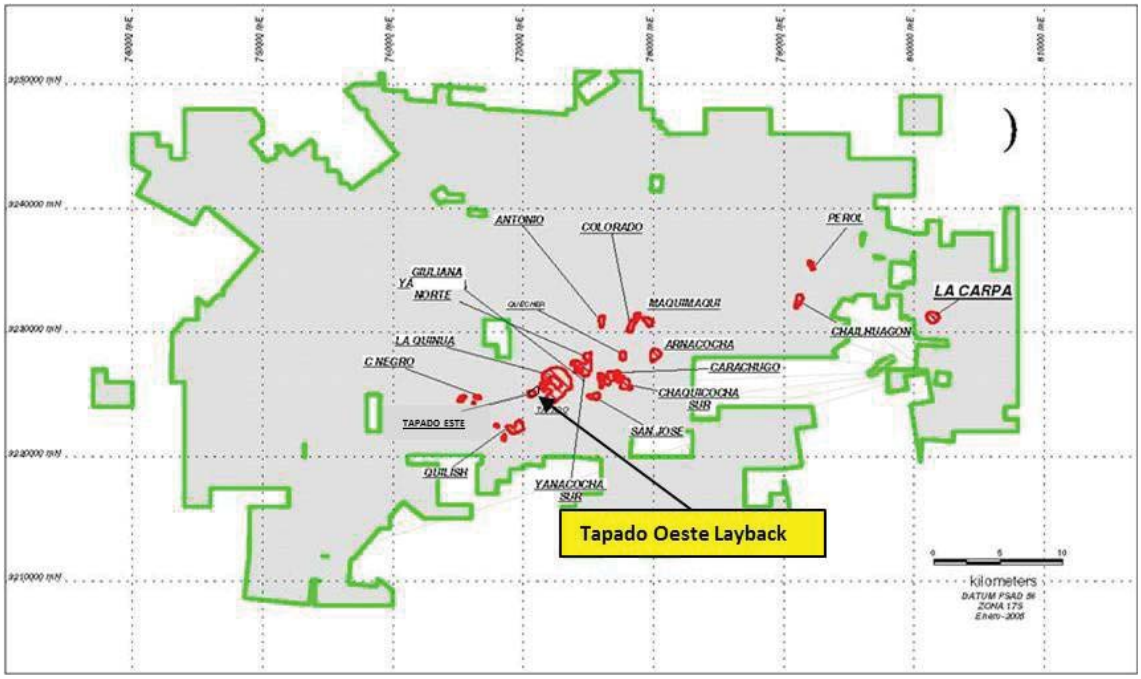


Figura 1: Mapa de ubicación de Tapado Oeste Layback.

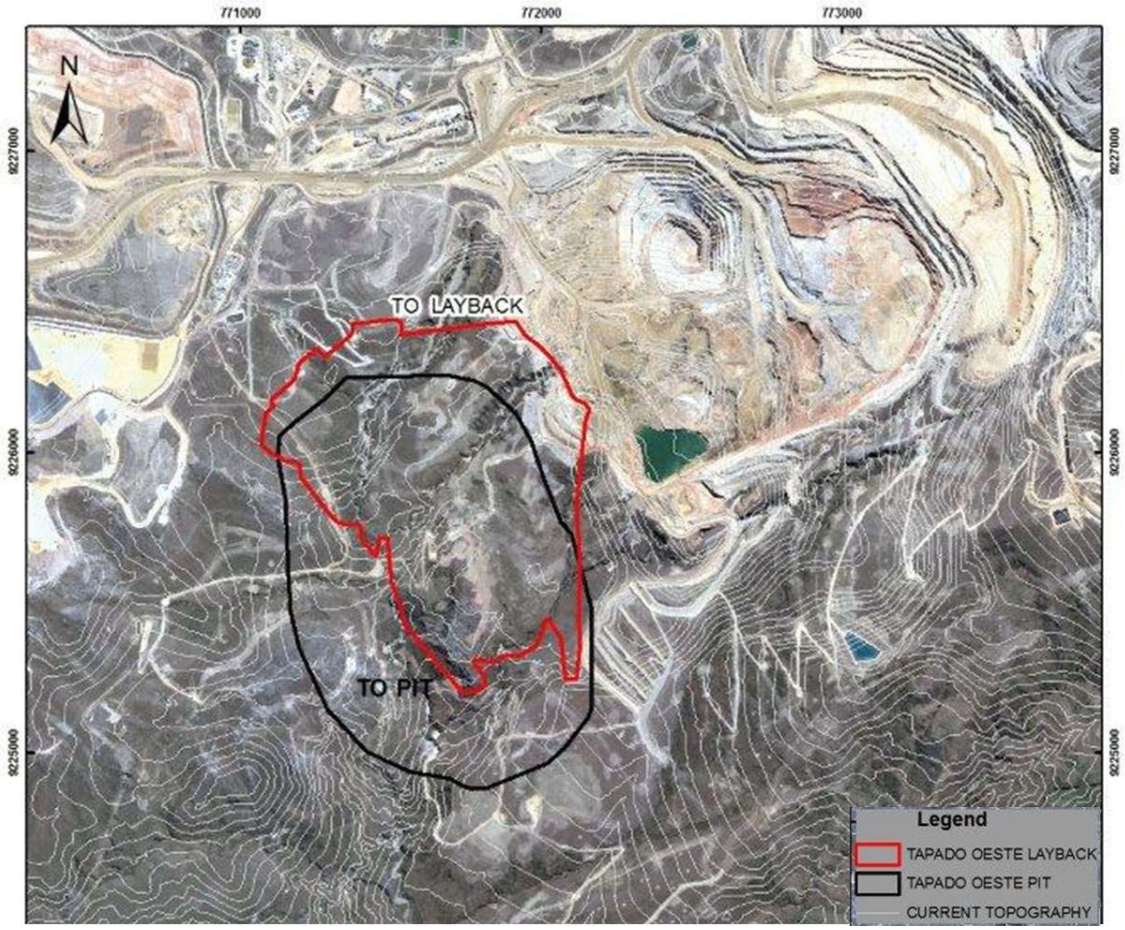


Figura 2: Ubicación de Tapado Oeste layback dentro del depósito Tapado Oeste. El layback es delineado en rojo y el pit Tapado es delineado en negro.

El Tapado Oeste, originalmente llamado Corimayo, fue descubierto en 1999 en la porción oeste-central del distrito de Yanacocha. Es un depósito de oro de alta sulfuración, que está completamente cubierta por gravas de La Quinua y flujos volcánicos sin alterar.

La mineralización de oro en El Tapado Oeste es controlado principalmente por brechas hidrotermales/freático orientadas al NE y NO. La alta ley de oro (hasta 63 g/t Au) se asocia con una última etapa de brecha cremosa calcedonia y baritina, llenando espacios abiertos de las fracturas.

La alteración hidrotermal produjo rocas ácido-lixiviadas (sílice granular y vuggy) y varias zonas de silicificación. El patrón de alteración consiste en silicificación en profundidad, con asociaciones distal divididos en zonas de argílico avanzado, argílico, propilítico débilmente a roca de andesita fresca (figura 3).

La mineralización de oro se presenta como un plano extendido a suavemente inmerso al horizonte, dentro de una secuencia de capas piroclásticas. Las altas leyes (> 1 g/t Au) corresponden a un corte transversal de silicificación asociada con brechas hidrotermales y canales fluidizados. El depósito está cubierto por una alteración de sílice arcilla, cubierta por una alteración de sílice granular y por último 150 metros de roca fresca/propilítica. La Andesita superior es típicamente argilizada e impermeable, formando tapas de rocas o barreras para los fluidos mineralizantes (figura 3).

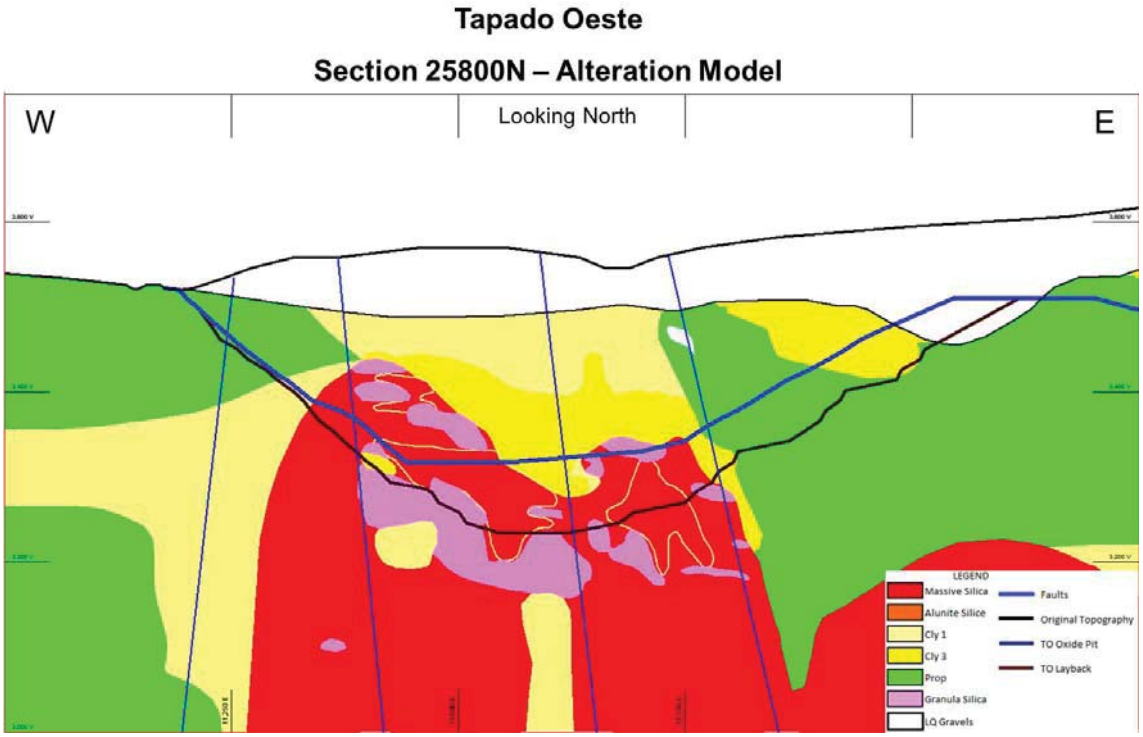


Figura 3: Sección transversal del Tapado Oeste muestra tipos de alteración típicos.

2. Estudios Geoquímicos:

Los estudios geoquímicos de este depósito se orientan básicamente a ensayos de Valor de Carbonato Neto (NCV). El NCV se determina a través de ensayos químicos de muestras minerales y desmonte para la determinación del Carbón Total y Carbón Residual después de pirolisis, del mismo modo se ensaya el Azufre Total y el Azufre residual después de pirolisis, con estos resultados determinamos el Potencial de Neutralización Acida (ANP) y el Potencial de Generación de Acido (AGP).

$$ANP = 3.67*(Ctotal - Cresidual)$$

$$AGP = -1.37*(Stotal - Sresidual)$$

$$\mathbf{NCV = ANP + AGP}$$

El valor de NCV se clasifica de acuerdo a la siguiente Tabla 1.

Tabla 1. Clasificación NCV

Clasificación NCV	
Altamente Ácido	NCV ≤ -5
Ácido	-5 < NCV ≤ -1
Ligeramente Ácido	-1 < NCV ≤ -0.1
Neutral	-0.1 < NCV < 0.1 y (ANP ≥ 0.1 o AGP ≤ -0.1)
Inerte	-0.1 < NCV < 0.1 y (ANP < 0.1 y AGP > -0.1)
Ligeramente Básico	0.1 ≤ NCV < -1
Básico	1 ≤ NCV < 5
Altamente Básico	5 ≤ NCV

Se han realizado 986 ensayes de NCV cuyas muestras fueron tomadas desde 61 taladros perforados, los cuales cubren el área del depósito (figura 4). Para desmonte se realizaron 491 ensayes de NCV y para mineral se realizaron 495 ensayes.

2.1 Resultados de clasificación NCV para mineral:

De acuerdo a la clasificación de NCV el mineral en general tiene predominancia a ser un material de comportamiento Inerte o Neutral. La Tabla 2 muestra los taladros con los intervalos desde donde se extrajeron muestras para los ensayos de Azufre y Carbono con los cuales calculamos los valores NCV.

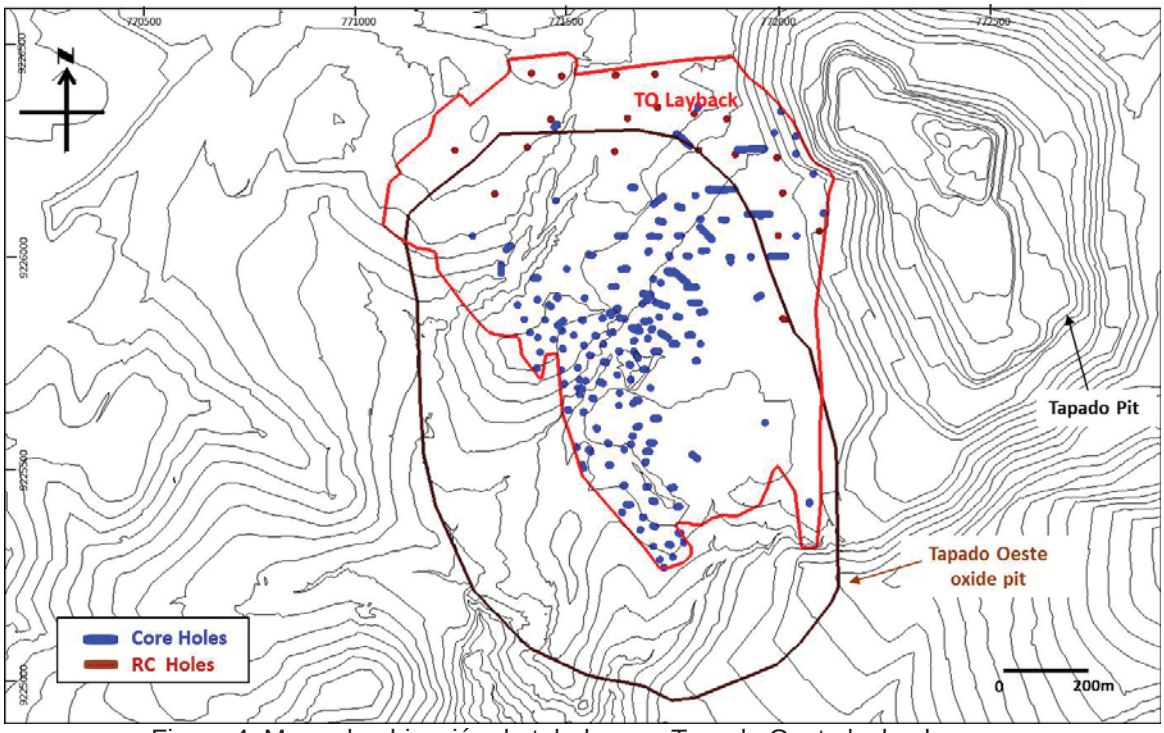


Figure 4: Mapa de ubicación de taladros en Tapado Oeste layback.

Tabla 2. Taladros usados en la determinación NCV para mineral.

No.	Hole_Id	Easting	Northing	Elevation	Td
1	COR-009	11640.87	25590.57	3562.68	437.65
2	COR-014	11441.91	25848.80	3568.30	342.75
3	COR-020	11797.33	26057.18	3593.21	513.00
4	COR-022	11560.00	25650.00	3536.00	500.70
5	COR-023	11724.11	25896.42	3574.16	442.35
6	COR-060	11775.17	25500.30	3559.75	390.55
7	LQ-1031	13153.02	25711.34	3715.76	231.10
8	LQ-1032	13053.86	25575.12	3699.96	200.00
9	LQ-1046	13073.95	25700.12	3697.34	215.05
10	LQ-1047	13100.02	25641.66	3708.98	220.45
11	LQ-944	12109.98	26150.01	3602.07	200.00
12	TAP-027	11702.51	25987.82	3584.45	514.60
13	TAP-109	12560.35	26146.43	3677.07	451.95
14	TAP-123	12618.96	26104.09	3695.38	500.00
15	TAP-127	12618.24	25951.76	3677.25	430.45
16	TAP-128	12640.76	26000.29	3685.16	452.10
17	TAP-132	12710.59	25799.88	3673.50	370.50
18	TAP-142	12545.31	26050.41	3680.01	524.45
19	TAP-145	12642.19	26049.47	3690.43	411.20
20	TAP-148	12590.17	26002.04	3677.91	443.65
21	TAP-149	12710.42	25749.97	3668.78	336.75

No.	Hole_Id	Easting	Northing	Elevation	Td
22	TAP-156	12562.77	26196.01	3695.51	436.75
23	TAP-158	12637.18	25900.01	3675.37	356.65
24	TAP-161	12666.15	25801.32	3667.68	340.05
25	TAP-163	12660.10	25849.79	3671.18	356.60
26	TAP-205	11777.15	26249.60	3576.29	374.95
27	TO-013	11676.01	25569.87	3569.93	325.00
28	TO-016	11448.21	25752.67	3572.95	280.00
29	TO-018	11742.54	25885.38	3561.26	356.55
30	TO-020	11509.82	25778.42	3570.60	280.00
31	TO-023	11530.91	25656.33	3547.17	313.35
32	TO-024	11598.15	25773.93	3561.21	294.90
33	TO-026	11740.68	25218.62	3517.94	428.70
34	TO-029	11709.69	25746.07	3561.77	344.50
35	TO-030	11596.40	25735.20	3547.05	312.60
36	TO-032	11555.69	25452.07	3532.30	330.50
37	TO-033	11640.06	25658.01	3546.87	336.90
38	TO-034	11739.20	25800.89	3562.82	370.00
39	TO-035	11656.05	25330.24	3526.80	350.00
40	TO-036	11670.04	25741.57	3551.23	350.00
41	TO-037	11695.92	25289.53	3526.40	344.80

La Figura 5 muestra los resultados de la clasificación NCV de las muestras de mineral.

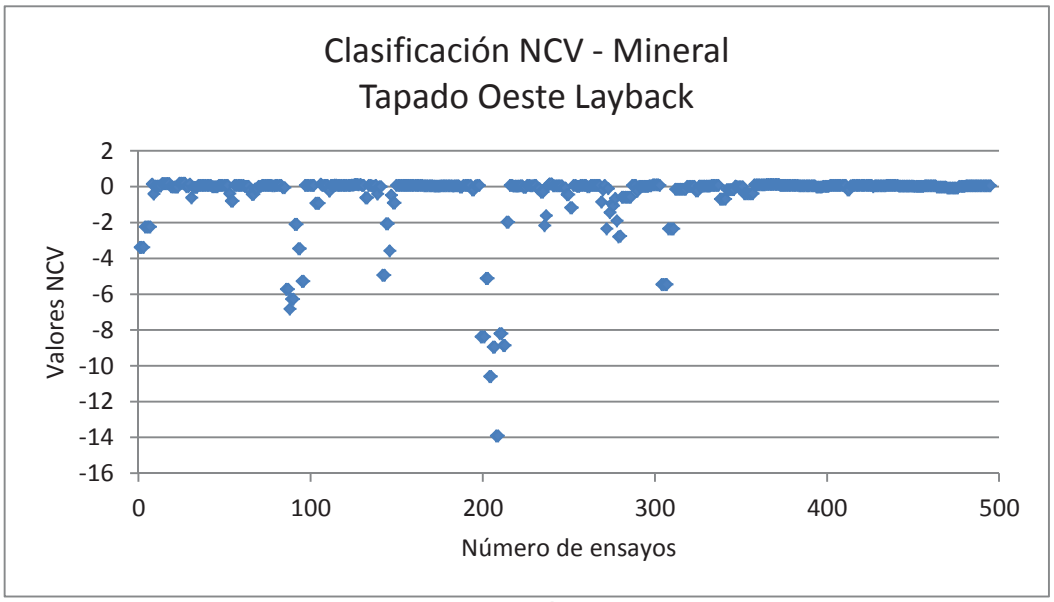


Figura 5. Resultados de la clasificación NCV para muestras de mineral

En la Figura 6 se observa el histograma de clasificación NCV, el cual nos indica que el 67% de las muestras ensayadas tienen comportamiento Inerte o Neutral, 13% Ligeramente Ácido y 11% se clasifica de Ácido a Altamente Ácido, principalmente. En general se puede decir que el mineral tiene comportamiento Inerte o Neutral con una tendencia a Ácido por lo que en contacto con agua meteórica podría generar soluciones ácidas y disolver algunos metales presentes. Pero este mineral en contacto con una cantidad adecuada de cal y bajo riego con solución alcalina mantendrá las soluciones de drenaje con pH básico.

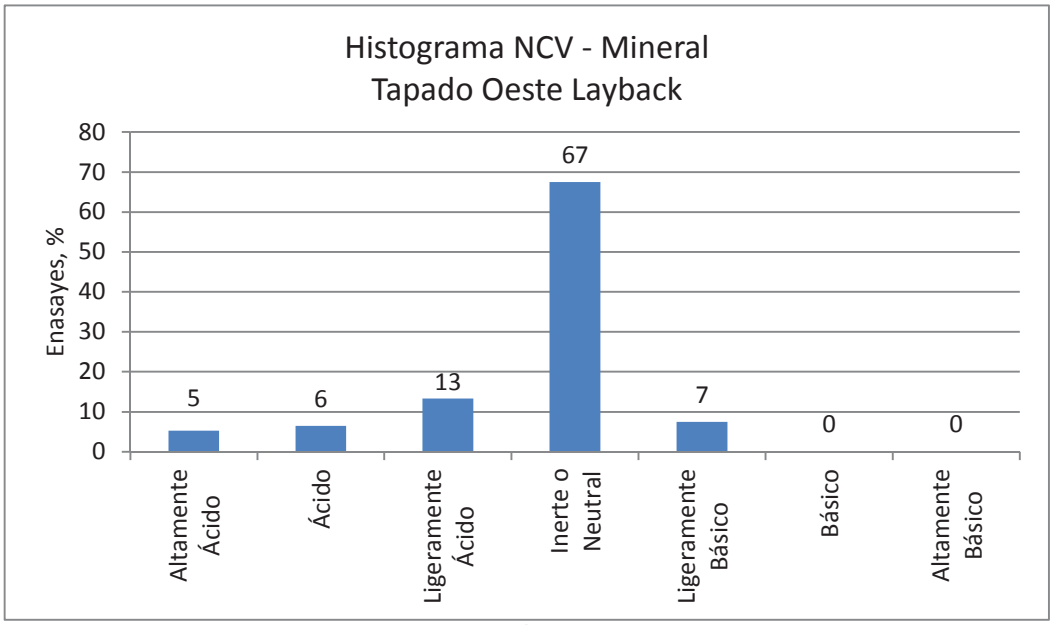


Figura 6. Histograma de la clasificación NCV para muestras de mineral.

Para cada muestra se determinó su alteración geológica, la figura 7 muestra el histograma respectivo, donde predomina la SM el cual está compuesto por Sílice Masiva, Sílice Masiva Granular y Sílice Masiva Vuggy.

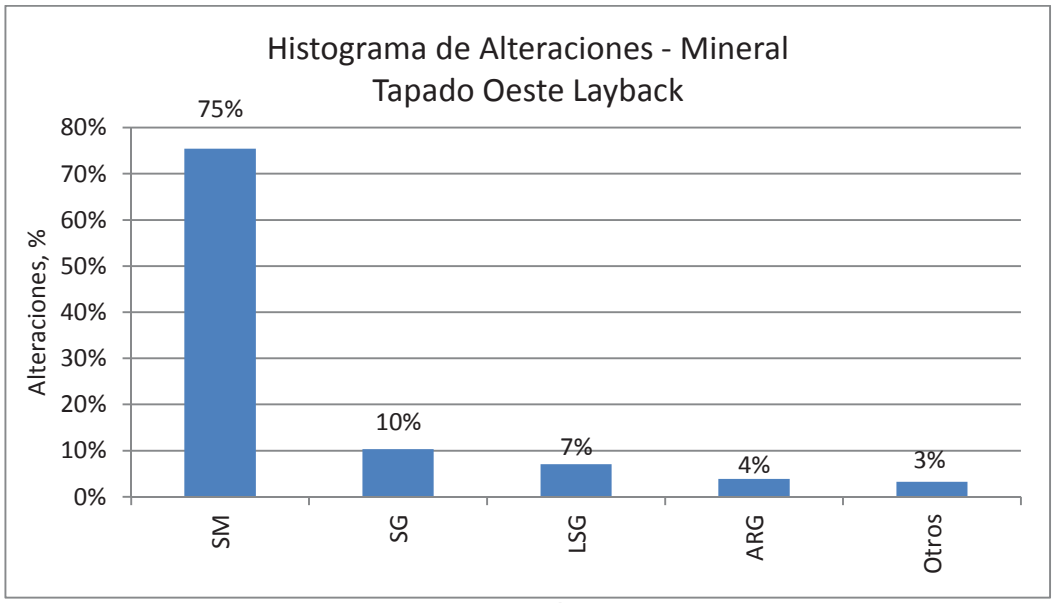


Figura 7. Histograma por alteraciones geológicas de las muestras de mineral.
SM: Sílice Masiva (49%), Sílice Masiva Granular (17%), Sílice Masiva Vuggy(9%). **SG**: Sílice Granular (10%), Sílice Granular Compacta (1%). **LSG**: Lower Sequence Gravel. **ARG**: Argílico (2%), Argílico Avanzado (2%). **Otros**: Sílice Vuggy Granular, Sílice Clay , Sílice Alunita, Propilítico, MSG, Ferricreta, Clay.

Adicionalmente, la figura 8 muestra la clasificación NCV para las muestras con la alteración predominante (SM). El cual nos indica que el 69% de las muestras ensayadas tienen comportamiento Inerte o Neutral.

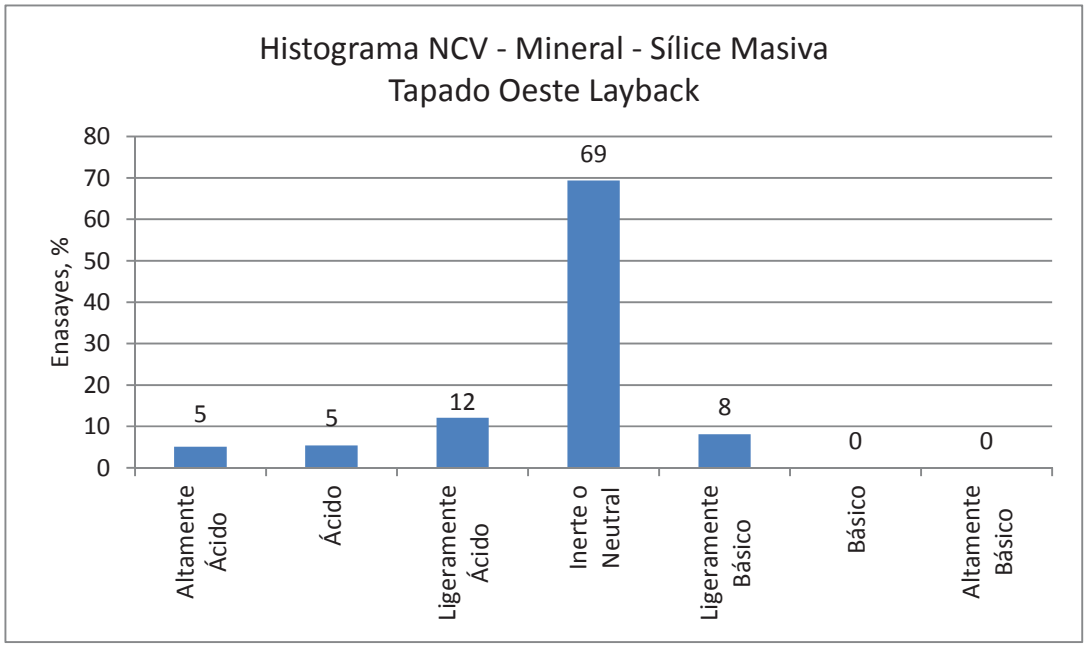


Figura 8. Histograma NCV para las muestras de mineral con alteración SM.

2.2 Resultados de clasificación NCV para desmonte

De acuerdo a la clasificación de NCV el desmonte en general tiene predominancia a ser un material de comportamiento entre Inerte o Neutral a ácido. La Tabla 3 muestra los taladros e intervalos usados para la determinación de los valores NCV.

Tabla 3. Taladros e intervalos usados para la determinación NCV para desmonte.

No.	Hole_Id	Easting	Northing	Elevation	Td
1	COR-004	11749.66	25627.42	3571.74	389.20
2	COR-008	11514.75	25920.38	3572.49	360.45
3	COR-009	11640.87	25590.57	3562.68	437.65
4	COR-012	11959.59	25949.81	3599.98	504.80
5	COR-014	11441.91	25848.80	3568.30	342.75
6	COR-015	11487.27	26084.83	3569.96	492.25
7	COR-020	11797.33	26057.18	3593.21	513.00
8	COR-022	11560.00	25650.00	3536.00	500.70
9	COR-023	11724.11	25896.42	3574.16	442.35
10	COR-032	11787.76	26129.86	3601.66	403.95
11	COR-039	11650.05	25466.10	3548.11	364.10
12	COR-046	11820.55	25704.88	3577.36	423.35
13	COR-060	11775.17	25500.30	3559.75	390.55
14	COR-064	11869.24	25696.62	3579.46	400.00
15	LQ-1031	13153.02	25711.34	3715.76	231.10
16	LQ-1032	13053.86	25575.12	3699.96	200.00
17	LQ-1046	13073.95	25700.12	3697.34	215.05
18	LQ-1047	13100.02	25641.66	3708.98	220.45
19	LQ-1152	11994.40	25549.80	3563.58	115.00
20	LQ-1166	11287.32	26000.22	3570.16	82.20
21	LQ-944	12109.98	26150.01	3602.07	200.00
22	LQPZ-009	12125.76	26011.57	3576.33	170.00
23	TAP-015	11810.12	26111.61	3599.87	723.70
24	TAP-027	11702.51	25987.82	3584.45	514.60
25	TAP-109	12560.35	26146.43	3677.07	451.95
26	TAP-123	12618.96	26104.09	3695.38	500.00
27	TAP-127	12618.24	25951.76	3677.25	430.45
28	TAP-128	12640.76	26000.29	3685.16	452.10
29	TAP-132	12710.59	25799.88	3673.50	370.50
30	TAP-142	12545.31	26050.41	3680.01	524.45
31	TAP-145	12642.19	26049.47	3690.43	411.20
32	TAP-146	12568.23	26097.82	3679.27	412.35
33	TAP-148	12590.17	26002.04	3677.91	443.65
34	TAP-149	12710.42	25749.97	3668.78	336.75
35	TAP-156	12562.77	26196.01	3695.51	436.75
36	TAP-158	12637.18	25900.01	3675.37	356.65
37	TAP-161	12666.15	25801.32	3667.68	340.05
38	TAP-163	12660.10	25849.79	3671.18	356.60
39	TAP-183	11960.91	25843.32	3570.64	415.70
40	TAP-184	12381.07	25562.19	3609.54	366.30
41	TAP-186	12790.69	26049.90	3599.75	367.85
42	TAP-193	12775.93	25841.95	3575.28	314.85
43	TAP-200	12698.46	25982.57	3528.34	260.00
44	TAP-205	11777.15	26249.60	3576.29	374.95
45	TO-008	11792.37	25187.93	3508.96	444.10
46	TO-013	11676.01	25569.87	3569.93	325.00
47	TO-016	11448.21	25752.67	3572.95	280.00
48	TO-018	11742.54	25885.38	3561.26	356.55
49	TO-020	11509.82	25778.42	3570.60	280.00
50	TO-023	11530.91	25656.33	3547.17	313.35
51	TO-024	11598.15	25773.93	3561.21	294.90
52	TO-026	11740.68	25218.62	3517.94	428.70
53	TO-029	11709.69	25746.07	3561.77	344.50
54	TO-030	11596.40	25735.20	3547.05	312.60
55	TO-032	11555.69	25452.07	3532.30	330.50
56	TO-033	11640.06	25658.01	3546.87	336.90
57	TO-034	11739.20	25800.89	3562.82	370.00
58	TO-035	11656.05	25330.24	3526.80	350.00
59	TO-036	11670.04	25741.57	3551.23	350.00
60	TO-037	11695.92	25289.53	3526.40	344.80
61	TO-044	11778.71	25224.93	3520.00	300.00

La Figura 9 muestra los resultados de la clasificación NCV de las muestras de desmonte.

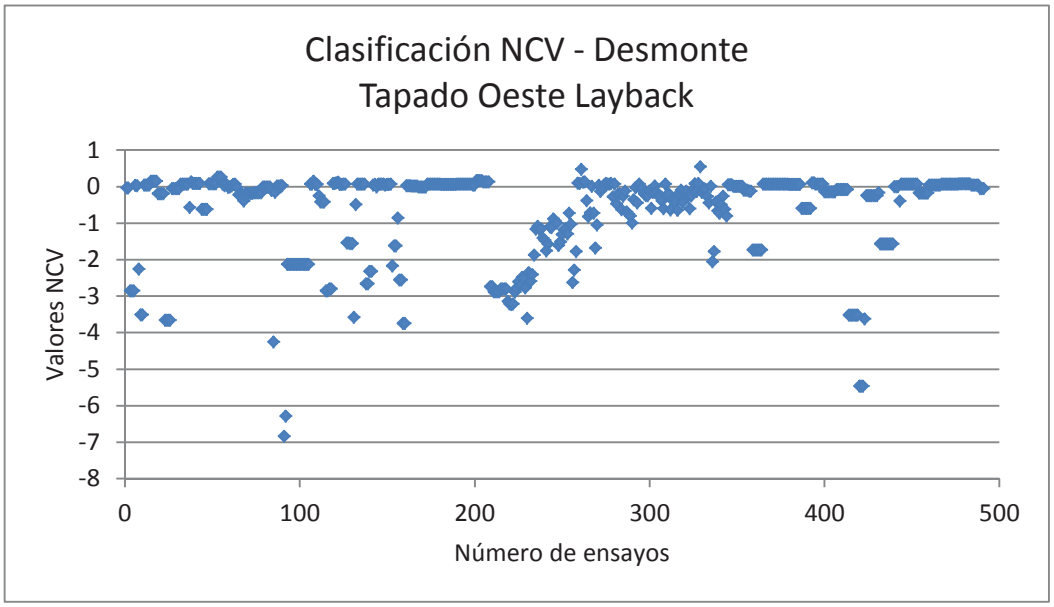


Figura 9. Resultados de la clasificación NCV para muestras de desmonte

En la Figura 10 se observa el histograma de clasificación NCV, el cual nos indica que el 46% de las muestras ensayadas tienen comportamiento Inerte o Neutral, 24% Ligeramente Ácido y 23% se clasifica como Ácido, principalmente. Esto implica que habrá generación de acidez cuando el desmonte entre en contacto con el agua meteórica. El depósito de desmonte está diseñado para colectar toda el agua acida que se genere y enviarla hacia la planta de tratamiento de aguas ácidas.

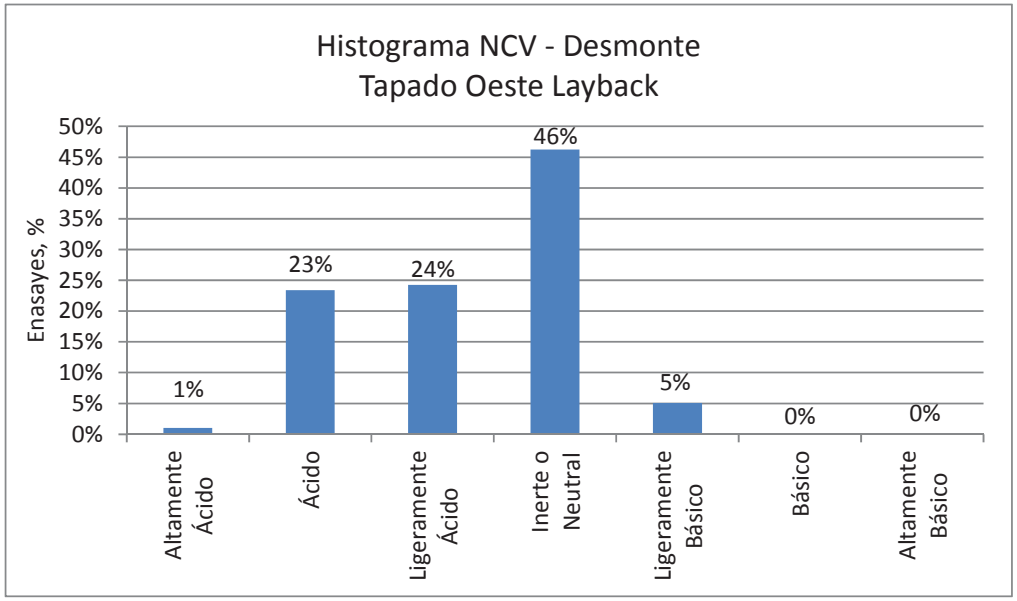


Figura 10. Histograma de la clasificación NCV para muestras de desmonte

Para cada muestra se determinó su alteración geológica, la figura 11 muestra el histograma respectivo, donde la mayor alteración está definida por SM el cual está compuesto por Sílice Masiva, Sílice Masiva Granular, Sílice Masiva Vuggy y Sílice Masiva Alunita.

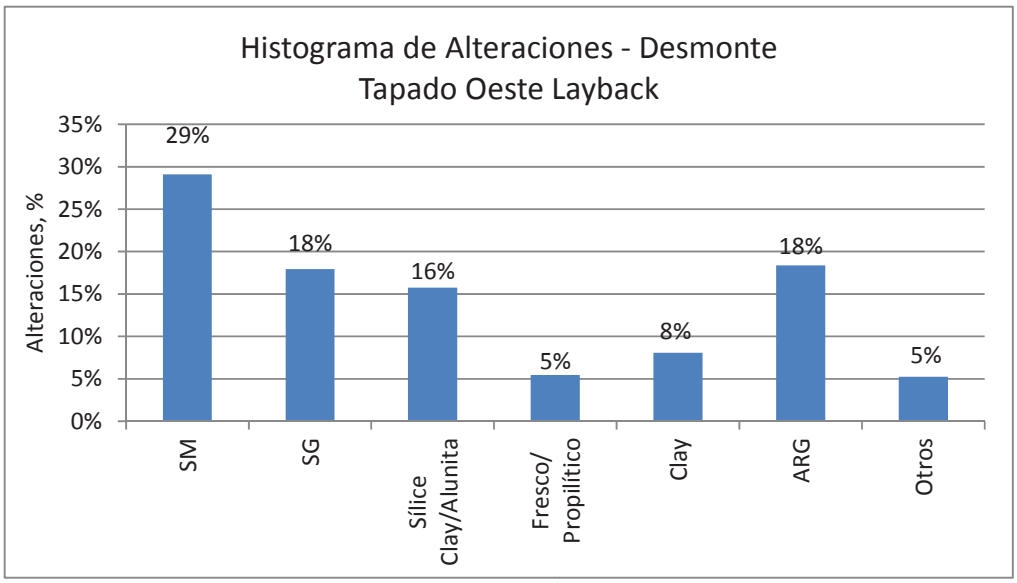


Figura 11. Histograma por alteraciones geológicas de las muestras de desmonte.
SM: Sílice Masiva (16%), Sílice Masiva Granular (7%), Sílice Masiva Vuggy(4%), Sílice Masiva Alunita (2%). **SG**: Sílice Granular (15%), Sílice Granular Compacta (3%). **Sílice Clay/Alunita**: Sílice Clay (10%), Sílice Alunita (6%). **Fresco/Propilítico**: Fresco (4%), Propilítico (1%). **ARG**: Argílico (15%), Argílico Avanzado (3%). **Otros**: Sílice Vuggy Granular, Mud Flow, LSG, INT.

Adicionalmente, la figura 12 muestra la clasificación NCV para las muestras con la alteración predominante (SM). El cual nos indica que el 67% de las muestras ensayadas tienen comportamiento Inerte o Neutral.

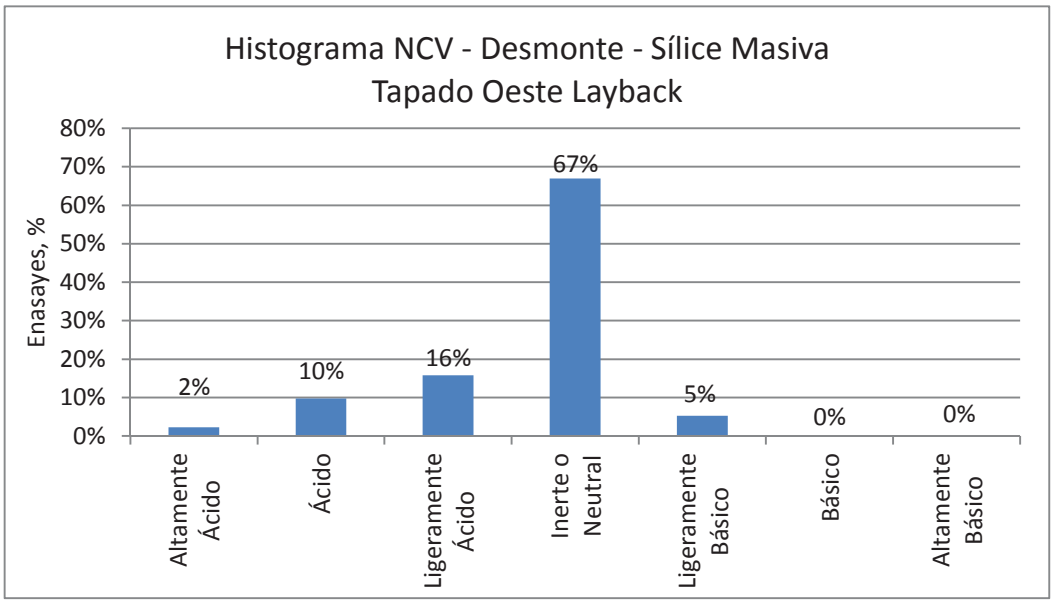


Figura 12. Histograma NCV para las muestras de desmonte con alteración SM.

La Tabla 4 muestra un resumen de la clasificación NCV del material tipo mineral y tipo desmonte. Especial interés se debe tomar en la disposición de desmonte en el depósito para tal fin. Se debe evaluar la posibilidad de mezclar este material con otro de comportamiento básico con el fin de minimizar la generación de acidez.

Tabla 4. Resumen de clasificación NCV del depósito Tapado Oeste Layback.

NCV	Desmonte	Mineral
Altamente Ácido	1%	5%
Ácido	23%	6%
Ligeramente Ácido	24%	13%
Inerte o Neutral	46%	67%
Ligeramente Básico	5%	7%
Básico	0%	0%
Altamente Básico	0%	0%

3. Conclusiones Finales:

- La clasificación NCV correspondiente al mineral del depósito Tapado Oeste Layback tiene tendencia a ser Neutral sin embargo hay cierto comportamiento acidico que será controlado con la adición de cal 1.54 kg/t. La adición de cal nos asegurara que la solución que drene del pad de lixiviación tendrá un comportamiento básico.
- La alteración dominante del mineral del depósito es la Sílice Masiva.
- Según la clasificación NCV correspondiente al material tipo desmonte del depósito, tiene carácter acido e inerte. El material será derivado a un depósito de desmonte para material PAG, habrá generación de acidez debido al contacto con agua meteórica y a la exposición del material al medio ambiente (oxigenación). La solución de escurrimiento del depósito de desmonte se colectara y se enviara a la planta de tratamiento de aguas acidas de La Quinua.

TAJO LA QUINUA SUR

Yanacocha

Metallurgical Services

To	:	Carla Telles
CC	:	Hamer Arevalo, Neil Ireland, Etienne Roux, Jorge Contreras
From	:	Gilmar Guzmán
Date	:	23-Agosto-2011
Subject	:	Caracterización de desmonte para el proyecto La Quinua Sur

El depósito La Quinua Sur es una extensión del depósito fluvioglacial La Quinua el cual tiene propiedades físicas y geoquímicas muy similares. El mineral de este depósito será depositado en la etapa 8A del pad La Quinua donde será lixiviado con una solución alcalina de cianuro. La solución de escurrimiento será colectada en una poza plastificada y enviada hacia la planta existente denominada Planta de Carbón en Columna La Quinua para la recuperación de oro.
El desmonte que se obtenga producto del desarrollo de la mina será dispuesto en el depósito de desmonte El Tapado Backfill.

Se realizó una campaña de perforación (10 taladros) con el fin de verificar el potencial de generación acida del desmonte bajo condiciones ambientales normales, es decir expuesta a la intemperie incluyendo el contacto con agua de lluvias, es que se envió un grupo de muestras a un laboratorio independiente (ALS Perú S.A.) con el fin de desarrollar pruebas estándares de Lixiviación por Precipitación Sintética. Además se ha desarrollado ensayos de caracterización de mineral con el fin de conocer los principales componentes de depósito mineralizado.

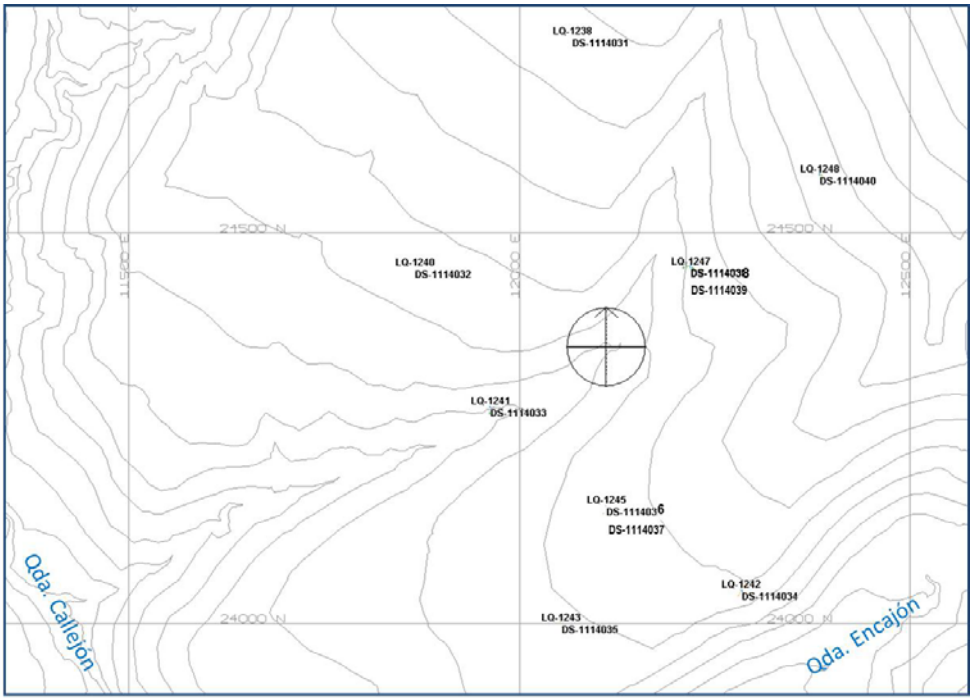


Fig. 1 Distribución de taladros en el proyecto La Quinua Sur

Resultados:

Composición Mineralógica

Los resultados de los ensayos MLA indican que el cuarzo es el mineral dominante en el depósito, seguido por un grupo de arcillas como la esmectita y caolín, además de alunita, goetita, albita y biotita.

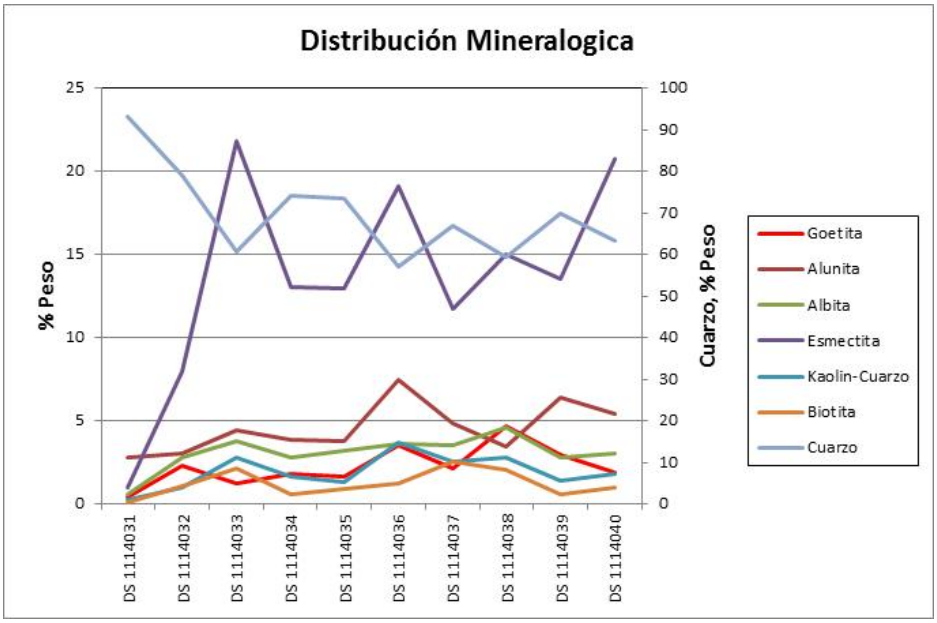


Fig. 2 Distribución mineralógica de muestras del proyecto La Quinua Sur

Tabla N°1 Composición mineralógica de muestras minerales del proyecto La Quinua Sur

	DS 1114031	DS 1114032	DS 1114033	DS 1114034	DS 1114035	DS 1114036	DS 1114037	DS 1114038	DS 1114039	DS 1114040
Mineral	**% Peso**	**% Peso**	**% Peso**	**% Peso**	**% Peso**	**% Peso**	**% Peso**	**% Peso**	**% Peso**	**% Peso**
Tungsteno	0	0.05	0	0	0	0	0	0.04	0.11	0
Ag2Au	0.04	0	0	0.04	0	0	0	0	0	0
Clorargirita	0	0	0	0	0	0	0	0	0	0.01
Chalcopirita	0.01	0.02	0	0	0	0	0	0	0	0
Bornita	0	0	0.02	0	0	0	0	0	0	0
Galena	0	0	0	0.02	0	0	0	0	0	0
Esfalerita	0	0	0	0	0	0.01	0	0	0	0
Pirita	0.04	0.04	0.03	0.01	0.02	0.11	0.06	0.34	0.02	0.1
Goetita	0.45	2.32	1.25	1.8	1.68	3.52	2.1	4.71	2.92	1.87
Oxido de hierro	0.04	0.19	0.26	0.11	0.22	0.33	0.14	0.33	0.42	0.11
Rutilo	0.68	0.87	0.52	0.31	0.39	0.27	0.66	0.3	0.23	0.19
Illmenita	0.12	0.04	0.19	0.24	0.12	0.15	0.1	0.1	0.2	0.09
Glaucoesfaerita	0	0	0	0	0	0	0	0	0.01	0
Calcita	0.01	0	0	0.01	0	0	0.02	0	0.01	0.01
Alunita	2.79	3.07	4.45	3.85	3.78	7.47	4.86	3.46	6.37	5.45
Barita	0	0.06	0	0	0.01	0	0.05	0.09	0	0.03
Esvanvergita	0.22	0.45	0.33	0.25	0.3	0.55	0.22	0.19	0.39	0.48
Apatita	0	0	0	0.01	0	0	0	0	0	0
Fosfato de Pb	0.04	0.03	0	0.02	0.04	0.16	0.03	0.01	0.03	0.01
Actinolita-Tremolita	0.06	0.03	0.01	0.02	0.01	0.05	0.05	0.09	0.11	0.01
Plagioclase CaNa	0.06	0.14	0.39	0.12	0.14	0.05	0.55	0.21	0.08	0.16
Albita	0.58	2.8	3.76	2.77	3.18	3.61	3.56	4.61	2.76	3
Feldespato K	0.06	0.1	0.09	0.14	0.24	0.13	2.36	4.43	0.06	0.13
Esmectita	0.96	7.98	21.86	13.08	13	19.14	11.7	15.01	13.56	20.78
Kaolin	0.03	0.19	0.22	0.25	0.3	0.37	0.43	0.5	0.33	0.74
Kaolin-Cuarzo	0.21	0.96	2.82	1.63	1.33	3.69	2.55	2.8	1.39	1.81
Al2O3	0	0	0	0	0	0.84	0.07	0.01	0.03	0.01
Rutilo Cuarzo	0.13	0.08	0.22	0.14	0.19	0.17	0.11	0.09	0.14	0.11
Rutilo Arcilla	0.01	0.08	0.22	0.09	0.14	0.21	0.2	0.19	0.09	0.21
Ox. Hierro-Cuarzo-Rutilo	0.03	0.14	0.1	0.06	0.11	0.13	0.12	0.22	0.15	0.1
Clorita	0.01	0	0	0.01	0.03	0.02	0.01	0.01	0	0.01
Moscovita	0.02	0.1	0.14	0.15	0.27	0.5	0.45	0.69	0.04	0.1
Biotita	0.09	1.03	2.16	0.58	0.88	1.21	2.57	2.03	0.56	0.99
Horblenda	0.07	0.14	0.05	0.07	0.11	0.1	0.15	0.18	0.15	0.12
Zircon	0.07	0.04	0.03	0.07	0.02	0.02	0.03	0.03	0.05	0.04
Cuarzo	93.17	79.02	60.88	74.15	73.5	57.18	66.84	59.32	69.79	63.34
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Procedimiento de Lixiviación por Precipitación Sintética (SPLP)

Los resultados de este ensayo indican que los metales presentes en la solución final de lixiviación están por debajo de los Limites Máximos Permisibles regulados por la legislación peruana. El pH final de la solución del total de las muestras en estudio se encuentra sobre 5 el cual indica que la generación de acidez será muy baja.

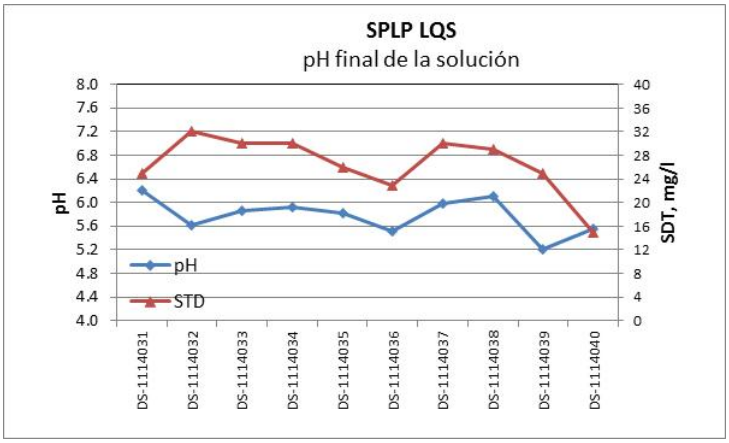


Fig. 3 pH y SDT en la solución final de lixiviación.

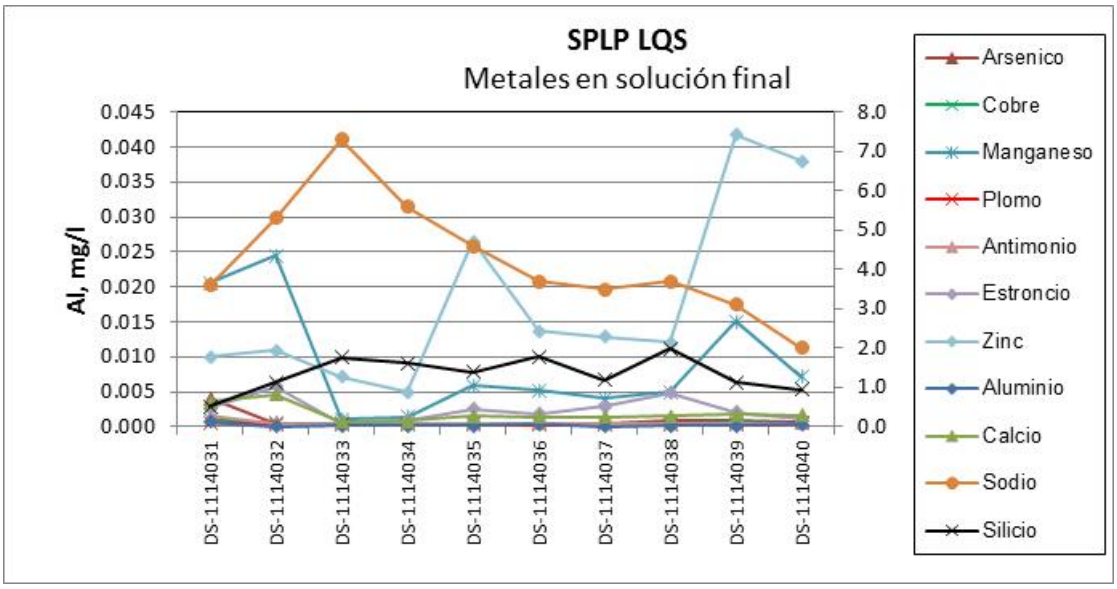


Fig. 4 Concentración de metales en solución luego de lixiviación.

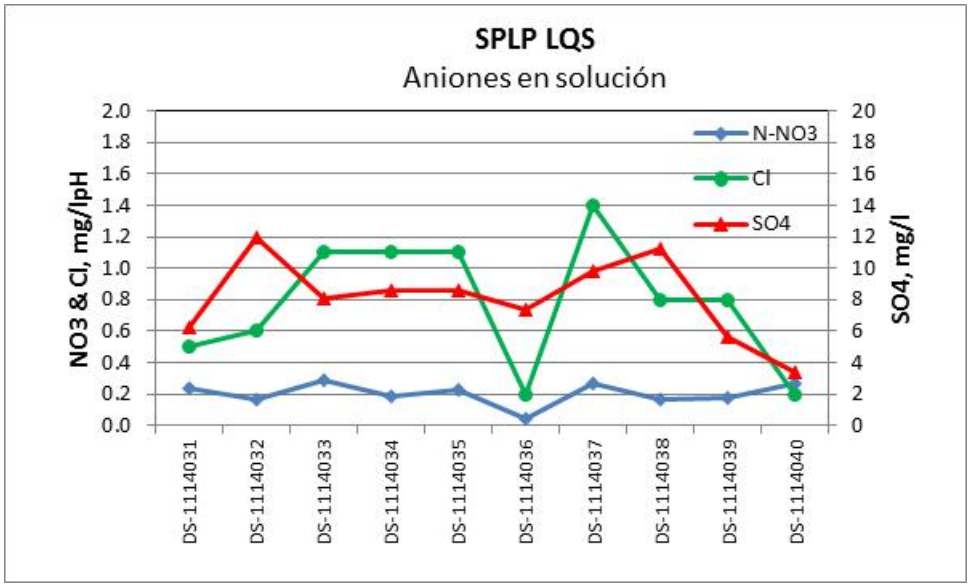


Fig. 5 Concentración de aniones en solución luego de lixiviación.

Parámetro / LD	Analito	Unidades	Fecha de Análisis	DS-1114031	DS-1114032	DS-1114033	DS-1114034	DS-1114035	DS-1114036	DS-1114037	DS-1114038	DS-1114039	DS-1114040
Aniones													
EMA-CRO536Br / 0.01	Br	mg/L	05-ago-11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EMA-CRO536Cl / 0.2	Cl	mg/L	05-ago-11	0.5	0.6	1.1	1.1	1.1	0.2	1.4	0.8	0.8	0.2
EMA-CRO536F / 0.02	F	mg/L	05-ago-11	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02
EMA-CRO536NO2 / 0.001	N-NO2	mg/L	05-ago-11	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.009	<0.001	<0.001
EMA-CRO536NO3 / 0.005	N-NO3	mg/L	05-ago-11	0.24	0.17	0.29	0.19	0.23	0.04	0.27	0.17	0.18	0.27
EMA-CRO536SO4 / 0.2	SO4	mg/L	05-ago-11	6.3	12	8.1	8.6	8.6	7.4	9.8	11.3	5.6	3.4
Fósforo													
EP-COL109 / 0.01	P React D	mg/L	02-ago-11	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Parametros Fisicoquimicos													
EALCB-VOL304 / 1	Alc HCO3	mg CaCO3/L	11-ago-11	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
EALCC-VOL304 / 1	Alc CO3	mg CaCO3/L	11-ago-11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
EPH-POT403 / 0.01	pH		10-ago-11	6.2	5.62	5.87	5.93	5.83	5.51	5.98	6.11	5.22	5.56
ESTD-GRA203 / 10	STD	mg/L	02-ago-11	25	32	30	30	26	23	30	29	25	15
METALES													
EHG-VF87 / 0.001	Hg	mg/L	11-ago-11	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EMA-MS680Ag / 0.000050	Ag	mg/L	12-ago-11	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
EMA-MS680Al / 0.0050	Al	mg/L	12-ago-11	0.124	0.008	0.012	0.016	0.028	0.064	0.008	0.012	0.028	0.068
EMA-MS680As / 0.00050	As	mg/L	12-ago-11	0.00408	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00088	0.00081	0.00069
EMA-MS680B / 0.050	B	mg/L	12-ago-11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
EMA-MS680Ba / 0.00025	Ba	mg/L	12-ago-11	0.00195	0.0448	0.00102	0.00986	0.0277	0.0121	0.01	0.0456	0.13	0.00979
EMA-MS680Be / 0.0025	Be	mg/L	12-ago-11	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680Bi / 0.0025	Bi	mg/L	12-ago-11	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680Ca / 0.050	Ca	mg/L	12-ago-11	0.64	0.809	0.124	0.138	0.271	0.246	0.236	0.264	0.304	0.28
EMA-MS680Cd / 0.00025	Cd	mg/L	12-ago-11	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
EMA-MS680Co / 0.00050	Co	mg/L	12-ago-11	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
EMA-MS680Cr / 0.0025	Cr	mg/L	12-ago-11	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680Cu / 0.00050	Cu	mg/L	12-ago-11	0.00099	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00056	0.0005
EMA-MS680Fe / 0.030	Fe	mg/L	12-ago-11	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
EMA-MS680K / 2.0	K	mg/L	12-ago-11	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
EMA-MS680Li / 0.0050	Li	mg/L	12-ago-11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EMA-MS680Mg / 0.10	Mg	mg/L	12-ago-11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
EMA-MS680Mn / 0.00025	Mn	mg/L	12-ago-11	0.0206	0.0245	0.00101	0.00141	0.00584	0.00513	0.00397	0.00492	0.0151	0.00711
EMA-MS680Mo / 0.00025	Mo	mg/L	12-ago-11	0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
EMA-MS680Na / 2.0	Na	mg/L	12-ago-11	3.6	5.3	7.3	5.6	4.6	3.7	3.5	3.7	3.1	2
EMA-MS680Ni / 0.0025	Ni	mg/L	12-ago-11	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680P / 0.30	P	mg/L	12-ago-11	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
EMA-MS680Pb / 0.00025	Pb	mg/L	12-ago-11	0.00059	0.00025	0.00025	0.00025	0.00036	0.00026	0.00025	0.00025	0.00025	0.00042
EMA-MS680Sb / 0.00050	Sb	mg/L	12-ago-11	0.00151	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
EMA-MS680Se / 0.0050	Se	mg/L	12-ago-11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EMA-MS680Si / 0.050	Si	mg/L	12-ago-11	0.517	1.12	1.75	1.61	1.38	1.77	1.19	1.98	1.13	0.947
EMA-MS680Sn / 0.00050	Sn	mg/L	12-ago-11	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
EMA-MS680Sr / 0.00050	Sr	mg/L	12-ago-11	0.00269	0.00571	0.0005	0.00097	0.00251	0.0019	0.00283	0.00478	0.00205	0.00118
EMA-MS680Ti / 0.010	Ti	mg/L	12-ago-11	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
EMA-MS680Tl / 0.00050	Tl	mg/L	12-ago-11	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
EMA-MS680U / 0.000050	U	mg/L	12-ago-11	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
EMA-MS680V / 0.0050	V	mg/L	12-ago-11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EMA-MS680Zn / 0.0050	Zn	mg/L	12-ago-11	0.01	0.0109	0.0071	0.005	0.0265	0.0137	0.0129	0.0121	0.0418	0.038

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
DST-039	0	12	0.049	0.02	1.145	1.016	-0.1767	0.0734	-0.1033	LIGERAMENTE ACIDO	USG
DST-039	12	24	0.02	0.02	0.894	0.894	0	0.0734	0.0734	INERTE	USG
DST-039	24	36	0.02	0.02	1.266	1.266	0	0.0734	0.0734	INERTE	USG
DST-039	36	48	0.02	0.02	0.669	0.642	-0.037	0.0734	0.03641	INERTE	USG
DST-039	48	60	0.02	0.02	0.718	0.659	-0.0808	0.0734	-0.0074	INERTE	USG
DST-039	60	72	0.02	0.02	0.698	0.678	-0.0274	0.0734	0.046	INERTE	USG
DST-039	72	84	0.02	0.02	0.7	0.639	-0.0836	0.0734	-0.0102	INERTE	USG
LQ-1077	0	12	0.086	0.02	0.75	0.654	-0.1315	0.0734	-0.0581	INERTE	USG
LQ-1077	12	24	0.058	0.02	0.922	0.842	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1077	24	36	0.07	0.02	0.792	0.739	-0.0726	0.0734	0.00079	INERTE	USG
LQ-1077	36	48	0.382	0.02	1.77	1.22	-0.7535	0.0734	-0.6801	LIGERAMENTE ACIDO	MSG
LQ-1078	0	11.7	0.113	0.02	0.793	0.717	-0.1041	0.0734	-0.0307	INERTE	USG
LQ-1078	11.7	24	0.049	0.02	0.903	0.903	0	0.0734	0.0734	INERTE	USG
LQ-1078	24	36	0.027	0.02	0.776	0.776	0	0.0734	0.0734	INERTE	USG
LQ-1078	36	48.6	0.067	0.02	0.949	0.85	-0.1356	0.0734	-0.0622	INERTE	USG
LQ-1078	48.6	57.2	0.589	0.02	1.05	0.886	-0.2247	0.0734	-0.1513	LIGERAMENTE ACIDO	LSG
LQ-1079	0	12	0.094	0.02	0.85	0.843	-0.0096	0.0734	0.06381	INERTE	USG
LQ-1079	12	24	0.057	0.02	0.993	0.987	-0.0082	0.0734	0.06518	INERTE	USG
LQ-1079	24	36	0.04	0.02	0.909	0.811	-0.1343	0.0734	-0.0609	INERTE	USG
LQ-1079	36	48	0.07	0.02	1.2	1.1	-0.137	0.0734	-0.0636	INERTE	LSG
LQ-1079	48	58.6	1.34	0.02	2.08	1.12	-1.3152	0.0734	-1.2418	ACIDO	LSG
LQ-1080	0.4	12	0.159	0.02	1.05	1.08	0.0411	0.0734	0.1145	LIGERAMENTE BASICO	USG
LQ-1080	12	24	0.066	0.02	1	0.963	-0.0507	0.0734	0.02271	INERTE	LSG
LQ-1080	24	29.8	0.081	0.02	0.831	0.888	0.07809	0.0734	0.15149	LIGERAMENTE BASICO	LSG
LQ-1080	29.8	40	0.084	0.02	0.179	0.179	0	0.0734	0.0734	INERTE	INT
LQ-1082	0.9	12	0.087	0.02	0.837	0.77	-0.0918	0.0734	-0.0184	INERTE	USG
LQ-1082	12	24.1	0.047	0.02	0.747	0.704	-0.0589	0.0734	0.01449	INERTE	USG
LQ-1082	24.1	36	0.048	0.02	0.916	0.888	-0.0384	0.0734	0.03504	INERTE	LSG
LQ-1083	0	12	0.097	0.02	0.72	0.669	-0.0699	0.0734	0.00353	INERTE	USG
LQ-1083	12	24	0.037	0.02	0.893	0.809	-0.1151	0.0734	-0.0417	INERTE	USG
LQ-1083	24	36	0.042	0.02	1	0.916	-0.1151	0.0734	-0.0417	INERTE	USG
LQ-1083	36	48	0.053	0.02	0.805	0.802	-0.0041	0.0734	0.06929	INERTE	LSG
LQ-1083	48	60	0.055	0.02	1.04	0.958	-0.1123	0.0734	-0.0389	INERTE	LSG
LQ-1084	0	12	0.179	0.02	0.905	0.881	-0.0329	0.0734	0.04052	INERTE	USG
LQ-1084	12	19	0.077	0.02	0.879	0.875	-0.0055	0.0734	0.06792	INERTE	USG
LQ-1085	0	12	0.163	0.02	0.705	0.584	-0.1658	0.0734	-0.0924	INERTE	USG
LQ-1085	12	24	0.16	0.02	0.721	0.655	-0.0904	0.0734	-0.017	INERTE	USG
LQ-1085	24	38.8	0.063	0.02	0.825	0.82	-0.0069	0.0734	0.06655	INERTE	LSG
LQ-1086	0	12	0.114	0.02	0.649	0.64	-0.0123	0.0734	0.06107	INERTE	USG
LQ-1086	12	24	0.176	0.02	0.717	0.71	-0.0096	0.0734	0.06381	INERTE	USG
LQ-1086	24	36	0.071	0.02	1.18	1.08	-0.137	0.0734	-0.0636	INERTE	USG
LQ-1086	36	48	0.069	0.02	1.21	0.91	-0.411	0.0734	-0.3376	LIGERAMENTE ACIDO	FERR
LQ-1086	48	60	0.059	0.02	1.13	0.96	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	LSG
LQ-1087	0	12	0.064	0.02	0.776	0.703	-0.1	0.0734	-0.0266	INERTE	USG
LQ-1087	12	24.3	0.06	0.02	1.01	1.01	0	0.0734	0.0734	INERTE	USG
LQ-1087	24.3	34.5	0.069	0.02	0.979	0.979	0	0.0734	0.0734	INERTE	LSG
LQ-1088	0	12.3	0.127	0.02	0.698	0.66	-0.0521	0.0734	0.02134	INERTE	USG
LQ-1088	12.3	24	0.088	0.02	0.792	0.704	-0.1206	0.0734	-0.0472	INERTE	USG
LQ-1088	24	36	0.086	0.02	1.07	1.05	-0.0274	0.0734	0.046	INERTE	USG
LQ-1088	36	46.2	0.366	0.02	0.711	0.679	-0.0438	0.0734	0.02956	INERTE	LSG
LQ-1088	46.2	55	0.126	0.02	0.026	0.026	0	0.0734	0.0734	INERTE	INT
LQ-1089	0	12	0.077	0.02	0.718	0.695	-0.0315	0.0734	0.04189	INERTE	USG
LQ-1089	12	24	0.115	0.02	0.806	0.806	0	0.0734	0.0734	INERTE	USG
LQ-1089	24	36	0.079	0.02	0.942	0.9	-0.0575	0.0734	0.01586	INERTE	USG
LQ-1089	36	47.9	0.13	0.02	0.968	0.906	-0.0849	0.0734	-0.0115	INERTE	USG
LQ-1089	47.9	60	0.058	0.02	0.97	0.891	-0.1082	0.0734	-0.0348	INERTE	USG
LQ-1090	0	12	0.082	0.02	0.891	0.866	-0.0343	0.0734	0.03915	INERTE	USG
LQ-1090	12	23.8	0.09	0.02	0.843	0.841	-0.0027	0.0734	0.07066	INERTE	USG
LQ-1090	23.8	36.4	0.09	0.02	1.09	1.09	0	0.0734	0.0734	INERTE	USG
LQ-1090	36.4	48	0.124	0.02	0.604	0.604	0	0.0734	0.0734	INERTE	LSG
LQ-1090	48	54.9	0.099	0.02	1.43	1.41	-0.0274	0.0734	0.046	INERTE	LSG
LQ-1095	0	12.2	0.213	0.02	0.72	0.704	-0.0219	0.0734	0.05148	INERTE	USG
LQ-1095	12.2	24.2	0.105	0.02	1.15	1.13	-0.0274	0.0734	0.046	INERTE	USG
LQ-1095	24.2	36.5	0.277	0.02	1.14	1.14	0	0.0734	0.0734	INERTE	USG
LQ-1095	36.5	48	0.311	0.02	0.887	0.88	-0.0096	0.0734	0.06381	INERTE	USG
LQ-1095	48	60	0.351	0.02	0.984	0.968	-0.0219	0.0734	0.05148	INERTE	USG
LQ-1095	60	65.6	0.292	0.02	1.32	1.3	-0.0274	0.0734	0.046	INERTE	LSG
LQ-1095	65.6	78	0.289	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1097	0	12	0.133	0.02	0.887	0.595	-0.4	0.0734	-0.3266	LIGERAMENTE ACIDO	USG
LQ-1097	12	24	0.057	0.02	1.07	0.771	-0.4096	0.0734	-0.3362	LIGERAMENTE ACIDO	USG
LQ-1097	24	36	0.045	0.02	0.937	0.718	-0.3	0.0734	-0.2266	LIGERAMENTE ACIDO	USG
LQ-1097	36	48.1	0.051	0.02	1	0.692	-0.422	0.0734	-0.3486	LIGERAMENTE ACIDO	USG
LQ-1098	0	12.2	0.163	0.02	0.779	0.706	-0.1	0.0734	-0.0266	INERTE	USG
LQ-1098	12.2	24	0.098	0.02	0.718	0.714	-0.0055	0.0734	0.06792	INERTE	USG
LQ-1098	24	36	0.075	0.02	0.924	0.924	0	0.0734	0.0734	INERTE	USG
LQ-1098	36	48	0.066	0.02	0.699	0.699	0	0.0734	0.0734	INERTE	USG
LQ-1098	48	60	0.065	0.02	0.708	0.708	0	0.0734	0.0734	INERTE	USG
LQ-1098	60	72.2	0.118	0.02	0.89	0.85	-0.0548	0.0734	0.0186	INERTE	LSG
LQ-1099	0	12	0.063	0.02	0.602	0.583	-0.026	0.0734	0.04737	INERTE	USG
LQ-1099	12	23.9	0.024	0.02	1.04	0.936	-0.1425	0.0734	-0.0691	INERTE	USG
LQ-1099	23.9	36	0.02	0.02	0.818	0.748	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1099	36	48	0.02	0.02	0.899	0.89	-0.0123	0.0734	0.06107	INERTE	USG
LQ-1099	48	59.8	0.022	0.02	0.67	0.668	-0.0027	0.0734	0.07066	INERTE	USG
LQ-1099	59.8	72	0.024	0.02	0.947	0.94	-0.0096	0.0734	0.06381	INERTE	USG
LQ-1100	1	12	0.299	0.02	0.699	0.606	-0.1274	0.0734	-0.054	INERTE	USG
LQ-1100	12	24	0.02	0.02	0.943	0.921	-0.0301	0.0734	0.04326	INERTE	USG
LQ-1100	24	36	0.139	0.02	1.19	1.06	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1100	36	48	0.338	0.02	0.942	0.806	-0.1863	0.0734	-0.1129	LIGERAMENTE ACIDO	USG
LQ-1100	48	60	0.151	0.02	0.799	0.765	-0.0466	0.0734	0.02682	INERTE	USG
LQ-1101	0	12.4	0.101	0.02	0.893	0.893	0	0.0734	0.0734	INERTE	USG
LQ-1101	12.4	24	0.022	0.02	0.866	0.853	-0.0178	0.0734	0.05559	INERTE	USG
LQ-1101	24	35.9	0.035	0.02	0.847	0.847	0	0.0734	0.0734	INERTE	USG
LQ-1101	35.9	48	0.02	0.02	0.792	0.792	0	0.0734	0.0734	INERTE	USG
LQ-1101	48	60	0.034	0.02	0.905	0.9	-0.0069	0.0734	0.06655	INERTE	USG
LQ-1103	0	12	0.135	0.054	0.972	0.847	-0.1713	0.1982	0.02693	INERTE	USG
LQ-1103	12	24.3	0.169	0.037	1.12	0.926	-0.2658	0.1358	-0.13	LIGERAMENTE ACIDO	USG
LQ-1103	24.3	36	0.154	0.075	1.02	0.854	-0.2274	0.2753	0.04783	INERTE	USG
LQ-1103	36	48	0.134	0.035	0.982	0.866	-0.1589	0.1285	-0.0305	INERTE	USG
LQ-1103	48	60	0.158	0.047	1.06	0.888	-0.2356	0.1725	-0.0632	INERTE	USG
LQ-1104	0	12	0.217	0.047	1.24	1.08	-0.2192	0.1725	-0.0467	INERTE	USG
LQ-1104	12	24	0.139	0.037	1.09	0.896	-0.2658	0.1358	-0.13	LIGERAMENTE ACIDO	USG
LQ-1104	24	36	0.207	0.056	0.872	0.696	-0.2411	0.2055	-0.0356	INERTE	USG
LQ-1104	36	48	0.202	0.083	0.951	0.726	-0.3083	0.3046	-0.0036	INERTE	USG
LQ-1105	0	12.5	0.145	0.04	1.26	1.11	-0.2055	0.1468	-0.0587	INERTE	USG
LQ-1105	12.5	24	0.101	0.037	1.04	0.81	-0.3151	0.1358	-0.1793	LIGERAMENTE ACIDO	USG
LQ-1105	24	36	0.061	0.045	1.06	0.84	-0.3014	0.1652	-0.1363	LIGERAMENTE ACIDO	USG
LQ-1105	36	48	0.156	0.043	0.818	0.663	-0.2124	0.1578	-0.0545	INERTE	USG
LQ-1106	0	2	0.112	0.02	1.62	1.25	-0.5069	0.0734	-0.4335	LIGERAMENTE ACIDO	USG
LQ-1106	2	4.3	0.087	0.02	1.32	1.2	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1106	4.3	5	0.079	0.02	1.14	1.07	-0.0959	0.0734	-0.0225	INERTE	USG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1106	5	6	0.061	0.02	1.41	1.28	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1106	6	6.7	0.065	0.02	2.06	1.78	-0.3836	0.0734	-0.3102	LIGERAMENTE ACIDO	USG
LQ-1106	6.7	8	0.096	0.02	1.04	0.991	-0.0671	0.0734	0.00627	INERTE	USG
LQ-1106	8	8.2	0.085	0.02	1.98	1.7	-0.3836	0.0734	-0.3102	LIGERAMENTE ACIDO	USG
LQ-1106	8.2	9.85	0.072	0.02	1.45	1.38	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1106	9.85	10.9	0.082	0.02	1.06	0.971	-0.1219	0.0734	-0.0485	INERTE	USG
LQ-1106	10.9	12	0.084	0.02	1.27	1.12	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	USG
LQ-1106	12	14	0.064	0.02	0.903	0.827	-0.1041	0.0734	-0.0307	INERTE	USG
LQ-1106	14	14.7	0.078	0.02	0.569	0.569	0	0.0734	0.0734	INERTE	USG
LQ-1106	14.7	15.9	0.057	0.02	1.29	1.11	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	USG
LQ-1106	15.9	18	0.039	0.02	0.838	0.769	-0.0945	0.0734	-0.0211	INERTE	USG
LQ-1106	18	18.7	0.02	0.02	1.77	1.55	-0.3014	0.0734	-0.228	LIGERAMENTE ACIDO	USG
LQ-1106	18.7	19.3	0.02	0.02	0.687	0.685	-0.0027	0.0734	0.07066	INERTE	USG
LQ-1106	19.3	20.3	0.107	0.02	0.781	0.781	0	0.0734	0.0734	INERTE	USG
LQ-1106	20.3	22.4	0.02	0.02	1.15	1.15	0	0.0734	0.0734	INERTE	USG
LQ-1106	22.4	23	0.02	0.02	1.25	1.17	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1106	23	24	0.02	0.02	1.86	1.68	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	USG
LQ-1106	24	25.3	0.02	0.02	1.12	1.03	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1106	25.3	26	0.02	0.02	1.89	1.7	-0.2603	0.0734	-0.1869	LIGERAMENTE ACIDO	USG
LQ-1106	26	28.2	0.02	0.02	0.866	0.705	-0.2206	0.0734	-0.1472	LIGERAMENTE ACIDO	USG
LQ-1106	28.2	30	0.02	0.02	0.744	0.677	-0.0918	0.0734	-0.0184	INERTE	USG
LQ-1106	30	32	0.02	0.02	0.751	0.669	-0.1123	0.0734	-0.0389	INERTE	USG
LQ-1106	32	32.9	0.02	0.02	0.994	0.928	-0.0904	0.0734	-0.017	INERTE	USG
LQ-1106	32.9	34	0.034	0.02	1.33	1.25	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1106	34	35.1	0.023	0.02	1.14	1.02	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1106	35.1	36.1	0.101	0.02	6.66	4.75	-2.6167	0.0734	-2.5433	ACIDO	USG
LQ-1106	36.1	38	0.06	0.02	1.93	1.93	0	0.0734	0.0734	INERTE	USG
LQ-1106	38	40	0.082	0.02	1.36	1.36	0	0.0734	0.0734	INERTE	USG
LQ-1106	40	41.9	0.095	0.02	0.631	0.607	-0.0329	0.0734	0.04052	INERTE	USG
LQ-1106	41.9	44	0.071	0.02	0.549	0.492	-0.0781	0.0734	-0.0047	INERTE	USG
LQ-1106	44	46	0.087	0.02	0.389	0.311	-0.1069	0.0734	-0.0335	INERTE	USG
LQ-1106	46	47	0.088	0.02	0.626	0.575	-0.0699	0.0734	0.00353	INERTE	USG
LQ-1106	47	48	0.074	0.02	0.44	0.408	-0.0438	0.0734	0.02956	INERTE	USG
LQ-1106	48	50	0.061	0.02	0.651	0.526	-0.1713	0.0734	-0.0979	INERTE	USG
LQ-1106	50	51.3	0.048	0.02	0.646	0.572	-0.1014	0.0734	-0.028	INERTE	USG
LQ-1106	51.3	52	0.083	0.02	0.466	0.487	0.02877	0.0734	0.10217	LIGERAMENTE ACIDO	USG
LQ-1106	52	54	0.088	0.02	0.697	0.628	-0.0945	0.0734	-0.0211	INERTE	USG
LQ-1106	54	56	0.082	0.02	0.638	0.659	0.02877	0.0734	0.10217	LIGERAMENTE ACIDO	USG
LQ-1106	56	57.8	0.061	0.02	1.37	1.35	-0.0274	0.0734	0.046	INERTE	USG
LQ-1106	57.8	60	0.094	0.02	0.569	0.543	-0.0356	0.0734	0.03778	INERTE	LSG
LQ-1106	60	62	0.114	0.02	0.918	0.741	-0.2425	0.0734	-0.1691	LIGERAMENTE ACIDO	LSG
LQ-1106	62	64.1	0.07	0.02	1.52	1.31	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	LSG
LQ-1106	64.1	66	0.092	0.02	0.621	0.526	-0.1302	0.0734	-0.0568	INERTE	LSG
LQ-1106	66	68	0.081	0.02	0.85	0.75	-0.137	0.0734	-0.0636	INERTE	LSG
LQ-1107	0	2	0.224	0.02	1.17	1.17	0	0.0734	0.0734	INERTE	USG
LQ-1107	2	4	0.227	0.02	1.37	1.34	-0.0411	0.0734	0.0323	INERTE	USG
LQ-1107	4	5.2	0.213	0.02	2.16	1.66	-0.685	0.0734	-0.6116	LIGERAMENTE ACIDO	USG
LQ-1107	5.2	6.2	0.34	0.02	1.79	1.47	-0.4384	0.0734	-0.365	LIGERAMENTE ACIDO	USG
LQ-1107	6.2	6.75	0.188	0.02	1.75	1.25	-0.685	0.0734	-0.6116	LIGERAMENTE ACIDO	USG
LQ-1107	6.75	7.4	0.134	0.02	1.94	1.86	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1107	7.4	8	0.125	0.02	1.71	1.68	-0.0411	0.0734	0.0323	INERTE	USG
LQ-1107	8	10	0.119	0.02	1.65	1.61	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1107	10	10.8	0.154	0.02	1.53	1.53	0	0.0734	0.0734	INERTE	USG
LQ-1107	10.8	12	0.154	0.02	1.53	1.35	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	USG
LQ-1107	12	13.8	0.124	0.02	1.52	1.31	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	USG
LQ-1107	13.8	16	0.18	0.02	1.41	1.28	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1107	16	18	0.209	0.02	1.06	1.02	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1107	18	19.1	0.212	0.02	0.938	0.91	-0.0384	0.0734	0.03504	INERTE	USG
LQ-1107	19.1	20	0.226	0.02	0.757	0.735	-0.0301	0.0734	0.04326	INERTE	USG
LQ-1107	20	20.6	0.126	0.02	0.971	0.971	0	0.0734	0.0734	INERTE	USG
LQ-1107	20.6	21.8	0.173	0.02	1.05	0.982	-0.0932	0.0734	-0.0198	INERTE	USG
LQ-1107	21.8	22.8	0.11	0.02	0.916	0.853	-0.0863	0.0734	-0.0129	INERTE	USG
LQ-1107	22.8	24.1	0.146	0.02	0.849	0.827	-0.0301	0.0734	0.04326	INERTE	USG
LQ-1107	24.1	25.9	0.067	0.02	0.922	0.918	-0.0055	0.0734	0.06792	INERTE	USG
LQ-1107	25.9	26.7	0.09	0.02	0.997	0.94	-0.0781	0.0734	-0.0047	INERTE	USG
LQ-1107	26.7	28	0.164	0.02	0.648	0.613	-0.048	0.0734	0.02545	INERTE	USG
LQ-1107	28	30	0.159	0.02	0.661	0.655	-0.0082	0.0734	0.06518	INERTE	USG
LQ-1107	30	30.7	0.093	0.02	1	1.02	0.0274	0.0734	0.1008	LIGERAMENTE BASICO	USG
LQ-1107	30.7	32	0.07	0.02	1.02	1.02	0	0.0734	0.0734	INERTE	USG
LQ-1107	32	34.1	0.09	0.02	1.21	1.12	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1107	34.1	36	0.116	0.02	0.867	0.788	-0.1082	0.0734	-0.0348	INERTE	USG
LQ-1107	36	38	0.104	0.02	0.852	0.775	-0.1055	0.0734	-0.0321	INERTE	USG
LQ-1107	38	38.8	0.073	0.02	0.606	0.606	0	0.0734	0.0734	INERTE	USG
LQ-1107	38.8	40	0.053	0.02	0.809	0.603	-0.2822	0.0734	-0.2088	LIGERAMENTE ACIDO	USG
LQ-1107	40	42	0.068	0.02	0.943	0.791	-0.2082	0.0734	-0.1348	LIGERAMENTE ACIDO	USG
LQ-1107	42	44	0.073	0.02	0.753	0.568	-0.2535	0.0734	-0.1801	LIGERAMENTE ACIDO	USG
LQ-1107	44	46	0.047	0.02	0.808	0.71	-0.1343	0.0734	-0.0609	INERTE	USG
LQ-1107	46	48.4	0.084	0.02	1.13	1.02	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1107	48.4	50	0.087	0.02	0.826	0.574	-0.3452	0.0734	-0.2718	LIGERAMENTE ACIDO	USG
LQ-1107	50	52.5	0.112	0.02	0.78	0.324	-0.6247	0.0734	-0.5513	LIGERAMENTE ACIDO	USG
LQ-1107	52.5	54	0.107	0.02	0.692	0.106	-0.8028	0.0734	-0.7294	LIGERAMENTE ACIDO	USG
LQ-1107	54	56	0.059	0.02	1.06	0.219	-1.1522	0.0734	-1.0788	ACIDO	USG
LQ-1107	56	58	0.079	0.02	0.808	0.096	-0.9754	0.0734	-0.902	LIGERAMENTE ACIDO	USG
LQ-1107	58	60	0.063	0.02	0.587	0.196	-0.5357	0.0734	-0.4623	LIGERAMENTE ACIDO	USG
LQ-1107	60	62	0.074	0.02	0.548	0.028	-0.7124	0.0734	-0.639	LIGERAMENTE ACIDO	USG
LQ-1107	62	63	0.079	0.02	0.769	0.3	-0.6425	0.0734	-0.5691	LIGERAMENTE ACIDO	USG
LQ-1107	63	64	0.079	0.02	0.688	0.197	-0.6727	0.0734	-0.5993	LIGERAMENTE ACIDO	USG
LQ-1107	64	66	0.078	0.02	1.13	0.795	-0.459	0.0734	-0.3856	LIGERAMENTE ACIDO	USG
LQ-1108	0	1.4	0.495	0.02	1.56	1.51	-0.0685	0.0734	0.0049	INERTE	USG
LQ-1108	1.4	2	0.059	0.02	4.1	3.75	-0.4795	0.0734	-0.4061	LIGERAMENTE ACIDO	USG
LQ-1108	2	3.1	0.02	0.02	5.47	5.47	0	0.0734	0.0734	INERTE	USG
LQ-1108	3.1	4	0.057	0.02	1.3	1.24	-0.0822	0.0734	-0.0088	INERTE	USG
LQ-1108	4	5	0.02	0.02	2.13	2.05	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1108	5	6	0.038	0.02	0.841	0.784	-0.0781	0.0734	-0.0047	INERTE	USG
LQ-1108	6	8	0.061	0.02	1.04	1.04	0	0.0734	0.0734	INERTE	USG
LQ-1108	8	8.5	0.05	0.02	0.961	0.876	-0.1165	0.0734	-0.0431	INERTE	USG
LQ-1108	8.5	10	0.064	0.02	0.842	0.773	-0.0945	0.0734	-0.0211	INERTE	USG
LQ-1108	10	12	0.045	0.02	1.42	1.28	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	USG
LQ-1108	12	14.1	0.032	0.02	1.46	1.2	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	USG
LQ-1108	14.1	16	0.024	0.02	0.833	0.787	-0.063	0.0734	0.01038	INERTE	USG
LQ-1108	16	18	0.02	0.02	1	0.966	-0.0466	0.0734	0.02682	INERTE	USG
LQ-1108	18	20	0.02	0.02	0.738	0.698	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1108	20	22	0.034	0.02	1.29	1.2	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1108	22	24	0.02	0.02	0.977	0.977	0	0.0734	0.0734	INERTE	USG
LQ-1108	24	26	0.045	0.02	1.15	0.931	-0.3	0.0734	-0.2266	LIGERAMENTE ACIDO	USG
LQ-1108	26	28	0.042	0.02	0.669	0.598	-0.0973	0.0734	-0.0239	INERTE	USG
LQ-1108	28	28.8	0.02	0.02	0.79	0.699	-0.1247	0.0734	-0.0513	INERTE	USG
LQ-1108	28.8	30	0.02	0.02	1.46	0.702	-1.0385	0.0734	-0.9651	LIGERAMENTE ACIDO	USG
LQ-1108	30	31.7	0.02	0.02	1.68	0.988	-0.948	0.0734	-0.8746	LIGERAMENTE ACIDO	USG
LQ-1108	31.7	34	0.02	0.02	1.3	1.3	0	0.0734	0.0734	INERTE	USG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1108	34	34.5	0.02	0.02	1.07	0.808	-0.3589	0.0734	-0.2855	LIGERAMENTE ACIDO	USG
LQ-1108	34.5	36	0.02	0.02	0.594	0.514	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1108	36	38	0.02	0.02	0.7	0.453	-0.3384	0.0734	-0.265	LIGERAMENTE ACIDO	USG
LQ-1108	38	40	0.02	0.02	0.835	0.757	-0.1069	0.0734	-0.0335	INERTE	USG
LQ-1108	40	42	0.02	0.02	0.517	0.466	-0.0699	0.0734	0.00353	INERTE	USG
LQ-1108	42	44	0.02	0.02	0.691	0.628	-0.0863	0.0734	-0.0129	INERTE	USG
LQ-1108	44	46	0.02	0.02	0.748	0.68	-0.0932	0.0734	-0.0198	INERTE	USG
LQ-1109	0	2	0.204	0.02	0.997	0.997	0	0.0734	0.0734	INERTE	USG
LQ-1109	2	4.2	0.189	0.02	0.905	0.905	0	0.0734	0.0734	INERTE	USG
LQ-1109	4.2	5.5	0.178	0.02	0.902	0.902	0	0.0734	0.0734	INERTE	USG
LQ-1109	5.5	6	0.104	0.02	1.02	1.02	0	0.0734	0.0734	INERTE	USG
LQ-1109	6	8	0.063	0.02	1.25	1.2	-0.0685	0.0734	0.0049	INERTE	USG
LQ-1109	8	10	0.108	0.02	0.932	0.932	0	0.0734	0.0734	INERTE	USG
LQ-1109	10	10.6	0.045	0.02	0.441	0.441	0	0.0734	0.0734	INERTE	USG
LQ-1109	10.6	11.9	0.021	0.02	1.2	1.19	-0.0137	0.0734	0.0597	INERTE	USG
LQ-1109	11.9	14	0.105	0.02	0.992	0.992	0	0.0734	0.0734	INERTE	USG
LQ-1109	14	14.7	0.093	0.02	1	0.983	-0.0233	0.0734	0.05011	INERTE	USG
LQ-1109	14.7	15.7	0.116	0.02	0.669	0.669	0	0.0734	0.0734	INERTE	USG
LQ-1109	15.7	18	0.048	0.02	1.29	1.27	-0.0274	0.0734	0.046	INERTE	USG
LQ-1109	18	20	0.066	0.02	0.994	0.994	0	0.0734	0.0734	INERTE	USG
LQ-1109	20	22.4	0.033	0.02	0.898	0.898	0	0.0734	0.0734	INERTE	USG
LQ-1109	22.4	23.3	0.042	0.02	0.675	0.642	-0.0452	0.0734	0.02819	INERTE	USG
LQ-1109	23.3	24	0.029	0.02	0.607	0.587	-0.0274	0.0734	0.046	INERTE	USG
LQ-1109	24	26	0.043	0.02	0.989	0.989	0	0.0734	0.0734	INERTE	USG
LQ-1109	26	28	0.028	0.02	0.939	0.939	0	0.0734	0.0734	INERTE	USG
LQ-1109	28	29.3	0.137	0.023	0.85	0.85	0	0.0844	0.08441	INERTE	USG
LQ-1109	29.3	30	0.035	0.02	0.519	0.519	0	0.0734	0.0734	INERTE	USG
LQ-1109	30	32	0.02	0.02	0.506	0.506	0	0.0734	0.0734	INERTE	USG
LQ-1109	32	34	0.028	0.02	0.704	0.636	-0.0932	0.0734	-0.0198	INERTE	USG
LQ-1109	34	35.5	0.02	0.02	0.898	0.898	0	0.0734	0.0734	INERTE	USG
LQ-1109	35.5	36	0.09	0.02	0.876	0.876	0	0.0734	0.0734	INERTE	USG
LQ-1109	36	37.4	0.057	0.02	0.886	0.827	-0.0808	0.0734	-0.0074	INERTE	USG
LQ-1109	37.4	38	0.021	0.02	0.715	0.715	0	0.0734	0.0734	INERTE	USG
LQ-1109	38	40	0.038	0.02	0.718	0.718	0	0.0734	0.0734	INERTE	USG
LQ-1109	40	42	0.024	0.02	0.688	0.688	0	0.0734	0.0734	INERTE	USG
LQ-1109	42	44	0.02	0.02	0.718	0.645	-0.1	0.0734	-0.0266	INERTE	USG
LQ-1109	44	46	0.031	0.02	0.523	0.447	-0.1041	0.0734	-0.0307	INERTE	USG
LQ-1109	46	48	0.028	0.02	0.773	0.747	-0.0356	0.0734	0.03778	INERTE	USG
LQ-1110	0	2	0.153	0.02	1.29	1.16	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1110	2	4.3	0.186	0.02	1.69	1.65	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1110	4.3	6	0.124	0.02	1.59	1.21	-0.5206	0.0734	-0.4472	LIGERAMENTE ACIDO	USG
LQ-1110	6	8	0.143	0.02	1.75	1.28	-0.6439	0.0734	-0.5705	LIGERAMENTE ACIDO	USG
LQ-1110	8	10	0.223	0.02	1.81	1.55	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	USG
LQ-1110	10	11.7	0.123	0.02	1.27	1.27	0	0.0734	0.0734	INERTE	USG
LQ-1110	11.7	14	0.032	0.02	0.591	0.59	-0.0014	0.0734	0.07203	INERTE	USG
LQ-1110	14	16	0.055	0.02	2.92	2.64	-0.3836	0.0734	-0.3102	LIGERAMENTE ACIDO	USG
LQ-1110	16	18.2	0.048	0.02	1.09	1.09	0	0.0734	0.0734	INERTE	USG
LQ-1110	18.2	20	0.175	0.02	1.22	1.22	0	0.0734	0.0734	INERTE	USG
LQ-1110	20	22	0.188	0.02	1.21	1.19	-0.0274	0.0734	0.046	INERTE	USG
LQ-1110	22	24	0.155	0.02	1.18	1.18	0	0.0734	0.0734	INERTE	USG
LQ-1110	24	25.6	0.05	0.02	0.926	0.895	-0.0425	0.0734	0.03093	INERTE	USG
LQ-1110	25.6	27.4	0.063	0.02	0.921	0.92	-0.0014	0.0734	0.07203	INERTE	USG
LQ-1110	27.4	28	0.109	0.02	0.792	0.79	-0.0027	0.0734	0.07066	INERTE	USG
LQ-1110	28	30	0.099	0.02	0.905	0.877	-0.0384	0.0734	0.03504	INERTE	USG
LQ-1110	30	31.6	0.058	0.02	1.3	1.3	0	0.0734	0.0734	INERTE	USG
LQ-1110	31.6	34	0.082	0.02	1.04	0.948	-0.126	0.0734	-0.0526	INERTE	USG
LQ-1110	34	36	0.071	0.02	0.679	0.653	-0.0356	0.0734	0.03778	INERTE	USG
LQ-1110	36	38	0.074	0.02	0.92	0.92	0	0.0734	0.0734	INERTE	USG
LQ-1110	38	40	0.038	0.02	1.13	1.13	0	0.0734	0.0734	INERTE	USG
LQ-1110	40	42	0.023	0.02	0.779	0.77	-0.0123	0.0734	0.06107	INERTE	USG
LQ-1110	42	43	0.021	0.02	0.896	0.846	-0.0685	0.0734	0.0049	INERTE	USG
LQ-1110	43	44	0.02	0.02	0.767	0.749	-0.0247	0.0734	0.04874	INERTE	USG
LQ-1110	44	45.3	0.042	0.02	0.875	0.795	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1110	45.3	46	0.02	0.02	0.908	0.9	-0.011	0.0734	0.06244	INERTE	USG
LQ-1110	46	48	0.02	0.02	0.852	0.827	-0.0343	0.0734	0.03915	INERTE	USG
LQ-1110	48	50	0.02	0.02	1	0.873	-0.174	0.0734	-0.1006	LIGERAMENTE ACIDO	USG
LQ-1110	50	52	0.02	0.02	0.835	0.83	-0.0069	0.0734	0.06655	INERTE	USG
LQ-1110	52	54	0.02	0.02	0.651	0.567	-0.1151	0.0734	-0.0417	INERTE	USG
LQ-1110	54	56	0.02	0.02	0.637	0.608	-0.0397	0.0734	0.03367	INERTE	USG
LQ-1110	56	58	0.021	0.02	0.862	0.772	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1110	58	60	0.032	0.02	0.697	0.642	-0.0754	0.0734	-0.002	INERTE	USG
LQ-1110	60	62	0.075	0.02	1.07	1.05	-0.0274	0.0734	0.046	INERTE	USG
LQ-1110	62	64	0.045	0.02	0.789	0.78	-0.0123	0.0734	0.06107	INERTE	USG
LQ-1110	64	66.1	0.02	0.02	0.806	0.8	-0.0082	0.0734	0.06518	INERTE	USG
LQ-1110	66.1	68	0.07	0.02	1.16	1.11	-0.0685	0.0734	0.0049	INERTE	USG
LQ-1110	68	69.7	0.059	0.02	0.693	0.69	-0.0041	0.0734	0.06929	INERTE	USG
LQ-1111	0	2	0.343	0.02	1.37	1.37	0	0.0734	0.0734	INERTE	USG
LQ-1111	2	4	0.26	0.02	1.26	1.26	0	0.0734	0.0734	INERTE	USG
LQ-1111	4	6	0.076	0.02	1.21	1.21	0	0.0734	0.0734	INERTE	USG
LQ-1111	6	6.85	0.047	0.02	1.58	1.58	0	0.0734	0.0734	INERTE	USG
LQ-1111	6.85	8	0.04	0.02	2	1.63	-0.5069	0.0734	-0.4335	LIGERAMENTE ACIDO	USG
LQ-1111	8	10	0.051	0.02	1.89	1.48	-0.5617	0.0734	-0.4883	LIGERAMENTE ACIDO	USG
LQ-1111	10	10.8	0.119	0.02	1.09	0.981	-0.1493	0.0734	-0.0759	INERTE	USG
LQ-1111	10.8	11.6	0.05	0.02	1.59	1.09	-0.685	0.0734	-0.6116	LIGERAMENTE ACIDO	USG
LQ-1111	11.6	14	0.063	0.02	0.919	0.919	0	0.0734	0.0734	INERTE	USG
LQ-1111	14	14.9	0.054	0.02	1.46	1.4	-0.0822	0.0734	-0.0088	INERTE	USG
LQ-1111	14.9	16	0.042	0.02	0.887	0.887	0	0.0734	0.0734	INERTE	USG
LQ-1111	16	17.9	0.025	0.02	1.47	1.37	-0.137	0.0734	-0.0636	INERTE	USG
LQ-1111	17.9	20	0.067	0.02	1.31	1.09	-0.3014	0.0734	-0.228	LIGERAMENTE ACIDO	USG
LQ-1111	20	22	0.071	0.02	1.09	1.09	0	0.0734	0.0734	INERTE	USG
LQ-1111	22	24	0.036	0.02	1.23	1.12	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1111	24	26	0.061	0.02	1.23	0.939	-0.3987	0.0734	-0.3253	LIGERAMENTE ACIDO	USG
LQ-1111	26	28	0.052	0.02	0.999	0.852	-0.2014	0.0734	-0.128	LIGERAMENTE ACIDO	USG
LQ-1111	28	30	0.035	0.02	1.83	1.82	-0.0137	0.0734	0.0597	INERTE	USG
LQ-1111	30	30.7	0.075	0.02	1.33	1.25	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1111	30.7	32	0.121	0.02	1.33	1.15	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	USG
LQ-1111	32	34	0.056	0.02	1.2	0.937	-0.3603	0.0734	-0.2869	LIGERAMENTE ACIDO	USG
LQ-1111	34	35.2	0.376	0.02	0.658	0.53	-0.1754	0.0734	-0.102	LIGERAMENTE ACIDO	USG
LQ-1111	35.2	36	0.184	0.02	1.59	1.55	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1111	36	37	0.194	0.02	1.38	1.24	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	USG
LQ-1111	37	37.7	0.048	0.02	0.966	0.742	-0.3069	0.0734	-0.2335	LIGERAMENTE ACIDO	USG
LQ-1111	37.7	40	0.107	0.02	1.44	1.11	-0.4521	0.0734	-0.3787	LIGERAMENTE ACIDO	USG
LQ-1111	40	40.7	0.094	0.02	0.983	0.808	-0.2398	0.0734	-0.1664	LIGERAMENTE ACIDO	USG
LQ-1111	40.7	42	0.071	0.02	0.811	0.671	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	USG
LQ-1111	42	43.1	0.12	0.02	0.955	0.814	-0.1932	0.0734	-0.1198	LIGERAMENTE ACIDO	USG
LQ-1111	43.1	44.2	0.03	0.02	0.816	0.651	-0.2261	0.0734	-0.1527	LIGERAMENTE ACIDO	USG
LQ-1111	44.2	46	0.202	0.02	1.67	1.59	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1111	46	47	0.306	0.02	1.64	1.34	-0.411	0.0734	-0.3376	LIGERAMENTE ACIDO	USG
LQ-1111	47	48	0.024	0.02	1.23	1.08	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	USG
LQ-1111	48	50	0.074	0.02	0.978	0.852	-0.1726	0.0734	-0.0992	INERTE	USG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1111	50	52	0.056	0.02	1.07	0.909	-0.2206	0.0734	-0.1472	LIGERAMENTE ACIDO	USG
LQ-1111	52	52.6	0.028	0.02	1.22	1.02	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	USG
LQ-1111	52.6	54.2	0.277	0.02	1.64	1.42	-0.3014	0.0734	-0.228	LIGERAMENTE ACIDO	USG
LQ-1111	54.2	56	0.063	0.02	0.787	0.633	-0.211	0.0734	-0.1376	LIGERAMENTE ACIDO	LSG
LQ-1111	56	57.9	0.04	0.02	0.741	0.657	-0.1151	0.0734	-0.0417	INERTE	LSG
LQ-1111	57.9	59.9	2.66	0.121	1.92	0.816	-1.5125	0.4441	-1.0684	ACIDO	LSG
LQ-1111	59.9	62	0.12	0.02	1.42	1.17	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	LSG
LQ-1112	0	0.9	0.117	0.02	0.837	0.657	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	LSG
LQ-1112	0.9	2	0.11	0.02	1.04	0.847	-0.2644	0.0734	-0.191	LIGERAMENTE ACIDO	LSG
LQ-1112	2	3.9	0.086	0.02	1.15	0.971	-0.2452	0.0734	-0.1718	LIGERAMENTE ACIDO	LSG
LQ-1112	3.9	6	0.129	0.02	1.04	0.876	-0.2247	0.0734	-0.1513	LIGERAMENTE ACIDO	LSG
LQ-1113	2.4	4	0.181	0.02	1.13	1.13	0	0.0734	0.0734	INERTE	USG
LQ-1113	4	6	0.189	0.02	1.46	1.46	0	0.0734	0.0734	INERTE	USG
LQ-1113	6	7.3	0.098	0.02	1.71	1.71	0	0.0734	0.0734	INERTE	USG
LQ-1113	7.3	8	0.137	0.02	0.67	0.67	0	0.0734	0.0734	INERTE	USG
LQ-1113	8	10	0.065	0.02	1.16	1.16	0	0.0734	0.0734	INERTE	USG
LQ-1113	10	10.6	0.14	0.02	1.47	1.47	0	0.0734	0.0734	INERTE	USG
LQ-1113	10.6	12	0.27	0.02	1.36	1.36	0	0.0734	0.0734	INERTE	USG
LQ-1113	12	13	0.035	0.02	0.627	0.627	0	0.0734	0.0734	INERTE	USG
LQ-1113	13	14	0.02	0.02	1.51	1.51	0	0.0734	0.0734	INERTE	USG
LQ-1113	14	16	0.02	0.02	0.721	0.721	0	0.0734	0.0734	INERTE	USG
LQ-1113	16	18	0.05	0.02	1.15	1.15	0	0.0734	0.0734	INERTE	USG
LQ-1113	18	18.9	0.02	0.02	1.13	1.13	0	0.0734	0.0734	INERTE	USG
LQ-1113	18.9	20	0.02	0.02	2.21	2.13	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1113	20	22	0.021	0.02	1.54	1.54	0	0.0734	0.0734	INERTE	USG
LQ-1113	22	24	0.02	0.02	2.77	2.77	0	0.0734	0.0734	INERTE	USG
LQ-1113	24	26	0.02	0.02	1.02	0.899	-0.1658	0.0734	-0.0924	INERTE	USG
LQ-1113	26	27	0.02	0.02	0.974	0.974	0	0.0734	0.0734	INERTE	USG
LQ-1113	27	28	0.02	0.02	0.699	0.699	0	0.0734	0.0734	INERTE	USG
LQ-1113	28	30	0.02	0.02	0.936	0.91	-0.0356	0.0734	0.03778	INERTE	USG
LQ-1113	30	32.2	0.074	0.02	1.1	1.1	0	0.0734	0.0734	INERTE	USG
LQ-1113	32.2	34	0.034	0.02	0.717	0.717	0	0.0734	0.0734	INERTE	USG
LQ-1113	34	36	0.02	0.02	0.671	0.671	0	0.0734	0.0734	INERTE	USG
LQ-1113	36	38	0.02	0.02	0.659	0.659	0	0.0734	0.0734	INERTE	USG
LQ-1113	38	40	0.032	0.02	0.776	0.75	-0.0356	0.0734	0.03778	INERTE	USG
LQ-1113	40	42	0.02	0.02	1.13	1.06	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1113	42	43.8	0.02	0.02	0.757	0.757	0	0.0734	0.0734	INERTE	USG
LQ-1113	43.8	46	0.02	0.02	0.704	0.704	0	0.0734	0.0734	INERTE	USG
LQ-1113	46	48	0.02	0.02	0.735	0.7	-0.048	0.0734	0.02545	INERTE	USG
LQ-1113	48	50	0.036	0.02	0.957	0.798	-0.2178	0.0734	-0.1444	LIGERAMENTE ACIDO	USG
LQ-1113	50	52	0.032	0.02	1.28	1.21	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1113	52	53.4	0.027	0.02	1.36	1.2	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	USG
LQ-1113	53.4	54	0.032	0.02	1.21	1.01	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	USG
LQ-1113	54	56	0.032	0.02	0.651	0.509	-0.1945	0.0734	-0.1211	LIGERAMENTE ACIDO	USG
LQ-1113	56	58	0.114	0.02	0.595	0.462	-0.1822	0.0734	-0.1088	LIGERAMENTE ACIDO	USG
LQ-1113	58	60	0.059	0.02	1.05	0.789	-0.3576	0.0734	-0.2842	LIGERAMENTE ACIDO	USG
LQ-1113	60	62	0.052	0.02	0.454	0.347	-0.1466	0.0734	-0.0732	INERTE	USG
LQ-1113	62	64	0.087	0.02	0.795	0.626	-0.2315	0.0734	-0.1581	LIGERAMENTE ACIDO	USG
LQ-1113	64	66	0.045	0.02	0.663	0.49	-0.237	0.0734	-0.1636	LIGERAMENTE ACIDO	USG
LQ-1113	66	68	0.02	0.02	0.872	0.641	-0.3165	0.0734	-0.2431	LIGERAMENTE ACIDO	USG
LQ-1113	68	70	0.02	0.02	0.027	0.027	0	0.0734	0.0734	INERTE	USG
LQ-1113	70	72	0.025	0.02	0.732	0.563	-0.2315	0.0734	-0.1581	LIGERAMENTE ACIDO	USG
LQ-1113	72	74	0.951	0.02	0.753	0.576	-0.2425	0.0734	-0.1691	LIGERAMENTE ACIDO	USG
LQ-1113	74	76	0.088	0.02	0.762	0.581	-0.248	0.0734	-0.1746	LIGERAMENTE ACIDO	USG
LQ-1113	76	76.9	0.049	0.02	0.742	0.561	-0.248	0.0734	-0.1746	LIGERAMENTE ACIDO	USG
LQ-1113	76.9	78	0.184	0.02	0.954	0.69	-0.3617	0.0734	-0.2883	LIGERAMENTE ACIDO	USG
LQ-1114	0	2	0.104	0.02	0.886	0.763	-0.1685	0.0734	-0.0951	INERTE	LSG
LQ-1114	2	4	0.122	0.02	1.03	0.946	-0.1151	0.0734	-0.0417	INERTE	LSG
LQ-1114	4	6	0.085	0.02	0.987	0.874	-0.1548	0.0734	-0.0814	INERTE	LSG
LQ-1114	6	8	0.062	0.02	1.13	0.96	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	LSG
LQ-1114	8	10	0.058	0.02	0.971	0.833	-0.1891	0.0734	-0.1157	LIGERAMENTE ACIDO	LSG
LQ-1114	10	12	0.124	0.02	1.17	1.17	0	0.0734	0.0734	INERTE	LSG
LQ-1114	12	14	0.091	0.02	0.982	0.86	-0.1671	0.0734	-0.0937	INERTE	LSG
LQ-1114	14	16	0.08	0.02	1.16	1	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	LSG
LQ-1114	16	18	0.075	0.02	0.946	0.854	-0.126	0.0734	-0.0526	INERTE	LSG
LQ-1114	18	20	0.063	0.02	0.858	0.773	-0.1165	0.0734	-0.0431	INERTE	LSG
LQ-1115	0	2	0.39	0.02	1.09	1.09	0	0.0734	0.0734	INERTE	USG
LQ-1115	2	4	0.112	0.02	1.94	1.73	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	USG
LQ-1115	4	5.7	0.118	0.02	2.08	1.96	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1115	5.7	8	0.244	0.02	1.17	1.15	-0.0274	0.0734	0.046	INERTE	USG
LQ-1115	8	9.7	0.268	0.02	1.08	1.08	0	0.0734	0.0734	INERTE	USG
LQ-1115	9.7	12	0.071	0.02	1.35	1.15	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	USG
LQ-1115	12	12.7	0.068	0.02	1.02	0.962	-0.0795	0.0734	-0.0061	INERTE	USG
LQ-1115	12.7	14	0.07	0.02	0.835	0.835	0	0.0734	0.0734	INERTE	USG
LQ-1115	14	16	0.058	0.02	0.986	0.866	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1115	16	18	0.045	0.02	1.14	0.986	-0.211	0.0734	-0.1376	LIGERAMENTE ACIDO	USG
LQ-1115	18	20	0.051	0.02	0.574	0.51	-0.0877	0.0734	-0.0143	INERTE	USG
LQ-1115	20	22	0.049	0.02	0.54	0.477	-0.0863	0.0734	-0.0129	INERTE	USG
LQ-1115	22	24	0.036	0.02	0.548	0.548	0	0.0734	0.0734	INERTE	USG
LQ-1115	24	26	0.053	0.02	0.401	0.401	0	0.0734	0.0734	INERTE	USG
LQ-1115	26	28	0.048	0.02	0.268	0.268	0	0.0734	0.0734	INERTE	USG
LQ-1115	28	28.5	0.046	0.02	0.535	0.535	0	0.0734	0.0734	INERTE	USG
LQ-1115	28.5	30	0.055	0.02	0.8	0.457	-0.4699	0.0734	-0.3965	LIGERAMENTE ACIDO	LSG
LQ-1115	30	30.8	0.051	0.02	0.703	0.533	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	LSG
LQ-1115	30.8	32	0.055	0.02	1.31	0.58	-1.0001	0.0734	-0.9267	LIGERAMENTE ACIDO	LSG
LQ-1115	32	33.8	0.056	0.02	0.615	0.292	-0.4425	0.0734	-0.3691	LIGERAMENTE ACIDO	LSG
LQ-1115	33.8	36	0.052	0.02	0.48	0.441	-0.0534	0.0734	0.01997	INERTE	LSG
LQ-1115	36	37.7	0.055	0.02	1.27	1.26	-0.0137	0.0734	0.0597	INERTE	LSG
LQ-1115	37.7	40	0.081	0.02	0.842	0.821	-0.0288	0.0734	0.04463	INERTE	LSG
LQ-1115	40	42	0.102	0.02	0.922	0.922	0	0.0734	0.0734	INERTE	LSG
LQ-1115	42	43.5	0.047	0.02	0.856	0.812	-0.0603	0.0734	0.01312	INERTE	LSG
LQ-1115	43.5	44.2	0.164	0.02	0.08	0.08	0	0.0734	0.0734	INERTE	ARG
LQ-1116	0	2	0.162	0.02	1.39	1.28	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1116	2	3.45	0.171	0.02	1.32	1.32	0	0.0734	0.0734	INERTE	USG
LQ-1116	3.45	4	0.116	0.02	1.37	1.36	-0.0137	0.0734	0.0597	INERTE	USG
LQ-1116	4	6	0.151	0.02	1.14	1.14	0	0.0734	0.0734	INERTE	USG
LQ-1116	6	8	0.188	0.02	1.29	1.29	0	0.0734	0.0734	INERTE	USG
LQ-1116	8	10	0.184	0.02	1.3	1.04	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	USG
LQ-1116	10	10.6	0.143	0.02	1.25	1.2	-0.0685	0.0734	0.0049	INERTE	USG
LQ-1116	10.6	12.1	0.042	0.02	0.852	0.852	0	0.0734	0.0734	INERTE	USG
LQ-1116	12.1	14.2	0.089	0.02	1.14	1.09	-0.0685	0.0734	0.0049	INERTE	USG
LQ-1116	14.2	16	0.065	0.02	1.15	0.948	-0.2767	0.0734	-0.2033	LIGERAMENTE ACIDO	USG
LQ-1116	16	18	0.038	0.02	0.857	0.773	-0.1151	0.0734	-0.0417	INERTE	USG
LQ-1116	18	20	0.048	0.02	0.718	0.718	0	0.0734	0.0734	INERTE	USG
LQ-1116	20	22.1	0.09	0.02	0.809	0.809	0	0.0734	0.0734	INERTE	USG
LQ-1116	22.1	24	0.091	0.02	0.721	0.721	0	0.0734	0.0734	INERTE	USG
LQ-1116	24	25.8	0.088	0.02	1.32	1.32	0	0.0734	0.0734	INERTE	USG
LQ-1116	25.8	28	0.073	0.02	1.35	1.18	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	USG
LQ-1116	28	30.5	0.074	0.02	0.736	0.736	0	0.0734	0.0734	INERTE	USG
LQ-1116	30.5	32	0.046	0.02	0.883	0.883	0	0.0734	0.0734	INERTE	USG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1116	32	33.4	0.082	0.02	1.34	1.34	0	0.0734	0.0734	INERTE	USG
LQ-1116	33.4	34	0.02	0.02	0.977	0.977	0	0.0734	0.0734	INERTE	USG
LQ-1116	34	36	0.069	0.02	1.1	0.93	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	USG
LQ-1116	36	37.3	0.02	0.02	1.21	1.1	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1116	37.3	38	0.02	0.02	0.811	0.758	-0.0726	0.0734	0.00079	INERTE	USG
LQ-1116	38	40.5	0.032	0.02	1.75	1.61	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	USG
LQ-1116	40.5	42	0.036	0.02	0.785	0.785	0	0.0734	0.0734	INERTE	USG
LQ-1116	42	44	0.02	0.02	0.967	0.926	-0.0562	0.0734	0.01723	INERTE	USG
LQ-1116	44	46	0.02	0.02	1.38	1.37	-0.0137	0.0734	0.0597	INERTE	USG
LQ-1116	46	48	0.035	0.02	0.613	0.565	-0.0658	0.0734	0.00764	INERTE	USG
LQ-1116	48	48.8	0.02	0.02	0.984	0.743	-0.3302	0.0734	-0.2568	LIGERAMENTE ACIDO	USG
LQ-1116	48.8	50	0.071	0.02	1.5	1.36	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	USG
LQ-1116	50	52.2	0.049	0.02	0.979	0.942	-0.0507	0.0734	0.02271	INERTE	USG
LQ-1116	52.2	54	0.037	0.02	0.649	0.649	0	0.0734	0.0734	INERTE	USG
LQ-1116	54	56	0.027	0.02	0.903	0.839	-0.0877	0.0734	-0.0143	INERTE	USG
LQ-1116	56	58.4	0.032	0.02	0.714	0.714	0	0.0734	0.0734	INERTE	USG
LQ-1116	58.4	60	0.02	0.02	1.2	1.2	0	0.0734	0.0734	INERTE	USG
LQ-1116	60	62	0.02	0.02	0.814	0.717	-0.1329	0.0734	-0.0595	INERTE	USG
LQ-1116	62	64	0.02	0.02	0.681	0.647	-0.0466	0.0734	0.02682	INERTE	USG
LQ-1116	64	64.7	0.036	0.02	1.47	1.36	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1117	0	2	0.411	0.02	0.956	0.844	-0.1534	0.0734	-0.08	INERTE	USG
LQ-1117	2	4	0.525	0.02	0.883	0.883	0	0.0734	0.0734	INERTE	USG
LQ-1117	4	6	0.396	0.02	0.982	0.941	-0.0562	0.0734	0.01723	INERTE	USG
LQ-1117	6	7.5	0.112	0.02	0.962	0.923	-0.0534	0.0734	0.01997	INERTE	USG
LQ-1117	7.5	8	0.154	0.02	0.869	0.869	0	0.0734	0.0734	INERTE	USG
LQ-1117	8	10	0.073	0.02	1.35	1.35	0	0.0734	0.0734	INERTE	USG
LQ-1117	10	12	0.057	0.02	0.751	0.725	-0.0356	0.0734	0.03778	INERTE	USG
LQ-1117	12	14.2	0.033	0.02	0.8	0.73	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1117	14.2	15.5	0.054	0.02	0.72	0.72	0	0.0734	0.0734	INERTE	USG
LQ-1117	15.5	16	0.12	0.021	0.823	0.695	-0.1754	0.0771	-0.0983	INERTE	LSG
LQ-1117	16	18	0.042	0.02	0.622	0.595	-0.037	0.0734	0.03641	INERTE	LSG
LQ-1117	18	20	0.034	0.02	0.547	0.547	0	0.0734	0.0734	INERTE	LSG
LQ-1117	20	22	0.028	0.02	0.558	0.527	-0.0425	0.0734	0.03093	INERTE	LSG
LQ-1117	22	24	0.02	0.02	0.448	0.448	0	0.0734	0.0734	INERTE	LSG
LQ-1117	24	26	0.059	0.02	0.477	0.477	0	0.0734	0.0734	INERTE	LSG
LQ-1117	26	27.6	0.02	0.02	0.548	0.508	-0.0548	0.0734	0.0186	INERTE	LSG
LQ-1117	27.6	30	0.02	0.02	0.657	0.616	-0.0562	0.0734	0.01723	INERTE	LSG
LQ-1117	30	32	0.021	0.02	0.832	0.776	-0.0767	0.0734	-0.0033	INERTE	LSG
LQ-1118	0	2	0.304	0.02	1.17	1.04	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1118	2	4	0.194	0.02	0.925	0.729	-0.2685	0.0734	-0.1951	LIGERAMENTE ACIDO	USG
LQ-1118	4	6	0.107	0.02	1.01	0.763	-0.3384	0.0734	-0.265	LIGERAMENTE ACIDO	USG
LQ-1118	6	7.2	0.115	0.02	0.927	0.715	-0.2904	0.0734	-0.217	LIGERAMENTE ACIDO	USG
LQ-1118	7.2	8	0.038	0.02	0.298	0.218	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1118	8	10	0.02	0.02	1.04	0.771	-0.3685	0.0734	-0.2951	LIGERAMENTE ACIDO	USG
LQ-1118	10	11.7	0.02	0.02	1.23	1	-0.3151	0.0734	-0.2417	LIGERAMENTE ACIDO	USG
LQ-1118	11.7	14.1	0.02	0.02	0.929	0.719	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	USG
LQ-1118	14.1	16	0.132	0.02	0.949	0.818	-0.1795	0.0734	-0.1061	LIGERAMENTE ACIDO	USG
LQ-1118	16	17.3	0.112	0.02	1.36	1.09	-0.3699	0.0734	-0.2965	LIGERAMENTE ACIDO	USG
LQ-1118	17.3	18	0.046	0.02	0.967	0.802	-0.2261	0.0734	-0.1527	LIGERAMENTE ACIDO	USG
LQ-1118	18	18.8	0.044	0.02	1.49	1.3	-0.2603	0.0734	-0.1869	LIGERAMENTE ACIDO	USG
LQ-1118	18.8	20	0.02	0.02	0.826	0.58	-0.337	0.0734	-0.2636	LIGERAMENTE ACIDO	USG
LQ-1118	20	22	0.02	0.02	0.525	0.437	-0.1206	0.0734	-0.0472	INERTE	USG
LQ-1118	22	24	0.02	0.02	0.456	0.327	-0.1767	0.0734	-0.1033	LIGERAMENTE ACIDO	USG
LQ-1118	24	26	0.036	0.02	0.426	0.32	-0.1452	0.0734	-0.0718	INERTE	USG
LQ-1118	26	26.9	0.034	0.02	1.21	1.05	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	USG
LQ-1118	26.9	28	0.024	0.02	1.83	0.969	-1.1796	0.0734	-1.1062	ACIDO	LSG
LQ-1118	28	29	0.025	0.02	1.59	0.732	-1.1755	0.0734	-1.1021	ACIDO	LSG
LQ-1118	29	30	0.02	0.02	0.789	0.639	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	LSG
LQ-1118	30	32	0.047	0.02	0.895	0.744	-0.2069	0.0734	-0.1335	LIGERAMENTE ACIDO	LSG
LQ-1118	32	34	0.02	0.02	0.928	0.756	-0.2356	0.0734	-0.1622	LIGERAMENTE ACIDO	LSG
LQ-1119	0	2	0.219	0.02	1.23	1.17	-0.0822	0.0734	-0.0088	INERTE	USG
LQ-1119	2	4	0.238	0.02	1.18	1.18	0	0.0734	0.0734	INERTE	USG
LQ-1119	4	6	0.236	0.02	1.74	1.7	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1119	6	8	0.152	0.02	1.16	1.16	0	0.0734	0.0734	INERTE	USG
LQ-1119	8	10	0.1	0.02	1.05	1.05	0	0.0734	0.0734	INERTE	USG
LQ-1119	10	12	0.087	0.02	1	0.918	-0.1123	0.0734	-0.0389	INERTE	USG
LQ-1119	12	14	0.094	0.02	1.29	1.07	-0.3014	0.0734	-0.228	LIGERAMENTE ACIDO	USG
LQ-1119	14	14.8	0.044	0.02	0.861	0.778	-0.1137	0.0734	-0.0403	INERTE	USG
LQ-1119	14.8	16	0.122	0.02	1.22	0.915	-0.4179	0.0734	-0.3445	LIGERAMENTE ACIDO	USG
LQ-1119	16	18	0.119	0.02	2.02	1.89	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1119	18	20	0.112	0.108	1.23	1.02	-0.2877	0.3964	0.10866	LIGERAMENTE BASICO	USG
LQ-1119	20	22	0.102	0.02	1.02	0.846	-0.2384	0.0734	-0.165	LIGERAMENTE ACIDO	USG
LQ-1119	22	24	0.118	0.02	1.06	1.06	0	0.0734	0.0734	INERTE	USG
LQ-1119	24	26	0.099	0.02	1.02	1.02	0	0.0734	0.0734	INERTE	USG
LQ-1119	26	28	0.089	0.02	1.11	1.19	0.1096	0.0734	0.183	LIGERAMENTE BASICO	USG
LQ-1119	28	30	0.052	0.02	0.543	0.492	-0.0699	0.0734	0.00353	INERTE	USG
LQ-1119	30	32	0.043	0.02	0.821	0.774	-0.0644	0.0734	0.00901	INERTE	USG
LQ-1119	32	34	0.142	0.02	1.71	1.64	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1119	34	36	0.178	0.02	1.71	1.1	-0.8357	0.0734	-0.7623	LIGERAMENTE ACIDO	USG
LQ-1119	36	38	0.1	0.02	1.11	1.11	0	0.0734	0.0734	INERTE	USG
LQ-1119	38	38.6	0.066	0.02	0.651	0.588	-0.0863	0.0734	-0.0129	INERTE	USG
LQ-1119	38.6	40	0.153	0.02	1.23	1.15	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1119	40	42	0.1	0.02	1.2	0.997	-0.2781	0.0734	-0.2047	LIGERAMENTE ACIDO	USG
LQ-1119	42	44	0.039	0.02	1.11	0.861	-0.3411	0.0734	-0.2677	LIGERAMENTE ACIDO	USG
LQ-1119	44	46	0.078	0.02	0.723	0.588	-0.185	0.0734	-0.1116	LIGERAMENTE ACIDO	USG
LQ-1119	46	48	0.053	0.02	0.422	0.365	-0.0781	0.0734	-0.0047	INERTE	USG
LQ-1119	48	49.5	0.118	0.02	0.949	0.02	-1.2727	0.0734	-1.1993	ACIDO	USG
LQ-1119	49.5	50	0.036	0.02	0.714	0.515	-0.2726	0.0734	-0.1992	LIGERAMENTE ACIDO	USG
LQ-1119	50	52	0.032	0.02	0.525	0.492	-0.0452	0.0734	0.02819	INERTE	USG
LQ-1119	52	54	0.022	0.02	0.624	0.624	0	0.0734	0.0734	INERTE	USG
LQ-1119	54	56	0.035	0.02	0.713	0.68	-0.0452	0.0734	0.02819	INERTE	USG
LQ-1119	56	58	0.032	0.02	0.642	0.63	-0.0164	0.0734	0.05696	INERTE	USG
LQ-1119	58	60	0.033	0.02	0.755	0.755	0	0.0734	0.0734	INERTE	USG
LQ-1119	60	62.4	0.053	0.02	1.16	1.16	0	0.0734	0.0734	INERTE	USG
LQ-1119	62.4	64	0.038	0.02	0.904	0.873	-0.0425	0.0734	0.03093	INERTE	USG
LQ-1119	64	66	0.026	0.02	0.764	0.64	-0.1699	0.0734	-0.0965	INERTE	USG
LQ-1119	66	68	0.027	0.02	1.12	1.12	0	0.0734	0.0734	INERTE	USG
LQ-1119	68	70	0.033	0.02	1.08	1.03	-0.0685	0.0734	0.0049	INERTE	USG
LQ-1120	0	2	0.154	0.02	1.27	1.04	-0.3151	0.0734	-0.2417	LIGERAMENTE ACIDO	USG
LQ-1120	2	4	0.177	0.02	1.3	1.17	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1120	4	5.9	0.19	0.02	1.41	1.27	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	USG
LQ-1120	5.9	8	0.194	0.02	1.45	1.37	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1120	8	9.4	0.165	0.02	1.25	1.05	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	USG
LQ-1120	9.4	10	0.132	0.02	1.23	0.981	-0.3411	0.0734	-0.2677	LIGERAMENTE ACIDO	USG
LQ-1120	10	12	0.123	0.02	1.12	0.95	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	USG
LQ-1120	12	14	0.162	0.02	1.4	1.17	-0.3151	0.0734	-0.2417	LIGERAMENTE ACIDO	USG
LQ-1120	14	16	0.164	0.02	1.11	0.87	-0.3288	0.0734	-0.2554	LIGERAMENTE ACIDO	USG
LQ-1120	16	18.1	0.033	0.02	1.08	0.906	-0.2384	0.0734	-0.165	LIGERAMENTE ACIDO	USG
LQ-1120	18.1	20	0.02	0.02	1.3	1.03	-0.3699	0.0734	-0.2965	LIGERAMENTE ACIDO	USG
LQ-1120	20	22	0.023	0.02	0.926	0.768	-0.2165	0.0734	-0.1431	LIGERAMENTE ACIDO	USG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1120	22	24	0.053	0.02	1.33	1.13	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	USG
LQ-1120	24	26	0.131	0.02	1.4	1.25	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	USG
LQ-1120	26	28	0.02	0.02	1.05	0.861	-0.2589	0.0734	-0.1855	LIGERAMENTE ACIDO	USG
LQ-1120	28	30	0.02	0.02	0.677	0.541	-0.1863	0.0734	-0.1129	LIGERAMENTE ACIDO	USG
LQ-1120	30	32	0.05	0.02	1.19	1.02	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	USG
LQ-1120	32	34	0.035	0.02	1.23	1.06	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	USG
LQ-1120	34	36	0.02	0.02	1.67	1.39	-0.3836	0.0734	-0.3102	LIGERAMENTE ACIDO	USG
LQ-1120	36	38	0.025	0.02	1.47	1.41	-0.0822	0.0734	-0.0088	INERTE	USG
LQ-1120	38	38.9	0.144	0.02	1.05	0.883	-0.2288	0.0734	-0.1554	LIGERAMENTE ACIDO	USG
LQ-1120	38.9	40	0.032	0.02	0.876	0.665	-0.2891	0.0734	-0.2157	LIGERAMENTE ACIDO	USG
LQ-1120	40	40.8	0.02	0.02	0.491	0.337	-0.211	0.0734	-0.1376	LIGERAMENTE ACIDO	USG
LQ-1120	40.8	42	0.041	0.02	1.28	1.02	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	USG
LQ-1120	42	44	0.02	0.02	0.786	0.632	-0.211	0.0734	-0.1376	LIGERAMENTE ACIDO	USG
LQ-1120	44	46	0.02	0.02	1.24	1.01	-0.3151	0.0734	-0.2417	LIGERAMENTE ACIDO	USG
LQ-1120	46	48	0.02	0.02	1.1	0.846	-0.348	0.0734	-0.2746	LIGERAMENTE ACIDO	USG
LQ-1120	48	50	0.02	0.02	0.794	0.598	-0.2685	0.0734	-0.1951	LIGERAMENTE ACIDO	USG
LQ-1120	50	52	0.02	0.02	0.767	0.584	-0.2507	0.0734	-0.1773	LIGERAMENTE ACIDO	USG
LQ-1120	52	54	0.02	0.02	0.839	0.621	-0.2987	0.0734	-0.2253	LIGERAMENTE ACIDO	USG
LQ-1120	54	56	0.041	0.02	1.2	0.966	-0.3206	0.0734	-0.2472	LIGERAMENTE ACIDO	USG
LQ-1121	0	2	0.162	0.02	0.758	0.626	-0.1808	0.0734	-0.1074	LIGERAMENTE ACIDO	
LQ-1121	2	4	0.102	0.02	0.853	0.755	-0.1343	0.0734	-0.0609	INERTE	
LQ-1121	4	6	0.078	0.02	0.798	0.702	-0.1315	0.0734	-0.0581	INERTE	
LQ-1121	6	6.5	0.068	0.02	1.33	1.13	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	
LQ-1121	6.5	8	0.045	0.02	0.717	0.584	-0.1822	0.0734	-0.1088	LIGERAMENTE ACIDO	
LQ-1121	8	10	0.02	0.02	0.705	0.548	-0.2151	0.0734	-0.1417	LIGERAMENTE ACIDO	
LQ-1121	10	12	0.02	0.02	0.812	0.652	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	
LQ-1121	12	13.7	0.023	0.02	0.756	0.655	-0.1384	0.0734	-0.065	INERTE	
LQ-1121	13.7	16	0.032	0.02	0.872	0.755	-0.1603	0.0734	-0.0869	INERTE	
LQ-1121	16	18	0.02	0.02	0.793	0.653	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	
LQ-1121	18	19.7	0.023	0.02	0.823	0.634	-0.2589	0.0734	-0.1855	LIGERAMENTE ACIDO	
LQ-1121	19.7	22	0.042	0.02	0.965	0.845	-0.1644	0.0734	-0.091	INERTE	
LQ-1121	22	24	0.079	0.02	0.658	0.561	-0.1329	0.0734	-0.0595	INERTE	
LQ-1121	24	26	0.035	0.02	0.677	0.559	-0.1617	0.0734	-0.0883	INERTE	
LQ-1121	26	28	0.026	0.02	0.664	0.584	-0.1096	0.0734	-0.0362	INERTE	
LQ-1121	28	30	0.02	0.02	0.876	0.769	-0.1466	0.0734	-0.0732	INERTE	
LQ-1121	30	31	0.02	0.02	0.846	0.673	-0.237	0.0734	-0.1636	LIGERAMENTE ACIDO	
LQ-1121	31	32	0.567	0.02	1.08	0.941	-0.1904	0.0734	-0.117	LIGERAMENTE ACIDO	
LQ-1121	32	32.6	0.656	0.02	1.13	0.997	-0.1822	0.0734	-0.1088	LIGERAMENTE ACIDO	
LQ-1121	32.6	34	0.031	0.02	1.5	1.37	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	
LQ-1121	34	35.5	0.023	0.02	0.59	0.503	-0.1192	0.0734	-0.0458	INERTE	
LQ-1121	35.5	36	0.656	0.02	0.922	0.78	-0.1945	0.0734	-0.1211	LIGERAMENTE ACIDO	
LQ-1121	36	38	0.264	0.02	1.05	0.841	-0.2863	0.0734	-0.2129	LIGERAMENTE ACIDO	
LQ-1121	38	38.7	0.604	0.02	0.898	0.765	-0.1822	0.0734	-0.1088	LIGERAMENTE ACIDO	
LQ-1121	38.7	40	0.03	0.02	0.484	0.391	-0.1274	0.0734	-0.054	INERTE	
LQ-1121	40	41.9	0.02	0.02	1.14	0.975	-0.2261	0.0734	-0.1527	LIGERAMENTE ACIDO	
LQ-1121	41.9	44.2	0.46	0.02	1.11	0.964	-0.2	0.0734	-0.1266	LIGERAMENTE ACIDO	
LQ-1121	44.2	46	0.057	0.02	0.991	0.812	-0.2452	0.0734	-0.1718	LIGERAMENTE ACIDO	
LQ-1121	46	48	0.02	0.02	1.15	0.939	-0.2891	0.0734	-0.2157	LIGERAMENTE ACIDO	
LQ-1121	48	50	0.073	0.02	0.435	0.37	-0.0891	0.0734	-0.0157	INERTE	
LQ-1121	50	52	0.02	0.02	0.955	0.808	-0.2014	0.0734	-0.128	LIGERAMENTE ACIDO	
LQ-1122	0	2	0.208	0.02	1.15	1.15	0	0.0734	0.0734	INERTE	USG
LQ-1122	2	4	0.185	0.02	0.855	0.834	-0.0288	0.0734	0.04463	INERTE	USG
LQ-1122	4	6	0.194	0.02	1.31	1.16	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	USG
LQ-1122	6	6.65	0.129	0.02	1.75	1.48	-0.3699	0.0734	-0.2965	LIGERAMENTE ACIDO	USG
LQ-1122	6.65	8	0.049	0.02	1.58	0.938	-0.8795	0.0734	-0.8061	LIGERAMENTE ACIDO	USG
LQ-1122	8	10	0.052	0.02	1.85	1.48	-0.5069	0.0734	-0.4335	LIGERAMENTE ACIDO	USG
LQ-1122	10	12	0.113	0.02	1.39	1.25	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	USG
LQ-1122	12	14	0.121	0.02	1.92	1.53	-0.5343	0.0734	-0.4609	LIGERAMENTE ACIDO	USG
LQ-1122	14	16	0.085	0.02	1.45	1.45	0	0.0734	0.0734	INERTE	USG
LQ-1122	16	17.1	0.036	0.02	1.06	0.979	-0.111	0.0734	-0.0376	INERTE	USG
LQ-1122	17.1	18	0.02	0.02	1.31	1.12	-0.2603	0.0734	-0.1869	LIGERAMENTE ACIDO	USG
LQ-1122	18	20	0.023	0.02	0.741	0.74	-0.0014	0.0734	0.07203	INERTE	USG
LQ-1122	20	22	0.09	0.02	0.977	0.97	-0.0096	0.0734	0.06381	INERTE	USG
LQ-1122	22	24	0.05	0.02	1.21	1.21	0	0.0734	0.0734	INERTE	USG
LQ-1122	24	26	0.109	0.02	0.96	0.96	0	0.0734	0.0734	INERTE	USG
LQ-1122	26	28	0.072	0.02	0.723	0.72	-0.0041	0.0734	0.06929	INERTE	USG
LQ-1122	28	30.1	0.179	0.02	0.778	0.735	-0.0589	0.0734	0.01449	INERTE	USG
LQ-1122	30.1	31.6	0.198	0.02	0.96	0.96	0	0.0734	0.0734	INERTE	USG
LQ-1122	31.6	33.4	0.052	0.02	1.1	1.1	0	0.0734	0.0734	INERTE	USG
LQ-1122	33.4	34	0.027	0.02	0.586	0.565	-0.0288	0.0734	0.04463	INERTE	USG
LQ-1122	34	36	0.029	0.02	0.815	0.784	-0.0425	0.0734	0.03093	INERTE	USG
LQ-1122	36	38	0.05	0.02	0.652	0.631	-0.0288	0.0734	0.04463	INERTE	USG
LQ-1122	38	40	0.033	0.02	1.01	0.975	-0.048	0.0734	0.02545	INERTE	USG
LQ-1122	40	42	0.026	0.02	0.737	0.643	-0.1288	0.0734	-0.0554	INERTE	USG
LQ-1122	42	44	0.023	0.02	0.464	0.46	-0.0055	0.0734	0.06792	INERTE	USG
LQ-1122	44	45.3	0.021	0.02	0.342	0.34	-0.0027	0.0734	0.07066	INERTE	USG
LQ-1122	45.3	46	0.074	0.02	0.871	0.87	-0.0014	0.0734	0.07203	INERTE	USG
LQ-1122	46	48	0.208	0.02	1.13	1.13	0	0.0734	0.0734	INERTE	USG
LQ-1122	48	49.4	0.061	0.02	0.666	0.66	-0.0082	0.0734	0.06518	INERTE	USG
LQ-1122	49.4	50	0.023	0.02	0.722	0.646	-0.1041	0.0734	-0.0307	INERTE	USG
LQ-1122	50	52	0.02	0.02	0.538	0.452	-0.1178	0.0734	-0.0444	INERTE	USG
LQ-1122	52	54	0.025	0.02	1.03	0.845	-0.2535	0.0734	-0.1801	LIGERAMENTE ACIDO	USG
LQ-1122	54	56	0.021	0.02	0.62	0.506	-0.1562	0.0734	-0.0828	INERTE	USG
LQ-1122	56	57.3	0.021	0.02	0.378	0.302	-0.1041	0.0734	-0.0307	INERTE	USG
LQ-1122	57.3	58	0.103	0.02	0.997	0.496	-0.6864	0.0734	-0.613	LIGERAMENTE ACIDO	USG
LQ-1122	58	59.6	0.069	0.02	0.534	0.316	-0.2987	0.0734	-0.2253	LIGERAMENTE ACIDO	LSG
LQ-1122	59.6	62	0.121	0.02	0.407	0.225	-0.2493	0.0734	-0.1759	LIGERAMENTE ACIDO	LSG
LQ-1122	62	64	0.109	0.02	0.106	0.1	-0.0082	0.0734	0.06518	INERTE	LSG
LQ-1123	0	1	0.279	0.02	1.71	1.49	-0.3014	0.0734	-0.228	LIGERAMENTE ACIDO	USG
LQ-1123	1	2	0.175	0.02	1.08	1.03	-0.0685	0.0734	0.0049	INERTE	USG
LQ-1123	2	4	0.167	0.02	0.979	0.94	-0.0534	0.0734	0.01997	INERTE	USG
LQ-1123	4	6	0.163	0.02	1.77	1.7	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1123	6	8	0.214	0.02	1.78	1.66	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1123	8	9.3	0.205	0.02	1.7	1.63	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1123	9.3	10	0.132	0.02	1.05	1.02	-0.0411	0.0734	0.0323	INERTE	USG
LQ-1123	10	12	0.052	0.02	1.09	0.872	-0.2987	0.0734	-0.2253	LIGERAMENTE ACIDO	USG
LQ-1123	12	14.2	0.099	0.02	1.91	1.78	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1123	14.2	16	0.089	0.02	1.83	1.71	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1123	16	17	0.064	0.02	0.67	0.636	-0.0466	0.0734	0.02682	INERTE	USG
LQ-1123	17	18	0.054	0.02	1.12	1.04	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1123	18	20	0.052	0.02	1.64	1.49	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	USG
LQ-1123	20	22	0.026	0.02	2.33	1.92	-0.5617	0.0734	-0.4883	LIGERAMENTE ACIDO	USG
LQ-1123	22	24	0.03	0.02	2.31	1.9	-0.5617	0.0734	-0.4883	LIGERAMENTE ACIDO	USG
LQ-1123	24	24.8	0.042	0.02	2.02	1.62	-0.548	0.0734	-0.4746	LIGERAMENTE ACIDO	USG
LQ-1123	24.8	26	0.037	0.02	1.88	1.62	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	USG
LQ-1123	26	28	0.072	0.02	1.45	1.39	-0.0822	0.0734	-0.0088	INERTE	USG
LQ-1123	28	30	0.082	0.02	1.65	1.54	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1123	30	32	0.089	0.02	1.61	1.54	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1123	32	34	0.101	0.02	0.881	0.881	0	0.0734	0.0734	INERTE	USG
LQ-1123	34	36	0.353	0.02	1.16	1.01	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	USG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1123	36	36.8	0.201	0.02	1.35	1.33	-0.0274	0.0734	0.046	INERTE	USG
LQ-1123	36.8	38.3	0.151	0.02	1.41	1.12	-0.3973	0.0734	-0.3239	LIGERAMENTE ACIDO	USG
LQ-1123	38.3	40	0.055	0.02	0.612	0.621	0.01233	0.0734	0.08573	INERTE	USG
LQ-1123	40	42	0.037	0.02	0.965	0.883	-0.1123	0.0734	-0.0389	INERTE	USG
LQ-1123	42	44	0.024	0.02	1.45	1.3	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	USG
LQ-1123	44	46	0.024	0.02	0.852	0.722	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1123	46	48	0.04	0.02	0.977	0.768	-0.2863	0.0734	-0.2129	LIGERAMENTE ACIDO	USG
LQ-1123	48	50	0.04	0.02	0.844	0.788	-0.0767	0.0734	-0.0033	INERTE	USG
LQ-1123	50	52	0.029	0.02	0.593	0.471	-0.1671	0.0734	-0.0937	INERTE	USG
LQ-1123	52	54	0.02	0.02	0.5	0.418	-0.1123	0.0734	-0.0389	INERTE	USG
LQ-1123	54	56.2	0.087	0.048	1.16	1.02	-0.1918	0.1762	-0.0156	INERTE	USG
LQ-1123	56.2	57.5	0.107	0.02	1.17	1.17	0	0.0734	0.0734	INERTE	USG
LQ-1123	57.5	58	0.029	0.02	0.36	0.324	-0.0493	0.0734	0.02408	INERTE	USG
LQ-1123	58	60	0.031	0.02	0.512	0.459	-0.0726	0.0734	0.00079	INERTE	USG
LQ-1124	0	1.5	0.245	0.02	0.972	0.879	-0.1274	0.0734	-0.054	INERTE	USG
LQ-1124	1.5	2	0.53	0.02	0.8	0.785	-0.0206	0.0734	0.05285	INERTE	USG
LQ-1124	2	4	0.128	0.02	1.04	0.905	-0.185	0.0734	-0.1116	LIGERAMENTE ACIDO	USG
LQ-1124	4	5.8	0.123	0.02	0.957	0.82	-0.1877	0.0734	-0.1143	LIGERAMENTE ACIDO	USG
LQ-1124	5.8	7.8	0.144	0.02	0.842	0.777	-0.0891	0.0734	-0.0157	INERTE	USG
LQ-1124	7.8	10	0.039	0.02	1.02	0.941	-0.1082	0.0734	-0.0348	INERTE	USG
LQ-1124	10	11.3	0.041	0.02	0.857	0.804	-0.0726	0.0734	0.00079	INERTE	USG
LQ-1124	11.3	12	0.024	0.02	1.06	0.86	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	USG
LQ-1124	12	13.3	0.02	0.02	0.589	0.506	-0.1137	0.0734	-0.0403	INERTE	USG
LQ-1124	13.3	14	0.057	0.02	0.878	0.77	-0.148	0.0734	-0.0746	INERTE	USG
LQ-1124	14	15.3	0.093	0.02	1.47	1.05	-0.5754	0.0734	-0.502	LIGERAMENTE ACIDO	USG
LQ-1124	15.3	16	0.02	0.02	0.354	0.314	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1124	16	18	0.089	0.02	0.761	0.742	-0.026	0.0734	0.04737	INERTE	USG
LQ-1124	18	20.1	0.055	0.02	0.829	0.713	-0.1589	0.0734	-0.0855	INERTE	USG
LQ-1124	20.1	22	0.132	0.02	1.42	0.579	-1.1522	0.0734	-1.0788	ACIDO	USG
LQ-1124	22	22.7	0.136	0.02	0.853	0.746	-0.1466	0.0734	-0.0732	INERTE	USG
LQ-1124	22.7	24	0.029	0.02	1.27	1	-0.3699	0.0734	-0.2965	LIGERAMENTE ACIDO	USG
LQ-1124	24	26	0.069	0.02	0.695	0.623	-0.0986	0.0734	-0.0252	INERTE	USG
LQ-1124	26	28	0.024	0.02	1.04	0.889	-0.2069	0.0734	-0.1335	LIGERAMENTE ACIDO	USG
LQ-1124	28	28.6	0.02	0.02	0.433	0.424	-0.0123	0.0734	0.06107	INERTE	USG
LQ-1124	28.6	30.5	0.336	0.02	0.705	0.635	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1124	30.5	32	0.065	0.02	0.754	0.64	-0.1562	0.0734	-0.0828	INERTE	USG
LQ-1124	32	33.8	0.073	0.02	0.823	0.697	-0.1726	0.0734	-0.0992	INERTE	USG
LQ-1124	33.8	36	0.035	0.02	0.718	0.635	-0.1137	0.0734	-0.0403	INERTE	LSG
LQ-1124	36	38	0.02	0.02	0.817	0.696	-0.1658	0.0734	-0.0924	INERTE	LSG
LQ-1124	38	40	0.02	0.02	0.742	0.66	-0.1123	0.0734	-0.0389	INERTE	LSG
LQ-1124	40	42	0.02	0.02	0.589	0.509	-0.1096	0.0734	-0.0362	INERTE	LSG
LQ-1124	42	44	0.02	0.02	1.26	1.02	-0.3288	0.0734	-0.2554	LIGERAMENTE ACIDO	LSG
LQ-1124	44	46	0.02	0.02	0.957	0.93	-0.037	0.0734	0.03641	INERTE	LSG
LQ-1124	46	47.6	0.096	0.02	0.833	0.782	-0.0699	0.0734	0.00353	INERTE	LSG
LQ-1124	47.6	50	0.032	0.02	1.16	1.04	-0.1644	0.0734	-0.091	INERTE	LSG
LQ-1124	50	52	0.066	0.02	1.15	1.05	-0.137	0.0734	-0.0636	INERTE	LSG
LQ-1124	52	53	0.024	0.02	0.984	0.918	-0.0904	0.0734	-0.017	INERTE	LSG
LQ-1124	53	54	0.02	0.02	0.777	0.71	-0.0918	0.0734	-0.0184	INERTE	LSG
LQ-1124	54	56.2	0.075	0.02	0.899	0.835	-0.0877	0.0734	-0.0143	INERTE	LSG
LQ-1124	56.2	58	0.028	0.02	0.669	0.632	-0.0507	0.0734	0.02271	INERTE	LSG
LQ-1124	58	60	0.047	0.02	1.08	0.855	-0.3083	0.0734	-0.2349	LIGERAMENTE ACIDO	LSG
LQ-1124	60	62	0.02	0.02	0.64	0.594	-0.063	0.0734	0.01038	INERTE	LSG
LQ-1124	62	64	0.02	0.02	0.491	0.486	-0.0069	0.0734	0.06655	INERTE	LSG
LQ-1127	0	1.1	0.233	0.02	1.42	1.23	-0.2603	0.0734	-0.1869	LIGERAMENTE ACIDO	USG
LQ-1127	1.1	1.8	1.69	0.02	1.7	1.5	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	USG
LQ-1127	1.8	4	0.268	0.02	1.3	0.977	-0.4425	0.0734	-0.3691	LIGERAMENTE ACIDO	USG
LQ-1128	0	2	0.224	0.02	1.33	1.25	-0.1096	0.0734	-0.0362	INERTE	LSG
LQ-1128	2	4	0.227	0.02	1.44	1.24	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	LSG
LQ-1129	0	2	0.513	0.02	1.17	1.16	-0.0137	0.0734	0.0597	INERTE	USG
LQ-1129	2	4	0.379	0.02	0.981	0.932	-0.0671	0.0734	0.00627	INERTE	USG
LQ-1133	0	2	0.124	0.02	0.531	0.479	-0.0712	0.0734	0.00216	INERTE	USG
LQ-1133	2	4	0.19	0.02	0.544	0.455	-0.1219	0.0734	-0.0485	INERTE	USG
LQ-1133	4	6.2	0.231	0.02	0.566	0.472	-0.1288	0.0734	-0.0554	INERTE	USG
LQ-1133	6.2	8.5	0.051	0.02	0.94	0.826	-0.1562	0.0734	-0.0828	INERTE	USG
LQ-1133	8.5	10.6	0.068	0.02	0.713	0.62	-0.1274	0.0734	-0.054	INERTE	USG
LQ-1133	10.6	12.5	0.302	0.02	0.585	0.488	-0.1329	0.0734	-0.0595	INERTE	USG
LQ-1133	12.5	14.6	0.285	0.02	0.612	0.557	-0.0754	0.0734	-0.002	INERTE	USG
LQ-1133	14.6	16.6	0.101	0.02	0.743	0.624	-0.163	0.0734	-0.0896	INERTE	USG
LQ-1133	16.6	18	0.039	0.02	1.197	1.061	-0.1863	0.0734	-0.1129	LIGERAMENTE ACIDO	USG
LQ-1133	18	19.1	0.075	0.02	0.611	0.497	-0.1562	0.0734	-0.0828	INERTE	USG
LQ-1133	19.1	20.9	0.038	0.02	1.081	0.906	-0.2398	0.0734	-0.1664	LIGERAMENTE ACIDO	USG
LQ-1133	20.9	22	0.046	0.02	2.307	1.64	-0.9138	0.0734	-0.8404	LIGERAMENTE ACIDO	USG
LQ-1133	22	23.4	0.042	0.02	0.858	0.744	-0.1562	0.0734	-0.0828	INERTE	USG
LQ-1133	23.4	25	0.073	0.02	0.893	0.831	-0.0849	0.0734	-0.0115	INERTE	USG
LQ-1133	25	26	0.02	0.02	1.18	1.036	-0.1973	0.0734	-0.1239	LIGERAMENTE ACIDO	USG
LQ-1133	26	27.9	0.02	0.02	1.322	1.333	0.01507	0.0734	0.08847	INERTE	USG
LQ-1133	27.9	29	0.02	0.02	2.274	1.882	-0.537	0.0734	-0.4636	LIGERAMENTE ACIDO	USG
LQ-1133	29	30.6	0.02	0.02	1.527	1.269	-0.3535	0.0734	-0.2801	LIGERAMENTE ACIDO	USG
LQ-1133	30.6	31.9	0.02	0.02	0.976	0.91	-0.0904	0.0734	-0.017	INERTE	USG
LQ-1133	31.9	34	0.02	0.02	1.179	1.078	-0.1384	0.0734	-0.065	INERTE	USG
LQ-1133	34	35	0.02	0.02	0.835	0.752	-0.1137	0.0734	-0.0403	INERTE	USG
LQ-1133	35	36	0.02	0.02	0.666	0.595	-0.0973	0.0734	-0.0239	INERTE	USG
LQ-1133	36	38	0.02	0.02	0.647	0.52	-0.174	0.0734	-0.1006	LIGERAMENTE ACIDO	USG
LQ-1133	38	40	0.02	0.02	0.59	0.479	-0.1521	0.0734	-0.0787	INERTE	USG
LQ-1133	40	42.5	0.02	0.02	0.677	0.522	-0.2124	0.0734	-0.139	LIGERAMENTE ACIDO	USG
LQ-1133	42.5	44.8	0.02	0.02	0.919	0.762	-0.2151	0.0734	-0.1417	LIGERAMENTE ACIDO	USG
LQ-1133	44.8	46	0.028	0.02	0.927	0.798	-0.1767	0.0734	-0.1033	LIGERAMENTE ACIDO	USG
LQ-1133	46	47.8	0.028	0.02	1.221	0.919	-0.4137	0.0734	-0.3403	LIGERAMENTE ACIDO	USG
LQ-1133	47.8	50	0.02	0.02	0.995	0.886	-0.1493	0.0734	-0.0759	INERTE	USG
LQ-1133	50	51	0.02	0.02	0.622	0.547	-0.1028	0.0734	-0.0294	INERTE	USG
LQ-1133	51	52.7	0.02	0.02	0.712	0.653	-0.0808	0.0734	-0.0074	INERTE	USG
LQ-1133	52.7	54	0.02	0.02	1.878	1.433	-0.6097	0.0734	-0.5363	LIGERAMENTE ACIDO	USG
LQ-1133	54	56	0.02	0.02	0.782	0.624	-0.2165	0.0734	-0.1431	LIGERAMENTE ACIDO	USG
LQ-1133	56	58.4	0.02	0.02	0.987	0.74	-0.3384	0.0734	-0.265	LIGERAMENTE ACIDO	USG
LQ-1133	58.4	59.4	0.02	0.02	0.669	0.549	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1133	59.4	61	0.02	0.02	0.986	0.822	-0.2247	0.0734	-0.1513	LIGERAMENTE ACIDO	LSG
LQ-1133	61	62.4	0.06	0.02	1.409	1.217	-0.263	0.0734	-0.1896	LIGERAMENTE ACIDO	LSG
LQ-1133	62.4	64	0.02	0.02	1.141	0.922	-0.3	0.0734	-0.2266	LIGERAMENTE ACIDO	LSG
LQ-1133	64	66	0.03	0.02	0.888	0.741	-0.2014	0.0734	-0.128	LIGERAMENTE ACIDO	LSG
LQ-1134	0	1.2	2.049	0.02	0.924	0.924	0	0.0734	0.0734	INERTE	USG
LQ-1134	1.2	2.5	0.272	0.02	1.692	1.62	-0.0986	0.0734	-0.0252	INERTE	USG
LQ-1134	2.5	3.9	0.239	0.02	2.013	1.6	-0.5658	0.0734	-0.4924	LIGERAMENTE ACIDO	USG
LQ-1134	3.9	5.5	0.02	0.02	2.062	1.983	-0.1082	0.0734	-0.0348	INERTE	USG
LQ-1134	5.5	7.7	0.027	0.02	1.373	1.201	-0.2356	0.0734	-0.1622	LIGERAMENTE ACIDO	USG
LQ-1134	7.7	9.05	0.02	0.02	1.175	1.175	0	0.0734	0.0734	INERTE	USG
LQ-1134	9.05	10.5	0.147	0.02	1.487	1.427	-0.0822	0.0734	-0.0088	INERTE	USG
LQ-1134	10.5	11.8	0.072	0.02	1.203	1.203	0	0.0734	0.0734	INERTE	USG
LQ-1134	11.8	13	0.071	0.02	1.531	1.339	-0.263	0.0734	-0.1896	LIGERAMENTE ACIDO	USG
LQ-1134	13	14.6	0.083	0.02	2.762	2.501	-0.3576	0.0734	-0.2842	LIGERAMENTE ACIDO	USG
LQ-1134	14.6	16.5	0.054	0.02	1.172	1.147	-0.0343	0.0734	0.03915	INERTE	USG

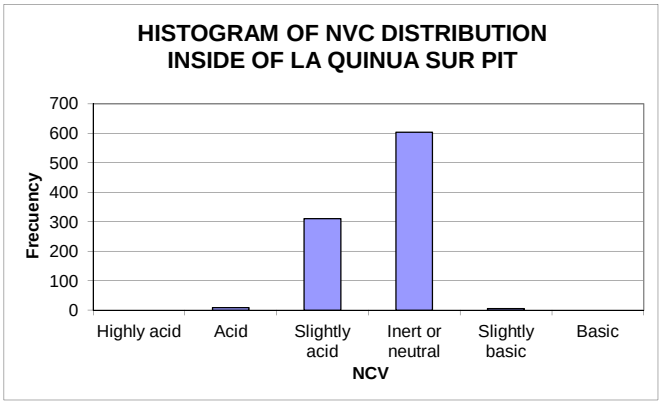
Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1134	16.5	18.9	0.041	0.02	0.995	0.957	-0.0521	0.0734	0.02134	INERTE	USG
LQ-1134	18.9	20.7	0.074	0.02	0.821	0.787	-0.0466	0.0734	0.02682	INERTE	USG
LQ-1134	20.7	22.5	0.06	0.02	0.917	0.894	-0.0315	0.0734	0.04189	INERTE	USG
LQ-1134	22.5	24	0.027	0.02	1.136	1.136	0	0.0734	0.0734	INERTE	USG
LQ-1134	24	26	0.02	0.02	1.047	0.903	-0.1973	0.0734	-0.1239	LIGERAMENTE ACIDO	USG
LQ-1134	26	28	0.02	0.02	1.231	1.196	-0.048	0.0734	0.02545	INERTE	USG
LQ-1134	28	30	0.027	0.02	1.418	1.146	-0.3726	0.0734	-0.2992	LIGERAMENTE ACIDO	USG
LQ-1134	30	32	0.02	0.02	0.77	0.693	-0.1055	0.0734	-0.0321	INERTE	USG
LQ-1134	32	34.1	0.02	0.02	1.176	1.176	0	0.0734	0.0734	INERTE	USG
LQ-1134	34.1	35.5	0.123	0.02	1.158	1.158	0	0.0734	0.0734	INERTE	USG
LQ-1134	35.5	38	0.02	0.02	0.943	0.907	-0.0493	0.0734	0.02408	INERTE	USG
LQ-1134	38	40	0.02	0.02	0.878	0.843	-0.048	0.0734	0.02545	INERTE	USG
LQ-1134	40	42	0.02	0.02	1.024	0.931	-0.1274	0.0734	-0.054	INERTE	USG
LQ-1134	42	44	0.02	0.02	0.771	0.716	-0.0754	0.0734	-0.002	INERTE	USG
LQ-1134	44	46	0.02	0.02	0.896	0.767	-0.1767	0.0734	-0.1033	LIGERAMENTE ACIDO	USG
LQ-1134	46	48	0.02	0.02	0.89	0.727	-0.2233	0.0734	-0.1499	LIGERAMENTE ACIDO	USG
LQ-1134	48	50	0.041	0.02	1.012	0.801	-0.2891	0.0734	-0.2157	LIGERAMENTE ACIDO	USG
LQ-1134	50	52	0.026	0.02	0.997	0.872	-0.1713	0.0734	-0.0979	INERTE	USG
LQ-1134	52	54	0.02	0.02	0.596	0.54	-0.0767	0.0734	-0.0033	INERTE	USG
LQ-1134	54	56	0.02	0.02	0.58	0.539	-0.0562	0.0734	0.01723	INERTE	USG
LQ-1134	56	57.4	0.029	0.02	0.64	0.582	-0.0795	0.0734	-0.0061	INERTE	USG
LQ-1134	57.4	58.5	0.031	0.02	0.471	0.46	-0.0151	0.0734	0.05833	INERTE	USG
LQ-1134	58.5	60	0.072	0.02	0.876	0.844	-0.0438	0.0734	0.02956	INERTE	USG
LQ-1135	0	0.7	3.309	0.029	0.728	0.703	-0.0343	0.1064	0.07218	INERTE	USG
LQ-1135	0.7	2	0.641	0.02	1.54	1.45	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1135	2	2.75	0.339	0.02	1.399	1.392	-0.0096	0.0734	0.06381	INERTE	USG
LQ-1135	2.75	5.75	0.251	0.02	1.176	1.147	-0.0397	0.0734	0.03367	INERTE	USG
LQ-1135	5.75	7.45	0.173	0.02	1.035	0.994	-0.0562	0.0734	0.01723	INERTE	USG
LQ-1135	7.45	9.1	0.581	0.02	0.648	0.639	-0.0123	0.0734	0.06107	INERTE	USG
LQ-1135	9.1	11.1	0.099	0.02	0.937	0.909	-0.0384	0.0734	0.03504	INERTE	USG
LQ-1135	11.1	12.5	0.02	0.02	1.118	0.964	-0.211	0.0734	-0.1376	LIGERAMENTE ACIDO	USG
LQ-1135	12.5	14	0.02	0.02	1.459	1.21	-0.3411	0.0734	-0.2677	LIGERAMENTE ACIDO	USG
LQ-1135	14	15.5	0.02	0.02	0.73	0.64	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1135	15.5	16.5	0.051	0.02	1.15	0.978	-0.2356	0.0734	-0.1622	LIGERAMENTE ACIDO	USG
LQ-1135	16.5	18	0.02	0.02	1.258	1.167	-0.1247	0.0734	-0.0513	INERTE	USG
LQ-1135	18	19.2	0.02	0.02	0.965	0.89	-0.1028	0.0734	-0.0294	INERTE	USG
LQ-1135	19.2	20.8	0.055	0.02	0.718	0.617	-0.1384	0.0734	-0.065	INERTE	USG
LQ-1135	20.8	21.9	0.02	0.02	0.62	0.58	-0.0548	0.0734	0.0186	INERTE	LSG
LQ-1135	21.9	23.5	0.031	0.02	0.517	0.513	-0.0055	0.0734	0.06792	INERTE	LSG
LQ-1135	23.5	24.5	0.02	0.02	0.702	0.549	-0.2096	0.0734	-0.1362	LIGERAMENTE ACIDO	LSG
LQ-1135	24.5	26	0.03	0.02	0.404	0.365	-0.0534	0.0734	0.01997	INERTE	LSG
LQ-1135	26	27.4	0.02	0.02	0.649	0.616	-0.0452	0.0734	0.02819	INERTE	LSG
LQ-1135	27.4	28.5	0.039	0.02	1.255	0.722	-0.7302	0.0734	-0.6568	LIGERAMENTE ACIDO	LSG
LQ-1135	28.5	29.6	0.031	0.02	1.112	0.774	-0.4631	0.0734	-0.3897	LIGERAMENTE ACIDO	LSG
LQ-1135	29.6	32	0.021	0.02	0.903	0.884	-0.026	0.0734	0.04737	INERTE	LSG
LQ-1135	32	34.2	0.02	0.02	1.6	1.459	-0.1932	0.0734	-0.1198	LIGERAMENTE ACIDO	LSG
LQ-1135	34.2	36.5	0.041	0.02	0.099	0.099	0	0.0734	0.0734	INERTE	INT
LQ-1135A	0	12	0.266	0.02	1.26	1.084	-0.2411	0.0734	-0.1677	LIGERAMENTE ACIDO	USG
LQ-1135A	12	24	0.078	0.02	0.765	0.765	0	0.0734	0.0734	INERTE	USG
LQ-1135A	24	34.8	0.053	0.02	0.728	0.639	-0.1219	0.0734	-0.0485	INERTE	USG
LQ-1136	0	1	0.488	0.02	2.239	2.224	-0.0206	0.0734	0.05285	INERTE	USG
LQ-1136	1	2	0.145	0.02	1.47	1.311	-0.2178	0.0734	-0.1444	LIGERAMENTE ACIDO	USG
LQ-1136	2	4.1	0.197	0.02	0.906	0.857	-0.0671	0.0734	0.00627	INERTE	USG
LQ-1136	4.1	5.45	0.187	0.02	1.027	0.989	-0.0521	0.0734	0.02134	INERTE	USG
LQ-1136	5.45	7.6	0.082	0.02	0.963	0.935	-0.0384	0.0734	0.03504	INERTE	USG
LQ-1136	7.6	8.6	0.104	0.02	0.794	0.771	-0.0315	0.0734	0.04189	INERTE	USG
LQ-1136	8.6	10	0.09	0.02	1.101	1.047	-0.074	0.0734	-0.0006	INERTE	USG
LQ-1136	10	12	0.089	0.02	0.979	0.941	-0.0521	0.0734	0.02134	INERTE	USG
LQ-1136	12	13.1	0.119	0.02	0.833	0.826	-0.0096	0.0734	0.06381	INERTE	USG
LQ-1136	13.1	15	0.083	0.02	0.924	0.848	-0.1041	0.0734	-0.0307	INERTE	USG
LQ-1136	15	16.9	0.057	0.02	1.562	1.383	-0.2452	0.0734	-0.1718	LIGERAMENTE ACIDO	USG
LQ-1136	16.9	18	0.04	0.02	1.234	1.053	-0.248	0.0734	-0.1746	LIGERAMENTE ACIDO	USG
LQ-1136	18	20.5	0.062	0.02	1.527	1.346	-0.248	0.0734	-0.1746	LIGERAMENTE ACIDO	USG
LQ-1136	20.5	22.6	0.041	0.02	1.249	1.019	-0.3151	0.0734	-0.2417	LIGERAMENTE ACIDO	USG
LQ-1136	22.6	23.8	0.129	0.02	1.27	1.115	-0.2124	0.0734	-0.139	LIGERAMENTE ACIDO	USG
LQ-1136	23.8	26	0.048	0.02	0.569	0.541	-0.0384	0.0734	0.03504	INERTE	USG
LQ-1136	26	28	0.027	0.02	0.855	0.773	-0.1123	0.0734	-0.0389	INERTE	USG
LQ-1136	28	30.5	0.035	0.02	1.097	1.074	-0.0315	0.0734	0.04189	INERTE	USG
LQ-1136	30.5	31.6	0.05	0.02	1.05	0.853	-0.2699	0.0734	-0.1965	LIGERAMENTE ACIDO	USG
LQ-1136	31.6	34	0.051	0.02	0.938	0.865	-0.1	0.0734	-0.0266	INERTE	USG
LQ-1136	34	36	0.03	0.02	1.332	1.045	-0.3932	0.0734	-0.3198	LIGERAMENTE ACIDO	USG
LQ-1136	36	37.7	0.033	0.02	1.03	0.905	-0.1713	0.0734	-0.0979	INERTE	USG
LQ-1136	37.7	39.6	0.085	0.02	1.481	1.272	-0.2863	0.0734	-0.2129	LIGERAMENTE ACIDO	USG
LQ-1136	39.6	41.8	0.046	0.02	1.167	0.917	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	USG
LQ-1136	41.8	43	0.146	0.02	1.425	1.322	-0.1411	0.0734	-0.0677	INERTE	USG
LQ-1136	43	44	0.071	0.02	0.92	0.771	-0.2041	0.0734	-0.1307	LIGERAMENTE ACIDO	USG
LQ-1136	44	46	0.07	0.02	0.906	0.809	-0.1329	0.0734	-0.0595	INERTE	USG
LQ-1136	46	48	0.029	0.02	0.851	0.754	-0.1329	0.0734	-0.0595	INERTE	USG
LQ-1136	48	50	0.047	0.02	0.858	0.745	-0.1548	0.0734	-0.0814	INERTE	USG
LQ-1136	50	52	0.04	0.02	0.839	0.715	-0.1699	0.0734	-0.0965	INERTE	USG
LQ-1136	52	53.3	0.048	0.02	0.571	0.543	-0.0384	0.0734	0.03504	INERTE	USG
LQ-1136	53.3	55.2	0.032	0.02	0.712	0.642	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1136	55.2	56.5	0.041	0.02	2.111	1.922	-0.2589	0.0734	-0.1855	LIGERAMENTE ACIDO	USG
LQ-1136	56.5	58	0.04	0.02	1.32	1.288	-0.0438	0.0734	0.02956	INERTE	USG
LQ-1136	58	60	0.04	0.02	0.764	0.659	-0.1439	0.0734	-0.0705	INERTE	USG
LQ-1136	60	61.4	0.059	0.02	1.453	1.342	-0.1521	0.0734	-0.0787	INERTE	USG
LQ-1136	61.4	63.9	0.038	0.02	0.98	0.844	-0.1863	0.0734	-0.1129	LIGERAMENTE ACIDO	LSG
LQ-1137	0	12.5	0.994	0.02	1.291	1.265	-0.0356	0.0734	0.03778	INERTE	USG
LQ-1137	12.5	24	0.063	0.02	1.159	1.112	-0.0644	0.0734	0.00901	INERTE	USG
LQ-1138	0	2.5	0.372	0.02	1.727	1.489	-0.3261	0.0734	-0.2527	LIGERAMENTE ACIDO	USG
LQ-1138	2.5	3.85	0.24	0.02	1.28	1.184	-0.1315	0.0734	-0.0581	INERTE	USG
LQ-1138	3.85	6	0.156	0.02	1.279	1.208	-0.0973	0.0734	-0.0239	INERTE	USG
LQ-1138	6	8	0.155	0.02	0.88	0.789	-0.1247	0.0734	-0.0513	INERTE	USG
LQ-1138	8	10	0.109	0.02	1.31	1.283	-0.037	0.0734	0.03641	INERTE	USG
LQ-1138	10	11.7	0.119	0.02	1.108	0.913	-0.2672	0.0734	-0.1938	LIGERAMENTE ACIDO	USG
LQ-1138	11.7	14	0.089	0.02	1.464	1.398	-0.0904	0.0734	-0.017	INERTE	USG
LQ-1138	14	15.2	0.053	0.02	1.193	1.107	-0.1178	0.0734	-0.0444	INERTE	USG
LQ-1138	15.2	17.1	0.17	0.02	1.25	0.985	-0.3631	0.0734	-0.2897	LIGERAMENTE ACIDO	USG
LQ-1138	17.1	18.5	0.103	0.02	2.268	1.976	-0.4	0.0734	-0.3266	LIGERAMENTE ACIDO	USG
LQ-1138	18.5	20	0.099	0.02	1.506	1.252	-0.348	0.0734	-0.2746	LIGERAMENTE ACIDO	USG
LQ-1138	20	21.7	0.046	0.02	2.542	2.255	-0.3932	0.0734	-0.3198	LIGERAMENTE ACIDO	USG
LQ-1139	0	12.6	0.222	0.02	1.604	1.504	-0.137	0.0734	-0.0636	INERTE	USG
LQ-1139	12.6	23	0.073	0.02	1.214	1.202	-0.0164	0.0734	0.05696	INERTE	USG
LQ-1139	23	36.9	0.101	0.02	1.125	1.033	-0.126	0.0734	-0.0526	INERTE	USG
LQ-1139	36.9	48	0.03	0.02	0.849	0.765	-0.1151	0.0734	-0.0417	INERTE	LSG
LQ-1139	48	60	0.051	0.02	0.892	0.863	-0.0397	0.0734	0.03367	INERTE	LSG
LQ-1139	60	72	0.073	0.02	0.912	0.839	-0.1	0.0734	-0.0266	INERTE	LSG
LQ-1140	0	12	0.217	0.02	1.57	1.235	-0.459	0.0734	-0.3856	LIGERAMENTE ACIDO	USG
LQ-1140	12	24	0.101	0.02	1.75	1.621	-0.1767	0.0734	-0.1033	LIGERAMENTE ACIDO	USG
LQ-1140	24	36	0.096	0.02	1.53	1.399	-0.1795	0.0734	-0.1061	LIGERAMENTE ACIDO	USG

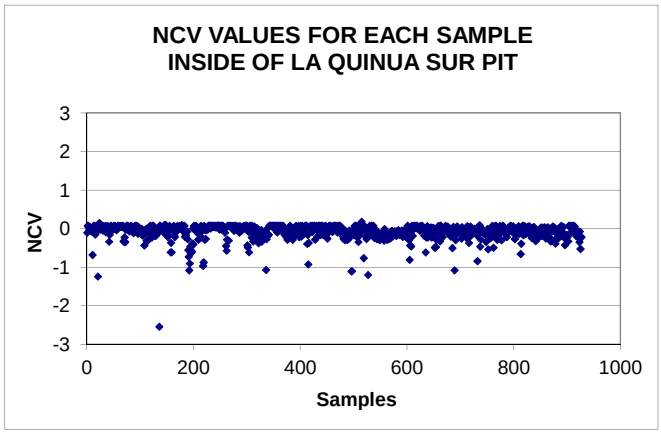
Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1140	36	47.7	0.141	0.02	0.955	0.73	-0.3083	0.0734	-0.2349	LIGERAMENTE ACIDO	USG
LQ-1140	47.7	60.9	0.065	0.02	1.07	0.835	-0.322	0.0734	-0.2486	LIGERAMENTE ACIDO	USG
LQ-1140	60.9	72.5	0.043	0.02	0.953	0.746	-0.2836	0.0734	-0.2102	LIGERAMENTE ACIDO	LSG
LQ-1140	72.5	84	0.037	0.028	1.23	0.978	-0.3452	0.1028	-0.2425	LIGERAMENTE ACIDO	LSG
LQ-1141	0	11.9	0.109	0.02	0.947	0.902	-0.0617	0.0734	0.01175	INERTE	USG
LQ-1141	11.9	24	0.049	0.02	1.053	0.963	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1141	24	36	0.054	0.02	0.894	0.734	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	USG
LQ-1141	36	48.5	0.078	0.02	1.022	0.912	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1143	0	12.5	0.199	0.02	0.928	0.928	0	0.0734	0.0734	INERTE	USG
LQ-1143	12.5	24.5	0.027	0.02	1.025	1.002	-0.0315	0.0734	0.04189	INERTE	USG
LQ-1143	24.5	36	0.02	0.02	1.059	0.872	-0.2562	0.0734	-0.1828	LIGERAMENTE ACIDO	USG
LQ-1143	36	48	0.026	0.02	1.228	1.055	-0.237	0.0734	-0.1636	LIGERAMENTE ACIDO	USG
LQ-1144	0	12	0.252	0.02	1.381	1.361	-0.0274	0.0734	0.046	INERTE	USG
LQ-1144	12	24	0.102	0.02	1.079	0.923	-0.2137	0.0734	-0.1403	LIGERAMENTE ACIDO	USG
LQ-1144	24	32.8	0.04	0.02	1.073	0.922	-0.2069	0.0734	-0.1335	LIGERAMENTE ACIDO	USG
LQ-1145	0	11.6	0.677	0.02	1.79	1.427	-0.4973	0.0734	-0.4239	LIGERAMENTE ACIDO	USG
LQ-1145	11.6	24.7	0.481	0.02	1.47	1.22	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	USG
LQ-1145	24.7	36	0.437	0.02	0.915	0.741	-0.2384	0.0734	-0.165	LIGERAMENTE ACIDO	USG
LQ-1145	36	47.4	0.449	0.02	1.28	1.076	-0.2795	0.0734	-0.2061	LIGERAMENTE ACIDO	USG
LQ-1145	47.4	60	0.068	0.02	1.04	0.863	-0.2425	0.0734	-0.1691	LIGERAMENTE ACIDO	USG
LQ-1145	60	70.9	0.14	0.02	0.94	0.732	-0.285	0.0734	-0.2116	LIGERAMENTE ACIDO	LSG
LQ-1145	70.9	84	0.072	0.02	1.15	0.857	-0.4014	0.0734	-0.328	LIGERAMENTE ACIDO	LSG
LQ-1146	0	12.7	0.204	0.02	1.344	1.344	0	0.0734	0.0734	INERTE	USG
LQ-1146	12.7	23.7	0.085	0.02	0.97	0.97	0	0.0734	0.0734	INERTE	USG
LQ-1146	23.7	36	0.024	0.02	0.742	0.742	0	0.0734	0.0734	INERTE	USG
LQ-1146	36	48	0.02	0.02	0.969	0.938	-0.0425	0.0734	0.03093	INERTE	USG
LQ-1146	48	60	0.02	0.02	0.894	0.771	-0.1685	0.0734	-0.0951	INERTE	LSG
LQ-1147	0	12	0.137	0.02	0.581	0.581	0	0.0734	0.0734	INERTE	USG
LQ-1147	12	24	0.03	0.02	0.709	0.709	0	0.0734	0.0734	INERTE	USG
LQ-1147	24	35.8	0.059	0.02	0.84	0.84	0	0.0734	0.0734	INERTE	USG
LQ-1147	35.8	48	0.02	0.02	0.816	0.803	-0.0178	0.0734	0.05559	INERTE	USG
LQ-1147	48	60.5	0.02	0.02	0.884	0.817	-0.0918	0.0734	-0.0184	INERTE	USG
LQ-1148	0	11.5	0.258	0.02	1.131	1.131	0	0.0734	0.0734	INERTE	USG
LQ-1149	0	12	0.091	0.02	0.843	0.826	-0.0233	0.0734	0.05011	INERTE	USG
LQ-1149	12	24	0.048	0.02	0.777	0.665	-0.1534	0.0734	-0.08	INERTE	USG
LQ-1149	24	36	0.034	0.02	0.83	0.707	-0.1685	0.0734	-0.0951	INERTE	USG
LQ-1149	36	48	0.051	0.02	0.873	0.684	-0.2589	0.0734	-0.1855	LIGERAMENTE ACIDO	USG
LQ-1149	48	60	0.055	0.02	0.767	0.568	-0.2726	0.0734	-0.1992	LIGERAMENTE ACIDO	USG
LQ-1151	0	12	0.041	0.02	0.841	0.679	-0.2219	0.0734	-0.1485	LIGERAMENTE ACIDO	
LQ-1151	12	24	0.058	0.02	0.851	0.741	-0.1507	0.0734	-0.0773	INERTE	
LQ-1151	24	36	0.026	0.02	0.813	0.703	-0.1507	0.0734	-0.0773	INERTE	
LQ-1151	36	48	0.04	0.02	0.866	0.649	-0.2973	0.0734	-0.2239	LIGERAMENTE ACIDO	
STZ-043	0	10	0.31	0.01	1.41	1.13	-0.3836	0.0367	-0.3469	LIGERAMENTE ACIDO	ARG
STZ-043	10	20	0.2	0.01	1.06	0.98	-0.1096	0.0367	-0.0729	INERTE	MF
STZ-043	20	30	0.24	0.01	1.69	1.28	-0.5617	0.0367	-0.525	LIGERAMENTE ACIDO	MF
STZ-043	30	40	0.24	0.01	1.02	0.84	-0.2466	0.0367	-0.2099	LIGERAMENTE ACIDO	MF
STZ-043	40	50	0.15	0.01	0.82	0.63	-0.2603	0.0367	-0.2236	LIGERAMENTE ACIDO	MF

ALTERATION LEGEND

Rock Units	FR	Fresh Rock
	PRO	Propylithic
	PROP	
	C	Argillic
	ARG	
	SC	Silica Clay
	AA	Advance Argillic
	SG	Granular Silica
	SM	Massive Silica
	INT	Intemperized Bed Rock
Gravels units	FERR	Ferricrete
	USG	Upper Sequence Gravel
	MSG	Medium Sequence Gravel
	LSG	Lower Sequence Gravel
	MF	Mud Flow
	MF-C	Mud Flow Clay
	MF-CP	Mud Flow Clay Pyrite
	F	Fines
	N/S	No Sample

NCV	# Samples
Highly acid	0
Acid	8
Slightly acid	310
Inert or neutral	604
Slightly basic	5
Basic	0
	927





Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
DST-039	84	96	0.038	0.02	1.013	0.759	-0.348	0.0734	-0.2746	LIGERAMENTE ACIDO	USG
DST-039	96	108	0.143	0.02	0.764	0.73	-0.0466	0.0734	0.02682	INERTE	USG
DST-039	108	120	0.031	0.02	0.676	0.664	-0.0164	0.0734	0.05696	INERTE	USG
DST-039	120	132	0.38	0.02	0.605	0.543	-0.0849	0.0734	-0.0115	INERTE	USG
DST-039	132	138	0.767	0.02	0.197	0.197	0	0.0734	0.0734	INERTE	
LQ-1019	83.5	92	0.139	0.02	0.109	0.052	-0.0781	0.0734	-0.0047	INERTE	ARG
LQ-1019	92	100	0.02	0.02	0.076	0.02	-0.0767	0.0734	-0.0033	INERTE	ARG
LQ-1019	100	109.1	0.028	0.02	0.173	0.093	-0.1096	0.0734	-0.0362	INERTE	ARG
LQ-1025	103.8	112.1	0.154	0.02	0.074	0.033	-0.0562	0.0734	0.01723	INERTE	ARG
LQ-1034	78	81.2	0.126	0.02	0.095	0.02	-0.1028	0.0734	-0.0294	INERTE	ARG
LQ-1041	70.4	78.05	0.04	0.02	2.125	2.071	-0.074	0.0734	-0.0006	INERTE	AA
LQ-1041	78.05	86.15	0.062	0.02	1.44	1.44	0	0.0734	0.0734	INERTE	AA
LQ-1041	86.15	93.55	0.15	0.05	1.16	1.082	-0.1069	0.1835	0.07664	INERTE	AA
LQ-1041	93.55	103.2	0.045	0.02	1.57	1.431	-0.1904	0.0734	-0.117	LIGERAMENTE ACIDO	AA
LQ-1044	45.1	54	0.071	0.02	0.172	0.102	-0.0959	0.0734	-0.0225	INERTE	ARG
LQ-1044	54	61.45	0.02	0.02	0.128	0.075	-0.0726	0.0734	0.00079	INERTE	ARG
LQ-1077	48	56.4	3.68	0.074	4.03	0.74	-4.5073	0.2716	-4.2357	ACIDO	LSG
LQ-1077	56.4	68	0.174	0.02	0.103	0.103	0	0.0734	0.0734	INERTE	ARG
LQ-1077	68	80	0.02	0.02	0.107	0.107	0	0.0734	0.0734	INERTE	ARG
LQ-1077	80	92	0.02	0.02	0.957	0.83	-0.174	0.0734	-0.1006	LIGERAMENTE ACIDO	ARG
LQ-1077	92	105.1	0.02	0.02	1.12	1.03	-0.1233	0.0734	-0.0499	INERTE	ARG
LQ-1078	57.2	70	0.091	0.02	0.065	0.043	-0.0301	0.0734	0.04326	INERTE	ARG
LQ-1078	70	83.9	0.045	0.02	0.037	0.022	-0.0206	0.0734	0.05285	INERTE	INT
LQ-1079	58.6	70	0.138	0.02	0.231	0.231	0	0.0734	0.0734	INERTE	INT
LQ-1080	40	52	0.055	0.02	0.078	0.078	0	0.0734	0.0734	INERTE	INT
LQ-1080	52	64	0.118	0.02	0.131	0.131	0	0.0734	0.0734	INERTE	INT
LQ-1080	64	70.5	0.196	0.02	0.083	0.083	0	0.0734	0.0734	INERTE	INT
LQ-1081	0	12.05	0.115	0.02	0.888	0.841	-0.0644	0.0734	0.00901	INERTE	USG
LQ-1081	12.05	18.75	0.055	0.02	1.13	1.04	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1081	18.75	30	0.115	0.02	1.95	1.87	-0.1096	0.0734	-0.0362	INERTE	ARG
LQ-1081	30	42	0.164	0.02	1.84	1.74	-0.137	0.0734	-0.0636	INERTE	INT
LQ-1081	42	50	0.182	0.02	0.228	0.217	-0.0151	0.0734	0.05833	INERTE	INT
LQ-1082	36	42.7	0.538	0.02	1.34	0.859	-0.659	0.0734	-0.5856	LIGERAMENTE ACIDO	LSG
LQ-1082	42.7	52	0.11	0.02	0.976	0.97	-0.0082	0.0734	0.06518	INERTE	INT
LQ-1083	60	72	0.156	0.02	1.23	1.14	-0.1233	0.0734	-0.0499	INERTE	LSG
LQ-1083	72	83.65	0.411	0.02	1.49	1.18	-0.4247	0.0734	-0.3513	LIGERAMENTE ACIDO	LSG
LQ-1083	83.65	96	0.686	0.02	0.445	0.38	-0.0891	0.0734	-0.0157	INERTE	LSG
LQ-1083	96	100.6	0.963	0.02	0.138	0.089	-0.0671	0.0734	0.00627	INERTE	LSG
LQ-1083	100.6	110.1	0.077	0.02	0.079	0.034	-0.0617	0.0734	0.01175	INERTE	INT
LQ-1084	18.95	30	0.108	0.02	11.2	11.2	0	0.0734	0.0734	INERTE	ARG
LQ-1084	30	45.25	0.11	0.02	1.86	1.71	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	ARG
LQ-1085	38.8	45	0.083	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1086	60	72	0.117	0.02	1.01	0.916	-0.1288	0.0734	-0.0554	INERTE	LSG
LQ-1086	72	82.3	0.516	0.02	0.38	0.336	-0.0603	0.0734	0.01312	INERTE	LSG
LQ-1086	82.3	94	0.116	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1086	94	108.6	0.062	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1087	34.5	46	0.235	0.02	0.032	0.032	0	0.0734	0.0734	INERTE	INT
LQ-1087	46	55	0.101	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1089	60	71.95	0.06	0.02	1.22	1.07	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	LSG
LQ-1089	71.95	81.95	0.136	0.02	0.948	0.948	0	0.0734	0.0734	INERTE	LSG
LQ-1089	81.95	94	0.169	0.02	0.047	0.041	-0.0082	0.0734	0.06518	INERTE	INT
LQ-1089	94	100	0.109	0.02	0.06	0.06	0	0.0734	0.0734	INERTE	INT
LQ-1090	54.9	66	0.156	0.02	0.182	0.182	0	0.0734	0.0734	INERTE	INT
LQ-1090	66	69.9	0.15	0.02	0.188	0.188	0	0.0734	0.0734	INERTE	INT
LQ-1095	78	90	0.209	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1095	90	95	0.152	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	F
LQ-1097	48.1	60	0.058	0.02	0.945	0.783	-0.2219	0.0734	-0.1485	LIGERAMENTE ACIDO	LSG
LQ-1097	60	71.7	0.075	0.02	0.82	0.681	-0.1904	0.0734	-0.117	LIGERAMENTE ACIDO	LSG
LQ-1097	71.7	81	0.056	0.02	0.05	0.047	-0.0041	0.0734	0.06929	INERTE	INT
LQ-1098	72.15	78.5	0.078	0.02	1.56	0.44	-1.5344	0.0734	-1.461	ACIDO	INT
LQ-1099	72	84	0.022	0.02	0.738	0.73	-0.011	0.0734	0.06244	INERTE	USG
LQ-1099	84	96.25	0.02	0.02	1.04	1.04	0	0.0734	0.0734	INERTE	USG
LQ-1099	96.25	108	0.054	0.02	0.824	0.759	-0.0891	0.0734	-0.0157	INERTE	LSG
LQ-1099	108	120	0.035	0.02	0.358	0.35	-0.011	0.0734	0.06244	INERTE	LSG
LQ-1099	120	131	0.047	0.02	0.112	0.11	-0.0027	0.0734	0.07066	INERTE	LSG
LQ-1100	60	72	0.181	0.02	1.61	1.6	-0.0137	0.0734	0.0597	INERTE	LSG
LQ-1100	72	84	0.247	0.02	0.938	0.817	-0.1658	0.0734	-0.0924	INERTE	LSG
LQ-1100	84	95.15	0.657	0.02	1.08	0.874	-0.2822	0.0734	-0.2088	LIGERAMENTE ACIDO	LSG
LQ-1100	95.15	107.9	0.228	0.02	0.481	0.457	-0.0329	0.0734	0.04052	INERTE	LSG
LQ-1100	107.9	120	0.251	0.02	0.466	0.429	-0.0507	0.0734	0.02271	INERTE	LSG
LQ-1100	120	126.8	0.129	0.02	0.201	0.2	-0.0014	0.0734	0.07203	INERTE	LSG
LQ-1101	60	72	0.054	0.02	0.952	0.952	0	0.0734	0.0734	INERTE	USG
LQ-1101	72	83.8	0.049	0.02	0.813	0.813	0	0.0734	0.0734	INERTE	USG
LQ-1101	83.8	96.45	0.052	0.02	1.08	1.08	0	0.0734	0.0734	INERTE	LSG
LQ-1101	96.45	108.6	0.039	0.02	1.45	1.45	0	0.0734	0.0734	INERTE	LSG
LQ-1101	108.6	120.3	0.065	0.02	0.405	0.405	0	0.0734	0.0734	INERTE	LSG
LQ-1101	120.3	132	0.065	0.02	0.641	0.641	0	0.0734	0.0734	INERTE	LSG
LQ-1101	132	143.5	0.503	0.02	0.243	0.243	0	0.0734	0.0734	INERTE	LSG
LQ-1101	143.5	150.6	0.048	0.02	0.096	0.096	0	0.0734	0.0734	INERTE	ARG
LQ-1103	60	72	0.103	0.059	1.08	0.867	-0.2918	0.2165	-0.0753	INERTE	LSG
LQ-1103	72	84	0.096	0.04	0.384	0.384	0	0.1468	0.1468	LIGERAMENTE BASICO	LSG
LQ-1103	84	96.2	0.122	0.075	0.11	0.11	0	0.2753	0.27525	LIGERAMENTE BASICO	INT
LQ-1103	96.2	108	0.091	0.042	0.054	0.054	0	0.1541	0.15414	LIGERAMENTE BASICO	INT
LQ-1103	108	122.4	0.117	0.056	0.061	0.061	0	0.2055	0.20552	LIGERAMENTE BASICO	INT
LQ-1104	48	60	0.486	0.057	1.29	1.05	-0.3288	0.2092	-0.1196	LIGERAMENTE ACIDO	USG
LQ-1104	60	72.3	0.251	0.04	1.15	0.978	-0.2356	0.1468	-0.0888	INERTE	LSG
LQ-1104	72.3	84.3	0.306	0.044	1.18	0.966	-0.2932	0.1615	-0.1317	LIGERAMENTE ACIDO	LSG
LQ-1104	84.3	96	0.19	0.043	0.061	0.061	0	0.1578	0.15781	LIGERAMENTE BASICO	ARG
LQ-1104	96	105.7	0.277	0.035	0.149	0.149	0	0.1285	0.12845	LIGERAMENTE BASICO	INT
LQ-1105	48	60	0.061	0.043	1.19	0.896	-0.4028	0.1578	-0.245	LIGERAMENTE ACIDO	LSG
LQ-1105	60	72	0.056	0.027	1.23	0.936	-0.4028	0.0991	-0.3037	LIGERAMENTE ACIDO	LSG
LQ-1105	72	84	0.074	0.05	0.964	0.767	-0.2699	0.1835	-0.0864	INERTE	LSG
LQ-1105	84	96	0.048	0.036	1.22	0.985	-0.322	0.1321	-0.1898	LIGERAMENTE ACIDO	LSG
LQ-1105	96	105.7	0.087	0.039	0.499	0.39	-0.1493	0.1431	-0.0062	INERTE	LSG
LQ-1105	105.7	118	0.077	0.048	0.037	0.037	0	0.1762	0.17616	LIGERAMENTE BASICO	INT
LQ-1105	118	125.7	0.034	0.034	0.023	0.023	0	0.1248	0.12478	LIGERAMENTE BASICO	INT
LQ-1106	68	70	0.086	0.02	0.887	0.875	-0.0164	0.0734	0.05696	INERTE	LSG
LQ-1106	70	72.2	0.079	0.02	1.02	0.949	-0.0973	0.0734	-0.0239	INERTE	LSG
LQ-1106	72.2	74	0.084	0.02	1.46	1.4	-0.0822	0.0734	-0.0088	INERTE	LSG
LQ-1106	74	75	0.092	0.02	0.948	0.869	-0.1082	0.0734	-0.0348	INERTE	LSG
LQ-1106	75	76	0.081	0.02	1.43	1.17	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	LSG
LQ-1106	76	78	0.102	0.02	0.861	0.746	-0.1576	0.0734	-0.0842	INERTE	LSG
LQ-1106	78	79.7	0.095	0.02	0.902	0.837	-0.0891	0.0734	-0.0157	INERTE	LSG
LQ-1106	79.7	82.2	0.067	0.02	0.751	0.538	-0.2918	0.0734	-0.2184	LIGERAMENTE ACIDO	LSG
LQ-1106	82.2	84	0.085	0.02	1.21	0.991	-0.3	0.0734	-0.2266	LIGERAMENTE ACIDO	LSG
LQ-1106	84	86	0.095	0.02	0.861	0.833	-0.0384	0.0734	0.03504	INERTE	LSG
LQ-1106	86	88	0.095	0.02	0.591	0.59	-0.0014	0.0734	0.07203	INERTE	LSG
LQ-1106	88	89.1	0.084	0.02	0.523	0.474	-0.0671	0.0734	0.00627	INERTE	LSG
LQ-1106	89.1	90	0.065	0.02	1.38	1.27	-0.1507	0.0734	-0.0773	INERTE	LSG
LQ-1106	90	91.7	0.084	0.02	1.37	1.37	0	0.0734	0.0734	INERTE	LSG
LQ-1106	91.7	93.3	0.086	0.02	1.81	1.3	-0.6987	0.0734	-0.6253	LIGERAMENTE ACIDO	LSG
LQ-1106	93.3	94	0.116	0.02	0.335	0.335	0	0.0734	0.0734	INERTE	LSG
LQ-1106	94	94.5	0.095	0.02	2.16	2.05	-0.1507	0.0734	-0.0773	INERTE	LSG
LQ-1106	94.5	96	0.064	0.02	1.05	0.968	-0.1123	0.0734	-0.0389	INERTE	LSG
LQ-1106	96	98	0.079	0.02	1.12	1.12	0	0.0734	0.0734	INERTE	LSG
LQ-1106	98	98.6	0.069	0.02	1.09	0.968	-0.1671	0.0734	-0.0937	INERTE	LSG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1106	98.6	100	0.071	0.02	2.28	2.2	-0.1096	0.0734	-0.0362	INERTE	LSG
LQ-1106	100	102.3	0.079	0.02	2.22	2.2	-0.0274	0.0734	0.046	INERTE	LSG
LQ-1106	102.3	104.4	0.235	0.02	0.12	0.11	-0.0137	0.0734	0.0597	INERTE	LSG
LQ-1106	104.4	105.5	0.153	0.02	0.279	0.279	0	0.0734	0.0734	INERTE	LSG
LQ-1106	105.5	106	0.109	0.02	0.78	0.78	0	0.0734	0.0734	INERTE	LSG
LQ-1106	106	106.9	0.083	0.02	0.995	0.988	-0.0096	0.0734	0.06381	INERTE	LSG
LQ-1106	106.9	108.3	0.083	0.02	0.48	0.48	0	0.0734	0.0734	INERTE	LSG
LQ-1106	108.3	109.3	0.091	0.02	0.675	0.688	0.01781	0.0734	0.09121	INERTE	LSG
LQ-1106	109.3	109.9	0.069	0.02	0.918	0.792	-0.1726	0.0734	-0.0992	INERTE	LSG
LQ-1106	109.9	112	0.08	0.02	0.69	0.634	-0.0767	0.0734	-0.0033	INERTE	LSG
LQ-1106	112	112.8	0.149	0.02	0.609	0.53	-0.1082	0.0734	-0.0348	INERTE	LSG
LQ-1106	112.8	114.5	0.127	0.02	0.57	0.492	-0.1069	0.0734	-0.0335	INERTE	LSG
LQ-1106	114.5	116.1	0.186	0.02	0.698	0.61	-0.1206	0.0734	-0.0472	INERTE	LSG
LQ-1106	116.1	118	0.085	0.02	1.1	1.1	0	0.0734	0.0734	INERTE	LSG
LQ-1106	118	118.9	0.117	0.02	0.086	0.056	-0.0411	0.0734	0.0323	INERTE	LSG
LQ-1106	118.9	120	0.1	0.02	0.042	0.02	-0.0301	0.0734	0.04326	INERTE	INT
LQ-1106	120	122	0.147	0.02	0.052	0.02	-0.0438	0.0734	0.02956	INERTE	INT
LQ-1106	122	124	0.061	0.02	0.032	0.023	-0.0123	0.0734	0.06107	INERTE	INT
LQ-1106	124	126	0.069	0.02	0.023	0.02	-0.0041	0.0734	0.06929	INERTE	INT
LQ-1106	126	128	0.07	0.02	0.022	0.02	-0.0027	0.0734	0.07066	INERTE	INT
LQ-1106	128	129	0.069	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1107	66	68	0.06	0.02	1.14	0.122	-1.3947	0.0734	-1.3213	ACIDO	USG
LQ-1107	68	70	0.09	0.02	0.67	0.162	-0.696	0.0734	-0.6226	LIGERAMENTE ACIDO	USG
LQ-1107	70	72	0.089	0.02	0.959	0.118	-1.1522	0.0734	-1.0788	ACIDO	USG
LQ-1107	72	74	0.092	0.02	1.12	0.799	-0.4398	0.0734	-0.3664	LIGERAMENTE ACIDO	USG
LQ-1107	74	75	0.045	0.02	0.939	0.664	-0.3768	0.0734	-0.3034	LIGERAMENTE ACIDO	USG
LQ-1107	75	76	0.088	0.02	1.48	0.889	-0.8097	0.0734	-0.7363	LIGERAMENTE ACIDO	LSG
LQ-1107	76	78	0.074	0.02	1.78	1.19	-0.8083	0.0734	-0.7349	LIGERAMENTE ACIDO	LSG
LQ-1107	78	79.9	0.063	0.02	0.861	0.343	-0.7097	0.0734	-0.6363	LIGERAMENTE ACIDO	LSG
LQ-1107	79.9	82	0.111	0.02	0.52	0.246	-0.3754	0.0734	-0.302	LIGERAMENTE ACIDO	LSG
LQ-1107	82	84	0.082	0.02	0.92	0.735	-0.2535	0.0734	-0.1801	LIGERAMENTE ACIDO	LSG
LQ-1107	84	86	0.084	0.02	0.82	0.443	-0.5165	0.0734	-0.4431	LIGERAMENTE ACIDO	LSG
LQ-1107	86	88	0.067	0.02	0.951	0.286	-0.9111	0.0734	-0.8377	LIGERAMENTE ACIDO	LSG
LQ-1107	88	90	0.056	0.035	0.695	0.691	-0.0055	0.1285	0.12297	LIGERAMENTE BASICO	LSG
LQ-1107	90	92	0.094	0.03	1.25	1.25	0	0.1101	0.1101	LIGERAMENTE BASICO	LSG
LQ-1107	92	94	0.087	0.027	1.01	1.01	0	0.0991	0.09909	INERTE	LSG
LQ-1107	94	96	0.089	0.035	1.55	1.51	-0.0548	0.1285	0.07365	INERTE	LSG
LQ-1107	96	98	0.106	0.042	1.01	0.988	-0.0301	0.1541	0.124	LIGERAMENTE BASICO	LSG
LQ-1107	98	100	0.075	0.031	1.64	1.6	-0.0548	0.1138	0.05897	INERTE	LSG
LQ-1107	100	102	0.12	0.046	0.939	0.938	-0.0014	0.1688	0.16745	LIGERAMENTE BASICO	LSG
LQ-1107	102	104	0.109	0.052	0.962	0.938	-0.0329	0.1908	0.15796	LIGERAMENTE BASICO	LSG
LQ-1107	104	104.6	0.204	0.059	0.509	0.509	0	0.2165	0.21653	LIGERAMENTE BASICO	LSG
LQ-1107	104.6	106	0.06	0.035	1.99	1.79	-0.274	0.1285	-0.1456	LIGERAMENTE ACIDO	LSG
LQ-1107	106	108	0.063	0.034	1.2	1.12	-0.1096	0.1248	0.01518	INERTE	LSG
LQ-1107	108	109.6	0.064	0.031	0.849	0.802	-0.0644	0.1138	0.04938	INERTE	LSG
LQ-1107	109.6	111.9	0.123	0.042	0.743	0.743	0	0.1541	0.15414	LIGERAMENTE BASICO	LSG
LQ-1107	111.9	114.2	0.063	0.041	0.054	0.054	0	0.1505	0.15047	LIGERAMENTE BASICO	INT
LQ-1107	114.2	116	0.067	0.034	0.042	0.042	0	0.1248	0.12478	LIGERAMENTE BASICO	INT
LQ-1107	116	118	0.085	0.036	0.046	0.037	-0.0123	0.1321	0.11979	LIGERAMENTE BASICO	INT
LQ-1107	118	120	0.07	0.031	0.038	0.027	-0.0151	0.1138	0.0987	INERTE	INT
LQ-1107	120	122	0.056	0.037	0.034	0.033	-0.0014	0.1358	0.13442	LIGERAMENTE BASICO	INT
LQ-1108	46	48	0.02	0.02	0.819	0.794	-0.0343	0.0734	0.03915	INERTE	USG
LQ-1108	48	50.1	0.038	0.02	0.791	0.753	-0.0521	0.0734	0.02134	INERTE	USG
LQ-1108	50.1	52	0.02	0.02	0.758	0.666	-0.126	0.0734	-0.0526	INERTE	USG
LQ-1108	52	54	0.02	0.02	1.62	1.51	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1108	54	54.5	0.02	0.02	0.992	0.323	-0.9165	0.0734	-0.8431	LIGERAMENTE ACIDO	USG
LQ-1108	54.5	56	0.02	0.02	1.08	0.934	-0.2	0.0734	-0.1266	LIGERAMENTE ACIDO	USG
LQ-1108	56	58	0.02	0.02	0.915	0.866	-0.0671	0.0734	0.00627	INERTE	USG
LQ-1108	58	60	0.02	0.02	1.68	1.47	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	USG
LQ-1108	60	61.4	0.02	0.02	1.38	1.27	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1108	61.4	62	0.02	0.02	1.46	1.43	-0.0411	0.0734	0.0323	INERTE	USG
LQ-1108	62	64	0.058	0.02	0.643	0.619	-0.0329	0.0734	0.04052	INERTE	USG
LQ-1108	64	66	0.02	0.02	0.915	0.766	-0.2041	0.0734	-0.1307	LIGERAMENTE ACIDO	USG
LQ-1108	66	68	0.032	0.02	0.911	0.862	-0.0671	0.0734	0.00627	INERTE	USG
LQ-1108	68	70	0.02	0.02	0.994	0.911	-0.1137	0.0734	-0.0403	INERTE	USG
LQ-1108	70	71.9	0.021	0.02	0.639	0.559	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1108	71.9	74	0.02	0.02	0.672	0.619	-0.0726	0.0734	0.00079	INERTE	USG
LQ-1108	74	76	0.02	0.02	1.14	0.986	-0.211	0.0734	-0.1376	LIGERAMENTE ACIDO	USG
LQ-1108	76	78	0.02	0.02	0.559	0.538	-0.0288	0.0734	0.04463	INERTE	USG
LQ-1108	78	80	0.02	0.02	0.337	0.324	-0.0178	0.0734	0.05559	INERTE	USG
LQ-1108	80	82	0.025	0.137	1.07	0.236	-1.1426	0.5028	-0.6398	LIGERAMENTE ACIDO	USG
LQ-1108	82	82.9	0.069	0.02	1.65	0.796	-1.17	0.0734	-1.0966	ACIDO	USG
LQ-1108	82.9	84	0.053	0.02	0.524	0.497	-0.037	0.0734	0.03641	INERTE	USG
LQ-1108	84	86	0.074	0.02	0.633	0.552	-0.111	0.0734	-0.0376	INERTE	USG
LQ-1108	86	87.5	0.02	0.02	1.22	0.948	-0.3726	0.0734	-0.2992	LIGERAMENTE ACIDO	USG
LQ-1108	87.5	88	0.02	0.02	2.02	1.56	-0.6302	0.0734	-0.5568	LIGERAMENTE ACIDO	USG
LQ-1108	88	90	0.02	0.02	1.88	1.35	-0.7261	0.0734	-0.6527	LIGERAMENTE ACIDO	USG
LQ-1108	90	92	0.06	0.02	0.825	0.822	-0.0041	0.0734	0.06929	INERTE	USG
LQ-1108	92	94.4	0.02	0.02	1.3	1.17	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1108	94.4	96	0.02	0.02	0.861	0.854	-0.0096	0.0734	0.06381	INERTE	USG
LQ-1108	96	97.8	0.02	0.02	1.18	1.16	-0.0274	0.0734	0.046	INERTE	USG
LQ-1108	97.8	100	0.066	0.02	0.689	0.68	-0.0123	0.0734	0.06107	INERTE	LSG
LQ-1108	100	101.5	0.036	0.02	1.67	1.62	-0.0685	0.0734	0.0049	INERTE	LSG
LQ-1108	101.5	102	0.02	0.02	1.76	1.72	-0.0548	0.0734	0.0186	INERTE	LSG
LQ-1108	102	104	0.02	0.02	0.781	0.762	-0.026	0.0734	0.04737	INERTE	LSG
LQ-1108	104	106	0.02	0.02	1.07	1.02	-0.0685	0.0734	0.0049	INERTE	LSG
LQ-1108	106	108	0.02	0.02	1.03	0.58	-0.6165	0.0734	-0.5431	LIGERAMENTE ACIDO	LSG
LQ-1108	108	109.7	0.02	0.02	1.27	1.26	-0.0137	0.0734	0.0597	INERTE	LSG
LQ-1108	109.7	112.1	0.069	0.02	0.466	0.398	-0.0932	0.0734	-0.0198	INERTE	LSG
LQ-1108	112.1	113.9	0.059	0.02	0.411	0.375	-0.0493	0.0734	0.02408	INERTE	LSG
LQ-1108	113.9	116.2	0.939	0.02	0.796	0.512	-0.3891	0.0734	-0.3157	LIGERAMENTE ACIDO	LSG
LQ-1108	116.2	117.9	0.02	0.02	0.988	0.965	-0.0315	0.0734	0.04189	INERTE	LSG
LQ-1108	117.9	119.4	0.02	0.02	0.859	0.779	-0.1096	0.0734	-0.0362	INERTE	LSG
LQ-1108	119.4	120	0.849	0.02	1.05	0.785	-0.3631	0.0734	-0.2897	LIGERAMENTE ACIDO	LSG
LQ-1108	120	122.3	0.347	0.02	0.46	0.359	-0.1384	0.0734	-0.065	INERTE	LSG
LQ-1108	122.3	124	0.027	0.02	0.306	0.222	-0.1151	0.0734	-0.0417	INERTE	LSG
LQ-1108	124	126	0.033	0.02	0.37	0.361	-0.0123	0.0734	0.06107	INERTE	LSG
LQ-1108	126	127.1	0.027	0.02	0.676	0.611	-0.0891	0.0734	-0.0157	INERTE	LSG
LQ-1108	127.1	128	0.02	0.02	0.154	0.089	-0.0891	0.0734	-0.0157	INERTE	INT
LQ-1108	128	130	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1108	130	132	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1108	132	134	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1108	134	136	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1108	136	138	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1108	138	140	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1109	48	50	0.049	0.02	1.05	0.994	-0.0767	0.0734	-0.0033	INERTE	USG
LQ-1109	50	52	0.039	0.02	0.781	0.69	-0.1247	0.0734	-0.0513	INERTE	USG
LQ-1109	52	53.95	0.066	0.02	1.16	1.03	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1109	53.95	55.35	0.13	0.02	0.766	0.735	-0.0425	0.0734	0.03093	INERTE	USG
LQ-1109	55.35	56	0.047	0.02	0.882	0.743	-0.1904	0.0734	-0.117	LIGERAMENTE ACIDO	USG
LQ-1109	56	56.6	0.057	0.02	1.36	1.29	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1109	56.6	58	0.04	0.02	1.71	1.67	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1109	58	59.05	0.047	0.02	2.1	2.03	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1109	59.05	60.35	0.055	0.02	0.749	0.725	-0.0329	0.0734	0.04052	INERTE	LSG
LQ-1109	60.35	62	0.04	0.02	1.18	1.01	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	LSG
LQ-1109	62	64	0.037	0.02	1.37	1.17	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	LSG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1109	64	66	0.02	0.02	1.7	1.52	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	LSG
LQ-1109	66	68.35	0.027	0.02	1.08	1.06	-0.0274	0.0734	0.046	INERTE	LSG
LQ-1109	68.35	70.45	2.59	0.02	1.86	1.37	-0.6713	0.0734	-0.5979	LIGERAMENTE ACIDO	LSG
LQ-1109	70.45	72	0.155	0.02	0.801	0.72	-0.111	0.0734	-0.0376	INERTE	LSG
LQ-1109	72	74.35	0.382	0.02	1.1	0.815	-0.3905	0.0734	-0.3171	LIGERAMENTE ACIDO	LSG
LQ-1109	74.35	76.45	2.92	0.02	0.877	0.63	-0.3384	0.0734	-0.265	LIGERAMENTE ACIDO	LSG
LQ-1109	76.45	78	0.108	0.02	0.303	0.076	-0.311	0.0734	-0.2376	LIGERAMENTE ACIDO	INT
LQ-1109	78	80	0.057	0.02	0.056	0.035	-0.0288	0.0734	0.04463	INERTE	INT
LQ-1109	80	81.45	0.031	0.02	0.047	0.028	-0.026	0.0734	0.04737	INERTE	INT
LQ-1109	81.45	82	0.02	0.02	0.041	0.023	-0.0247	0.0734	0.04874	INERTE	INT
LQ-1109	82	84	0.039	0.02	0.043	0.022	-0.0288	0.0734	0.04463	INERTE	INT
LQ-1109	84	86	0.036	0.02	0.055	0.032	-0.0315	0.0734	0.04189	INERTE	INT
LQ-1109	86	88	0.02	0.02	0.026	0.02	-0.0082	0.0734	0.06518	INERTE	INT
LQ-1109	88	90	0.021	0.02	0.025	0.02	-0.0069	0.0734	0.06655	INERTE	INT
LQ-1109	90	92	0.02	0.02	0.021	0.02	-0.0014	0.0734	0.07203	INERTE	INT
LQ-1109	92	94	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1109	94	95.25	0.02	0.02	0.022	0.021	-0.0014	0.0734	0.07203	INERTE	INT
LQ-1110	69.7	72	0.057	0.02	0.972	0.911	-0.0836	0.0734	-0.0102	INERTE	USG
LQ-1110	72	74	0.034	0.02	1.28	1.19	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1110	74	76	0.025	0.02	0.726	0.72	-0.0082	0.0734	0.06518	INERTE	USG
LQ-1110	76	78.45	0.033	0.02	0.831	0.83	-0.0014	0.0734	0.07203	INERTE	USG
LQ-1110	78.45	80	0.318	0.02	1.52	0.944	-0.7891	0.0734	-0.7157	LIGERAMENTE ACIDO	LSG
LQ-1110	80	82	1.15	0.026	2.13	1.34	-1.0823	0.0954	-0.9869	LIGERAMENTE ACIDO	LSG
LQ-1110	82	83	0.706	0.02	2.03	0.718	-1.7974	0.0734	-1.724	ACIDO	LSG
LQ-1110	83	84	0.051	0.02	1.39	1.2	-0.2603	0.0734	-0.1869	LIGERAMENTE ACIDO	LSG
LQ-1110	84	85.05	0.029	0.02	0.835	0.83	-0.0069	0.0734	0.06655	INERTE	LSG
LQ-1110	85.05	86	0.042	0.02	0.651	0.65	-0.0014	0.0734	0.07203	INERTE	LSG
LQ-1110	86	88	0.03	0.02	0.707	0.7	-0.0096	0.0734	0.06381	INERTE	LSG
LQ-1110	88	88.9	0.025	0.02	0.984	0.98	-0.0055	0.0734	0.06792	INERTE	LSG
LQ-1110	88.9	90	0.056	0.02	0.704	0.7	-0.0055	0.0734	0.06792	INERTE	LSG
LQ-1110	90	92	0.02	0.02	0.451	0.45	-0.0014	0.0734	0.07203	INERTE	LSG
LQ-1110	92	94.2	0.032	0.02	1.68	1.6	-0.1096	0.0734	-0.0362	INERTE	LSG
LQ-1110	94.2	96	0.258	0.02	0.609	0.541	-0.0932	0.0734	-0.0198	INERTE	LSG
LQ-1110	96	98.2	0.441	0.02	0.391	0.39	-0.0014	0.0734	0.07203	INERTE	LSG
LQ-1110	98.2	100.2	0.051	0.02	0.441	0.44	-0.0014	0.0734	0.07203	INERTE	LSG
LQ-1110	100.2	102	0.02	0.02	0.917	0.851	-0.0904	0.0734	-0.017	INERTE	LSG
LQ-1110	102	102.5	0.028	0.02	1.93	1.93	0	0.0734	0.0734	INERTE	LSG
LQ-1110	102.5	103.6	0.058	0.039	0.563	0.563	0	0.1431	0.14313	LIGERAMENTE BASICO	LSG
LQ-1110	103.6	105	0.04	0.02	0.743	0.654	-0.1219	0.0734	-0.0485	INERTE	LSG
LQ-1110	105	106	2.17	0.03	0.636	0.303	-0.4562	0.1101	-0.3461	LIGERAMENTE ACIDO	LSG
LQ-1110	106	108	0.931	0.02	0.424	0.183	-0.3302	0.0734	-0.2568	LIGERAMENTE ACIDO	LSG
LQ-1110	108	110	2.85	0.027	1.73	0.238	-2.044	0.0991	-1.945	ACIDO	LSG
LQ-1110	110	111	1.36	0.02	0.681	0.176	-0.6919	0.0734	-0.6185	LIGERAMENTE ACIDO	LSG
LQ-1110	111	112	0.837	0.02	0.443	0.119	-0.4439	0.0734	-0.3705	LIGERAMENTE ACIDO	INT
LQ-1110	112	114	0.102	0.02	0.034	0.034	0	0.0734	0.0734	INERTE	INT
LQ-1110	114	116	0.135	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1110	116	118	0.101	0.02	0.022	0.022	0	0.0734	0.0734	INERTE	INT
LQ-1110	118	120	0.101	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1111	62	64	0.051	0.02	1.33	1.06	-0.3699	0.0734	-0.2965	LIGERAMENTE ACIDO	LSG
LQ-1111	64	66	0.02	0.02	2.67	2.44	-0.3151	0.0734	-0.2417	LIGERAMENTE ACIDO	LSG
LQ-1111	66	66.7	0.02	0.02	1.11	0.898	-0.2904	0.0734	-0.217	LIGERAMENTE ACIDO	LSG
LQ-1111	66.7	67.5	0.067	0.02	0.338	0.338	0	0.0734	0.0734	INERTE	LSG
LQ-1111	67.5	68	0.169	0.02	0.047	0.047	0	0.0734	0.0734	INERTE	LSG
LQ-1111	68	70	0.203	0.02	0.031	0.031	0	0.0734	0.0734	INERTE	LSG
LQ-1111	70	71.6	0.039	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	LSG
LQ-1111	71.6	72.6	0.193	0.02	1.32	1.32	0	0.0734	0.0734	INERTE	LSG
LQ-1111	72.6	74.2	0.182	0.02	0.021	0.021	0	0.0734	0.0734	INERTE	LSG
LQ-1111	74.2	76	0.223	0.02	1.59	1.49	-0.137	0.0734	-0.0636	INERTE	LSG
LQ-1111	76	78	0.166	0.02	1.73	1.73	0	0.0734	0.0734	INERTE	LSG
LQ-1111	78	78.6	0.148	0.02	1.42	1.42	0	0.0734	0.0734	INERTE	LSG
LQ-1111	78.6	80	0.047	0.02	0.059	0.059	0	0.0734	0.0734	INERTE	INT
LQ-1111	80	82	0.026	0.02	0.027	0.027	0	0.0734	0.0734	INERTE	INT
LQ-1111	82	84	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1111	84	85	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1112	6	8	0.106	0.02	1.07	0.889	-0.248	0.0734	-0.1746	LIGERAMENTE ACIDO	LSG
LQ-1112	8	9.7	0.078	0.02	1.09	0.921	-0.2315	0.0734	-0.1581	LIGERAMENTE ACIDO	LSG
LQ-1112	9.7	11	0.03	0.02	1.06	0.877	-0.2507	0.0734	-0.1773	LIGERAMENTE ACIDO	LSG
LQ-1112	11	12.05	0.057	0.02	1.62	1.35	-0.3699	0.0734	-0.2965	LIGERAMENTE ACIDO	LSG
LQ-1112	12.05	14	0.023	0.02	1.11	0.94	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	LSG
LQ-1112	14	16.5	0.039	0.02	0.546	0.446	-0.137	0.0734	-0.0636	INERTE	LSG
LQ-1112	16.5	18	0.165	0.02	1.01	0.865	-0.1987	0.0734	-0.1253	LIGERAMENTE ACIDO	LSG
LQ-1112	18	20	0.205	0.02	0.867	0.67	-0.2699	0.0734	-0.1965	LIGERAMENTE ACIDO	LSG
LQ-1112	20	22	0.164	0.02	0.872	0.711	-0.2206	0.0734	-0.1472	LIGERAMENTE ACIDO	LSG
LQ-1112	22	24	0.161	0.02	1.03	0.891	-0.1904	0.0734	-0.117	LIGERAMENTE ACIDO	LSG
LQ-1112	24	24.55	0.163	0.02	0.925	0.802	-0.1685	0.0734	-0.0951	INERTE	LSG
LQ-1112	24.55	26	0.077	0.02	1.15	0.714	-0.5973	0.0734	-0.5239	LIGERAMENTE ACIDO	LSG
LQ-1112	26	28	0.095	0.02	1.27	0.546	-0.9919	0.0734	-0.9185	LIGERAMENTE ACIDO	LSG
LQ-1112	28	30.45	0.042	0.02	1.01	0.486	-0.7179	0.0734	-0.6445	LIGERAMENTE ACIDO	LSG
LQ-1112	30.45	32	0.154	0.02	0.55	0.437	-0.1548	0.0734	-0.0814	INERTE	LSG
LQ-1112	32	34	0.037	0.02	1.31	1.01	-0.411	0.0734	-0.3376	LIGERAMENTE ACIDO	LSG
LQ-1112	34	35.1	0.02	0.02	1.47	1.23	-0.3288	0.0734	-0.2554	LIGERAMENTE ACIDO	LSG
LQ-1112	35.1	36	0.058	0.02	1.22	0.975	-0.3357	0.0734	-0.2623	LIGERAMENTE ACIDO	LSG
LQ-1112	36	38	0.057	0.02	0.89	0.8	-0.1233	0.0734	-0.0499	INERTE	LSG
LQ-1112	38	38.8	0.059	0.02	1.15	0.947	-0.2781	0.0734	-0.2047	LIGERAMENTE ACIDO	LSG
LQ-1112	38.8	40	0.02	0.02	1.44	1.36	-0.1096	0.0734	-0.0362	INERTE	LSG
LQ-1112	40	42	0.035	0.02	1.02	0.802	-0.2987	0.0734	-0.2253	LIGERAMENTE ACIDO	LSG
LQ-1112	42	43.15	0.045	0.02	0.721	0.49	-0.3165	0.0734	-0.2431	LIGERAMENTE ACIDO	LSG
LQ-1112	43.15	44	0.086	0.02	0.186	0.155	-0.0425	0.0734	0.03093	INERTE	LSG
LQ-1112	44	46	0.143	0.02	0.057	0.057	0	0.0734	0.0734	INERTE	LSG
LQ-1112	46	47	0.105	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	LSG
LQ-1112	47	48	0.144	0.02	0.078	0.078	0	0.0734	0.0734	INERTE	LSG
LQ-1112	48	50	0.088	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	LSG
LQ-1112	50	52	0.122	0.02	0.063	0.063	0	0.0734	0.0734	INERTE	LSG
LQ-1112	52	54	0.107	0.02	0.175	0.175	0	0.0734	0.0734	INERTE	LSG
LQ-1112	54	55.45	0.079	0.02	0.405	0.405	0	0.0734	0.0734	INERTE	LSG
LQ-1112	55.45	56	0.102	0.02	1.95	1.89	-0.0822	0.0734	-0.0088	INERTE	ARG
LQ-1112	56	58	0.039	0.02	0.081	0.081	0	0.0734	0.0734	INERTE	ARG
LQ-1112	58	60	0.053	0.02	0.054	0.054	0	0.0734	0.0734	INERTE	ARG
LQ-1112	60	62	0.109	0.02	1.07	0.355	-0.9796	0.0734	-0.9062	LIGERAMENTE ACIDO	ARG
LQ-1112	62	62.9	0.121	0.02	0.374	0.327	-0.0644	0.0734	0.00901	INERTE	ARG
LQ-1112	62.9	64	0.029	0.02	0.059	0.059	0	0.0734	0.0734	INERTE	INT
LQ-1112	64	66.1	0.02	0.02	0.807	0.718	-0.1219	0.0734	-0.0485	INERTE	INT
LQ-1113	78	80	0.055	0.02	0.986	0.744	-0.3315	0.0734	-0.2581	LIGERAMENTE ACIDO	USG
LQ-1113	80	82	0.044	0.02	0.943	0.651	-0.4	0.0734	-0.3266	LIGERAMENTE ACIDO	USG
LQ-1113	82	84	0.036	0.02	1.27	1.07	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	USG
LQ-1113	84	85.5	0.097	0.02	0.618	0.541	-0.1055	0.0734	-0.0321	INERTE	USG
LQ-1113	85.5	86	0.162	0.02	1.32	1.14	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	LSG
LQ-1113	86	87.65	0.172	0.02	1.04	0.911	-0.1767	0.0734	-0.1033	LIGERAMENTE ACIDO	LSG
LQ-1113	87.65	89.1	0.06	0.02	0.663	0.331	-0.4548	0.0734	-0.3814	LIGERAMENTE ACIDO	LSG
LQ-1113	89.1	90	0.048	0.02	1.48	0.182	-1.7783	0.0734	-1.7049	ACIDO	LSG
LQ-1113	90	90.8	0.03	0.02	2.91	0.292	-3.5867	0.0734	-3.5133	ACIDO	LSG
LQ-1113	90.8	92	0.133	0.02	3.52	0.377	-4.3059	0.0734	-4.2325	ACIDO	LSG
LQ-1113	92	94.1	0.159	0.063	3.57	0.307	-4.4703	0.2312	-4.2391	ACIDO	LSG
LQ-1113	94.1	96	0.207	0.02	0.358	0.342	-0.0219	0.0734	0.05148	INERTE	LSG
LQ-1113	96	96.6	0.39	0.02	0.351	0.351	0	0.0734	0.0734	INERTE	LSG
LQ-1113	96.6	98	0.086	0.02	1.2	1.2	0	0.0734	0.0734	INERTE	LSG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1113	98	99.5	0.052	0.02	0.696	0.696	0	0.0734	0.0734	INERTE	LSG
LQ-1113	99.5	100	0.117	0.02	1.35	0.63	-0.9864	0.0734	-0.913	LIGERAMENTE ACIDO	LSG
LQ-1113	100	102	0.218	0.02	0.447	0.361	-0.1178	0.0734	-0.0444	INERTE	LSG
LQ-1113	102	104	0.225	0.02	0.666	0.246	-0.5754	0.0734	-0.502	LIGERAMENTE ACIDO	LSG
LQ-1113	104	106	0.203	0.02	0.306	0.267	-0.0534	0.0734	0.01997	INERTE	LSG
LQ-1113	106	106.5	0.207	0.02	0.739	0.281	-0.6275	0.0734	-0.5541	LIGERAMENTE ACIDO	LSG
LQ-1113	106.5	108.3	0.309	0.02	0.299	0.269	-0.0411	0.0734	0.0323	INERTE	LSG
LQ-1113	108.3	110	0.07	0.02	1.75	1.61	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	LSG
LQ-1113	110	112	0.02	0.02	1.85	1.85	0	0.0734	0.0734	INERTE	LSG
LQ-1113	112	114	0.02	0.02	1.11	1.08	-0.0411	0.0734	0.0323	INERTE	LSG
LQ-1113	114	116	0.022	0.02	0.726	0.726	0	0.0734	0.0734	INERTE	LSG
LQ-1113	116	118	0.02	0.02	0.513	0.513	0	0.0734	0.0734	INERTE	LSG
LQ-1113	118	120	0.087	0.02	0.582	0.582	0	0.0734	0.0734	INERTE	LSG
LQ-1113	120	120.7	0.048	0.02	0.298	0.298	0	0.0734	0.0734	INERTE	LSG
LQ-1113	120.7	122	0.1	0.02	0.169	0.167	-0.0027	0.0734	0.07066	INERTE	LSG
LQ-1113	122	123.9	0.06	0.02	0.396	0.396	0	0.0734	0.0734	INERTE	LSG
LQ-1113	123.9	126	0.02	0.02	1.2	1.2	0	0.0734	0.0734	INERTE	LSG
LQ-1113	126	128	0.02	0.02	1.24	1.24	0	0.0734	0.0734	INERTE	LSG
LQ-1113	128	129.8	0.028	0.02	0.51	0.487	-0.0315	0.0734	0.04189	INERTE	LSG
LQ-1113	129.8	131.1	0.041	0.02	0.87	0.774	-0.1315	0.0734	-0.0581	INERTE	LSG
LQ-1113	131.1	132	0.052	0.02	1.54	0.542	-1.3673	0.0734	-1.2939	ACIDO	LSG
LQ-1113	132	134	0.075	0.042	2.92	0.445	-3.3908	0.1541	-3.2366	ACIDO	LSG
LQ-1113	134	136.3	0.022	0.02	2.69	0.581	-2.8893	0.0734	-2.8159	ACIDO	LSG
LQ-1113	136.3	138	0.307	0.02	0.23	0.182	-0.0658	0.0734	0.00764	INERTE	LSG
LQ-1113	138	140	0.954	0.02	0.18	0.146	-0.0466	0.0734	0.02682	INERTE	LSG
LQ-1113	140	141.8	0.222	0.02	0.348	0.336	-0.0164	0.0734	0.05696	INERTE	LSG
LQ-1113	141.8	144	0.058	0.02	1.07	0.836	-0.3206	0.0734	-0.2472	LIGERAMENTE ACIDO	LSG
LQ-1113	144	145.1	0.088	0.02	2.04	0.571	-2.0125	0.0734	-1.9391	ACIDO	LSG
LQ-1113	145.1	146	0.199	0.02	0.569	0.492	-0.1055	0.0734	-0.0321	INERTE	LSG
LQ-1113	146	146.5	0.126	0.02	0.154	0.09	-0.0877	0.0734	-0.0143	INERTE	LSG
LQ-1113	146.5	148	0.205	0.02	0.138	0.086	-0.0712	0.0734	0.00216	INERTE	LSG
LQ-1113	148	149.1	0.208	0.02	0.406	0.104	-0.4137	0.0734	-0.3403	LIGERAMENTE ACIDO	LSG
LQ-1113	149.1	150	0.724	0.02	0.159	0.105	-0.074	0.0734	-0.0006	INERTE	LSG
LQ-1114	20	22	0.04	0.02	0.932	0.767	-0.2261	0.0734	-0.1527	LIGERAMENTE ACIDO	LSG
LQ-1114	22	24.3	0.071	0.02	1.19	1.16	-0.0411	0.0734	0.0323	INERTE	LSG
LQ-1114	24.3	26.3	0.02	0.02	0.943	0.877	-0.0904	0.0734	-0.017	INERTE	LSG
LQ-1114	26.3	28	0.03	0.02	0.679	0.492	-0.2562	0.0734	-0.1828	LIGERAMENTE ACIDO	LSG
LQ-1114	28	30	0.071	0.02	0.906	0.756	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	LSG
LQ-1114	30	32	0.034	0.02	1.48	0.821	-0.9028	0.0734	-0.8294	LIGERAMENTE ACIDO	LSG
LQ-1114	32	34	0.042	0.02	1.11	0.836	-0.3754	0.0734	-0.302	LIGERAMENTE ACIDO	LSG
LQ-1114	34	35.3	0.027	0.02	0.941	0.81	-0.1795	0.0734	-0.1061	LIGERAMENTE ACIDO	LSG
LQ-1114	35.3	36	0.027	0.02	0.573	0.5	-0.1	0.0734	-0.0266	INERTE	LSG
LQ-1114	36	38	0.02	0.02	0.738	0.655	-0.1137	0.0734	-0.0403	INERTE	LSG
LQ-1114	38	40	0.046	0.02	0.767	0.69	-0.1055	0.0734	-0.0321	INERTE	LSG
LQ-1114	40	42.4	0.041	0.02	0.728	0.661	-0.0918	0.0734	-0.0184	INERTE	LSG
LQ-1114	42.4	44	0.048	0.02	0.482	0.45	-0.0438	0.0734	0.02956	INERTE	LSG
LQ-1114	44	46	0.055	0.02	0.611	0.611	0	0.0734	0.0734	INERTE	LSG
LQ-1114	46	48	0.07	0.02	0.527	0.503	-0.0329	0.0734	0.04052	INERTE	LSG
LQ-1114	48	48.9	0.047	0.02	1.08	0.992	-0.1206	0.0734	-0.0472	INERTE	LSG
LQ-1114	48.9	50	0.121	0.02	0.785	0.785	0	0.0734	0.0734	INERTE	LSG
LQ-1114	50	52	0.051	0.02	0.544	0.503	-0.0562	0.0734	0.01723	INERTE	LSG
LQ-1114	52	54	0.048	0.02	0.824	0.813	-0.0151	0.0734	0.05833	INERTE	LSG
LQ-1114	54	54.5	0.033	0.02	0.75	0.724	-0.0356	0.0734	0.03778	INERTE	LSG
LQ-1114	54.5	55.65	0.053	0.02	0.643	0.62	-0.0315	0.0734	0.04189	INERTE	LSG
LQ-1114	55.65	58	0.111	0.02	0.282	0.282	0	0.0734	0.0734	INERTE	ARG
LQ-1114	58	60	0.071	0.02	0.334	0.334	0	0.0734	0.0734	INERTE	ARG
LQ-1114	60	61	0.06	0.02	0.149	0.149	0	0.0734	0.0734	INERTE	ARG
LQ-1115	44.15	46	0.089	0.02	0.022	0.022	0	0.0734	0.0734	INERTE	ARG
LQ-1115	46	48	0.048	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1115	48	50	0.056	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1115	50	52	0.049	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1115	52	54	0.042	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1115	54	56	0.045	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1115	56	58	0.036	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1115	58	60	0.049	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1115	60	61	0.027	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1116	64.65	66	0.059	0.02	0.741	0.741	0	0.0734	0.0734	INERTE	USG
LQ-1116	66	68	0.02	0.02	0.632	0.632	0	0.0734	0.0734	INERTE	USG
LQ-1116	68	70.45	0.022	0.02	1.12	1.12	0	0.0734	0.0734	INERTE	USG
LQ-1116	70.45	72	0.02	0.02	0.732	0.732	0	0.0734	0.0734	INERTE	USG
LQ-1116	72	74	0.02	0.02	0.881	0.881	0	0.0734	0.0734	INERTE	USG
LQ-1116	74	76	0.024	0.02	0.538	0.538	0	0.0734	0.0734	INERTE	USG
LQ-1116	76	78	0.051	0.02	0.968	0.968	0	0.0734	0.0734	INERTE	USG
LQ-1116	78	78.5	0.051	0.02	0.955	0.933	-0.0301	0.0734	0.04326	INERTE	USG
LQ-1116	78.5	80	0.02	0.02	0.753	0.753	0	0.0734	0.0734	INERTE	LSG
LQ-1116	80	82.4	0.02	0.02	0.925	0.925	0	0.0734	0.0734	INERTE	LSG
LQ-1116	82.4	84	0.02	0.02	1.41	1.35	-0.0822	0.0734	-0.0088	INERTE	LSG
LQ-1116	84	86	0.02	0.02	1.51	1.51	0	0.0734	0.0734	INERTE	LSG
LQ-1116	86	87.5	0.02	0.02	1.44	1.44	0	0.0734	0.0734	INERTE	LSG
LQ-1116	87.5	88	0.064	0.02	1.41	1.41	0	0.0734	0.0734	INERTE	LSG
LQ-1116	88	90	0.037	0.02	1.62	1.62	0	0.0734	0.0734	INERTE	LSG
LQ-1116	90	90.7	0.034	0.02	0.782	0.782	0	0.0734	0.0734	INERTE	LSG
LQ-1116	90.7	92	0.132	0.02	0.246	0.246	0	0.0734	0.0734	INERTE	LSG
LQ-1116	92	94.2	0.143	0.02	0.187	0.187	0	0.0734	0.0734	INERTE	LSG
LQ-1116	94.2	96	0.373	0.02	0.61	0.322	-0.3946	0.0734	-0.3212	LIGERAMENTE ACIDO	LSG
LQ-1116	96	97.65	0.147	0.02	0.799	0.232	-0.7768	0.0734	-0.7034	LIGERAMENTE ACIDO	LSG
LQ-1116	97.65	99.55	0.321	0.02	0.476	0.283	-0.2644	0.0734	-0.191	LIGERAMENTE ACIDO	LSG
LQ-1116	99.55	100.1	1.12	0.026	1.38	0.675	-0.9659	0.0954	-0.8704	LIGERAMENTE ACIDO	LSG
LQ-1116	100.1	101.7	0.811	0.02	1.18	0.758	-0.5781	0.0734	-0.5047	LIGERAMENTE ACIDO	LSG
LQ-1116	101.7	104	0.198	0.02	1.1	0.659	-0.6042	0.0734	-0.5308	LIGERAMENTE ACIDO	LSG
LQ-1116	104	104.7	0.116	0.02	0.262	0.173	-0.1219	0.0734	-0.0485	INERTE	LSG
LQ-1116	104.7	106	0.136	0.02	0.114	0.09	-0.0329	0.0734	0.04052	INERTE	LSG
LQ-1116	106	108	0.062	0.02	0.329	0.24	-0.1219	0.0734	-0.0485	INERTE	LSG
LQ-1116	108	110	0.06	0.02	0.298	0.244	-0.074	0.0734	-0.0006	INERTE	LSG
LQ-1116	110	112	0.048	0.02	0.081	0.034	-0.0644	0.0734	0.00901	INERTE	LSG
LQ-1116	112	114	0.044	0.02	0.108	0.02	-0.1206	0.0734	-0.0472	INERTE	LSG
LQ-1116	114	115.8	0.077	0.02	0.259	0.192	-0.0918	0.0734	-0.0184	INERTE	LSG
LQ-1116	115.8	118	0.105	0.02	0.12	0.067	-0.0726	0.0734	0.00079	INERTE	LSG
LQ-1116	118	119.6	0.076	0.02	0.108	0.078	-0.0411	0.0734	0.0323	INERTE	LSG
LQ-1116	119.6	120.8	0.054	0.02	0.748	0.467	-0.385	0.0734	-0.3116	LIGERAMENTE ACIDO	LSG
LQ-1116	120.8	122	0.063	0.02	0.071	0.067	-0.0055	0.0734	0.06792	INERTE	ARG
LQ-1116	122	124	0.02	0.02	0.041	0.03	-0.0151	0.0734	0.05833	INERTE	ARG
LQ-1116	124	126	0.06	0.02	0.035	0.026	-0.0123	0.0734	0.06107	INERTE	ARG
LQ-1116	126	128	0.049	0.02	0.077	0.04	-0.0507	0.0734	0.02271	INERTE	ARG
LQ-1116	128	130	0.043	0.02	0.035	0.028	-0.0096	0.0734	0.06381	INERTE	ARG
LQ-1117	32	34	0.02	0.02	0.578	0.541	-0.0507	0.0734	0.02271	INERTE	LSG
LQ-1117	34	36	0.02	0.02	0.671	0.612	-0.0808	0.0734	-0.0074	INERTE	LSG
LQ-1117	36	38	0.051	0.02	0.663	0.663	0	0.0734	0.0734	INERTE	LSG
LQ-1117	38	39.2	0.02	0.02	0.95	0.792	-0.2165	0.0734	-0.1431	LIGERAMENTE ACIDO	LSG
LQ-1117	39.2	40	0.031	0.02	0.603	0.603	0	0.0734	0.0734	INERTE	LSG
LQ-1117	40	42	0.02	0.02	0.823	0.823	0	0.0734	0.0734	INERTE	LSG
LQ-1117	42	44	0.02	0.02	1.44	1.39	-0.0685	0.0734	0.0049	INERTE	LSG
LQ-1117	44	46	0.02	0.02	2.05	1.7	-0.4795	0.0734	-0.4061	LIGERAMENTE ACIDO	LSG
LQ-1117	46	48	0.026	0.02	1.4	1.25	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	LSG
LQ-1117	48	49.05	0.025	0.02	1.25	1.25	0	0.0734	0.0734	INERTE	LSG
LQ-1117	49.05	50	0.045	0.02	0.882	0.742	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	LSG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1117	50	52	0.049	0.02	0.825	0.669	-0.2137	0.0734	-0.1403	LIGERAMENTE ACIDO	LSG
LQ-1117	52	54	0.117	0.02	1.08	0.866	-0.2932	0.0734	-0.2198	LIGERAMENTE ACIDO	LSG
LQ-1117	54	56	0.055	0.02	0.631	0.485	-0.2	0.0734	-0.1266	LIGERAMENTE ACIDO	LSG
LQ-1117	56	58.3	0.066	0.02	1.24	0.99	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	LSG
LQ-1117	58.3	60	0.02	0.02	0.817	0.577	-0.3288	0.0734	-0.2554	LIGERAMENTE ACIDO	LSG
LQ-1117	60	62	0.02	0.02	0.763	0.606	-0.2151	0.0734	-0.1417	LIGERAMENTE ACIDO	LSG
LQ-1117	62	64	0.061	0.02	1.6	1.38	-0.3014	0.0734	-0.228	LIGERAMENTE ACIDO	LSG
LQ-1117	64	66	0.036	0.02	0.59	0.424	-0.2274	0.0734	-0.154	LIGERAMENTE ACIDO	LSG
LQ-1117	66	67.2	0.04	0.02	0.473	0.39	-0.1137	0.0734	-0.0403	INERTE	LSG
LQ-1117	67.2	68	0.058	0.02	0.46	0.333	-0.174	0.0734	-0.1006	LIGERAMENTE ACIDO	LSG
LQ-1117	68	70	0.048	0.02	0.571	0.43	-0.1932	0.0734	-0.1198	LIGERAMENTE ACIDO	LSG
LQ-1117	70	72.1	0.031	0.02	0.572	0.473	-0.1356	0.0734	-0.0622	INERTE	LSG
LQ-1117	72.1	74	0.031	0.02	0.237	0.183	-0.074	0.0734	-0.0006	INERTE	INT
LQ-1117	74	76	0.069	0.02	0.029	0.021	-0.011	0.0734	0.06244	INERTE	INT
LQ-1117	76	78	0.02	0.02	0.036	0.02	-0.0219	0.0734	0.05148	INERTE	INT
LQ-1117	78	80	0.021	0.02	0.033	0.022	-0.0151	0.0734	0.05833	INERTE	INT
LQ-1118	33.95	36	0.02	0.02	0.317	0.211	-0.1452	0.0734	-0.0718	INERTE	LSG
LQ-1118	36	36.65	0.02	0.02	0.394	0.292	-0.1397	0.0734	-0.0663	INERTE	LSG
LQ-1118	36.65	37.75	0.02	0.02	1.26	1.05	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	LSG
LQ-1118	37.75	38.85	0.082	0.02	0.522	0.424	-0.1343	0.0734	-0.0609	INERTE	LSG
LQ-1118	38.85	40	0.253	0.02	0.159	0.118	-0.0562	0.0734	0.01723	INERTE	LSG
LQ-1118	40	41.8	0.171	0.02	0.269	0.197	-0.0986	0.0734	-0.0252	INERTE	LSG
LQ-1118	41.8	44	0.159	0.02	0.675	0.537	-0.1891	0.0734	-0.1157	LIGERAMENTE ACIDO	SC
LQ-1118	44	46	0.091	0.02	1.47	1.31	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	SC
LQ-1118	46	48	0.02	0.02	1.38	1.28	-0.137	0.0734	-0.0636	INERTE	SC
LQ-1118	48	50	0.027	0.02	0.769	0.615	-0.211	0.0734	-0.1376	LIGERAMENTE ACIDO	SC
LQ-1118	50	52	0.051	0.02	2.24	1.99	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	SC
LQ-1118	52	54	0.032	0.02	1.24	0.984	-0.3507	0.0734	-0.2773	LIGERAMENTE ACIDO	SC
LQ-1118	54	56	0.021	0.02	0.586	0.457	-0.1767	0.0734	-0.1033	LIGERAMENTE ACIDO	SC
LQ-1118	56	58	0.051	0.02	1.54	1.28	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	SC
LQ-1118	58	60	0.061	0.02	2.36	2.25	-0.1507	0.0734	-0.0773	INERTE	SC
LQ-1118	60	62	0.02	0.02	2.41	2.2	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	SC
LQ-1118	62	64	0.043	0.02	3.45	3.2	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	SC
LQ-1118	64	66	0.032	0.02	2.56	2.31	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	SC
LQ-1118	66	68	0.033	0.02	2.56	2.43	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	SC
LQ-1118	68	70	0.084	0.02	2.14	1.97	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	SC
LQ-1118	70	72	0.048	0.02	1.71	1.57	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	SC
LQ-1118	72	74	0.027	0.02	0.859	0.802	-0.0781	0.0734	-0.0047	INERTE	SC
LQ-1118	74	76	0.025	0.02	2.86	2.7	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	SC
LQ-1118	76	78	0.036	0.02	2.48	2.42	-0.0822	0.0734	-0.0088	INERTE	SC
LQ-1118	78	80	0.02	0.02	0.299	0.269	-0.0411	0.0734	0.0323	INERTE	SC
LQ-1118	80	82	0.02	0.02	0.307	0.282	-0.0343	0.0734	0.03915	INERTE	SC
LQ-1118	82	84	0.02	0.02	0.369	0.359	-0.0137	0.0734	0.0597	INERTE	SC
LQ-1118	84	86	0.027	0.02	0.516	0.499	-0.0233	0.0734	0.05011	INERTE	SC
LQ-1118	86	88	0.022	0.02	0.555	0.485	-0.0959	0.0734	-0.0225	INERTE	SC
LQ-1118	88	90	0.029	0.02	1.73	1.58	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	SC
LQ-1118	90	92	0.034	0.02	1.77	1.77	0	0.0734	0.0734	INERTE	SC
LQ-1118	92	94	0.032	0.02	2.2	2.2	0	0.0734	0.0734	INERTE	SC
LQ-1118	94	96	0.034	0.02	3.31	2.85	-0.6302	0.0734	-0.5568	LIGERAMENTE ACIDO	SC
LQ-1118	96	98	0.033	0.02	1.21	1.21	0	0.0734	0.0734	INERTE	SC
LQ-1118	98	100	0.032	0.02	3.04	2.81	-0.3151	0.0734	-0.2417	LIGERAMENTE ACIDO	SC
LQ-1118	100	102	0.03	0.02	2.12	1.98	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	SC
LQ-1118	102	104	0.037	0.02	2.07	1.88	-0.2603	0.0734	-0.1869	LIGERAMENTE ACIDO	SC
LQ-1118	104	106	0.031	0.02	2.38	2.29	-0.1233	0.0734	-0.0499	INERTE	SC
LQ-1118	106	108	0.049	0.02	1.82	1.64	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	SC
LQ-1118	108	110	0.027	0.02	1.32	1.07	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	SC
LQ-1118	110	112	0.031	0.02	1.04	0.943	-0.1329	0.0734	-0.0595	INERTE	SC
LQ-1118	112	114	0.047	0.02	1.25	1.1	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	SC
LQ-1118	114	116	0.054	0.02	2.27	1.65	-0.8494	0.0734	-0.776	LIGERAMENTE ACIDO	SC
LQ-1118	116	118	0.031	0.02	2.44	2.44	0	0.0734	0.0734	INERTE	SC
LQ-1118	118	120	0.033	0.02	2.29	2.07	-0.3014	0.0734	-0.228	LIGERAMENTE ACIDO	SC
LQ-1118	120	122	0.038	0.02	1.47	1.37	-0.137	0.0734	-0.0636	INERTE	SC
LQ-1119	70	72	0.029	0.02	0.576	0.542	-0.0466	0.0734	0.02682	INERTE	USG
LQ-1119	72	74	0.027	0.02	0.596	0.596	0	0.0734	0.0734	INERTE	USG
LQ-1119	74	76	0.033	0.02	1.99	1.99	0	0.0734	0.0734	INERTE	USG
LQ-1119	76	77.3	0.121	0.02	0.686	0.686	0	0.0734	0.0734	INERTE	USG
LQ-1119	77.3	78	0.055	0.02	0.324	0.311	-0.0178	0.0734	0.05559	INERTE	LSG
LQ-1119	78	80.05	0.02	0.02	3.36	0.394	-4.0634	0.0734	-3.99	ACIDO	LSG
LQ-1119	80.05	82	0.081	0.02	0.877	0.335	-0.7425	0.0734	-0.6691	LIGERAMENTE ACIDO	LSG
LQ-1119	82	84.35	0.138	0.02	0.593	0.298	-0.4042	0.0734	-0.3308	LIGERAMENTE ACIDO	LSG
LQ-1119	84.35	86.15	0.091	0.02	0.139	0.139	0	0.0734	0.0734	INERTE	LSG
LQ-1119	86.15	88	0.322	0.228	1.6	0.274	-1.8166	0.8368	-0.9799	LIGERAMENTE ACIDO	LSG
LQ-1119	88	90	0.694	0.577	1.13	0.216	-1.2522	2.1176	0.86541	LIGERAMENTE BASICO	LSG
LQ-1119	90	92	0.411	0.215	0.736	0.292	-0.6083	0.7891	0.18077	LIGERAMENTE BASICO	LSG
LQ-1119	92	94	0.158	0.02	0.526	0.311	-0.2946	0.0734	-0.2212	LIGERAMENTE ACIDO	LSG
LQ-1119	94	95.1	0.029	0.02	0.228	0.18	-0.0658	0.0734	0.00764	INERTE	LSG
LQ-1119	95.1	96	0.043	0.02	0.039	0.034	-0.0069	0.0734	0.06655	INERTE	ARG
LQ-1119	96	98	0.026	0.02	0.045	0.045	0	0.0734	0.0734	INERTE	ARG
LQ-1119	98	100	0.039	0.02	0.096	0.096	0	0.0734	0.0734	INERTE	ARG
LQ-1119	100	100.7	0.038	0.02	0.079	0.045	-0.0466	0.0734	0.02682	INERTE	ARG
LQ-1119	100.7	102	0.03	0.02	0.023	0.02	-0.0041	0.0734	0.06929	INERTE	F
LQ-1119	102	104	0.021	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	F
LQ-1119	104	105.1	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	F
LQ-1120	56	58.2	0.034	0.02	0.88	0.737	-0.1959	0.0734	-0.1225	LIGERAMENTE ACIDO	USG
LQ-1120	58.2	60.25	0.158	0.02	0.592	0.495	-0.1329	0.0734	-0.0595	INERTE	LSG
LQ-1120	60.25	62	0.042	0.02	0.52	0.428	-0.126	0.0734	-0.0526	INERTE	ARG
LQ-1120	62	64	0.025	0.02	0.561	0.463	-0.1343	0.0734	-0.0609	INERTE	ARG
LQ-1120	64	66	0.022	0.02	0.529	0.472	-0.0781	0.0734	-0.0047	INERTE	ARG
LQ-1120	66	68	0.02	0.02	0.584	0.495	-0.1219	0.0734	-0.0485	INERTE	ARG
LQ-1120	68	70	0.044	0.02	0.433	0.36	-0.1	0.0734	-0.0266	INERTE	ARG
LQ-1120	70	72.2	0.038	0.02	0.366	0.269	-0.1329	0.0734	-0.0595	INERTE	ARG
LQ-1120	72.2	74	0.02	0.02	0.75	0.596	-0.211	0.0734	-0.1376	LIGERAMENTE ACIDO	ARG
LQ-1120	74	76	0.02	0.02	0.576	0.477	-0.1356	0.0734	-0.0622	INERTE	ARG
LQ-1120	76	78	0.041	0.034	0.688	0.575	-0.1548	0.1248	-0.03	INERTE	ARG
LQ-1120	78	80	0.035	0.02	0.725	0.606	-0.163	0.0734	-0.0896	INERTE	ARG
LQ-1121	52	54	0.284	0.02	0.864	0.775	-0.1219	0.0734	-0.0485	INERTE	
LQ-1121	54	55.4	0.026	0.02	0.811	0.676	-0.185	0.0734	-0.1116	LIGERAMENTE ACIDO	
LQ-1121	55.4	56	0.056	0.02	1.02	0.81	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	
LQ-1121	56	56.9	0.072	0.02	0.591	0.472	-0.163	0.0734	-0.0896	INERTE	
LQ-1121	56.9	58	0.031	0.02	1.36	1.07	-0.3973	0.0734	-0.3239	LIGERAMENTE ACIDO	
LQ-1121	58	59.6	0.08	0.02	1.27	1.06	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	
LQ-1121	59.6	61.9	0.142	0.02	0.817	0.684	-0.1822	0.0734	-0.1088	LIGERAMENTE ACIDO	
LQ-1121	61.9	64	0.02	0.02	2.93	2.71	-0.3014	0.0734	-0.228	LIGERAMENTE ACIDO	
LQ-1121	64	65.4	0.025	0.02	2.18	2.03	-0.2055	0.0734	-0.1321	LIGERAMENTE ACIDO	
LQ-1121	65.4	66	0.044	0.02	0.803	0.627	-0.2411	0.0734	-0.1677	LIGERAMENTE ACIDO	
LQ-1121	66	68	0.335	0.02	0.849	0.677	-0.2356	0.0734	-0.1622	LIGERAMENTE ACIDO	
LQ-1121	68	70	0.171	0.02	0.76	0.663	-0.1329	0.0734	-0.0595	INERTE	
LQ-1121	70	71.6	0.163	0.02	0.54	0.445	-0.1302	0.0734	-0.0568	INERTE	
LQ-1121	71.6	74	0.039	0.02	0.157	0.086	-0.0973	0.0734	-0.0239	INERTE	ARG
LQ-1121	74	76	0.04	0.02	0.035	0.02	-0.0206	0.0734	0.05285	INERTE	ARG
LQ-1121	76	78	0.045	0.02	0.03	0.02	-0.0137	0.0734	0.0597	INERTE	ARG
LQ-1121	78	80	0.02	0.02	0.026	0.02	-0.0082	0.0734	0.06518	INERTE	ARG
LQ-1121	80	82	0.032	0.02	0.024	0.02	-0.0055	0.0734	0.06792	INERTE	ARG
LQ-1121	82	84	0.02	0.02	0.026	0.02	-0.0082	0.0734	0.06518	INERTE	ARG
LQ-1121	84	85.4	0.02	0.02	0.031	0.02	-0.0151	0.0734	0.05833	INERTE	ARG
LQ-1122	64	66	0.185	0.025	0.524	0.33	-0.2658	0.0918	-0.174	LIGERAMENTE ACIDO	LSG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1122	66	67.9	0.211	0.02	0.056	0.05	-0.0082	0.0734	0.06518	INERTE	LSG
LQ-1122	67.9	68.6	0.149	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1123	60	62	0.025	0.02	0.396	0.347	-0.0671	0.0734	0.00627	INERTE	USG
LQ-1123	62	64	0.028	0.02	0.779	0.61	-0.2315	0.0734	-0.1581	LIGERAMENTE ACIDO	USG
LQ-1123	64	66	0.042	0.02	0.876	0.876	0	0.0734	0.0734	INERTE	LSG
LQ-1123	66	68	0.026	0.02	0.478	0.478	0	0.0734	0.0734	INERTE	LSG
LQ-1123	68	69.35	0.025	0.02	0.508	0.467	-0.0562	0.0734	0.01723	INERTE	LSG
LQ-1123	69.35	70	0.041	0.02	0.618	0.618	0	0.0734	0.0734	INERTE	LSG
LQ-1123	70	72	0.04	0.02	0.639	0.627	-0.0164	0.0734	0.05696	INERTE	LSG
LQ-1123	72	74	0.04	0.02	2.05	1.94	-0.1507	0.0734	-0.0773	INERTE	LSG
LQ-1123	74	76	0.041	0.02	1.82	1.59	-0.3151	0.0734	-0.2417	LIGERAMENTE ACIDO	LSG
LQ-1123	76	78	0.062	0.02	1.51	1.35	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	LSG
LQ-1123	78	80	0.043	0.02	0.718	0.656	-0.0849	0.0734	-0.0115	INERTE	LSG
LQ-1123	80	81.7	0.081	0.02	1.29	1.29	0	0.0734	0.0734	INERTE	LSG
LQ-1123	81.7	84	0.196	0.023	0.576	0.576	0	0.0844	0.08441	INERTE	LSG
LQ-1123	84	85	0.213	0.02	0.042	0.042	0	0.0734	0.0734	INERTE	LSG
LQ-1123	85	86	0.139	0.02	2.9	0.343	-3.5031	0.0734	-3.4297	ACIDO	LSG
LQ-1123	86	87.6	0.186	0.02	3.16	0.494	-3.6524	0.0734	-3.579	ACIDO	LSG
LQ-1123	87.6	89.7	0.4	0.031	0.575	0.529	-0.063	0.1138	0.05075	INERTE	LSG
LQ-1123	89.7	92	0.052	0.02	1.37	1.3	-0.0959	0.0734	-0.0225	INERTE	LSG
LQ-1123	92	94	0.245	0.02	2.61	2.26	-0.4795	0.0734	-0.4061	LIGERAMENTE ACIDO	LSG
LQ-1123	94	95.75	0.03	0.02	0.639	0.574	-0.0891	0.0734	-0.0157	INERTE	LSG
LQ-1123	95.75	97.6	0.023	0.02	1.4	1.35	-0.0685	0.0734	0.0049	INERTE	LSG
LQ-1123	97.6	100	0.318	0.02	0.936	0.936	0	0.0734	0.0734	INERTE	LSG
LQ-1123	100	102	0.055	0.02	2.22	1.87	-0.4795	0.0734	-0.4061	LIGERAMENTE ACIDO	LSG
LQ-1123	102	104	0.067	0.02	1.19	1.19	0	0.0734	0.0734	INERTE	LSG
LQ-1123	104	106	0.073	0.02	1.25	1.25	0	0.0734	0.0734	INERTE	LSG
LQ-1123	106	108.3	0.052	0.02	1.67	1.67	0	0.0734	0.0734	INERTE	LSG
LQ-1123	108.3	110.1	1.22	0.037	0.302	0.302	0	0.1358	0.13579	LIGERAMENTE BASICO	LSG
LQ-1123	110.1	112	0.228	0.025	0.094	0.094	0	0.0918	0.09175	INERTE	ARG
LQ-1123	112	114	0.411	0.02	0.085	0.085	0	0.0734	0.0734	INERTE	ARG
LQ-1123	114	116	0.223	0.02	0.127	0.127	0	0.0734	0.0734	INERTE	ARG
LQ-1123	116	118	0.02	0.02	0.023	0.023	0	0.0734	0.0734	INERTE	ARG
LQ-1123	118	118.9	0.002	0.02	0.037	0.037	0	0.0734	0.0734	INERTE	ARG
LQ-1123	118.9	120	0.084	0.02	0.08	0.08	0	0.0734	0.0734	INERTE	INT
LQ-1123	120	122	0.059	0.02	0.069	0.069	0	0.0734	0.0734	INERTE	INT
LQ-1123	122	123.2	0.17	0.02	0.065	0.065	0	0.0734	0.0734	INERTE	INT
LQ-1124	64	65.3	0.02	0.02	1.33	1.32	-0.0137	0.0734	0.0597	INERTE	LSG
LQ-1124	65.3	66	0.097	0.022	0.243	0.202	-0.0562	0.0807	0.02457	INERTE	LSG
LQ-1124	66	68	0.081	0.02	0.125	0.101	-0.0329	0.0734	0.04052	INERTE	LSG
LQ-1124	68	70	0.061	0.02	0.073	0.048	-0.0343	0.0734	0.03915	INERTE	LSG
LQ-1124	70	70.65	0.092	0.02	0.07	0.044	-0.0356	0.0734	0.03778	INERTE	LSG
LQ-1124	70.65	72	0.027	0.02	0.038	0.021	-0.0233	0.0734	0.05011	INERTE	ARG
LQ-1124	72	74	0.038	0.02	0.034	0.021	-0.0178	0.0734	0.05559	INERTE	ARG
LQ-1124	74	76	0.02	0.02	0.171	0.112	-0.0808	0.0734	-0.0074	INERTE	ARG
LQ-1124	76	78	0.02	0.02	0.046	0.02	-0.0356	0.0734	0.03778	INERTE	ARG
LQ-1124	78	80	0.02	0.02	0.03	0.021	-0.0123	0.0734	0.06107	INERTE	ARG
LQ-1124	80	82	0.02	0.02	0.043	0.027	-0.0219	0.0734	0.05148	INERTE	ARG
LQ-1124	82	83.25	0.033	0.02	0.08	0.031	-0.0671	0.0734	0.00627	INERTE	ARG
LQ-1124	83.25	84	0.06	0.02	0.063	0.02	-0.0589	0.0734	0.01449	INERTE	INT
LQ-1124	84	86	0.065	0.02	0.074	0.035	-0.0534	0.0734	0.01997	INERTE	INT
LQ-1124	86	87.75	0.051	0.036	0.051	0.021	-0.0411	0.1321	0.09102	INERTE	INT
LQ-1125	0	2	0.137	0.02	1.47	1.44	-0.0411	0.0734	0.0323	INERTE	USG
LQ-1125	2	4	0.08	0.02	1.7	1.52	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	USG
LQ-1125	4	6	0.209	0.02	1.25	1.18	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1125	6	8	0.19	0.02	1.37	1.29	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1125	8	9.4	0.197	0.02	1.68	1.55	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	USG
LQ-1125	9.4	10	0.095	0.02	2.45	2.22	-0.3151	0.0734	-0.2417	LIGERAMENTE ACIDO	USG
LQ-1125	10	12	0.02	0.02	1.15	1.06	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1125	12	12.6	0.02	0.02	1.05	0.951	-0.1356	0.0734	-0.0622	INERTE	USG
LQ-1125	12.6	14	0.133	0.02	1.27	1.21	-0.0822	0.0734	-0.0088	INERTE	USG
LQ-1125	14	16	0.069	0.02	1.13	1.09	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1125	16	17.55	0.029	0.02	1.58	1.41	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	USG
LQ-1125	17.55	20	0.02	0.02	1.08	0.99	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1125	20	20.6	0.02	0.02	2.31	2.05	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	USG
LQ-1125	20.6	22	0.067	0.02	1.14	1.04	-0.137	0.0734	-0.0636	INERTE	USG
LQ-1125	22	24	0.02	0.02	1.14	0.933	-0.2836	0.0734	-0.2102	LIGERAMENTE ACIDO	USG
LQ-1125	24	24.55	0.02	0.02	1.42	1.25	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	USG
LQ-1125	24.55	25.65	0.088	0.02	1.26	1.17	-0.1233	0.0734	-0.0499	INERTE	USG
LQ-1125	25.65	26.65	0.144	0.02	1.53	1.43	-0.137	0.0734	-0.0636	INERTE	USG
LQ-1125	26.65	28	0.02	0.02	1.04	0.923	-0.1603	0.0734	-0.0869	INERTE	USG
LQ-1125	28	30	0.02	0.02	1.06	0.911	-0.2041	0.0734	-0.1307	LIGERAMENTE ACIDO	USG
LQ-1125	30	32	0.02	0.02	0.552	0.477	-0.1028	0.0734	-0.0294	INERTE	USG
LQ-1125	32	34	0.02	0.02	0.907	0.764	-0.1959	0.0734	-0.1225	LIGERAMENTE ACIDO	USG
LQ-1125	34	36	0.033	0.02	0.883	0.817	-0.0904	0.0734	-0.017	INERTE	USG
LQ-1125	36	37.85	0.02	0.02	0.667	0.585	-0.1123	0.0734	-0.0389	INERTE	USG
LQ-1125	37.85	39	0.104	0.02	0.982	0.912	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1125	39	40.4	0.071	0.02	1.16	1.08	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1125	40.4	42	0.02	0.02	1.18	1.02	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	LSG
LQ-1125	42	44	0.063	0.02	1.22	1.1	-0.1644	0.0734	-0.091	INERTE	LSG
LQ-1125	44	45.9	0.02	0.02	1.54	1.35	-0.2603	0.0734	-0.1869	LIGERAMENTE ACIDO	LSG
LQ-1125	45.9	48.4	0.032	0.02	0.936	0.866	-0.0959	0.0734	-0.0225	INERTE	LSG
LQ-1125	48.4	50	0.041	0.02	1.28	1.16	-0.1644	0.0734	-0.091	INERTE	LSG
LQ-1125	50	52	0.02	0.02	0.841	0.779	-0.0849	0.0734	-0.0115	INERTE	LSG
LQ-1125	52	54	0.02	0.02	0.931	0.827	-0.1425	0.0734	-0.0691	INERTE	LSG
LQ-1125	54	56	0.02	0.02	1.22	1.09	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	LSG
LQ-1125	56	57.55	0.02	0.02	0.885	0.834	-0.0699	0.0734	0.00353	INERTE	LSG
LQ-1125	57.55	59.95	0.02	0.02	1.17	1.04	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	LSG
LQ-1125	59.95	62	0.151	0.02	1.36	1.33	-0.0411	0.0734	0.0323	INERTE	LSG
LQ-1125	62	64	0.133	0.02	1.59	1.54	-0.0685	0.0734	0.0049	INERTE	LSG
LQ-1125	64	65	0.127	0.02	1.65	1.57	-0.1096	0.0734	-0.0362	INERTE	LSG
LQ-1125	65	66	0.02	0.02	0.822	0.706	-0.1589	0.0734	-0.0855	INERTE	LSG
LQ-1125	66	68	0.02	0.02	0.985	0.928	-0.0781	0.0734	-0.0047	INERTE	LSG
LQ-1125	68	70.4	0.048	0.02	1.43	1.27	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	LSG
LQ-1125	70.4	72	0.608	0.02	1.65	1.28	-0.5069	0.0734	-0.4335	LIGERAMENTE ACIDO	LSG
LQ-1125	72	74.05	0.979	0.02	1.61	0.76	-1.1645	0.0734	-1.0911	ACIDO	LSG
LQ-1125	74.05	76	0.02	0.02	0.935	0.877	-0.0795	0.0734	-0.0061	INERTE	LSG
LQ-1125	76	78	0.02	0.02	1.98	1.69	-0.3973	0.0734	-0.3239	LIGERAMENTE ACIDO	LSG
LQ-1125	78	80	0.039	0.02	1.24	0.805	-0.596	0.0734	-0.5226	LIGERAMENTE ACIDO	LSG
LQ-1125	80	80.7	0.02	0.02	3.51	3.15	-0.4932	0.0734	-0.4198	LIGERAMENTE ACIDO	LSG
LQ-1125	80.7	82	0.091	0.02	0.395	0.241	-0.211	0.0734	-0.1376	LIGERAMENTE ACIDO	LSG
LQ-1125	82	82.8	0.167	0.02	0.494	0.381	-0.1548	0.0734	-0.0814	INERTE	LSG
LQ-1125	82.8	84	1.62	0.02	0.662	0.535	-0.174	0.0734	-0.1006	LIGERAMENTE ACIDO	LSG
LQ-1125	84	85.9	0.846	0.02	0.895	0.809	-0.1178	0.0734	-0.0444	INERTE	LSG
LQ-1125	85.9	88	0.522	0.02	1.38	1.21	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	LSG
LQ-1125	88	89.1	0.623	0.02	0.979	0.828	-0.2069	0.0734	-0.1335	LIGERAMENTE ACIDO	LSG
LQ-1125	89.1	90	0.717	0.02	1.33	1.03	-0.411	0.0734	-0.3376	LIGERAMENTE ACIDO	LSG
LQ-1125	90	90.8	3.35	0.02	0.48	0.456	-0.0329	0.0734	0.04052	INERTE	LSG
LQ-1125	90.8	91.5	0.183	0.02	0.201	0.201	0	0.0734	0.0734	INERTE	LSG
LQ-1125	91.5	92	0.02	0.02	0.089	0.089	0	0.0734	0.0734	INERTE	ARG
LQ-1125	92	94	0.02	0.02	0.066	0.066	0	0.0734	0.0734	INERTE	ARG
LQ-1125	94	95.1	0.02	0.02	0.071	0.071	0	0.0734	0.0734	INERTE	ARG
LQ-1127	4	6	0.178	0.02	1.38	1.2	-0.2466	0.0734	-0.1732	LIGERAMENTE ACIDO	USG
LQ-1127	6	8.2	0.1	0.02	1.12	0.891	-0.3137	0.0734	-0.2403	LIGERAMENTE ACIDO	USG
LQ-1127	8.2	10	0.029	0.02	0.912	0.725	-0.2562	0.0734	-0.1828	LIGERAMENTE ACIDO	USG
LQ-1127	10	11.45	0.034	0.02	0.83	0.585	-0.3357	0.0734	-0.2623	LIGERAMENTE ACIDO	USG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1127	11.45	12	0.02	0.02	0.807	0.578	-0.3137	0.0734	-0.2403	LIGERAMENTE ACIDO	USG
LQ-1127	12	12.95	0.02	0.02	1.7	1.15	-0.7535	0.0734	-0.6801	LIGERAMENTE ACIDO	USG
LQ-1127	12.95	14	0.037	0.02	1.22	1.01	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	USG
LQ-1127	14	16	0.1	0.02	1.55	0.472	-1.4769	0.0734	-1.4035	ACIDO	USG
LQ-1127	16	16.55	0.02	0.02	1.46	0.911	-0.7521	0.0734	-0.6787	LIGERAMENTE ACIDO	USG
LQ-1127	16.55	17.65	0.24	0.02	0.707	0.541	-0.2274	0.0734	-0.154	LIGERAMENTE ACIDO	USG
LQ-1127	17.65	20	0.061	0.02	1.08	0.945	-0.185	0.0734	-0.1116	LIGERAMENTE ACIDO	USG
LQ-1127	20	22.2	0.236	0.02	0.739	0.587	-0.2082	0.0734	-0.1348	LIGERAMENTE ACIDO	USG
LQ-1127	22.2	24	0.033	0.033	1.13	0.865	-0.3631	0.1211	-0.2419	LIGERAMENTE ACIDO	USG
LQ-1127	24	25.8	0.02	0.02	0.906	0.612	-0.4028	0.0734	-0.3294	LIGERAMENTE ACIDO	USG
LQ-1127	25.8	27.4	0.131	0.02	1.4	1.11	-0.3973	0.0734	-0.3239	LIGERAMENTE ACIDO	USG
LQ-1127	27.4	28	0.02	0.02	3.03	2.39	-0.8768	0.0734	-0.8034	LIGERAMENTE ACIDO	USG
LQ-1127	28	30	0.02	0.02	0.751	0.518	-0.3192	0.0734	-0.2458	LIGERAMENTE ACIDO	USG
LQ-1127	30	32	0.02	0.02	0.891	0.59	-0.4124	0.0734	-0.339	LIGERAMENTE ACIDO	USG
LQ-1127	32	34	0.028	0.02	1.26	0.877	-0.5247	0.0734	-0.4513	LIGERAMENTE ACIDO	USG
LQ-1127	34	36	0.02	0.02	0.923	0.712	-0.2891	0.0734	-0.2157	LIGERAMENTE ACIDO	USG
LQ-1127	36	36.65	0.037	0.02	1.09	0.822	-0.3672	0.0734	-0.2938	LIGERAMENTE ACIDO	USG
LQ-1127	36.65	38	0.081	0.02	0.957	0.758	-0.2726	0.0734	-0.1992	LIGERAMENTE ACIDO	LSG
LQ-1127	38	40	0.281	0.053	1.5	1.15	-0.4795	0.1945	-0.285	LIGERAMENTE ACIDO	LSG
LQ-1127	40	40.8	0.141	0.02	1.57	1.32	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	LSG
LQ-1127	40.8	42	0.077	0.02	0.981	0.705	-0.3781	0.0734	-0.3047	LIGERAMENTE ACIDO	LSG
LQ-1127	42	44	0.073	0.02	0.804	0.545	-0.3548	0.0734	-0.2814	LIGERAMENTE ACIDO	LSG
LQ-1127	44	46	0.059	0.02	0.887	0.659	-0.3124	0.0734	-0.239	LIGERAMENTE ACIDO	LSG
LQ-1127	46	48	0.054	0.02	0.707	0.493	-0.2932	0.0734	-0.2198	LIGERAMENTE ACIDO	LSG
LQ-1127	48	50	0.049	0.02	0.719	0.554	-0.2261	0.0734	-0.1527	LIGERAMENTE ACIDO	LSG
LQ-1127	50	51.75	0.064	0.02	0.682	0.492	-0.2603	0.0734	-0.1869	LIGERAMENTE ACIDO	LSG
LQ-1127	51.75	54	0.06	0.02	1.04	0.748	-0.4	0.0734	-0.3266	LIGERAMENTE ACIDO	LSG
LQ-1127	54	54.8	0.076	0.02	1.09	0.642	-0.6138	0.0734	-0.5404	LIGERAMENTE ACIDO	LSG
LQ-1127	54.8	56	0.102	0.02	0.9	0.663	-0.3247	0.0734	-0.2513	LIGERAMENTE ACIDO	LSG
LQ-1127	56	58	0.055	0.02	0.65	0.465	-0.2535	0.0734	-0.1801	LIGERAMENTE ACIDO	LSG
LQ-1127	58	60.1	0.05	0.02	1.02	0.731	-0.3959	0.0734	-0.3225	LIGERAMENTE ACIDO	LSG
LQ-1127	60.1	62	0.062	0.02	0.112	0.031	-0.111	0.0734	-0.0376	INERTE	INT
LQ-1127	62	64	0.056	0.02	0.122	0.02	-0.1397	0.0734	-0.0663	INERTE	INT
LQ-1127	64	66	0.096	0.02	0.112	0.027	-0.1165	0.0734	-0.0431	INERTE	INT
LQ-1127	66	68	0.117	0.02	0.109	0.022	-0.1192	0.0734	-0.0458	INERTE	INT
LQ-1127	68	70	0.045	0.02	0.122	0.02	-0.1397	0.0734	-0.0663	INERTE	INT
LQ-1127	70	72	0.096	0.02	0.127	0.033	-0.1288	0.0734	-0.0554	INERTE	INT
LQ-1127	72	74	0.061	0.02	0.086	0.031	-0.0754	0.0734	-0.002	INERTE	INT
LQ-1127	74	76	0.061	0.02	0.085	0.033	-0.0712	0.0734	0.00216	INERTE	INT
LQ-1127	76	78	0.064	0.02	0.179	0.107	-0.0986	0.0734	-0.0252	INERTE	INT
LQ-1127	78	80	0.075	0.02	0.096	0.02	-0.1041	0.0734	-0.0307	INERTE	INT
LQ-1127	80	82	0.057	0.02	0.083	0.02	-0.0863	0.0734	-0.0129	INERTE	INT
LQ-1127	82	84	0.048	0.02	0.065	0.02	-0.0617	0.0734	0.01175	INERTE	INT
LQ-1127	84	86	0.071	0.02	0.082	0.02	-0.0849	0.0734	-0.0115	INERTE	INT
LQ-1127	86	88	0.048	0.02	0.085	0.02	-0.0891	0.0734	-0.0157	INERTE	INT
LQ-1127	88	90.3	0.038	0.02	0.058	0.02	-0.0521	0.0734	0.02134	INERTE	INT
LQ-1128	4	6	0.203	0.02	1.51	1.14	-0.5069	0.0734	-0.4335	LIGERAMENTE ACIDO	LSG
LQ-1128	6	8	0.23	0.02	1.45	1.08	-0.5069	0.0734	-0.4335	LIGERAMENTE ACIDO	LSG
LQ-1128	8	10	0.168	0.02	1.3	1.09	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	LSG
LQ-1128	10	12	0.107	0.02	1.3	1.1	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	LSG
LQ-1128	12	14	0.125	0.02	1.29	0.946	-0.4713	0.0734	-0.3979	LIGERAMENTE ACIDO	LSG
LQ-1128	14	15.5	0.074	0.02	1.23	0.905	-0.4453	0.0734	-0.3719	LIGERAMENTE ACIDO	LSG
LQ-1128	15.5	16	0.099	0.02	1.32	1.08	-0.3288	0.0734	-0.2554	LIGERAMENTE ACIDO	LSG
LQ-1128	16	18	0.112	0.02	1.45	1.14	-0.4247	0.0734	-0.3513	LIGERAMENTE ACIDO	LSG
LQ-1128	18	18.7	0.146	0.02	1.59	1.33	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	LSG
LQ-1128	18.7	20	0.047	0.02	2.71	1.9	-1.1097	0.0734	-1.0363	ACIDO	LSG
LQ-1128	20	22	0.157	0.02	2.59	2.04	-0.7535	0.0734	-0.6801	LIGERAMENTE ACIDO	LSG
LQ-1128	22	24	0.14	0.02	1.77	1.61	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	LSG
LQ-1128	24	26	0.133	0.02	1.75	1.51	-0.3288	0.0734	-0.2554	LIGERAMENTE ACIDO	LSG
LQ-1128	26	28	0.199	0.02	1.27	0.937	-0.4562	0.0734	-0.3828	LIGERAMENTE ACIDO	LSG
LQ-1128	28	28.5	0.059	0.02	0.815	0.614	-0.2754	0.0734	-0.202	LIGERAMENTE ACIDO	LSG
LQ-1128	28.5	30	0.077	0.02	0.474	0.309	-0.2261	0.0734	-0.1527	LIGERAMENTE ACIDO	LSG
LQ-1128	30	32	0.119	0.02	1.7	1.41	-0.3973	0.0734	-0.3239	LIGERAMENTE ACIDO	LSG
LQ-1128	32	34	0.092	0.02	0.818	0.558	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	LSG
LQ-1128	34	35.9	0.119	0.02	0.998	0.631	-0.5028	0.0734	-0.4294	LIGERAMENTE ACIDO	LSG
LQ-1128	35.9	38	0.117	0.02	1.07	0.814	-0.3507	0.0734	-0.2773	LIGERAMENTE ACIDO	LSG
LQ-1128	38	40.35	0.146	0.02	1.15	0.898	-0.3452	0.0734	-0.2718	LIGERAMENTE ACIDO	LSG
LQ-1128	40.35	42	0.062	0.02	0.626	0.408	-0.2987	0.0734	-0.2253	LIGERAMENTE ACIDO	LSG
LQ-1128	42	44	0.088	0.02	0.801	0.522	-0.3822	0.0734	-0.3088	LIGERAMENTE ACIDO	LSG
LQ-1128	44	46	0.124	0.02	0.853	0.568	-0.3905	0.0734	-0.3171	LIGERAMENTE ACIDO	LSG
LQ-1128	46	46.65	0.03	0.02	0.815	0.718	-0.1329	0.0734	-0.0595	INERTE	LSG
LQ-1128	46.65	48	0.069	0.02	1.23	1.06	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	LSG
LQ-1128	48	50	0.031	0.02	1.2	1.09	-0.1507	0.0734	-0.0773	INERTE	LSG
LQ-1128	50	52	0.079	0.02	0.759	0.742	-0.0233	0.0734	0.05011	INERTE	LSG
LQ-1128	52	53.55	0.039	0.02	0.952	0.926	-0.0356	0.0734	0.03778	INERTE	LSG
LQ-1128	53.55	56	0.05	0.02	0.991	0.88	-0.1521	0.0734	-0.0787	INERTE	LSG
LQ-1128	56	57.6	0.095	0.02	1.14	1.13	-0.0137	0.0734	0.0597	INERTE	LSG
LQ-1128	57.6	60	0.086	0.02	0.476	0.451	-0.0343	0.0734	0.03915	INERTE	LSG
LQ-1128	60	60.65	0.077	0.02	0.11	0.109	-0.0014	0.0734	0.07203	INERTE	LSG
LQ-1128	60.65	62.25	0.125	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	LSG
LQ-1128	62.25	63.85	0.127	0.02	0.757	0.74	-0.0233	0.0734	0.05011	INERTE	LSG
LQ-1128	63.85	66	0.079	0.02	0.037	0.036	-0.0014	0.0734	0.07203	INERTE	F
LQ-1128	66	68	0.045	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	F
LQ-1128	68	70	0.037	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	F
LQ-1128	70	72	0.067	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	F
LQ-1128	72	74	0.068	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	F
LQ-1128	74	75.05	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	F
LQ-1129	4	6	0.24	0.02	0.928	0.916	-0.0164	0.0734	0.05696	INERTE	USG
LQ-1129	6	7	0.125	0.02	0.989	0.987	-0.0027	0.0734	0.07066	INERTE	USG
LQ-1129	7	8	0.058	0.02	2.19	1.98	-0.2877	0.0734	-0.2143	LIGERAMENTE ACIDO	USG
LQ-1129	8	10	0.058	0.02	1.56	1.31	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	USG
LQ-1129	10	12	0.217	0.02	0.883	0.774	-0.1493	0.0734	-0.0759	INERTE	USG
LQ-1129	12	12.9	0.182	0.02	1.09	1.02	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1129	12.9	14	0.039	0.02	1.04	0.902	-0.1891	0.0734	-0.1157	LIGERAMENTE ACIDO	USG
LQ-1129	14	16	0.02	0.02	0.472	0.395	-0.1055	0.0734	-0.0321	INERTE	USG
LQ-1129	16	17.5	0.156	0.02	1.24	1.04	-0.274	0.0734	-0.2006	LIGERAMENTE ACIDO	USG
LQ-1129	17.5	18	0.383	0.02	0.947	0.801	-0.2	0.0734	-0.1266	LIGERAMENTE ACIDO	USG
LQ-1129	18	19.6	0.211	0.02	0.872	0.67	-0.2767	0.0734	-0.2033	LIGERAMENTE ACIDO	USG
LQ-1129	19.6	22	0.074	0.02	1.37	1.15	-0.3014	0.0734	-0.228	LIGERAMENTE ACIDO	USG
LQ-1129	22	24	0.155	0.02	1.28	0.944	-0.4603	0.0734	-0.3869	LIGERAMENTE ACIDO	USG
LQ-1129	24	26	0.083	0.02	0.86	0.617	-0.3329	0.0734	-0.2595	LIGERAMENTE ACIDO	USG
LQ-1129	26	28	0.183	0.02	0.523	0.398	-0.1713	0.0734	-0.0979	INERTE	USG
LQ-1129	28	29.4	0.122	0.02	0.56	0.44	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1129	29.4	30	0.099	0.02	0.544	0.397	-0.2014	0.0734	-0.128	LIGERAMENTE ACIDO	LSG
LQ-1129	30	32	0.124	0.02	0.665	0.452	-0.2918	0.0734	-0.2184	LIGERAMENTE ACIDO	LSG
LQ-1129	32	32.85	0.072	0.02	0.84	0.654	-0.2548	0.0734	-0.1814	LIGERAMENTE ACIDO	LSG
LQ-1129	32.85	34	0.102	0.02	0.764	0.536	-0.3124	0.0734	-0.239	LIGERAMENTE ACIDO	LSG
LQ-1129	34	36	0.073	0.02	0.854	0.548	-0.4192	0.0734	-0.3458	LIGERAMENTE ACIDO	LSG
LQ-1129	36	36.55	0.102	0.02	1.58	1.29	-0.3973	0.0734	-0.3239	LIGERAMENTE ACIDO	LSG
LQ-1129	36.55	38	0.081	0.02	1.18	0.936	-0.3343	0.0734	-0.2609	LIGERAMENTE ACIDO	LSG
LQ-1129	38	40.45	0.092	0.02	1.16	0.955	-0.2809	0.0734	-0.2075	LIGERAMENTE ACIDO	LSG
LQ-1129	40.45	42	0.081	0.02	1.34	1.08	-0.3562	0.0734	-0.2828	LIGERAMENTE ACIDO	LSG
LQ-1129	42	43.7	1.76	0.02	1.35	0.852	-0.6823	0.0734	-0.6089	LIGERAMENTE ACIDO	LSG
LQ-1129	43.7	46	0.166	0.02	0.175	0.054	-0.1658	0.0734	-0.0924	INERTE	ARG
LQ-1129	46	48	0.19	0.02	0.159	0.076	-0.1137	0.0734	-0.0403	INERTE	ARG
LQ-1129	48	50.2	0.165	0.02	0.106	0.024	-0.1123	0.0734	-0.0389	INERTE	ARG

Hole_Id	From	To	C_LECO_YAN_pct	C_LERE_YAN_pct	S_TOT_LECO_YAN_pct	S_S04_LECO_YAN_pct	AGP	ANP	NCV	WasteType	ALTERATION
LQ-1129	50.2	52	0.145	0.02	0.131	0.02	-0.1521	0.0734	-0.0787	INERTE	INT
LQ-1129	52	54	0.108	0.02	0.097	0.035	-0.0849	0.0734	-0.0115	INERTE	INT
LQ-1129	54	56	0.139	0.02	0.152	0.051	-0.1384	0.0734	-0.065	INERTE	INT
LQ-1129	56	58	0.038	0.02	0.034	0.025	-0.0123	0.0734	0.06107	INERTE	INT
LQ-1129	58	60.4	0.047	0.02	0.055	0.054	-0.0014	0.0734	0.07203	INERTE	INT
LQ-1130	0.4	2	0.27	0.027	1.63	1.63	0	0.0991	0.09909	INERTE	USG
LQ-1130	2	4	0.18	0.02	1.89	1.88	-0.0137	0.0734	0.0597	INERTE	USG
LQ-1130	4	5.7	0.073	0.02	1.45	1.44	-0.0137	0.0734	0.0597	INERTE	USG
LQ-1130	5.7	6.4	0.069	0.02	1.39	1.31	-0.1096	0.0734	-0.0362	INERTE	USG
LQ-1130	6.4	8	0.034	0.02	1.32	1.28	-0.0548	0.0734	0.0186	INERTE	USG
LQ-1130	8	10	0.02	0.02	0.775	0.77	-0.0069	0.0734	0.06655	INERTE	USG
LQ-1130	10	11.8	0.02	0.02	1.55	1.43	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1130	11.8	13.6	0.038	0.02	1.28	1.21	-0.0959	0.0734	-0.0225	INERTE	USG
LQ-1130	13.6	16	0.078	0.02	1.36	1.11	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	USG
LQ-1130	16	18.1	0.033	0.02	1.23	1.22	-0.0137	0.0734	0.0597	INERTE	USG
LQ-1130	18.1	20	0.02	0.02	0.808	0.801	-0.0096	0.0734	0.06381	INERTE	USG
LQ-1130	20	22	0.02	0.02	0.966	0.853	-0.1548	0.0734	-0.0814	INERTE	LSG
LQ-1130	22	24	0.02	0.02	0.848	0.784	-0.0877	0.0734	-0.0143	INERTE	LSG
LQ-1130	24	26	0.02	0.02	0.74	0.661	-0.1082	0.0734	-0.0348	INERTE	LSG
LQ-1130	26	27.65	0.02	0.02	0.688	0.654	-0.0466	0.0734	0.02682	INERTE	LSG
LQ-1130	27.65	30.2	0.205	0.074	0.116	0.111	-0.0069	0.2716	0.26473	LIGERAMENTE BASICO	LSG
LQ-1130	30.2	32	0.02	0.02	0.053	0.052	-0.0014	0.0734	0.07203	INERTE	ARG
LQ-1130	32	34	0.02	0.02	0.02	0.054	0.04658	0.0734	0.11998	LIGERAMENTE BASICO	ARG
LQ-1130	34	36	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1130	36	38	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1130	38	40	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1130	40	42	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1133	66	68	0.05	0.02	1.349	1.135	-0.2932	0.0734	-0.2198	LIGERAMENTE ACIDO	LSG
LQ-1133	68	69.45	0.044	0.02	1.222	0.998	-0.3069	0.0734	-0.2335	LIGERAMENTE ACIDO	LSG
LQ-1133	69.45	71	0.063	0.02	0.958	0.842	-0.1589	0.0734	-0.0855	INERTE	LSG
LQ-1133	71	72.5	0.053	0.02	1.146	1.027	-0.163	0.0734	-0.0896	INERTE	LSG
LQ-1133	72.5	74	0.055	0.02	1.804	1.531	-0.374	0.0734	-0.3006	LIGERAMENTE ACIDO	LSG
LQ-1133	74	76	0.02	0.02	2.321	1.909	-0.5644	0.0734	-0.491	LIGERAMENTE ACIDO	LSG
LQ-1133	76	78	0.02	0.02	1.218	1.022	-0.2685	0.0734	-0.1951	LIGERAMENTE ACIDO	LSG
LQ-1133	78	80	0.02	0.02	1.758	1.57	-0.2576	0.0734	-0.1842	LIGERAMENTE ACIDO	LSG
LQ-1133	80	82.1	0.031	0.02	0.554	0.533	-0.0288	0.0734	0.04463	INERTE	LSG
LQ-1133	82.1	84	0.14	0.02	1.213	0.952	-0.3576	0.0734	-0.2842	LIGERAMENTE ACIDO	LSG
LQ-1133	84	85.1	3.367	0.039	1.02	0.527	-0.6754	0.1431	-0.5323	LIGERAMENTE ACIDO	LSG
LQ-1133	85.1	86.5	0.03	0.02	1.195	1.111	-0.1151	0.0734	-0.0417	INERTE	LSG
LQ-1133	86.5	88	0.027	0.02	1.053	0.916	-0.1877	0.0734	-0.1143	LIGERAMENTE ACIDO	LSG
LQ-1133	88	89.5	0.02	0.02	1.405	1.109	-0.4055	0.0734	-0.3321	LIGERAMENTE ACIDO	LSG
LQ-1133	89.5	91.9	0.162	0.02	1.677	0.256	-1.9468	0.0734	-1.8734	ACIDO	LSG
LQ-1133	91.9	93	0.02	0.02	0.984	0.479	-0.6919	0.0734	-0.6185	LIGERAMENTE ACIDO	LSG
LQ-1133	93	94.75	0.02	0.02	0.467	0.436	-0.0425	0.0734	0.03093	INERTE	LSG
LQ-1133	94.75	96	0.058	0.02	0.038	0.038	0	0.0734	0.0734	INERTE	INT
LQ-1133	96	98	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1133	98	100	0.06	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1133	100	102	0.068	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1133	102	104	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1133	104	106	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1133	106	108	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1133	108	110	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1133	110	111	0.02	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1134	60	62	0.052	0.02	0.644	0.601	-0.0589	0.0734	0.01449	INERTE	USG
LQ-1134	62	64	0.022	0.02	1.09	0.942	-0.2028	0.0734	-0.1294	LIGERAMENTE ACIDO	USG
LQ-1134	64	66	0.059	0.02	1.41	1.239	-0.2343	0.0734	-0.1609	LIGERAMENTE ACIDO	USG
LQ-1134	66	68	0.036	0.02	0.983	0.866	-0.1603	0.0734	-0.0869	INERTE	USG
LQ-1134	68	70	0.021	0.02	0.98	0.972	-0.011	0.0734	0.06244	INERTE	USG
LQ-1134	70	72	0.04	0.02	1.018	0.99	-0.0384	0.0734	0.03504	INERTE	USG
LQ-1134	72	73.15	0.096	0.02	1.007	0.976	-0.0425	0.0734	0.03093	INERTE	USG
LQ-1134	73.15	75.2	0.149	0.02	0.839	0.803	-0.0493	0.0734	0.02408	INERTE	USG
LQ-1134	75.2	76.5	0.033	0.02	1.208	1.184	-0.0329	0.0734	0.04052	INERTE	USG
LQ-1134	76.5	78.35	0.02	0.02	1.177	1.115	-0.0849	0.0734	-0.0115	INERTE	USG
LQ-1134	78.35	80	0.058	0.02	0.693	0.605	-0.1206	0.0734	-0.0472	INERTE	LSG
LQ-1134	80	82	0.053	0.02	1.155	1.09	-0.0891	0.0734	-0.0157	INERTE	LSG
LQ-1134	82	84	0.021	0.02	0.789	0.752	-0.0507	0.0734	0.02271	INERTE	LSG
LQ-1134	84	85.15	0.212	0.02	0.429	0.429	0	0.0734	0.0734	INERTE	LSG
LQ-1134	85.15	86.5	0.02	0.02	1.83	1.704	-0.1726	0.0734	-0.0992	INERTE	LSG
LQ-1134	86.5	88	0.02	0.02	1.482	1.422	-0.0822	0.0734	-0.0088	INERTE	LSG
LQ-1134	88	90	0.02	0.02	2.461	2.227	-0.3206	0.0734	-0.2472	LIGERAMENTE ACIDO	LSG
LQ-1134	90	91.25	0.02	0.02	1.749	1.589	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	LSG
LQ-1134	91.25	92.3	0.153	0.02	1.379	1.258	-0.1658	0.0734	-0.0924	INERTE	LSG
LQ-1134	92.3	94	0.021	0.02	2.337	1.943	-0.5398	0.0734	-0.4664	LIGERAMENTE ACIDO	LSG
LQ-1134	94	96.5	0.049	0.02	0.697	0.687	-0.0137	0.0734	0.0597	INERTE	LSG
LQ-1134	96.5	98.65	0.07	0.02	0.744	0.685	-0.0808	0.0734	-0.0074	INERTE	LSG
LQ-1134	98.65	100.6	0.124	0.02	0.692	0.653	-0.0534	0.0734	0.01997	INERTE	LSG
LQ-1134	100.6	102	0.02	0.02	2.588	2.209	-0.5192	0.0734	-0.4458	LIGERAMENTE ACIDO	LSG
LQ-1134	102	103.5	0.02	0.02	1.697	1.552	-0.1987	0.0734	-0.1253	LIGERAMENTE ACIDO	LSG
LQ-1134	103.5	106	0.033	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1134	106	108.5	0.026	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1135	36.5	38.7	0.039	0.02	0.052	0.052	0	0.0734	0.0734	INERTE	INT
LQ-1135A	34.8	40	0.097	0.02	0.039	0.024	-0.0206	0.0734	0.05285	INERTE	
LQ-1136	63.85	66	0.057	0.02	0.882	0.836	-0.063	0.0734	0.01038	INERTE	LSG
LQ-1136	66	67	0.035	0.02	1.271	1.212	-0.0808	0.0734	-0.0074	INERTE	LSG
LQ-1136	67	68.8	0.056	0.02	0.81	0.778	-0.0438	0.0734	0.02956	INERTE	LSG
LQ-1136	68.8	70	0.039	0.02	0.697	0.673	-0.0329	0.0734	0.04052	INERTE	LSG
LQ-1136	70	72	0.051	0.02	0.796	0.748	-0.0658	0.0734	0.00764	INERTE	LSG
LQ-1136	72	74.1	0.038	0.02	0.813	0.741	-0.0986	0.0734	-0.0252	INERTE	LSG
LQ-1136	74.1	76	0.067	0.02	0.985	0.98	-0.0069	0.0734	0.06655	INERTE	LSG
LQ-1136	76	77.75	0.042	0.02	1.493	1.431	-0.0849	0.0734	-0.0115	INERTE	LSG
LQ-1136	77.75	79.35	0.068	0.02	0.667	0.667	0	0.0734	0.0734	INERTE	LSG
LQ-1136	79.35	80.5	0.048	0.02	0.581	0.578	-0.0041	0.0734	0.06929	INERTE	LSG
LQ-1136	80.5	82	0.051	0.02	0.777	0.732	-0.0617	0.0734	0.01175	INERTE	LSG
LQ-1136	82	84	0.047	0.02	0.807	0.755	-0.0712	0.0734	0.00216	INERTE	LSG
LQ-1136	84	86.5	0.041	0.02	0.659	0.631	-0.0384	0.0734	0.03504	INERTE	LSG
LQ-1136	86.5	88.7	0.07	0.02	1.061	1.019	-0.0575	0.0734	0.01586	INERTE	LSG
LQ-1136	88.7	90	0.201	0.02	0.177	0.177	0	0.0734	0.0734	INERTE	LSG
LQ-1136	90	91.7	0.092	0.02	0.083	0.083	0	0.0734	0.0734	INERTE	LSG
LQ-1136	91.7	93.5	0.239	0.02	0.933	0.297	-0.8713	0.0734	-0.7979	LIGERAMENTE ACIDO	LSG
LQ-1136	93.5	95	0.032	0.02	1.532	1.433	-0.1356	0.0734	-0.0622	INERTE	LSG
LQ-1136	95	96.85	0.055	0.02	1.189	1.049	-0.1918	0.0734	-0.1184	LIGERAMENTE ACIDO	LSG
LQ-1136	96.85	97.85	0.062	0.02	0.735	0.241	-0.6768	0.0734	-0.6034	LIGERAMENTE ACIDO	LSG
LQ-1136	97.85	100	0.059	0.02	0.869	0.785	-0.1151	0.0734	-0.0417	INERTE	LSG
LQ-1136	100	102	0.048	0.02	1.84	1.707	-0.1822	0.0734	-0.1088	LIGERAMENTE ACIDO	LSG
LQ-1136	102	104	0.059	0.02	1.732	1.668	-0.0877	0.0734	-0.0143	INERTE	LSG
LQ-1136	104	106	0.093	0.02	1.446	1.291	-0.2124	0.0734	-0.139	LIGERAMENTE ACIDO	LSG
LQ-1136	106	107	0.031	0.02	0.05	0.05	0	0.0734	0.0734	INERTE	LSG
LQ-1136	107	108	0.054	0.02	0.324	0.306	-0.0247	0.0734	0.04874	INERTE	LSG
LQ-1136	108	110	0.028	0.02	1.226	1.182	-0.0603	0.0734	0.01312	INERTE	LSG
LQ-1136	110	112	0.103	0.02	0.412	0.412	0	0.0734	0.0734	INERTE	LSG
LQ-1136	112	114.5	0.133	0.02	0.678	0.639	-0.0534	0.0734	0.01997	INERTE	LSG
LQ-1136	114.5	116.8	0.095	0.02	0.152	0.041	-0.1521	0.0734	-0.0787	INERTE	LSG
LQ-1136	116.8	118	0.076	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1136	118	120.5	0.07	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1137	24	36	0.059	0.02	1.101	0.978	-0.1685	0.0734	-0.0951	INERTE	USG
LQ-1137	36	48	0.053	0.02	0.993	0.955	-0.0521	0.0734	0.02134	INERTE	USG

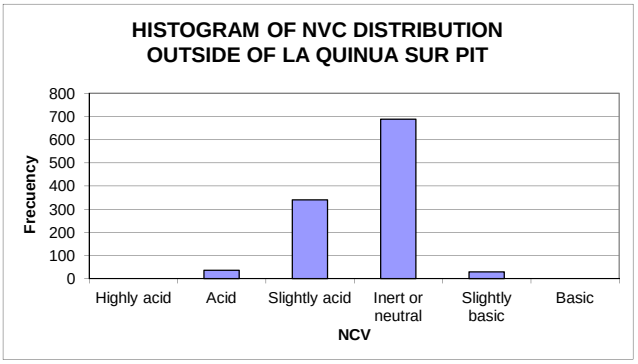
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LQ-1137	48	60.5	0.052	0.02	1.167	0.976	-0.2617	0.0734	-0.1883	LIGERAMENTE ACIDO	USG
LQ-1137	60.5	71.75	0.039	0.02	1.553	1.283	-0.3699	0.0734	-0.2965	LIGERAMENTE ACIDO	LSG
LQ-1137	71.75	82.8	0.112	0.02	1.191	1.089	-0.1397	0.0734	-0.0663	INERTE	LSG
LQ-1137	82.8	88.55	0.25	0.02	0.107	0.107	0	0.0734	0.0734	INERTE	LSG
LQ-1138	21.65	23.55	0.06	0.02	1.012	0.814	-0.2713	0.0734	-0.1979	LIGERAMENTE ACIDO	USG
LQ-1138	23.55	25	0.038	0.02	1.938	1.598	-0.4658	0.0734	-0.3924	LIGERAMENTE ACIDO	USG
LQ-1138	25	26.1	0.084	0.02	0.875	0.804	-0.0973	0.0734	-0.0239	INERTE	USG
LQ-1138	26.1	28	0.089	0.02	1.303	1.175	-0.1754	0.0734	-0.102	LIGERAMENTE ACIDO	USG
LQ-1138	28	30	0.059	0.02	0.906	0.773	-0.1822	0.0734	-0.1088	LIGERAMENTE ACIDO	USG
LQ-1138	30	31.2	0.175	0.02	1.234	1.255	0.02877	0.0734	0.10217	LIGERAMENTE BASICO	USG
LQ-1138	31.2	32.5	0.063	0.02	0.544	0.49	-0.074	0.0734	-0.0006	INERTE	USG
LQ-1138	32.5	34	0.051	0.02	0.725	0.605	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1138	34	36	0.034	0.02	1.148	1.038	-0.1507	0.0734	-0.0773	INERTE	USG
LQ-1138	36	37.15	0.077	0.02	1.103	0.995	-0.148	0.0734	-0.0746	INERTE	USG
LQ-1138	37.15	38.5	0.091	0.02	0.747	0.675	-0.0986	0.0734	-0.0252	INERTE	USG
LQ-1138	38.5	40	0.045	0.02	0.916	0.819	-0.1329	0.0734	-0.0595	INERTE	USG
LQ-1138	40	42	0.067	0.02	1.027	0.871	-0.2137	0.0734	-0.1403	LIGERAMENTE ACIDO	USG
LQ-1138	42	43.2	0.04	0.02	0.613	0.513	-0.137	0.0734	-0.0636	INERTE	USG
LQ-1138	43.2	44.2	0.056	0.02	1.176	1.107	-0.0945	0.0734	-0.0211	INERTE	USG
LQ-1138	44.2	46.5	0.039	0.02	1.074	0.914	-0.2192	0.0734	-0.1458	LIGERAMENTE ACIDO	LSG
LQ-1138	46.5	48.8	0.023	0.02	1.245	1.046	-0.2726	0.0734	-0.1992	LIGERAMENTE ACIDO	LSG
LQ-1138	48.8	50.6	0.113	0.02	0.898	0.849	-0.0671	0.0734	0.00627	INERTE	LSG
LQ-1138	50.6	52	0.056	0.02	1.155	1.026	-0.1767	0.0734	-0.1033	LIGERAMENTE ACIDO	LSG
LQ-1138	52	54	0.083	0.02	0.847	0.73	-0.1603	0.0734	-0.0869	INERTE	LSG
LQ-1138	54	56	0.156	0.02	0.968	0.868	-0.137	0.0734	-0.0636	INERTE	LSG
LQ-1138	56	57.65	0.04	0.02	0.806	0.676	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	LSG
LQ-1138	57.65	60	0.045	0.02	0.839	0.801	-0.0521	0.0734	0.02134	INERTE	LSG
LQ-1138	60	62.4	0.034	0.02	0.896	0.782	-0.1562	0.0734	-0.0828	INERTE	LSG
LQ-1138	62.4	64	0.03	0.02	0.773	0.659	-0.1562	0.0734	-0.0828	INERTE	LSG
LQ-1138	64	66	0.033	0.02	1.15	0.876	-0.3754	0.0734	-0.302	LIGERAMENTE ACIDO	LSG
LQ-1138	66	68	0.043	0.02	0.842	0.715	-0.174	0.0734	-0.1006	LIGERAMENTE ACIDO	LSG
LQ-1138	68	70	0.04	0.02	1.164	0.97	-0.2658	0.0734	-0.1924	LIGERAMENTE ACIDO	LSG
LQ-1138	70	72	0.054	0.02	0.896	0.723	-0.237	0.0734	-0.1636	LIGERAMENTE ACIDO	LSG
LQ-1138	72	74	0.055	0.02	1.406	1.232	-0.2384	0.0734	-0.165	LIGERAMENTE ACIDO	LSG
LQ-1138	74	76.5	0.047	0.02	1.249	1.174	-0.1028	0.0734	-0.0294	INERTE	LSG
LQ-1138	76.5	78.8	0.091	0.02	0.816	0.726	-0.1233	0.0734	-0.0499	INERTE	LSG
LQ-1138	78.8	80.4	0.113	0.02	0.956	0.824	-0.1808	0.0734	-0.1074	LIGERAMENTE ACIDO	LSG
LQ-1138	80.4	81.4	2.121	0.02	0.748	0.375	-0.511	0.0734	-0.4376	LIGERAMENTE ACIDO	LSG
LQ-1138	81.4	83.65	0.366	0.02	1.019	0.868	-0.2069	0.0734	-0.1335	LIGERAMENTE ACIDO	LSG
LQ-1138	83.65	85.55	0.337	0.02	0.085	0.08	-0.0069	0.0734	0.06655	INERTE	LSG
LQ-1138	85.55	88	0.049	0.02	0.066	0.02	-0.063	0.0734	0.01038	INERTE	INT
LQ-1138	88	90	0.155	0.02	0.032	0.025	-0.0096	0.0734	0.06381	INERTE	INT
LQ-1138	90	92.15	0.035	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1139	72	84.5	0.071	0.02	2.444	1.973	-0.6453	0.0734	-0.5719	LIGERAMENTE ACIDO	LSG
LQ-1139	84.5	96.2	0.592	0.394	2.761	1.266	-2.0482	1.446	-0.6022	LIGERAMENTE ACIDO	LSG
LQ-1139	96.2	108	0.095	0.02	0.77	0.66	-0.1507	0.0734	-0.0773	INERTE	LSG
LQ-1139	108	118	0.311	0.02	0.494	0.454	-0.0548	0.0734	0.0186	INERTE	LSG
LQ-1139	118	123.2	0.224	0.02	0.399	0.274	-0.1713	0.0734	-0.0979	INERTE	F
LQ-1140	84	96	0.123	0.02	1.7	0.857	-1.1549	0.0734	-1.0815	ACIDO	LSG
LQ-1140	96	108	0.235	0.073	2.66	0.468	-3.003	0.2679	-2.7351	ACIDO	LSG
LQ-1140	108	120.1	0.173	0.028	1.1	0.887	-0.2918	0.1028	-0.1891	LIGERAMENTE ACIDO	LSG
LQ-1140	120.1	131.5	0.109	0.02	1.09	0.919	-0.2343	0.0734	-0.1609	LIGERAMENTE ACIDO	LSG
LQ-1140	131.5	140.9	0.573	0.02	0.759	0.432	-0.448	0.0734	-0.3746	LIGERAMENTE ACIDO	F
LQ-1141	48.5	59.85	0.071	0.02	0.909	0.859	-0.0685	0.0734	0.0049	INERTE	USG
LQ-1141	59.85	72	0.057	0.02	1.016	0.975	-0.0562	0.0734	0.01723	INERTE	USG
LQ-1141	72	84	0.102	0.02	1.192	1.192	0	0.0734	0.0734	INERTE	LSG
LQ-1141	84	96	0.084	0.02	0.816	0.751	-0.0891	0.0734	-0.0157	INERTE	LSG
LQ-1141	96	107.9	0.081	0.02	0.762	0.699	-0.0863	0.0734	-0.0129	INERTE	LSG
LQ-1141	107.9	120	0.222	0.02	0.713	0.543	-0.2329	0.0734	-0.1595	LIGERAMENTE ACIDO	LSG
LQ-1141	120	124.6	0.051	0.02	0.331	0.307	-0.0329	0.0734	0.04052	INERTE	F
LQ-1142	0	12	0.224	0.02	1.263	1.217	-0.063	0.0734	0.01038	INERTE	USG
LQ-1142	12	24.2	0.035	0.02	0.641	0.59	-0.0699	0.0734	0.00353	INERTE	USG
LQ-1142	24.2	35.7	0.023	0.02	0.909	0.752	-0.2151	0.0734	-0.1417	LIGERAMENTE ACIDO	USG
LQ-1142	35.7	48.5	0.115	0.02	1.023	0.827	-0.2685	0.0734	-0.1951	LIGERAMENTE ACIDO	LSG
LQ-1142	48.5	59.2	0.257	0.02	1.17	1.123	-0.0644	0.0734	0.00901	INERTE	LSG
LQ-1142	59.2	67.9	0.166	0.02	0.853	0.797	-0.0767	0.0734	-0.0033	INERTE	LSG
LQ-1142	67.9	73.9	0.079	0.02	0.126	0.126	0	0.0734	0.0734	INERTE	INT
LQ-1143	48	60	0.026	0.02	1.535	1.396	-0.1904	0.0734	-0.117	LIGERAMENTE ACIDO	USG
LQ-1143	60	72	0.02	0.02	0.826	0.743	-0.1137	0.0734	-0.0403	INERTE	LSG
LQ-1143	72	84	0.027	0.02	1.065	1.024	-0.0562	0.0734	0.01723	INERTE	LSG
LQ-1143	84	96	0.031	0.02	0.84	0.78	-0.0822	0.0734	-0.0088	INERTE	LSG
LQ-1143	96	109	0.104	0.02	0.152	0.152	0	0.0734	0.0734	INERTE	LSG
LQ-1145	84	96	0.099	0.02	1.32	1.07	-0.3425	0.0734	-0.2691	LIGERAMENTE ACIDO	LSG
LQ-1145	96	108.3	0.182	0.02	1.31	1.114	-0.2685	0.0734	-0.1951	LIGERAMENTE ACIDO	LSG
LQ-1145	108.3	118	0.538	0.02	1.07	0.794	-0.3781	0.0734	-0.3047	LIGERAMENTE ACIDO	LSG
LQ-1145	118	122.9	1.65	0.02	1.38	0.821	-0.7658	0.0734	-0.6924	LIGERAMENTE ACIDO	LSG
LQ-1146	60	72.8	0.074	0.02	1.08	0.979	-0.1384	0.0734	-0.065	INERTE	LSG
LQ-1146	72.8	84	0.03	0.02	1.03	0.957	-0.1	0.0734	-0.0266	INERTE	LSG
LQ-1146	84	96	0.347	0.02	0.598	0.504	-0.1288	0.0734	-0.0554	INERTE	LSG
LQ-1146	96	101.3	0.029	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	ARG
LQ-1147	60.5	72	0.033	0.02	1.16	1.145	-0.0206	0.0734	0.05285	INERTE	LSG
LQ-1147	72	84.5	0.044	0.02	0.967	0.905	-0.0849	0.0734	-0.0115	INERTE	LSG
LQ-1147	84.5	96	0.115	0.02	0.868	0.845	-0.0315	0.0734	0.04189	INERTE	LSG
LQ-1147	96	108.5	0.069	0.02	0.656	0.656	0	0.0734	0.0734	INERTE	LSG
LQ-1147	108.5	120	0.311	0.02	0.285	0.285	0	0.0734	0.0734	INERTE	LSG
LQ-1147	120	128.5	0.105	0.02	0.02	0.02	0	0.0734	0.0734	INERTE	INT
LQ-1148	11.45	24.25	0.1	0.02	1.492	1.492	0	0.0734	0.0734	INERTE	USG
LQ-1148	24.25	36	0.192	0.062	1.34	1.34	0	0.2275	0.22754	LIGERAMENTE BASICO	USG
LQ-1148	36	48	0.063	0.021	0.874	0.83	-0.0603	0.0771	0.01679	INERTE	USG
LQ-1148	48	60	0.02	0.02	0.751	0.744	-0.0096	0.0734	0.06381	INERTE	LSG
LQ-1148	60	72	0.02	0.02	0.86	0.848	-0.0164	0.0734	0.05696	INERTE	LSG
LQ-1148	72	84.95	0.102	0.02	0.85	0.85	0	0.0734	0.0734	INERTE	LSG
LQ-1148	84.95	96	0.318	0.02	0.531	0.496	-0.048	0.0734	0.02545	INERTE	F
LQ-1148	96	108	0.05	0.02	0.092	0.092	0	0.0734	0.0734	INERTE	F
LQ-1148	108	114.1	0.02	0.02	0.079	0.079	0	0.0734	0.0734	INERTE	F
LQ-1149	60	72	0.037	0.02	0.914	0.691	-0.3055	0.0734	-0.2321	LIGERAMENTE ACIDO	USG
LQ-1149	72	84	0.03	0.02	0.834	0.711	-0.1685	0.0734	-0.0951	INERTE	USG
LQ-1149	84	96	0.03	0.02	0.964	0.8	-0.2247	0.0734	-0.1513	LIGERAMENTE ACIDO	USG
LQ-1149	96	108	0.025	0.02	0.674	0.542	-0.1808	0.0734	-0.1074	LIGERAMENTE ACIDO	USG
LQ-1149	108	120	0.028	0.02	0.744	0.639	-0.1439	0.0734	-0.0705	INERTE	USG
LQ-1149	120	132	0.268	0.02	0.675	0.468	-0.2836	0.0734	-0.2102	LIGERAMENTE ACIDO	USG
LQ-1149	132	144	0.13	0.02	0.36	0.348	-0.0164	0.0734	0.05696	INERTE	
LQ-1149	144	156	0.055	0.02	0.366	0.344	-0.0301	0.0734	0.04326	INERTE	
LQ-1149	156	168	0.044	0.02	0.326	0.326	0	0.0734	0.0734	INERTE	
LQ-1149	168	180	0.029	0.02	0.15	0.15	0	0.0734	0.0734	INERTE	
LQ-1150	0	12	0.259	0.02	1.473	1.353	-0.1644	0.0734	-0.091	INERTE	USG
LQ-1150	12	24	0.083	0.02	0.748	0.632	-0.1589	0.0734	-0.0855	INERTE	USG
LQ-1150	24	36	0.027	0.02	0.844	0.75	-0.1288	0.0734	-0.0554	INERTE	USG
LQ-1150	36	48	0.09	0.02	0.696	0.679	-0.0233	0.0734	0.05011	INERTE	USG
LQ-1150	48	60	0.173	0.02	0.122	0.122	0	0.0734	0.0734	INERTE	
LQ-1150	60	72	0.126	0.02	0.072	0.072	0	0.0734	0.0734	INERTE	
LQ-1150	72	84	0.125	0.02	0.05	0.05	0	0.0734	0.0734	INERTE	
LQ-1150	84	96	0.053	0.02	0.061	0.02	-0.0562	0.0734	0.01723	INERTE	
LQ-1150	96	108	0.044	0.02	0.059	0.02	-0.0534	0.0734	0.01997	INERTE	
LQ-1150	108	120	0.038	0.02	0.063	0.02	-0.0589	0.0734	0.01449	INERTE	
LQ-1150	120	132	0.083	0.02	0.089	0.089	0	0.0734	0.0734	INERTE	

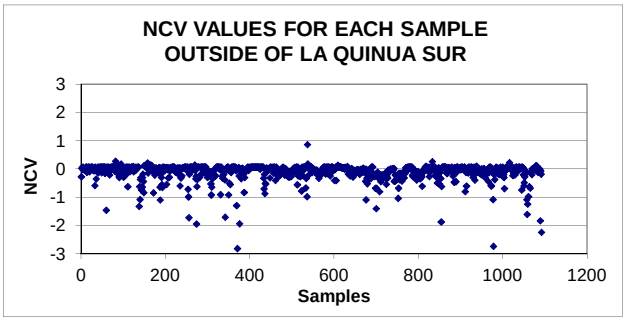
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LQ-1150	132	144	0.154	0.02	0.672	0.077	-0.8152	0.0734	-0.7418	LIGERAMENTE ACIDO	
LQ-1150	144	156	0.05	0.02	0.686	0.672	-0.0192	0.0734	0.05422	INERTE	
LQ-1150	156	168	0.047	0.02	0.686	0.686	0	0.0734	0.0734	INERTE	
LQ-1150	168	180	0.024	0.02	0.079	0.062	-0.0233	0.0734	0.05011	INERTE	
LQ-1151	48	60	0.031	0.02	0.994	0.791	-0.2781	0.0734	-0.2047	LIGERAMENTE ACIDO	
LQ-1151	60	72	0.283	0.02	1.249	0.76	-0.6699	0.0734	-0.5965	LIGERAMENTE ACIDO	
LQ-1151	72	84	0.372	0.02	0.956	0.551	-0.5549	0.0734	-0.4815	LIGERAMENTE ACIDO	
LQ-1151	84	96	0.647	0.02	0.528	0.276	-0.3452	0.0734	-0.2718	LIGERAMENTE ACIDO	
LQ-1151	96	108	0.066	0.02	0.506	0.414	-0.126	0.0734	-0.0526	INERTE	
LQ-1151	108	120	0.054	0.02	0.52	0.353	-0.2288	0.0734	-0.1554	LIGERAMENTE ACIDO	
LQ-1151	120	132	0.056	0.02	0.454	0.296	-0.2165	0.0734	-0.1431	LIGERAMENTE ACIDO	
LQ-1151	132	140	0.066	0.02	0.367	0.242	-0.1713	0.0734	-0.0979	INERTE	
STZ-039	174	179.6	0.01	0.01	1.5	0.68	-1.1234	0.0367	-1.0867	ACIDO	
STZ-039	179.6	188.1	0.05	0.01	2.84	1.64	-1.644	0.0367	-1.6073	ACIDO	
STZ-039	188.1	197.9	0.2	0.005	1.98	1.06	-1.2604	0.0184	-1.2421	ACIDO	
STZ-039	197.9	198.5	0.22	0.01	4.11	0.92	-4.3703	0.0367	-4.3336	ACIDO	
STZ-039	198.5	210	0.24	0.01	1.68	0.94	-1.0138	0.0367	-0.9771	LIGERAMENTE ACIDO	
STZ-039	210	212.8	0.2	0.005	4.91	0.75	-5.6992	0.0184	-5.6809	ACIDO	
STZ-039	212.8	217.8	0.38	0.01	1.28	0.8	-0.6576	0.0367	-0.6209	LIGERAMENTE ACIDO	
STZ-039	217.8	218.6	0.22	0.02	4.93	0.9	-5.5211	0.0734	-5.4477	ACIDO	
STZ-039	218.6	219.4	0.26	0.01	1.27	0.75	-0.7124	0.0367	-0.6757	LIGERAMENTE ACIDO	
STZ-039	219.4	221.2	0.22	0.01	4.97	0.95	-5.5074	0.0367	-5.4707	ACIDO	
STZ-043	50	60	0.07	0.02	0.86	0.73	-0.1781	0.0734	-0.1047	LIGERAMENTE ACIDO	MF
STZ-043	60	70	0.05	0.02	0.72	0.62	-0.137	0.0734	-0.0636	INERTE	MF
STZ-043	70	80	0.07	0.01	0.87	0.7	-0.2329	0.0367	-0.1962	LIGERAMENTE ACIDO	MF
STZ-043	80	90	0.19	0.03	0.83	0.76	-0.0959	0.1101	0.0142	INERTE	MF
STZ-043	90	100	0.14	0.01	0.8	0.75	-0.0685	0.0367	-0.0318	INERTE	MF
STZ-043	100	110	0.27	0.01	0.87	0.84	-0.0411	0.0367	-0.0044	INERTE	MF
STZ-043	110	120	0.47	0.01	0.3	0.29	-0.0137	0.0367	0.023	INERTE	MF-C
STZ-043	120	130	0.17	0.01	0.13	0.12	-0.0137	0.0367	0.023	INERTE	FR
STZ-043	130	140	0.08	0.02	0.19	0.18	-0.0137	0.0734	0.0597	INERTE	FR
STZ-043	140	150	0.06	0.01	0.19	0.17	-0.0274	0.0367	0.0093	INERTE	FR
STZ-043	150	160	0.07	0.005	0.22	0.21	-0.0137	0.0184	0.00465	INERTE	FR
STZ-043	160	170	0.06	0.005	0.23	0.2	-0.0411	0.0184	-0.0228	INERTE	FR
STZ-043	170	180	0.05	0.04	0.25	0.23	-0.0274	0.1468	0.1194	LIGERAMENTE BASICO	FR
STZ-043	180	190	0.05	0.04	0.23	0.21	-0.0274	0.1468	0.1194	LIGERAMENTE BASICO	FR
STZ-043	190	200	0.06	0.01	0.21	0.2	-0.0137	0.0367	0.023	INERTE	FR
STZ-043	200	210	0.05	0.01	0.3	0.27	-0.0411	0.0367	-0.0044	INERTE	FR
STZ-043	210	220	0.1	0.01	0.39	0.29	-0.137	0.0367	-0.1003	LIGERAMENTE ACIDO	FR
STZ-043	220	230	0.1	0.005	0.48	0.38	-0.137	0.0184	-0.1187	LIGERAMENTE ACIDO	FR
STZ-043	230	240	0.06	0.01	0.27	0.22	-0.0685	0.0367	-0.0318	INERTE	FR
STZ-043	240	250	0.05	0.01	0.29	0.26	-0.0411	0.0367	-0.0044	INERTE	PROP
STZ-043	250	260	0.06	0.01	0.29	0.26	-0.0411	0.0367	-0.0044	INERTE	FR
STZ-043	260	270	0.14	0.01	0.35	0.32	-0.0411	0.0367	-0.0044	INERTE	ARG
STZ-043	270	280	0.07	0.02	1.52	0.13	-1.9043	0.0734	-1.8309	ACIDO	SM
STZ-043	280	290	0.09	0.01	0.97	0.89	-0.1096	0.0367	-0.0729	INERTE	SM
STZ-043	290	300	0.1	0.01	0.85	0.69	-0.2192	0.0367	-0.1825	LIGERAMENTE ACIDO	SM
STZ-043	300	310	0.08	0.005	2.99	1.34	-2.2605	0.0184	-2.2422	ACIDO	FR
STZ-043	310	320	0.08	0.07	4.7	2.24	-3.3702	0.2569	-3.1133	ACIDO	C
STZ-043	320	330	0.11	0.005	4.36	1.14	-4.4114	0.0184	-4.3931	ACIDO	C
STZ-043	330	340	0.08	0.01	4.76	0.59	-5.7129	0.0367	-5.6762	ACIDO	C
STZ-043	340	350	0.14	0.02	8.79	1.73	-9.6722	0.0734	-9.5988	ACIDO	C

NCV	# Samples	%
Highly acid	0	0%
Acid	37	3%
Slightly acid	341	31%
Inert or neutral	689	63%
Slightly basic	29	3%
Basic	0	0%
	1096	100%

ALTERATION LEGEND

Rock Units	FR	Fresh Rock
	PRO	Propylithic
	PROP	
	C	Argillic
	ARG	
	SC	Silica Clay
	AA	Advance Argillic
	SG	Granular Silica
	SM	Massive Silica
	INT	
Gravels units	FERR	Ferricrete
	USG	Upper Sequence Gravel
	MSG	Medium Sequence Gravel
	LSG	Lower Sequence Gravel
	MF	Mud Flow
	MF-C	Mud Flow Clay
	MF-CP	Mud Flow Clay Pyrite
	F	Fines
	N/S	No Sample





DEPOSITO DE ARENAS DE MOLIENDA

7. Estudio geoquímico del material que conformará la presa del depósito de arenas de molienda y del material que se depositara en el embalse.

7.1. Estudio geoquímico del material que conformará la presa del depósito de arena de moliendas:

La construcción del depósito de arenas de molienda (DAM) expansión norte se hará con material lixiviado del PAD La Quinua, mediante el sistema de corte y relleno. El material de corte pasara a formar las paredes o dique del DAM expansión norte.

Análisis de NCV se realizaron a los materiales que se venían descargando en el LQ PAD que a continuación resumimos en las tablas siguientes: sightly

Tabla: 7.1: Análisis de NCV de muestras de descargas en PAD LQ.

Sample Code	Sub Project	Sample Name	S Sulfur %	S Total %	C Total %	C Residual %	pH Natural	NCV	NCV classification
8030	LQ_PAD	LQ - PAD - Comp 72 - Zona C - Lift 7	0.2	1.42	0.062	0.02	0	-1.517	acid
8037	LQ_PAD	LQ - PAD - Comp 74(Grupo A)	0.311	0.724	0.038	0.021	0	-0.503	slightly acid
8093	LQ_PAD	LQ - Pad	0.083	0.585	0.082	0.021	0	-0.464	slightly acid
8094	LQ_PAD	LQ - Pad	0.078	0.549	0.058	0.04	0	-0.580	slightly acid
8095	LQ_PAD	LQ - Pad	0.010	0.068	0.033	0.02	0	-0.032	neutral
8096	LQ_PAD	LQ - Pad	0.196	1.388	0.084	0.02	0	-1.398	acid
8097	LQ_PAD	LQ - Pad	0.085	0.602	0.115	0.02	0	-0.360	slightly acid
8180	LQ_PAD	LQ - PAD Comp 79(05 al11Feb)"B"	0.059	0.42	0.03	0.02	0	-0.457	slightly acid
9631	LQ_PAD	Pad LQ - Composito 104 D	0.13	1.51	0.096	0.02	5.45	-1.612	acid
9632	LQ_PAD	Pad LQ - Composito 104 C	0.134	1.79	0.072	0.02	5.24	-2.078	acid
9633	LQ_PAD	Pad LQ - Composito 105 C	0.1	0.741	0.066	0.02	5.95	-0.709	slightly acid
9810	LQ_PAD	PAD LQ	0.24	2.38	0.06	0.02	6.32	-2.785	acid
9811	LQ_PAD	PAD LQ	0.078	0.867	0.056	0.02	6.38	-0.949	slightly acid
9817	LQ_PAD	Pad LQ - Composito 107	0.022	0.157	0.033	0.02	5.05	-0.137	slightly acid
9836	LQ_PAD	Composito 108 - LQ Pad	0.054	0.382	0.09	0.02	4.32	-0.192	slightly acid
9837	LQ_PAD	LQ Pad - Composito 108	0.152	0.57	0.087	0.02	3.9	-0.327	slightly acid
9866	LQ_PAD	LQ Pad	0.821	0.821	0.079	0.02	3.93	0.217	neutral
9867	LQ_PAD	LQ Pad	0.489	0.489	0.056	0.02	4.21	0.132	neutral
9885	LQ_PAD	LQ Pad - Composito 111	0.072	0.843	0.051	0.02	3.95	-0.943	slightly acid
9916	LQ_PAD	LQ - Pad - Composito 112 - Zona C	0.627	0.68	0.029	0.02	6.58	-0.040	neutral
9935	LQ_PAD	LQ - Pad - Composito 113 - Zona C	0.061	0.43	0.042	0.024	4.78	-0.440	slightly acid
9938	LQ_PAD	LQ Pad Comp 114	0.643	0.78	0.072	0.024	6.43	-0.012	neutral
9939	LQ_PAD	LQ LIF 09	0.12	0.16	0.056	0.022	6.22	0.070	neutral
9940	LQ_PAD	LQ LIF 12	0.093	0.658	0.073	0.043	7.8	-0.664	slightly acid
9941	LQ_PAD	LPAD LQ	0.122	0.866	0.092	0.032	7.42	-0.799	slightly acid
9963	LQ_PAD	LQ - Pad (Comp 116) - Sem 29/10 al 04/11) - Zona C	0.033	0.235	0.066	0.04	5.21	-0.181	slightly acid
10170	LQ_PAD	Pad LQ - Composito 114 - Sem 14 al 20 Ene	0.111	0.783	0.049	0.02	7.6	-0.815	slightly acid
10283	LQ_PAD	Pad LQ composito 121 semana del 1 al 9 marzo	0.082	0.709	0.02	0.02	4.81	-0.859	slightly acid
10285	LQ_PAD	Pad YN Semana del 03 al 09 Marzo	0.047	0.335	0	0.02	9.1	-0.468	slightly acid
10295	LQ_PAD	Pad LQ Semana del 10 al 16 Marzo	0.131	0.93	0.045	0.02	4.92	-1.002	acid
10297	LQ_PAD	Pad LQ - Sem 17 al 23 Marzo	0.182	1.129	0.071	0.02	4.9	-1.110	acid
10301	LQ_PAD	Pad LQ - Sem 24 al 30 de marzo	0.173	1.025	0.067	0.02	4.94	-0.995	slightly acid
10360	LQ_PAD	Descargas - Pad LQ - Semana 31-03 al 06-04	0.241	1.65	0.032	0.02	4.8	-1.886	acid
10431	LQ_PAD	Descarga LQ Pad - Sem 07 al 13 abril	0.299	2.27	0.061	0.02	4.41	-2.550	acid
10454	LQ_PAD	Descarga Pad LQ - Sem del 14/04 al 20/04	0.06	1.04	0.02	0.02	10.35	-1.343	acid
10455	LQ_PAD	Descarga PAD - LQ Sem (20/04 al 27/04)	0.064	0.736	0.02	0.02	5.09	-0.921	slightly acid

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Sample Code	Sub Project	Sample Name	S Sulfur %	S Total %	C Total %	C Residual %	pH Natural	NCV	NCV classification
10464	LQ_PAD	Descarga Pad - LQ (Sem 28/04 al 04/05)	0.15	1.39	0.02	0.02	5.1	-1.699	acid
10785	LQ_PAD	Semana del 26-05-08 al 01-06-08	0.165	0.971	0.028	0.02	4.65	-1.075	acid
10961	LQ_PAD	Semana del 02-06 al 08-06 Descragas del pad LQ	0.185	0.726	0.02	0.02	4.28	-0.741	slightly acid
10984	LQ_PAD	Semana del 16 al 22 de Junio	0.055	0.873	0.02	0.02	4.54	-1.121	acid
11004	LQ_PAD	Semana del 23-06-08 al 29-06-08	0.150	1.06	0.037	0.02	6.9	-1.185	acid
11025	LQ_PAD	Semana del 30-06-08 al 06-07-08	0.06	1.11	0.02	0.02	2.58	-1.439	acid
11071	LQ_PAD	Semana del 07-07-08 al 11-07-08	0.129	0.912	0.073	0.02	3.35	-0.878	slightly acid
11094	LQ_PAD	Semana del 14-07-08 al 20-07-08	0.305	1.23	0.075	0.02	4.98	-1.065	acid
11113	LQ_PAD	Semana del 21, 22, 25 del 07-2008	0.120	0.849	0.103	0.02	4.66	-0.694	slightly acid
11673	LQ_PAD	Semana del 29-09 al 05-10-08	0.118	0.832	0.036	0.02	6.07	-0.920	slightly acid
11681	LQ_PAD	PA LQ SEMANA DEL 06 AL 12 - 10 08	0.144	1.02	0.042	0.02	4.3	-1.119	acid
11799	LQ_PAD	semana del 13-10-08 al 19-10-08	0.08	0.875	0.052	0.02	5.2	-0.972	slightly acid
11806	LQ_PAD	descarga del pad LQ	0.335	1.15	0.02	0.02	4.71	-1.117	acid
11830	LQ_PAD	semana del 27-10-08 al 02-11-08	0.130	0.917	0.02	0.02	5.1	-1.079	acid
11852	LQ_PAD	Semana del 04-11-08 al 09-11-08	0.081	0.575	0.061	0.02	7.85	-0.526	slightly acid
11893	LQ_PAD	PAD LQ SEMANA DEL 10 AL 16-11-08	0.139	0.991	0.02	0.02	7.3	-1.167	acid
11910	LQ_PAD	Comp. de Mes de Octubre	0.109	0.878	0.026	0.02	11548	-1.032	acid
12016	LQ_PAD	PAD LQ SEMANA DEL 17 AL 23-11-08	0.051	0.482	0.02	0.02	4.2	-0.590	slightly acid
12063	LQ_PAD	PAD LQ SEMANA (26,27,28,29 Y 30/11/08)	0.037	0.255	0.02	0.02	8.8	-0.299	slightly acid
12109	LQ_PAD	Composito del Mes de Noviembre LQ-Pad	0.15	0.73	0.02	0.02	5.8	-0.795	slightly acid
12112	LQ_PAD	Semana 02-12 al 07-12-08	0.066	0.384	0.02	0.02	4.38	-0.436	slightly acid
12165	LQ_PAD	Semana del 08-12 al 14-12-08	0.043	0.301	0.02	0.02	5.02	-0.354	slightly acid
12268	LQ_PAD	Semana del 15-12- al 20-12-08	0.063	0.223	0.059	0.02	7.56	-0.076	neutral
12285	LQ_PAD	descarga del pad semana (22,25,26,27,28-12-08)	0.155	0.668	0.053	0.02	8.62	-0.582	slightly acid
12318	LQ_PAD	PAD LQ SEMANA DEL 29 AL 04-01-09	0.29	1.39	0.039	0.02	5.38	-1.437	acid
12372	LQ_PAD	semana del 05-01-09 al 11-01-09	0.196	0.716	0.02	0.02	5.58	-0.712	slightly acid
12390	LQ_PAD	semana del 12 al 18-01-09	0.114	0.807	0.027	0.02	4.99	-0.924	slightly acid
12403	LQ_PAD	semana del 19-01-09 al 25-01-09	0.039	0.622	0.02	0.02	4.88	-0.799	slightly acid
12445	LQ_PAD	Semana del 26-01 al 01-02-09	0.051	0.362	0.02	0.021	5.49	-0.430	slightly acid
12475	LQ_PAD	Semana 02-02 al 08-02-09	0.05	0.221	0.02	0.02	6.3	-0.234	slightly acid
12482	LQ_PAD	COMPOSITO ENERO LQ PAD	0.127	0.766	0.02	0.02	5.26	-0.875	slightly acid
12490	LQ_PAD	SEMANA DEL 09-02-09 AL 15-02-09	0.358	0.358	0.08	0.02	7.28	0.220	neutral
12527	LQ_PAD	LQ PAD Semana: 16/02/09 - 22/02/09	0.055	0.289	0.027	0.02	5.84	-0.295	slightly acid
12547	LQ_PAD	GM semana del 23 al 11-03-09	0.057	0.536	0.026	0.02	4.07	-0.634	slightly acid
12634	LQ_PAD	Comp. MES FEBRERO - LQ-PAD	0.037	0.373	0.02	0.02	5.15	-0.460	slightly acid
12635	LQ_PAD	LQ-PAD Semana 02-03 al 09-03-09	0.108	0.999	0.02	0.02	5.14	-1.221	acid
12651	LQ_PAD	LQ semana del 09 al 15-03-09	0.117	0.831	0.055	0.02	4.17	-0.849	slightly acid
12694	LQ_PAD	LQ semana del 16 al 22-03-2009	0.097	0.683	0.075	0.02	4.6	-0.602	slightly acid
12721	LQ_PAD	LQ_PAD SEMANA: 23-03-09 AL 29-03-09	0.097	0.799	0.036	0.02	4.63	-0.903	slightly acid
12776	LQ_PAD	LQ Semana del 30-03 al 05-04-09	0.07	0.512	0.032	0.02	4.3	-0.562	slightly acid
12926	LQ_PAD	descarga del pad LQ semana 06 al 12-04-09	0.062	0.44	0.039	0.02	4.37	-0.448	slightly acid
12973	LQ_PAD	Descarga Pad LQ Semana 13 al 19-04-09	0.175	0.612	0.054	0.02	4.19	-0.474	slightly acid
12975	LQ_PAD	Comp. MES MARZO LQ-PAD	0.126	0.695	0.039	0.02	4.79	-0.710	slightly acid
12981	LQ_PAD	LQ Semana 20-04-09 al 26-04-09	0.181	1.1	0.075	0.02	4.61	-1.057	acid
12998	LQ_PAD	semana del 27/04/09 al 03/05/09 descarga pad LQ	0.073	0.685	0.026	0.02	4	-0.816	slightly acid
13051	LQ_PAD	descarga LQ pad semana del 04 al 10-05-09	0.087	0.613	0.034	0.02	3.85	-0.670	slightly acid
13072	LQ_PAD	Semana del 12-05 al 17-05-09 LQ-Pad	0.08	1.61	0.185	0.02	4.08	-1.491	acid
13074	LQ_PAD	Compósito Mes Abril LQ-PAD	0.181	0.811	0.137	0.02	4.42	-0.434	slightly acid
13111	LQ_PAD	Semana del 18-05 al 24/05/09 LQ-PAD	0.145	0.711	0.029	0.02	4.05	-0.742	slightly acid
13167	LQ_PAD	Descarga pad la quinua semana 25 al 31 de mayo	0.1	1.05	0.028	0.02	3.7	-1.272	acid

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Sample Code	Sub Project	Sample Name	S Sulfur %	S Total %	C Total %	C Residual %	pH Natural	NCV	NCV classification
13168	LQ_PAD	Compósito Mes Mayo LQ-PAD	0.16	1.16	0.02	0.02	4.2	-1.370	acid
13263	LQ_PAD	semana del 01 al 07-06-09 pad LQ descarga del pad	0.035	0.708	0.051	0.02	3.93	-0.808	slightly acid
13307	LQ_PAD	DESCARGA LQ PAD SEMANA DEL 08 AL 14-06-09	0.316	1.43	0.036	0.02	4.2	-1.467	acid
13490	LQ_PAD	COMP. JUNIO LQ-PAD (Descargas)	0.092	0.956	0.041	0.02	4.65	-1.107	acid
13643	LQ_PAD	descarga del pad LQ semana del 06-07 al 12-07-09; 2"	0.177	0.938	0.071	0.02	3.7	-0.855	slightly acid
13783	LQ_PAD	DESCARGA PAD LQ SEMANA DEL 13 AL 19-07-09; -2"	0.272	1.627	0.074	0.02	4.37	-1.658	acid
13840	LQ_PAD	Descarga pad LQ semana del 20 al 26 -07-09	0.218	1.956	0.044	0.02	3.4	-2.293	acid
13850	LQ_PAD	COMPOSITO JULIO LQ PAD	0.229	1.306	0.053	0.02	4.2	-1.354	acid
13852	LQ_PAD	SEMANA DEL 27-07 AL 02-08-09 DESCARGA LQ PAD	0.104	0.67	0.032	0.029	4.7	-0.764	slightly acid
13905	LQ_PAD	descarga pad LQ semana del 03-09-08 al 09-08-09	0.332	1.03	0.097	0.02	2.78	-0.674	slightly acid
14077	LQ_PAD	semana del 10 al 16-08-09 descarga semanal pad LQ	0.073	1.878	0.115	0.02	4.36	-2.124	acid
14301	LQ_PAD	LQ descarga semana del 17 al 23-08-09	0.251	1.418	0.049	0.02	4.01	-1.492	acid
14555	LQ_PAD	descarga pad LQ semana del 24 al 30-08-09	0.136	0.919	0.049	0.02	3.85	-0.966	slightly acid
14566	LQ_PAD	COMP.-AGOSTO LA QUINUA-PAD	0.382	1.362	0.067	0.02	4.09	-1.170	acid
14623	LQ_PAD	descarga pad LQ semana del 31-08 al 06-09-09	0.111	0.786	0.083	0.02	4.4	-0.693	slightly acid
14637	LQ_PAD	semana del 07-09 al 13-09-09 descarga PAD LQ	0.158	1.346	0.076	0.02	4.12	-1.422	acid
14661	LQ_PAD	Semana 14-09 al 20-09-09 LQ-Pad	0.158	0.958	0.122	0.02	3.78	-0.722	slightly acid
14678	LQ_PAD	Semana 21-09 al 27-09-09 LQ-Pad	0.388	2.05	0.136	0.02	4.65	-1.851	acid
14696	LQ_PAD	composito mes de SETIEMBRE LQ PAD	0.123	1.195	0.067	0.02	4.51	-1.296	acid
14705	LQ_PAD	Semana 28-09 al 04-10-09 LQ-PAD (Descargas)	0.071	1.744	0.084	0.02	3.72	-2.057	acid
14770	LQ_PAD	Semana del 05-10 al 11-10-09 LQ-Pad	0.211	1.32	0.211	0.02	4.73	-0.818	slightly acid
14796	LQ_PAD	Semana 12-10 al 18-10-09 LQ-PAD	0.767	2.186	0.032	0.02	4.45	-1.900	acid
14802	LQ_PAD	Descarga PAD LQ semana 19/10 al 25/10/2009	0.31	1.557	0.103	0.02	5.1	-1.404	acid
14934	LQ_PAD	Semana 26-10 al 01-11-09 LQ-Pad	0.504	1.43	0.085	0.02	4.33	-1.030	acid
14948	LQ_PAD	DESCARGA DEL PAD LQ SEMANA DEL 02-11 AL 08-11-09	0.218	0.762	0.05	0.02	4.33	-0.635	slightly acid
14954	LQ_PAD	Composito-Octubre LQ-PAD (Descargas)	0.174	1.796	0.054	0.02	4.37	-2.097	acid
15471	LQ_PAD	Semana 09-11 al 15-11-09 LQ-Pad	0.136	0.705	0.038	0.02	6.83	-0.713	slightly acid
15480	LQ_PAD	LQ -3576-129-165	0.317	1.551	0.034	0.02	5.6	-1.639	acid
15482	LQ_PAD	semana 16-11 al 22-11-09 LQ Pad	0.12	1.279	0.073	0.02	4.03	-1.393	acid
15637	LQ_PAD	Descargas del Pad IA Quinua (semana del 23 al 29-11-09)	0.113	0.8	0.131	0.02	4.63	-0.534	slightly acid
15691	LQ_PAD	Comp. Mes-Noviembre LQ-PAD	0.18	0.956	0.081	0.02	4.62	-0.839	slightly acid
15838	LQ_PAD	Semana 30-11 al 06-12-09 LQ PAD	0.091	0.644	0.372	0.02	5.54	0.534	neutral
15855	LQ_PAD	Semana 07-12 al 13-12-09 LQ-PAD	0.130	0.922	0.044	0.02	4.63	-0.997	slightly acid
15871	LQ_PAD	Semana 14-12 al 20-12-09 LQ-PAD	0.055	0.897	0.076	0.02	4.12	-0.948	slightly acid
15902	LQ_PAD	Semana 21-12 al 27-12-09 PAD. LQ	0.099	0.701	0.132	0.02	4.48	-0.414	slightly acid
15922	LQ_PAD	Semana 28-12-09 al 03-01-2010 PAD LQ	0.347	1.485	0.092	0.02	0.48	-1.295	acid
21685	LQ_PAD	COMPOSITO DESCARGA PAD LQ (SETIIEMBRE 2010)	0.279	1.106	0.104	0.02	7.64	-0.825	slightly acid
21686	LQ_PAD	COMPOSITO DESCARGA PAD LQ (OCTUBRE 2010)	0.053	0.538	0.088	0.02	6.27	-0.415	slightly acid
21687	LQ_PAD	COMPOSITO DESCARGA PAD LQ (NOVIEMBRE 2010)	0.222	0.735	0.06	0.02	6.37	-0.556	slightly acid
21703	LQ_PAD	COMPOSITO DESCARGA PAD - JUNIO	0.215	1.083	0.02	0.02	4.56	-1.189	acid
24127	LQ_PAD	COMPOSITO DEL MES DE ABRIL (DESCARGA AL PAD LQ)	0.11	0.357	0.057	0.05	5.83	-0.313	slightly acid
28026	LQ_PAD	comp.junio. LQ	0.118	0.473	0.03	0.02	5.56	-0.450	slightly acid
28027	LQ_PAD	comp.julio. LQ	0.071	0.501	0.028	0.02	6.33	-0.560	slightly acid
28028	LQ_PAD	comp.septiembre. LQ	0.041	0.464	0.02	0.02	3.8	-0.580	slightly acid
28029	LQ_PAD	comp.octubre. LQ	0.067	0.472	0.02	0.02	4.64	-0.555	slightly acid
28030	LQ_PAD	comp.noviembre. LQ	0.173	0.424	0.02	0.02	4.57	-0.344	slightly acid
28031	LQ_PAD	comp.agosto. CARACHUGO	0.019	0.134	0.02	0.02	5.51	-0.158	slightly acid
28032	LQ_PAD	comp.septiembre. CARACHUGO	0.021	0.151	0.02	0.02	5.74	-0.178	slightly acid
28033	LQ_PAD	comp.agosto. MQMQ	0.050	0.357	0.02	0.02	5.43	-0.420	slightly acid
28034	LQ_PAD	comp.septiembre. MQMQ	0.023	0.16	0.02	0.02	5.06	-0.188	slightly acid

Sample Code	Sub Project	Sample Name	S Sulfur %	S Total %	C Total %	C Residual %	pH Natural	NCV	NCV classification
28261	LQ_PAD	composito diciembre - LQ 2011	0.023	0.161	0.02	0.02	5.58	-0.189	slightly acid
29167	LQ_PAD	Comp.Descarga - PAD -La Quinua- Febrero	0.284	0.531	0.02	0.02	4.48	-0.338	slightly acid
30040	LQ_PAD	COMPOSITO DESCARGA AL PAD - L.Q - ABRIL- 2012	0.093	0.284	0.021	0.02	5.6	-0.258	slightly acid
30072	LQ_PAD	CELDA 192 LIFT 4.5 24/05/2012	0.036	0.256	0.02	0.02	10.48	-0.301	slightly acid
30143	LQ_PAD	COMP MAYO PAD L.Q	0.148	0.471	0.028	0.02	4.41	-0.413	slightly acid
30732	LQ_PAD	Comp. Junio 2012	0.047	0.263	0.06	0.02	4.37	-0.142	slightly acid
30909	LQ_PAD	COMPS PAD LA QUINUA	0.026	0.185	0.16	0.02	7.53	0.307	neutral
31154	LQ_PAD	COMP-PAD LA QUINUA	0.047	0.333	0.13	0.02	6.04	0.023	neutral
32179	LQ_PAD	COMPOSITO PAD LA QUINUA	0.040	0.769	0.05	0.02	4.92	-0.907	slightly acid
32803	LQ_PAD	desg.pad_noviembre	0.036	0.254	0.10	0.02	7.41	-0.013	neutral
34096	LQ_PAD	COMP. DES. PAD_Diciembre	0.108	0.487	0.07	0.02	6.17	-0.347	slightly acid
34300	LQ_PAD	LQ-COMP - ENERO	0.053	0.566	0.06	0.02	5.38	-0.552	slightly acid

7.2. Estudio geoquímico del material que conformará del material que se depositara en el embalse:

De acuerdo a los planes de descarga en el DAM expansión norte para los siguientes años, los materiales serán de procedencia de los Lay backs de Yanacocha Sur y del Tapado Oeste (YSLB & TOLB).

A continuación describimos las pruebas geoquímicas realizadas a estos materiales.

7.2.1. Geoquímica de materiales del Tapado Oeste Layback (TOLB)

7.2.1.1. Net Carbonate Value del material de TOLB

Se seleccionaron diferentes muestras de taladros del depósito que fueron analizadas y clasificadas de acuerdo al estándar NCV. En total se tienen 809 muestras clasificadas por NCV de las cuales 495 se analizaron en la Etapa 1 y 314 en la etapa 2A del proyecto. De acuerdo a la clasificación NCV para ambas etapas, el 82% es material NPAG (inerte/neutral/ligeramente básico) y el 11% es material PAG (ácido/ligeramente ácido), ver Figura 1.

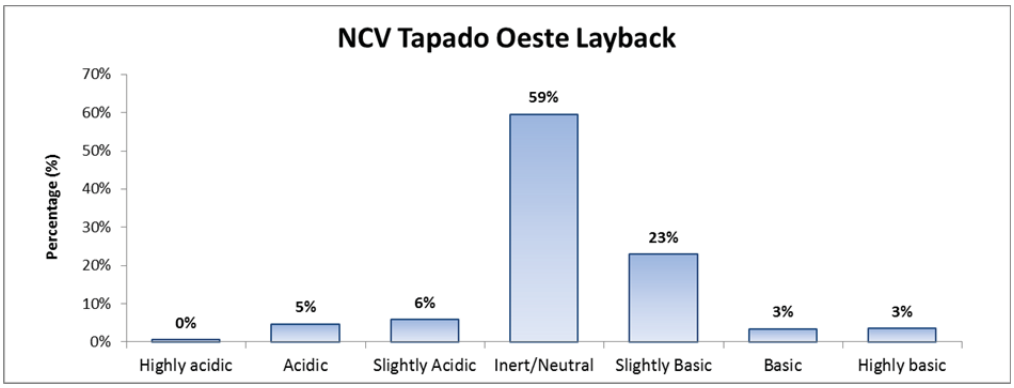


Figura 1. Clasificación de mineral según NCV

Se observa que en general, el mineral es inerte o neutral con una ligera tendencia a la acidez. El agua de lluvia podría disolver algunos metales pero esto podría evitarse controlando la cantidad de cal y manteniendo el pH básico en la solución de irrigación. Los resultados completos de la prueba NCV y la ubicación de taladros se encuentra en el Anexo 1.

7.2.1.2. Pruebas SPLP en Muestras de arenas de Botella

Las pruebas SPLP y HCT se emplean para determinar el potencial de disolución de componentes orgánicos que tiene un mineral en aguas superficiales y subterráneas. La primera determina los niveles de metales en la solución de descarga y la segunda el tiempo que demorará la lixiviación de estos componentes. Ambas pruebas se realizaron en el laboratorio ALS en Lima, Perú.

Se realizaron pruebas SPLP en colas de botella de mineral de alta ley destinado a la planta Gold Mill con la finalidad de observar el potencial de disolución de metales en el depósito de arenas del molino. Los 04 compósitos se también se seleccionaron en base a las alteraciones predominantes que son SM&V y SG (ver Tabla 2).

Composites	Hole_ID	Hole	From (m)	To (m)	Alteration	NCV Class	AuFA g/t
1	DS-1254841	COR-004	350	358	SM	Inert/Neutral	4.411
		COR-004	360	374	SMV		3.636
2	DS-1254843	TO-026	232	236.6	SMV	Inert/Neutral	1.961
		TO-026	253.55	260	SMV		1.882
		TO-026	266	270	SM		1.646
		TO-026	270	282.4	SM		3.278
3	DS-1254844	TO-058	278	285.25	SG2	Inert/Neutral	1.803
4	DS-1254845	TO-104	201.35	210	SMG	Inert/Neutral	2.555
		TO-104	208.25	214	SMG		3.054

Tabla 2. Muestras a partir de las cuales se prepararon los compósitos para SPLP

TOL - SPLP MINERA YANACOCHA S.R.L.

Type			BRT tail			
Hole_ID			DS-1254841	DS-1254844	DS-1254845	DS-1254843
NCV Classification			Inert/Neutral	Inert/Neutral	Inert/Neutral	Inert/Neutral
Alteration			SM-SMV	SG2	SMG-SMV	SM-SMV-SMG
Analito	Unidades	STD or Goal*				
Physicochemical parameters						
Alc Total	mg CaCO3/L		15	9	29	26
CE	uS/cm		55	44	70	66
pH		6-9	8	6.62	8.82	8.57
TDS	mg/L	1000	40	30	48	42
Inorganic parameters						
Anions						
Br	mg/L		<0.01	<0.01	<0.01	<0.01
Cl	mg/L	100-700	<0.2	<0.2	<0.2	<0.2
F	mg/L	1	<0.02	<0.02	<0.02	<0.02
N-NO2	mg/L	0.06	<0.001	<0.001	<0.001	<0.001
N-NO3	mg/L	10	0.22	0.23	0.23	0.23
SO4	mg/L	300	7.6	8.1	4	4.4
Phosphorus						
P React D	mg/L		<0.01	0.03	0.03	<0.01
Metals						
Hg	mg/L	0.001	<0.001	<0.001	<0.001	<0.001
Dissolved metals						
Ag	mg/L	0.05	<0.000050	0.000109	<0.000050	0.000083
Al	mg/L	5	0.0284	0.0127	0.0118	<0.0050
As	mg/L	0.05	0.0143	0.078	0.00649	0.014
B	mg/L	0.5-6	<0.050	<0.050	<0.050	<0.050
Ba	mg/L	0.7	0.538	0.663	0.45	0.545
Be	mg/L	0.1	<0.0025	<0.0025	<0.0025	<0.0025
Bi	mg/L		<0.0025	<0.0025	<0.0025	<0.0025
Ca	mg/L	200	6.87	5.16	9.01	8.27
Cd	mg/L	0.005	<0.00025	<0.00025	<0.00025	<0.00025
Co	mg/L	0.05	<0.00050	0.00103	<0.00050	<0.00050
Cr	mg/L	0.1	<0.0025	<0.0025	<0.0025	<0.0025
Cu	mg/L	0.2	<0.00050	<0.00050	<0.00050	0.00055
Fe	mg/L	1	<0.030	<0.030	<0.030	<0.030
K	mg/L		<2.0	<2.0	<2.0	<2.0
Li	mg/L	2.5	<0.0050	<0.0050	<0.0050	<0.0050
Mg	mg/L	150	0.2	0.22	0.41	0.24
Mn	mg/L	0.2	0.00215	0.00817	0.00108	0.00183
Mo	mg/L		0.00614	0.00237	0.00221	0.00246
Na	mg/L	200	<2.0	<2.0	<2.0	<2.0
Ni	mg/L	0.2	<0.0025	<0.0025	<0.0025	<0.0025
P	mg/L		<0.30	<0.30	<0.30	<0.30
Pb	mg/L	0.05	<0.00025	0.00044	0.00041	0.00041
Sb	mg/L	0.006	0.00738	0.025	0.0011	0.0172
Se	mg/L	0.05	<0.0050	<0.0050	<0.0050	<0.0050
Si	mg/L		5.15	6.61	11.3	12.3
Sn	mg/L		<0.00050	<0.00050	<0.00050	<0.00050
Sr	mg/L		0.0196	0.0202	0.0422	0.021
Ti	mg/L		<0.010	<0.010	<0.010	<0.010
Tl	mg/L		0.00052	<0.00050	<0.00050	<0.00050
U	mg/L		<0.000050	0.000164	0.000056	<0.000050
V	mg/L	0.1	<0.0050	<0.0050	<0.0050	<0.0050
Zn	mg/L	2	<0.0050	0.0143	<0.0050	<0.0050

* Values are those specified in the Decreto Supremo No. 002-2008-MINAM for category 3 waters.

Tabla 3. Resultados SPLP en colas de botellas realizadas en mineral de alta ley.

7.2.1.3. Pruebas SPLP en Mineral no Lixiviado

Se realizaron pruebas SPLP en mineral no lixiviado para observar el caso más extremo de lixiviación de metales en el mineral.

TOL - SPLP

Type			ORE	BRT Tail
Hole_ID			DS-1238920	DS-1254845
NCV Classification			Inert/Neutral	Inert/Neutral
Alteration			SMG	SMG-SMV
Analito	Unidades	STD or Goal*		
Physicochemical parameters				
Alc Total	mg CaCO3/L		<1	29
CE	uS/cm		64	70
pH		6-9	4.3	8.82
TDS	mg/L	1000	36	48
Inorganic parameters				
Anions				
Br	mg/L		<0.01	<0.01
Cl	mg/L	100-700	<0.2	<0.2
F	mg/L	1	<0.02	<0.02
N-NO2	mg/L	0.06	<0.001	<0.001
N-NO3	mg/L	10	0.077	0.23
SO4	mg/L	300	17	4
Phosphorus				
P React D	mg/L		<0.01	0.03
Metals				
Hg	mg/L	0.001	<0.001	<0.001
Dissolved metals				
Ag	mg/L	0.05	<0.00005	<0.000050
Al	mg/L	5	0.32	0.0118
As	mg/L	0.05	0.041	0.00649
B	mg/L	0.5-6	<0.05	<0.050
Ba	mg/L	0.7	0.13	0.45
Be	mg/L	0.1	<0.0025	<0.0025
Bi	mg/L		<0.0025	<0.0025
Ca	mg/L	200	1	9.01
Cd	mg/L	0.005	0.499	<0.00025
Co	mg/L	0.05	0.111	<0.00050
Cr	mg/L	0.1	0.015	<0.0025
Cu	mg/L	0.2	2.230	<0.00050
Fe	mg/L	1	0.8	<0.030
K	mg/L		<2.0	<2.0
Li	mg/L	2.5	<0.005	<0.0050
Mg	mg/L	150	0.2	0.41
Mn	mg/L	0.2	1.11	0.00108
Mo	mg/L		0.002	0.00221
Na	mg/L	200	<2	<2.0
Ni	mg/L	0.2	0.031	<0.0025
P	mg/L		<0.3	<0.30
Pb	mg/L	0.05	0.001	0.00041
Sb	mg/L	0.006	0.0059	0.0011
Se	mg/L	0.05	<0.0005	<0.0050
Si	mg/L		1	11.3
Sn	mg/L		<0.0005	<0.00050
Sr	mg/L		0.023	0.0422
Ti	mg/L		<0.010	<0.010
Tl	mg/L		0.138	<0.00050
U	mg/L		0.0064	0.000056
V	mg/L	0.1	<0.005	<0.0050
Zn	mg/L	2	0.30	<0.0050

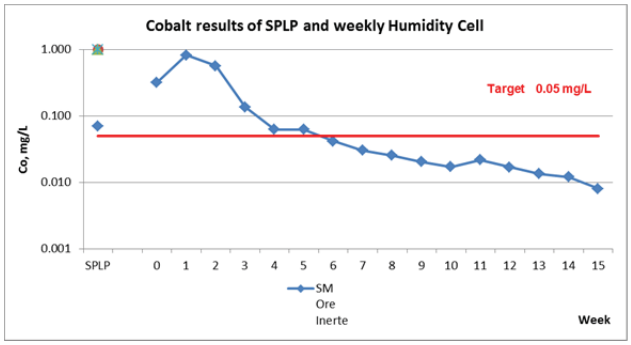
* Values are those specified in the Decreto Supremo No. 002-2008-MINAM for category 3 waters.

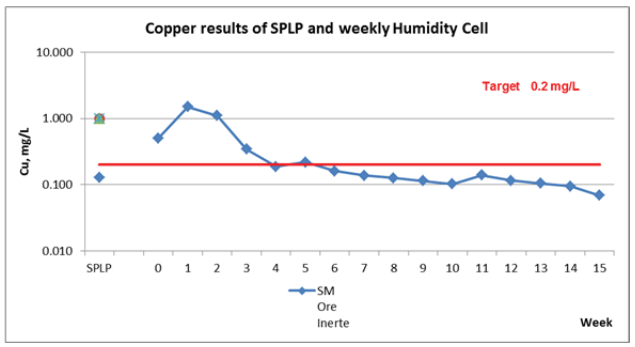
Samples for HCT

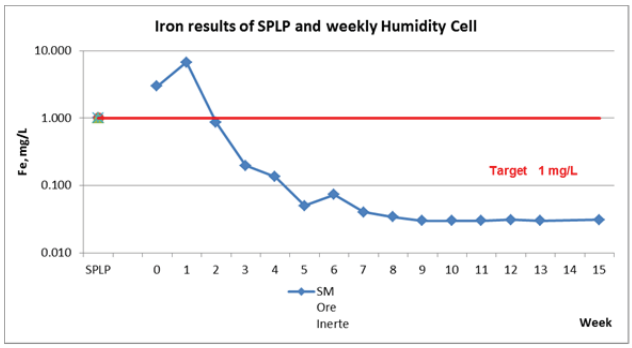
Tabla 4. Resultados de la prueba SPLP sobre mineral no lixiviado

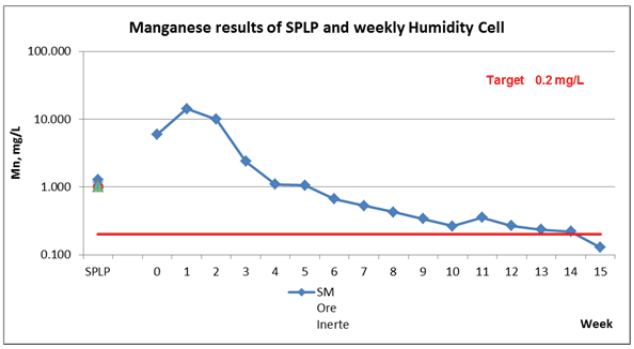
7.2.1.4. Prueba de Celda de Humedad (HCT)

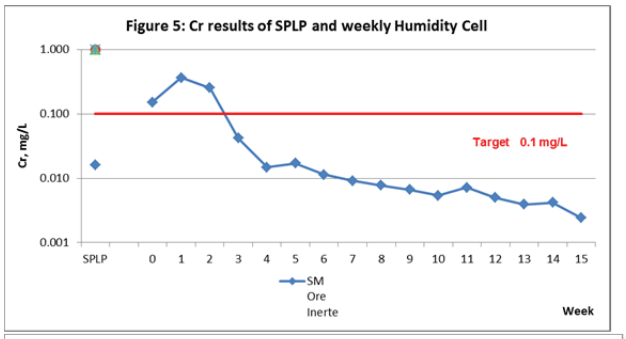
En base a los resultados de la prueba SPLP, se decidió realizar la prueba de celda de humedad al mineral remanente de la prueba SPLP de la muestra DS-1238919. Los resultados SPLP de las pruebas hasta la semana 15 se muestran en el Anexo 2B.

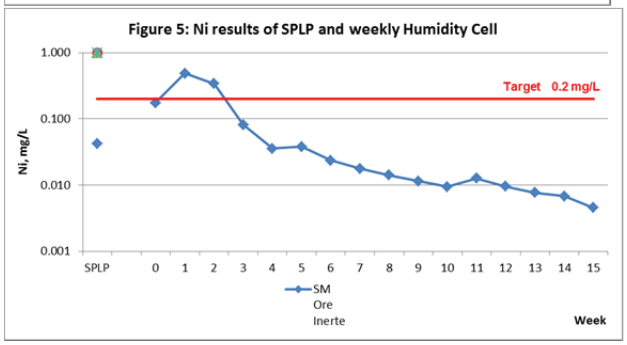












Anexo 1.

A) Ubicación de muestras para Pruebas NCV

HOLE_ID	EASTING	NORTHING	ELEVATION	TD
COR-002	11767	25902	3579	462
COR-055	11482	25750	3571	350
COR-060	11775	25500	3560	391
COR-063	11966	25100	3543	400
COR-066	11725	25250	3522	434
COR-074	11560	25760	3565	390
COR-105	11762	25797	3570	381
COR-113	11704	25701	3564	400
COR-135	11560	25800	3570	400
COR-141	11762	26001	3587	360
COR-156	11509	25724	3567	420
COR-157	11761	25960	3585	370
COR-164	11800	25332	3535	550
COR-178	11812	25963	3586	376
LQ-1067	12279	25349	3578	130
LQ-1069	12207	25353	3578	93
LQ-1087	11846	24851	3520	55
LQ-1131	12105	25554	3568	116
LQ-667	12248	25593	3602	120
LQ-944	12110	26150	3602	200
LQPZ-009	12126	26012	3576	170
TAP-054	12160	26147	3632	150
TAP-183	11961	25843	3571	416
TAP-201	12193	25884	3508	282
TAP-205	11777	26250	3576	375
TAP-206	12161	25750	3539	301
TO-004	11669	25450	3545	300
TO-005	11960	25261	3514	500
TO-007	11954	25261	3514	457
TO-008	11792	25188	3509	444
TO-009	11776	25250	3525	453
TO-013	11676	25570	3570	325
TO-015	11699	25420	3547	320

HOLE_ID	EASTING	NORTHING	ELEVATION	TD
TO-017	11470	25705	3573	330
TO-018	11743	25885	3561	357
TO-020	11510	25778	3571	280
TO-022	11483	25615	3543	305
TO-024	11598	25774	3561	295
TO-026	11741	25219	3518	429
TO-029	11710	25746	3562	345
TO-030	11596	25735	3547	313
TO-032	11556	25452	3532	331
TO-034	11739	25801	3563	370
TO-035	11656	25330	3527	350
TO-036	11670	25742	3551	350
TO-037	11696	25290	3526	345
TO-039	11695	25175	3512	250
TO-041	11747	25174	3514	266
TO-044	11779	25225	3520	300
TO-045	11522	25475	3534	327
TO-048	11650	25179	3507	230
TO-050	11750	25270	3529	310
TO-051	11684	25317	3529	310
TO-056	11637	25435	3542	300
TO-057	11424	25615	3549	361
TO-058	11479	25579	3533	291
TO-062	11673	25647	3559	347
TO-063	11446	25851	3568	300
TO-064	11699	25633	3554	280
TO-065	11435	25581	3539	310
TO-066	11951	25248	3505	392
TO-067	11956	25232	3505	469
TO-069	12005	25265	3518	501
TO-070	11550	25341	3504	463
TO-071	11656	25950	3554	323
TO-072	11708	25926	3554	302

HOLE_ID	EASTING	NORTHING	ELEVATION	TD
TO-073	11847	26079	3555	303
TO-074	11745	25327	3507	333
TO-075	11817	26051	3555	308
TO-076	11375	25883	3538	357
TO-077	11907	25200	3505	388
TO-078	11772	26069	3557	367
TO-079	11352	25863	3538	300
TO-080	11792	26053	3556	327
TO-081	11826	26063	3555	271
TO-082	11615	26096	3574	301
TO-083	11720	25949	3554	350
TO-084	11911	25892	3540	329
TO-085	11829	25392	3495	390
TO-086	11843	25350	3494	408
TO-087	11816	26048	3556	301
TO-090	11816	25700	3501	393
TO-093	11813	25500	3495	348
TO-094	11674	25931	3554	408
TO-095	11761	25920	3542	400
TO-096	11585	26018	3565	350
TO-097	11721	25280	3492	362
TO-100	11764	26084	3556	300
TO-102	11703	25419	3494	299
TO-103	11761	25920	3543	275
TO-104	11735	25959	3554	281
TO-106	11707	25612	3493	302
TO-107	11768	26054	3558	300
TO-108	11842	26072	3555	330
TO-109	11714	26038	3562	353
TO-110	11834	25945	3546	306
TO-111	11674	25969	3542	320
TO-117	11505	25866	3518	311
TOGE-001	11311	26003	3568	300

Hole_Id	Easting	Northing	Elevation	Td
COR-009	11640.87	25590.57	3562.68	437.65
COR-014	11441.91	25848.80	3568.30	342.75
COR-020	11797.33	26057.18	3593.21	513.00
COR-022	11560.00	25650.00	3536.00	500.70
COR-023	11724.11	25896.42	3574.16	442.35
COR-060	11775.17	25500.30	3559.75	390.55
LQ-1031	13153.02	25711.34	3715.76	231.10
LQ-1032	13053.86	25575.12	3699.96	200.00
LQ-1046	13073.95	25700.12	3697.34	215.05
LQ-1047	13100.02	25641.66	3708.98	220.45
LQ-944	12109.98	26150.01	3602.07	200.00
TAP-027	11702.51	25987.82	3584.45	514.60
TAP-109	12560.35	26146.43	3677.07	451.95
TAP-123	12618.96	26104.09	3695.38	500.00
TAP-127	12618.24	25951.76	3677.25	430.45
TAP-128	12640.76	26000.29	3685.16	452.10
TAP-132	12710.59	25799.88	3673.50	370.50
TAP-142	12545.31	26050.41	3680.01	524.45
TAP-145	12642.19	26049.47	3690.43	411.20
TAP-148	12590.17	26002.04	3677.91	443.65
TAP-149	12710.42	25749.97	3668.78	336.75
TAP-156	12562.77	26196.01	3695.51	436.75
TAP-158	12637.18	25900.01	3675.37	356.65
TAP-161	12666.15	25801.32	3667.68	340.05
TAP-163	12660.10	25849.79	3671.18	356.60
TAP-205	11777.15	26249.60	3576.29	374.95
TO-013	11676.01	25569.87	3569.93	325.00
TO-016	11448.21	25752.67	3572.95	280.00
TO-018	11742.54	25885.38	3561.26	356.55
TO-020	11509.82	25778.42	3570.60	280.00
TO-023	11530.91	25656.33	3547.17	313.35
TO-024	11598.15	25773.93	3561.21	294.90
TO-026	11740.68	25218.62	3517.94	428.70
TO-029	11709.69	25746.07	3561.77	344.50
TO-030	11596.40	25735.20	3547.05	312.60
TO-032	11555.69	25452.07	3532.30	330.50
TO-033	11640.06	25658.01	3546.87	336.90
TO-034	11739.20	25800.89	3562.82	370.00
TO-035	11656.05	25330.24	3526.80	350.00
TO-036	11670.04	25741.57	3551.23	350.00
TO-037	11695.92	25289.53	3526.40	344.80

B) Resultados de NCV en mineral de Tapado Oeste Layback

	HOLE_ID	FROM	TO	C_LECO, %	C_RES%	S_TOT%	S_SO4%	ANP	AGP	NCV	NCV_CLASS	ALTERATION	AU_PREF
1	COR-002	292	304	0.050	0.050	1.477	0.335	0.184	-1.565	-1.381	Acidic	SM	3.862
2	COR-002	304	316	0.050	0.050	1.006	0.917	0.184	-0.122	0.062	Inert/Neutral	SM	1.721
3	COR-002	316	328	0.050	0.050	0.499	0.249	0.184	-0.343	-0.159	Slightly Acidic	SM	6.217
4	COR-002	328	340	0.050	0.050	0.569	0.224	0.184	-0.473	-0.289	Slightly Acidic	SM	4.354
5	COR-002	340	352	0.050	0.050	0.117	0.050	0.184	-0.092	0.092	Inert/Neutral	SM	1.021
6	COR-055	270	281.8	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	2.226
7	COR-055	281.8	294	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SV	1.576
8	COR-055	294	306	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SV	0.852
9	COR-060	282	294	0.050	0.050	0.511	0.363	0.184	-0.203	-0.019	Inert/Neutral	SM	4.520
10	COR-060	294	305.1	0.050	0.050	1.507	1.106	0.184	-0.549	-0.366	Slightly Acidic	SMV	1.869
11	COR-066	284	296	0.050	0.050	0.172	0.135	0.184	-0.051	0.133	Slightly Basic	SM	1.452
12	COR-066	296	307.6	0.050	0.050	0.166	0.127	0.184	-0.053	0.130	Slightly Basic	SM	0.278
13	COR-066	307.6	320	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SVG	0.317
14	COR-074	286	298	0.050	0.050	0.311	0.170	0.184	-0.193	-0.010	Inert/Neutral	SM	2.526
15	COR-074	298	310	0.050	0.050	0.239	0.103	0.184	-0.186	-0.003	Inert/Neutral	SM	1.847
16	COR-074	310	322	0.050	0.050	0.280	0.145	0.184	-0.185	-0.001	Inert/Neutral	SM	5.339
17	COR-074	322	334	0.050	0.050	0.161	0.050	0.184	-0.152	0.031	Inert/Neutral	SM	3.465
18	COR-074	334	346	0.050	0.050	0.142	0.050	0.184	-0.126	0.057	Inert/Neutral	SM	0.760
19	COR-074	346	358	0.050	0.050	0.110	0.050	0.184	-0.082	0.101	Slightly Basic	SMV	0.291
20	COR-105	314	326	0.050	0.050	0.337	0.247	0.184	-0.123	0.060	Inert/Neutral	SM	3.093
21	COR-105	326	338	0.050	0.050	0.372	0.194	0.184	-0.244	-0.060	Inert/Neutral	SM	2.153
22	COR-113	350	362	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SG	0.438
23	COR-113	362	373.3	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SG	0.343
24	COR-135	258	270	0.050	0.050	1.167	0.364	0.184	-1.100	-0.917	Slightly Acidic	SM	0.574
25	COR-135	270	282	0.050	0.050	0.741	0.349	0.184	-0.537	-0.354	Slightly Acidic	ARG	0.554
26	COR-135	282	294	0.050	0.050	0.729	0.102	0.184	-0.859	-0.675	Slightly Acidic	SMV	1.135
27	COR-135	294	306	0.050	0.050	0.511	0.165	0.184	-0.474	-0.291	Slightly Acidic	SMG	1.304
28	COR-141	194	206	0.050	0.050	1.428	0.992	0.184	-0.597	-0.414	Slightly Acidic	SG	0.873
29	COR-141	206	218	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	2.022
30	COR-141	218	230	0.050	0.050	0.105	0.105	0.184	0.000	0.184	Slightly Basic	SG	0.994
31	COR-141	230	240.05	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	1.502
32	COR-141	242.75	254	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	4.441
33	COR-141	254	266	0.050	0.050	0.220	0.168	0.184	-0.071	0.112	Slightly Basic	SG	2.526
34	COR-141	266	278	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SG	0.539
35	COR-141	278	290	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SGC	1.246
36	COR-156	304	316	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SMG	1.499
37	COR-157	210	222	0.050	0.050	3.149	1.892	0.184	-1.722	-1.539	Acidic	SG	0.324
38	COR-157	222	233.9	0.050	0.050	0.502	0.483	0.184	-0.026	0.157	Slightly Basic	SM	2.302
39	COR-157	233.9	246	0.050	0.050	0.235	0.188	0.184	-0.064	0.119	Slightly Basic	SM	2.079
40	COR-157	246	258	0.050	0.050	0.566	0.484	0.184	-0.112	0.071	Inert/Neutral	SG	1.487
41	COR-157	258	270	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SMG	0.781
42	COR-157	270	281.8	0.050	0.050	0.465	0.465	0.184	0.000	0.184	Slightly Basic	SG	0.774
43	COR-157	282.55	294	0.050	0.050	2.156	0.270	0.184	-2.584	-2.400	Acidic	SMG	0.586
44	COR-164	246	258	0.050	0.050	0.464	0.456	0.184	-0.011	0.173	Slightly Basic	SMV	0.381
45	COR-164	258	270	0.050	0.050	0.245	0.245	0.184	0.000	0.184	Slightly Basic	SMV	0.330
46	COR-164	270	282	0.050	0.050	1.313	1.313	0.184	0.000	0.184	Slightly Basic	SM	1.716
47	COR-164	282	294	0.050	0.050	0.474	0.474	0.184	0.000	0.184	Slightly Basic	SM	4.863
48	COR-178	208	218	0.050	0.050	0.117	0.117	0.184	0.000	0.184	Slightly Basic	SMV	0.236
49	COR-178	220.4	231.8	0.050	0.050	0.134	0.134	0.184	0.000	0.184	Slightly Basic	SM	3.502
50	COR-178	234	244	0.050	0.050	0.199	0.199	0.184	0.000	0.184	Slightly Basic	SM	2.449
51	COR-178	244	256	0.050	0.050	0.156	0.156	0.184	0.000	0.184	Slightly Basic	SM	2.168
52	COR-178	256	268	0.050	0.050	0.167	0.167	0.184	0.000	0.184	Slightly Basic	SMG	1.379
53	COR-178	268	280	0.050	0.050	0.158	0.158	0.184	0.000	0.184	Slightly Basic	SMG	1.168
54	COR-178	280	292	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SG	0.710
55	LQ-1067	60	72	0.098	0.020	0.701	0.700	0.073	-0.001	0.072	Inert/Neutral	LSG	0.521
56	LQ-1067	72	84	0.145	0.027	0.481	0.480	0.099	-0.001	0.098	Inert/Neutral	LSG	0.284
57	LQ-944	104	108	0.094	0.020	0.705	0.070	0.073	-0.870	-0.797	Slightly Acidic	SMG	0.353
58	LQ-944	108	112	0.205	0.020	0.064	0.064	0.073	0.000	0.073	Inert/Neutral	SMG	0.511
59	LQ-944	112	116	0.048	0.020	0.087	0.087	0.073	0.000	0.073	Inert/Neutral	SMG	0.476
60	LQ-944	116	120	0.020	0.020	0.048	0.048	0.073	0.000	0.073	Inert/Neutral	SG	0.556
61	TAP-054	116	120	0.073	0.020	0.044	0.042	0.073	-0.003	0.071	Inert/Neutral	SM	0.633
62	TAP-054	120	124	0.053	0.020	0.026	0.025	0.073	-0.001	0.072	Inert/Neutral	SM	0.419
63	TAP-054	124	128	0.075	0.020	0.026	0.021	0.073	-0.007	0.067	Inert/Neutral	SM	0.345
64	TAP-054	128	132	0.057	0.020	0.022	0.020	0.073	-0.003	0.071	Inert/Neutral	SM	0.437
65	TAP-054	132	136	0.068	0.020	0.028	0.027	0.073	-0.001	0.072	Inert/Neutral	SM	0.395
66	TAP-054	136	140	0.074	0.020	0.023	0.022	0.073	-0.001	0.072	Inert/Neutral	SM	0.506
67	TAP-054	140	144	0.058	0.020	0.032	0.030	0.073	-0.003	0.071	Inert/Neutral	SM	0.227
68	TAP-205	6.4	8	0.100	0.038	1.858	0.928	0.139	-1.274	-1.135	Acidic	LSG	0.353
69	TAP-205	8	9	0.039	0.020	3.282	0.548	0.073	-3.746	-3.672	Acidic	LSG	0.625
70	TAP-205	22.3	22.8	0.085	0.028	1.203	1.004	0.103	-0.273	-0.170	Slightly Acidic	FERR	0.295
71	TAP-205	22.8	23.55	0.092	0.020	0.506	0.501	0.073	-0.007	0.067	Inert/Neutral	MSG	0.249
72	TAP-205	23.55	24.35	0.157	0.068	2.422	0.527	0.250	-2.596	-2.347	Acidic	MSG	0.584
73	TAP-205	26.85	28.05	0.120	0.032	2.120	0.983	0.117	-1.558	-1.440	Acidic	LSG	0.341
74	TAP-205	34	35.05	0.054	0.020	3.544	2.713	0.073	-1.138	-1.065	Acidic	SA	0.242
75	TAP-205	35.05	36.5	0.085	0.038	2.108	1.529	0.139	-0.793	-0.654	Slightly Acidic	SVG	0.306
76	TAP-205	54.9	56	0.049	0.020	2.474	1.031	0.073	-1.977	-1.904	Acidic	C	0.248
77	TAP-205	56	58	0.058	0.020	3.076	0.978	0.073	-2.874	-2.801	Acidic	C	0.389
78	TAP-205	58	59.4	0.044	0.020	2.561	0.487	0.073	-2.841	-2.768	Acidic	C	0.299
79	TO-004	256	268	0.034	0.020	0.020	0.020	0.073	0.000	0.073	Inert/Neutral	SMV	0.287
80	TO-008	184	196	0.040	0.020	0.045	0.025	0.073	-0.027	0.046	Inert/Neutral	SV	0.522
81	TO-008	196	208.5	0.068	0.020	0.033	0.020	0.073	-0.018	0.056	Inert/Neutral	SM	0.672
82	TO-008	208.5	220	0.075	0.020	0.088	0.064	0.073	-0.033	0.041	Inert/Neutral	SMV	1.481
83	TO-008	220	232	0.056	0.020	0.192	0.093	0.073	-0.136	-0.062	Inert/Neutral	SMV	1.710
84	TO-008	232	244.35	0.054	0.020	0.104	0.067	0.073	-0.051	0.023	Inert/Neutral	SM	0.784
85	TO-009	228	240	0.020	0.020	0.083	0.083	0.073	0.000	0.073	Inert/Neutral	SG	0.245
86	TO-009	240	252	0.020	0.020	0.078	0.078	0.073	0.000	0.073	Inert/Neutral	SMG	0.224
87	TO-009	264	276.65	0.020	0.020	0.484	0.173	0.073	-0.426	-0.353	Slightly Acidic	SM	0.695
88	TO-013	308	320	0.020	0.020	0.704	0.219	0.073	-0.664	-0.591	Slightly Acidic	SM	2.536
89	TO-013	320	325	0.025	0.020	0.124	0.124	0.073	0.000	0.073	Inert/Neutral	SM	0.829
90	TO-017	270	282	0.035	0.020	0.095	0.052	0.073	-0.059	0.014	Inert/Neutral	SG	2.425
91	TO-017	282	294	0.059	0.020	0.076	0.060	0.073	-0.022	0.051	Inert/Neutral	SG	1.357
92	TO-017	294	306	0.025	0.020	0.081	0.065	0.073	-0.022	0.051	Inert/Neutral	SG	2.672
93	TO-018	288	300	0.059	0.020	4.296	0.253	0.073	-5.539	-5.466	Highly Acidic	SM	0.854
94	TO-018	300	312	0.077	0.020	2.321	0.554	0.073	-2.421	-2.347	Acidic	SM	4.211
95	TO-020	260	272	0.031	0.020	0.192	0.040	0.073	-0.208	-0.135	Slightly Acidic	SMV	1.568
96	TO-020	272	280	0.033	0.022	0.061	0.020	0.081	-0.056	0.025	Inert/Neutral	SMV	0.512
97	TO-022	260	272	0.073	0.020	0.067	0.061	0.073	-0.008	0.065	Inert/Neutral	SG	0.557
98	TO-022	284	296	0.039	0.020	1.642	1.465	0.073	-0.242	-0.169	Slightly Acidic	SG	0.613
99	TO-022	296	305.2	0.053	0.020	0.075	0.057	0.073	-0.025	0.049	Inert/Neutral	SMG	0.347
100	TO-024	274	280	0.042	0.020	0.164	0.134	0.073	-0.041	0.032	Inert/Neutral	SM	1.035

	HOLE_ID	FROM	TO	C_LECO, %	C_RES%	S_TOT%	S_SO4%	ANP	AGP	NCV	NCV_CLASS	ALTERATION	AU_PREF
101	TO-024	280	286	0.042	0.020	0.164	0.134	0.073	-0.041	0.032	Inert/Neutral	SM	3.362
102	TO-024	286	290	0.071	0.020	0.223	0.218	0.073	-0.007	0.067	Inert/Neutral	SMG	2.257
103	TO-024	290	294.9	0.071	0.020	0.223	0.218	0.073	-0.007	0.067	Inert/Neutral	SMG	5.286
104	TO-026	178	190	0.068	0.020	0.506	0.207	0.073	-0.410	-0.336	Slightly Acidic	SMV	0.244
105	TO-026	190	202	0.054	0.020	0.751	0.591	0.073	-0.219	-0.146	Slightly Acidic	SMV	0.394
106	TO-026	202	213.4	0.041	0.020	0.165	0.095	0.073	-0.096	-0.023	Inert/Neutral	SMV	0.704
107	TO-026	213.4	226	0.032	0.020	0.110	0.042	0.073	-0.093	-0.020	Inert/Neutral	SMV	0.624
108	TO-026	226	238	0.045	0.020	0.205	0.092	0.073	-0.155	-0.081	Inert/Neutral	SMV	1.456
109	TO-026	238	250	0.048	0.020	0.261	0.087	0.073	-0.238	-0.165	Slightly Acidic	SM	0.868
110	TO-026	250	262	0.059	0.020	0.084	0.056	0.073	-0.038	0.035	Inert/Neutral	SMV	1.564
111	TO-026	262	274.25	0.048	0.020	0.090	0.077	0.073	-0.018	0.056	Inert/Neutral	SMG	1.799
112	TO-026	274.25	286	0.040	0.020	0.218	0.112	0.073	-0.145	-0.072	Inert/Neutral	SM	3.503
113	TO-026	286	297.4	0.049	0.020	0.737	0.181	0.073	-0.762	-0.688	Slightly Acidic	SMG	0.889
114	TO-026	297.4	310	0.152	0.020	0.406	0.231	0.073	-0.240	-0.166	Slightly Acidic	SG	0.473
115	TO-029	264	276	0.042	0.020	0.446	0.107	0.073	-0.464	-0.391	Slightly Acidic	SMG	0.373
116	TO-029	276	288	0.038	0.020	0.155	0.180	0.073	0.034	0.108	Slightly Basic	SM	0.281
117	TO-029	288	300	0.039	0.020	0.219	0.253	0.073	0.047	0.120	Slightly Basic	SMV	2.065
118	TO-029	300	311.8	0.038	0.020	0.380	0.379	0.073	-0.001	0.072	Inert/Neutral	SM	6.883
119	TO-029	311.8	324	0.037	0.020	0.182	0.177	0.073	-0.007	0.067	Inert/Neutral	SM	5.297
120	TO-029	324	335.7	0.042	0.020	0.211	0.211	0.073	0.000	0.073	Inert/Neutral	SM	4.701
121	TO-029	335.7	344.5	0.037	0.020	0.193	0.174	0.073	-0.026	0.047	Inert/Neutral	SM	1.002
122	TO-030	280	292	0.029	0.020	0.338	0.119	0.073	-0.300	-0.227	Slightly Acidic	SM	0.704
123	TO-030	292	304	0.034	0.020	0.100	0.087	0.073	-0.018	0.056	Inert/Neutral	SMG	0.331
124	TO-030	304	312.6	0.024	0.020	0.110	0.094	0.073	-0.022	0.051	Inert/Neutral	SG	0.405
125	TO-032	312	324	0.053	0.020	0.239	0.171	0.073	-0.093	-0.020	Inert/Neutral	SM	2.983
126	TO-032	324	330.5	0.048	0.020	0.138	0.099	0.073	-0.053	0.020	Inert/Neutral	SM	2.726
127	TO-034	296	308.2	0.050	0.020	0.298	0.298	0.073	0.000	0.073	Inert/Neutral	SM	0.675
128	TO-034	308.2	320	0.037	0.020	0.176	0.176	0.073	0.000	0.073	Inert/Neutral	SM	1.363
129	TO-034	320	332	0.039	0.020	0.131	0.131	0.073	0.000	0.073	Inert/Neutral	SM	5.407
130	TO-034	332	344	0.032	0.020	0.160	0.130	0.073	-0.041	0.032	Inert/Neutral	SM	4.444
131	TO-035	302	314	0.038	0.020	0.320	0.271	0.073	-0.067	0.006	Inert/Neutral	SM	1.083
132	TO-035	314	326	0.027	0.020	0.111	0.097	0.073	-0.019	0.054	Inert/Neutral	SMG	0.668
133	TO-035	326	338	0.033	0.020	0.084	0.079	0.073	-0.007	0.067	Inert/Neutral	SG	1.238
134	TO-035	338	350	0.030	0.020	0.238	0.214	0.073	-0.033	0.041	Inert/Neutral	SG	0.961
135	TO-036	278	290	0.096	0.020	0.299	0.288	0.073	-0.015	0.058	Inert/Neutral	SMG	6.019
136	TO-036	290	302	0.050	0.020	0.473	0.405	0.073	-0.093	-0.020	Inert/Neutral	SM	6.335
137	TO-036	302	314	0.043	0.020	0.659	0.550	0.073	-0.149	-0.076	Inert/Neutral	SMV	5.283
138	TO-036	314	326	0.054	0.020	0.129	0.094	0.073	-0.048	0.025	Inert/Neutral	SMG	0.824
139	TO-036	326	337.4	0.050	0.044	0.048	0.048	0.161	0.000	0.161	Slightly Basic	SG	0.415
140	TO-037	276.5	288	0.031	0.020	0.411	0.347	0.073	-0.088	-0.014	Inert/Neutral	SM	1.403
141	TO-037	288	300	0.046	0.020	0.133	0.112	0.073	-0.029	0.045	Inert/Neutral	SM	0.445
142	TO-037	300	312	0.021	0.020	0.134	0.105	0.073	-0.040	0.034	Inert/Neutral	SM	0.273
143	TO-037	324	336	0.024	0.020	0.082	0.062	0.073	-0.027	0.046	Inert/Neutral	SM	0.471
144	TO-037	336	344.8	0.031	0.020	0.064	0.048	0.073	-0.022	0.051	Inert/Neutral	SM	0.246
145	TO-039	180	192	0.020	0.020	0.356	0.219	0.073	-0.188	-0.114	Slightly Acidic	SM	0.536
146	TO-039	192	204	0.020	0.020	0.122	0.098	0.073	-0.033	0.041	Inert/Neutral	SM	1.653
147	TO-041	188	200.1	0.068	0.020	0.102	0.097	0.073	-0.007	0.067	Inert/Neutral	SMG	0.336
148	TO-041	200.1	212	0.202	0.144	0.033	0.030	0.528	-0.004	0.524	Slightly Basic	SM	0.640
149	TO-041	212	224	0.040	0.020	0.122	0.027	0.073	-0.130	-0.057	Inert/Neutral	SM	0.588
150	TO-041	224	236	0.035	0.020	0.162	0.055	0.073	-0.147	-0.073	Inert/Neutral	SM	0.317
151	TO-044	204	216	0.062	0.020	0.069	0.068	0.073	-0.001	0.072	Inert/Neutral	SG	0.696
152	TO-044	216	228.45	0.116	0.038	0.050	0.045	0.139	-0.007	0.133	Slightly Basic	SG	0.351
153	TO-044	228.45	240	0.053	0.020	0.103	0.071	0.073	-0.044	0.030	Inert/Neutral	SM	0.468
154	TO-044	240	252	0.043	0.020	0.171	0.121	0.073	-0.069	0.005	Inert/Neutral	SM	1.148
155	TO-044	252	264	0.031	0.020	0.129	0.078	0.073	-0.070	0.004	Inert/Neutral	SM	2.459
156	TO-044	264	276	0.059	0.020	0.037	0.037	0.073	0.000	0.073	Inert/Neutral	SM	1.104
157	TO-045	286	298	0.041	0.037	0.061	0.057	0.136	-0.005	0.130	Slightly Basic	SMG	0.444
158	TO-045	298	310	0.064	0.035	0.069	0.069	0.128	0.000	0.128	Slightly Basic	SMG	0.240
159	TO-048	192	204.4	0.047	0.020	0.293	0.195	0.073	-0.134	-0.061	Inert/Neutral	SM	0.376
160	TO-050	214	226	0.038	0.020	0.079	0.051	0.073	-0.038	0.035	Inert/Neutral	SG	0.490
161	TO-050	226	238	0.076	0.032	0.067	0.060	0.117	-0.010	0.108	Slightly Basic	SMG	0.333
162	TO-050	238	250	0.041	0.020	0.089	0.078	0.073	-0.015	0.058	Inert/Neutral	SMG	1.152
163	TO-050	250	262	0.059	0.026	0.151	0.146	0.095	-0.007	0.089	Inert/Neutral	SM	0.384
164	TO-050	262	274	0.048	0.034	0.205	0.203	0.125	-0.003	0.122	Slightly Basic	SM	0.419
165	TO-050	274	286	0.042	0.023	0.336	0.296	0.084	-0.055	0.030	Inert/Neutral	SM	0.860
166	TO-050	286	298	0.036	0.020	0.136	0.098	0.073	-0.052	0.021	Inert/Neutral	SM	1.198
167	TO-050	298	310.1	0.092	0.067	0.153	0.107	0.246	-0.063	0.183	Slightly Basic	SM	0.492
168	TO-051	280	292	0.039	0.020	0.456	0.409	0.073	-0.064	0.009	Inert/Neutral	SM	0.633
169	TO-051	292	304	0.075	0.020	0.099	0.067	0.073	-0.044	0.030	Inert/Neutral	SM	0.724
170	TO-051	304	310.3	0.044	0.020	0.145	0.110	0.073	-0.048	0.025	Inert/Neutral	SM	0.275
171	TO-057	252.3	264	0.042	0.020	0.148	0.082	0.073	-0.090	-0.017	Inert/Neutral	SMV	0.347
172	TO-057	264	276	0.038	0.020	0.257	0.200	0.073	-0.078	-0.005	Inert/Neutral	SMG	1.948
173	TO-058	250.2	262.35	0.053	0.020	0.124	0.084	0.073	-0.055	0.019	Inert/Neutral	SM	0.411
174	TO-058	262.35	274	0.033	0.020	0.119	0.079	0.073	-0.055	0.019	Inert/Neutral	SG	1.707
175	TO-058	274	286	0.033	0.020	0.186	0.147	0.073	-0.053	0.020	Inert/Neutral	SG	1.873
176	TO-058	286	290.65	0.031	0.020	0.136	0.091	0.073	-0.062	0.012	Inert/Neutral	SMG	1.133
177	TO-062	290	302	0.028	0.020	2.337	2.209	0.073	-0.175	-0.102	Slightly Acidic	SM	1.872
178	TO-062	302	314	0.034	0.020	0.780	0.575	0.073	-0.281	-0.207	Slightly Acidic	SM	1.361
179	TO-062	314	326.35	0.028	0.020	0.500	0.250	0.073	-0.343	-0.269	Slightly Acidic	SM	3.696
180	TO-062	326.35	338	0.038	0.020	0.427	0.292	0.073	-0.185	-0.112	Slightly Acidic	SM	0.907
181	TO-063	228	240	0.026	0.020	1.152	0.169	0.073	-1.347	-1.273	Acidic	SM	1.910
182	TO-063	240	252	0.034	0.023	1.086	0.176	0.084	-1.247	-1.162	Acidic	SM	2.088
183	TO-063	252	264	0.026	0.020	0.884	0.119	0.073	-1.048	-0.975	Slightly Acidic	SM	1.507
184	TO-065	248	260	0.020	0.020	0.312	0.146	0.073	-0.227	-0.154	Slightly Acidic	SM	0.274
185	TO-065	260	272	0.020	0.020	0.122	0.110	0.073	-0.016	0.057	Inert/Neutral	SG	0.586
186	TO-065	272	284	0.020	0.020	0.121	0.115	0.073	-0.008	0.065	Inert/Neutral	SG	2.853
187	TO-070	249.5	250	0.050	0.050	0.132	0.050	0.184	-0.112	0.071	Inert/Neutral	SMV	3.166
188	TO-070	250	260	0.050	0.050	0.132	0.050	0.184	-0.112	0.071	Inert/Neutral	SVG	2.275
189	TO-070	260	262	0.050	0.050	0.132	0.050	0.184	-0.112	0.071	Inert/Neutral	SVG	3.046
190	TO-070	262	270	0.050	0.050	0.125	0.050	0.184	-0.103	0.081	Inert/Neutral	SVG	8.748
191	TO-070	270	274	0.050	0.050	0.125	0.050	0.184	-0.103	0.081	Inert/Neutral	SG	1.422
192	TO-070	280	286	0.050	0.050	0.120	0.050	0.184	-0.096	0.088	Inert/Neutral	SG	0.270
193	TO-070	286	290	0.050	0.050	0.153	0.050	0.184	-0.141	0.042	Inert/Neutral	SG	0.291
194	TO-070	297.5	300	0.050	0.050	0.233	0.135	0.184	-0.134	0.049	Inert/Neutral	SG	0.362
195	TO-071	218	223.1	0.050	0.050	5.652	2.404	0.184	-4.450	-4.266	Acidic	C	0.356
196	TO-071	223.1	230.25	0.106	0.050	2.295	0.417	0.184	-2.573	-2.389	Acidic	SMV	4.463
197	TO-071	230.25	237	0.050	0.050	3.754	0.642	0.184	-4.263	-4.080	Acidic	SVG	0.599
198	TO-071	237	244	0.050	0.050	0.140	0.137	0.184	-0.004	0.179	Slightly Basic	SMG	1.019
199	TO-071	244	250	0.050	0.050	0.539	0.050	0.184	-0.670	-0.486	Slightly Acidic	SG	0.707
200	TO-071	250	262	0.050	0.050	1.496	0.159	0.184	-1.832	-1.648	Acidic	SMG	0.718

	HOLE_ID	FROM	TO	C_LECO, %	C_RES%	S_TOT%	S_SO4%	ANP	AGP	NCV	NCV_CLASS	ALTERATION	AU_PREF
201	TO-072	232.75	243.95	0.050	0.050	0.219	0.119	0.184	-0.137	0.047	Inert/Neutral	SG	0.536
202	TO-072	243.95	250	0.050	0.050	0.248	0.186	0.184	-0.085	0.099	Inert/Neutral	SMV	0.622
203	TO-072	250	256	0.050	0.050	0.248	0.186	0.184	-0.085	0.099	Inert/Neutral	SMV	0.396
204	TO-072	256	260	0.050	0.050	0.117	0.050	0.184	-0.092	0.092	Inert/Neutral	SMV	0.287
205	TO-072	260	268	0.050	0.050	0.117	0.050	0.184	-0.092	0.092	Inert/Neutral	SMG	0.276
206	TO-072	268	270	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SMG	0.281
207	TO-074	184	196	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SMG	0.623
208	TO-074	196	208	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SMG	0.509
209	TO-074	208	220	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	0.277
210	TO-074	220	232	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	0.307
211	TO-074	232	244	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	0.996
212	TO-074	244	256.5	0.050	0.050	0.136	0.136	0.184	0.000	0.184	Slightly Basic	SM	0.600
213	TO-074	256.5	268	0.050	0.050	0.106	0.050	0.184	-0.077	0.107	Slightly Basic	SM	0.627
214	TO-074	268	280	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	0.497
215	TO-074	280	290	0.050	0.050	0.127	0.124	0.184	-0.004	0.179	Slightly Basic	SM	0.853
216	TO-074	290	292	0.050	0.050	0.127	0.124	0.184	-0.004	0.179	Slightly Basic	SM	0.372
217	TO-074	292	300	0.050	0.050	0.225	0.212	0.184	-0.018	0.166	Slightly Basic	SM	0.723
218	TO-076	177.9	190	0.050	0.050	4.734	0.471	0.184	-5.840	-5.657	Highly Acidic	SM	1.454
219	TO-080	172	184	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SG	0.318
220	TO-080	184	196.8	0.050	0.050	0.408	0.378	0.184	-0.041	0.142	Slightly Basic	SG	0.338
221	TO-080	196.8	208	0.050	0.050	0.217	0.154	0.184	-0.086	0.097	Inert/Neutral	SMG	0.442
222	TO-080	208	220	0.050	0.050	0.196	0.151	0.184	-0.062	0.122	Slightly Basic	SG	2.186
223	TO-080	220	232	0.050	0.050	0.380	0.142	0.184	-0.326	-0.143	Slightly Acidic	SMV	4.119
224	TO-080	232	243.15	0.050	0.050	0.689	0.517	0.184	-0.236	-0.052	Inert/Neutral	SM	0.594
225	TO-080	243.15	250	0.050	0.050	0.485	0.132	0.184	-0.484	-0.300	Slightly Acidic	SG	6.944
226	TO-080	250	256	0.050	0.050	0.485	0.132	0.184	-0.484	-0.300	Slightly Acidic	SM	5.597
227	TO-080	256	260	0.050	0.050	0.589	0.274	0.184	-0.432	-0.248	Slightly Acidic	SM	6.383
228	TO-080	260	268	0.050	0.050	0.589	0.274	0.184	-0.432	-0.248	Slightly Acidic	SMV	3.273
229	TO-081	220	228	0.050	0.050	0.181	0.160	0.184	-0.029	0.155	Slightly Basic	SM	0.243
230	TO-081	228	230	0.050	0.050	0.286	0.275	0.184	-0.015	0.168	Slightly Basic	SMG	0.971
231	TO-081	230	240	0.050	0.050	0.286	0.275	0.184	-0.015	0.168	Slightly Basic	SG	1.426
232	TO-081	240	250	0.050	0.050	0.499	0.424	0.184	-0.103	0.081	Inert/Neutral	SG	0.397
233	TO-083	210	222	0.050	0.050	0.241	0.173	0.184	-0.093	0.090	Inert/Neutral	SMG	0.970
234	TO-083	222	234	0.050	0.050	0.354	0.109	0.184	-0.336	-0.152	Slightly Acidic	SMG	1.077
235	TO-083	234	246	0.050	0.050	0.169	0.102	0.184	-0.092	0.092	Inert/Neutral	SM	0.434
236	TO-083	246	258	0.050	0.050	0.669	0.298	0.184	-0.508	-0.325	Slightly Acidic	SMG	0.699
237	TO-084	228	240	0.050	0.050	0.996	0.237	0.184	-1.040	-0.856	Slightly Acidic	C	1.221
238	TO-084	240	252.35	0.050	0.050	0.194	0.173	0.184	-0.029	0.155	Slightly Basic	SM	1.357
239	TO-087	180.5	192	0.050	0.050	0.278	0.272	0.184	-0.008	0.175	Slightly Basic	SG	5.774
240	TO-087	192	204	0.050	0.050	0.207	0.207	0.184	0.000	0.184	Slightly Basic	SM	1.257
241	TO-087	204	216.1	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	1.194
242	TO-087	216.1	228	0.050	0.050	0.163	0.159	0.184	-0.005	0.178	Slightly Basic	SM	1.665
243	TO-087	228	240.5	0.050	0.050	0.251	0.200	0.184	-0.070	0.114	Slightly Basic	SM	2.227
244	TO-087	240.5	250	0.050	0.050	0.477	0.403	0.184	-0.101	0.082	Inert/Neutral	SMV	1.262
245	TO-087	250	252	0.050	0.050	0.477	0.403	0.184	-0.101	0.082	Inert/Neutral	SG	1.574
246	TO-087	252	260	0.050	0.050	0.376	0.286	0.184	-0.123	0.060	Inert/Neutral	SG	0.914
247	TO-087	260	264.5	0.050	0.050	0.376	0.286	0.184	-0.123	0.060	Inert/Neutral	SG	0.661
248	TO-087	264.5	270	0.050	0.050	0.352	0.315	0.184	-0.051	0.133	Slightly Basic	SG	0.437
249	TO-095	256	267.9	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SG	0.677
250	TO-095	267.9	280.65	0.050	0.050	0.295	0.212	0.184	-0.114	0.070	Inert/Neutral	SM	2.240
251	TO-095	280.65	292.3	0.050	0.050	0.161	0.123	0.184	-0.052	0.131	Slightly Basic	SM	1.600
252	TO-095	292.3	304.5	0.050	0.050	0.344	0.307	0.184	-0.051	0.133	Slightly Basic	SM	2.212
253	TO-095	304.5	316	0.050	0.050	0.324	0.202	0.184	-0.167	0.016	Inert/Neutral	SM	3.389
254	TO-097	200	212	0.050	0.050	0.050	0.108	0.184	0.079	0.263	Slightly Basic	SM	1.387
255	TO-097	212	224	0.050	0.050	0.191	0.156	0.184	-0.048	0.136	Slightly Basic	SM	0.465
256	TO-097	224	236.4	0.050	0.050	0.249	0.153	0.184	-0.132	0.052	Inert/Neutral	SM	0.421
257	TO-097	236.4	248.6	0.050	0.050	0.266	0.264	0.184	-0.003	0.181	Slightly Basic	SM	0.543
258	TO-097	248.6	260	0.050	0.050	0.220	0.223	0.184	0.004	0.188	Slightly Basic	SM	1.865
259	TO-097	260	272	0.050	0.050	0.122	0.136	0.184	0.019	0.203	Slightly Basic	SM	0.624
260	TO-097	272	283.8	0.050	0.050	0.130	0.131	0.184	0.001	0.185	Slightly Basic	SMV	0.275
261	TO-097	283.8	296.4	0.050	0.050	0.114	0.116	0.184	0.003	0.186	Slightly Basic	SM	0.385
262	TO-097	296.4	308	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SM	0.357
263	TO-097	308	320	0.050	0.050	0.111	0.111	0.184	0.000	0.184	Slightly Basic	SM	2.602
264	TO-097	320	332	0.050	0.050	0.106	0.106	0.184	0.000	0.184	Slightly Basic	SM	2.277
265	TO-103	204	216	0.050	0.050	0.163	0.127	0.184	-0.049	0.134	Slightly Basic	SM	2.524
266	TO-103	216	228	0.050	0.050	0.156	0.104	0.184	-0.071	0.112	Slightly Basic	SM	0.942
267	TO-103	228	240	0.050	0.050	0.204	0.116	0.184	-0.121	0.063	Inert/Neutral	SMG	0.506
268	TO-103	240	252	0.050	0.050	0.468	0.240	0.184	-0.312	-0.129	Slightly Acidic	SG	0.823
269	TO-104	192.3	204.8	0.050	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SMG	3.125
270	TO-104	204.8	216	0.050	0.050	0.143	0.104	0.184	-0.053	0.130	Slightly Basic	SMG	2.730
271	TO-104	216	228.5	0.050	0.050	0.312	0.239	0.184	-0.100	0.083	Inert/Neutral	SMG	1.121
272	TO-104	228.5	240	0.050	0.050	0.355	0.122	0.184	-0.319	-0.136	Slightly Acidic	SM	1.290
273	TO-104	240	252	0.050	0.050	2.001	0.293	0.184	-2.340	-2.156	Acidic	SM	1.358
274	TO-104	252	264	0.050	0.050	4.917	0.289	0.184	-6.340	-6.157	Highly Acidic	SMG	0.428
275	TO-106	236	247.65	0.050	0.050	1.510	0.185	0.184	-1.815	-1.632	Acidic	C	0.346
276	TO-107	210	222	0.140	0.050	0.050	0.050	0.184	0.000	0.184	Slightly Basic	SG	0.482
277	TO-107	222	234	0.164	0.050	0.701	0.106	0.184	-0.815	-0.632	Slightly Acidic	SG	0.853
278	TO-107	234	246	0.050	0.050	4.846	0.161	0.184	-6.418	-6.235	Highly Acidic	SMG	1.718
279	TO-107	246	258	0.050	0.050	0.109	0.050	0.184	-0.081	0.103	Slightly Basic	SMV	4.230
280	TO-108	190	202	0.050	0.050	1.462	1.056	0.184	-0.556	-0.373	Slightly Acidic	SM	0.500
281	TO-108	202	214.9	0.050	0.050	0.502	0.495	0.184	-0.010	0.174	Slightly Basic	SMG	4.779
282	TO-108	214.9	226	0.050	0.050	0.374	0.411	0.184	0.051	0.234	Slightly Basic	SM	0.660
283	TO-109	198	210	0.050	0.050	0.112	0.050	0.184	-0.085	0.099	Inert/Neutral	SMG	0.588
284	TO-109	210	222	0.050	0.050	0.349	0.248	0.184	-0.138	0.045	Inert/Neutral	SM	0.384
285	TO-109	222	234.75	0.050	0.050	0.374	0.221	0.184	-0.210	-0.026	Inert/Neutral	SMG	0.251
286	TO-111	181.2	182.5	0.050	0.050	2.310	0.965	0.184	-1.843	-1.659	Acidic	SG	0.740
287	TO-111	182.5	184.1	0.050	0.050	2.310	0.965	0.184	-1.843	-1.659	Acidic	SG	1.212
288	TO-111	184.1	186	0.050	0.050	0.403	0.347	0.184	-0.077	0.107	Slightly Basic	SMG	1.152
289	TO-111	186	187.8	0.050	0.050	0.403	0.347	0.184	-0.077	0.107	Slightly Basic	SMG	1.123
290	TO-111	187.8	190	0.050	0.050	0.403	0.347	0.184	-0.077	0.107	Slightly Basic	SM	0.350
291	TO-111	190	192	0.050	0.050	0.403	0.347	0.184	-0.077	0.107	Slightly Basic	SM	0.456
292	TO-111	192	193.2	0.050	0.050	0.403	0.347	0.184	-0.077	0.107	Slightly Basic	SM	1.186
293	TO-111	193.2	194	0.050	0.050	0.403	0.347	0.184	-0.077	0.107	Slightly Basic	SMG	0.666
294	TO-111	194	196	0.050	0.050	0.403	0.347	0.184	-0.077	0.107	Slightly Basic	SMG	1.196
295	TO-111	196	198	0.050	0.050	0.258	0.215	0.184	-0.059	0.125	Slightly Basic	SMG	1.115
296	TO-111	198	199	0.050	0.050	0.258	0.215	0.184	-0.059	0.125	Slightly Basic	SMG	1.854
297	TO-111	199	200	0.050	0.050	0.258	0.215	0.184	-0.059	0.125	Slightly Basic	SG	2.330
298	TO-111	200	202	0.050	0.050	0.258	0.215	0.184	-0.059	0.125	Slightly Basic	SG	3.029
299	TO-111	202	204.2	0.050	0.050	0.258	0.215	0.184	-0.059	0.125	Slightly Basic	SG	4.230
300	TO-111	204.2	206	0.050	0.050	0.258	0.215	0.184	-0.059	0.125	Slightly Basic	SMG	3.259

	HOLE_ID	FROM	TO	C_LECO, %	C_RES%	S_TOT%	S_SO4%	ANP	AGP	NCV	NCV_CLASS	ALTERATION	AU_PREF
301	TO-111	206	208.3	0.050	0.050	0.258	0.215	0.184	-0.059	0.125	Slightly Basic	SMG	1.092
302	TO-111	209.5	210.5	0.050	0.050	0.350	0.334	0.184	-0.022	0.162	Slightly Basic	SMV	0.403
303	TO-111	210.5	212	0.050	0.050	0.350	0.334	0.184	-0.022	0.162	Slightly Basic	SMV	0.452
304	TO-111	212	214	0.050	0.050	0.350	0.334	0.184	-0.022	0.162	Slightly Basic	SMV	1.047
305	TO-111	215.5	217.4	0.050	0.050	0.350	0.334	0.184	-0.022	0.162	Slightly Basic	SMG	0.290
306	TO-111	218.5	220	0.050	0.050	0.350	0.334	0.184	-0.022	0.162	Slightly Basic	SG	0.441
307	TO-111	220	221.8	0.050	0.050	1.367	0.144	0.184	-1.676	-1.492	Acidic	SG	0.592
308	TO-111	221.8	222.9	0.050	0.050	1.367	0.144	0.184	-1.676	-1.492	Acidic	SMG	1.675
309	TO-111	222.9	223.6	0.050	0.050	1.367	0.144	0.184	-1.676	-1.492	Acidic	SMG	1.677
310	TO-111	223.6	224.6	0.050	0.050	1.367	0.144	0.184	-1.676	-1.492	Acidic	SMG	1.019
311	TO-111	224.6	226	0.050	0.050	1.367	0.144	0.184	-1.676	-1.492	Acidic	SMG	0.957
312	TO-111	226	228	0.050	0.050	1.367	0.144	0.184	-1.676	-1.492	Acidic	SMG	1.395
313	TO-111	228	230	0.050	0.050	1.367	0.144	0.184	-1.676	-1.492	Acidic	SG	1.556
314	TO-111	230	232	0.050	0.050	1.367	0.144	0.184	-1.676	-1.492	Acidic	SG	1.139
315	COR-009	350	352	0.04	0.02	2.93	0.4	0.0734	-3.4661	-3.3927	Acidic	ARG	0.366
316	COR-009	352	354	0.04	0.02	2.93	0.4	0.0734	-3.4661	-3.3927	Acidic	ARG	0.329
317	COR-009	354	356	0.04	0.02	2.93	0.4	0.0734	-3.4661	-3.3927	Acidic	ARG	0.282
318	COR-014	226.2	228	0.05	0.02	1.9	0.2	0.0734	-2.329	-2.2556	Acidic	SM	0.624
319	COR-014	228	230	0.05	0.02	1.9	0.2	0.0734	-2.329	-2.2556	Acidic	SM	0.498
320	COR-014	232	232.8	0.05	0.02	1.9	0.2	0.0734	-2.329	-2.2556	Acidic	SM	0.823
321	COR-014	232.8	234	0.05	0.02	1.9	0.2	0.0734	-2.329	-2.2556	Acidic	SM	0.28
322	COR-020	242	243	0.05	0.04	0.1	0.1	0.1468	0	0.1468	Inert/Neutral	SM	0.282
323	COR-022	298	300	0.01	0.005	5.63	5.32	0.01835	-0.4247	-0.40635	Slightly Acidic	SG	0.185
324	COR-023	250	252	0.04	0.01	0.47	0.47	0.0367	0	0.0367	Inert/Neutral	SVG	0.361
325	COR-023	252	254	0.04	0.01	0.47	0.47	0.0367	0	0.0367	Inert/Neutral	SVG	0.523
326	COR-023	254	256	0.04	0.01	0.47	0.47	0.0367	0	0.0367	Inert/Neutral	SVG	0.47
327	COR-023	256	258	0.04	0.01	0.47	0.47	0.0367	0	0.0367	Inert/Neutral	SVG	0.379
328	COR-060	317.25	318	0.07	0.05	0.11	0.1	0.1835	-0.0137	0.1698	Inert/Neutral	SMG	2.534
329	COR-060	318	320	0.07	0.05	0.11	0.1	0.1835	-0.0137	0.1698	Inert/Neutral	SMG	0.902
330	COR-060	320	321.4	0.07	0.05	0.11	0.1	0.1835	-0.0137	0.1698	Inert/Neutral	SMG	0.658
331	COR-060	321.4	322	0.07	0.05	0.11	0.1	0.1835	-0.0137	0.1698	Inert/Neutral	SM	0.401
332	COR-060	322	324.3	0.07	0.05	0.11	0.1	0.1835	-0.0137	0.1698	Inert/Neutral	SM	0.448
333	LQ-1031	130	131.7	0.035	0.02	1.45	1.51	0.0734	0.0822	0.1556	Inert/Neutral	LSG	0.517
334	LQ-1031	131.7	134.2	0.036	0.02	0.706	0.775	0.0734	0.09453	0.16793	Inert/Neutral	LSG	0.531
335	LQ-1031	134.6	136	0.036	0.02	0.706	0.775	0.0734	0.09453	0.16793	Inert/Neutral	LSG	0.267
336	LQ-1031	136	138	0.036	0.02	0.706	0.775	0.0734	0.09453	0.16793	Inert/Neutral	LSG	0.931
337	LQ-1031	138	140	0.036	0.02	0.706	0.775	0.0734	0.09453	0.16793	Inert/Neutral	LSG	0.756
338	LQ-1031	140	142	0.021	0.02	0.825	0.73	0.0734	-0.13015	-0.05675	Slightly Acidic	LSG	1.384
339	LQ-1031	142	144	0.021	0.02	0.825	0.73	0.0734	-0.13015	-0.05675	Slightly Acidic	LSG	1.046
340	LQ-1031	144	146	0.021	0.02	0.825	0.73	0.0734	-0.13015	-0.05675	Slightly Acidic	LSG	0.867
341	LQ-1031	146	148	0.021	0.02	0.825	0.73	0.0734	-0.13015	-0.05675	Slightly Acidic	LSG	0.262
342	LQ-1031	148	149.3	0.073	0.02	1.45	1.5	0.0734	0.0685	0.1419	Inert/Neutral	LSG	0.353
343	LQ-1031	149.3	150	0.073	0.02	1.45	1.5	0.0734	0.0685	0.1419	Inert/Neutral	LSG	2.059
344	LQ-1032	115.5	116	0.171	0.02	0.316	0.271	0.0734	-0.06165	0.01175	Inert/Neutral		0.226
345	LQ-1032	129	130	0.068	0.02	0.121	0.628	0.0734	0.69459	0.76799	Slightly Basic		0.256
346	LQ-1046	148	150	0.103	0.02	0.878	0.952	0.0734	0.10138	0.17478	Slightly Basic	LSG	0.7
347	LQ-1046	150	152	0.103	0.02	0.878	0.952	0.0734	0.10138	0.17478	Slightly Basic	LSG	2.212
348	LQ-1046	152	154	0.103	0.02	0.878	0.952	0.0734	0.10138	0.17478	Slightly Basic	LSG	1.725
349	LQ-1046	154	155.65	0.156	0.02	0.267	0.267	0.0734	0	0.0734	Inert/Neutral	LSG	0.855
350	LQ-1046	155.65	157.7	0.156	0.02	0.267	0.267	0.0734	0	0.0734	Inert/Neutral	LSG	1.142
351	LQ-1046	157.7	160	0.156	0.02	0.267	0.267	0.0734	0	0.0734	Inert/Neutral	LSG	0.799
352	LQ-1046	160	160.75	0.156	0.02	0.267	0.267	0.0734	0	0.0734	Inert/Neutral	LSG	1.374
353	LQ-1046	160.75	162	0.156	0.02	0.267	0.267	0.0734	0	0.0734	Inert/Neutral	LSG	0.973
354	LQ-1046	162	164	0.095	0.02	0.102	0.102	0.0734	0	0.0734	Inert/Neutral	LSG	0.72
355	LQ-1046	164	166	0.095	0.02	0.102	0.102	0.0734	0	0.0734	Inert/Neutral	LSG	1.502
356	LQ-1046	166	168	0.095	0.02	0.102	0.102	0.0734	0	0.0734	Inert/Neutral	LSG	1.023
357	LQ-1047	147.85	150	0.103	0.02	0.329	0.38	0.0734	0.06987	0.14327	Inert/Neutral	LSG	0.447
358	LQ-1047	150	152	0.103	0.02	0.329	0.38	0.0734	0.06987	0.14327	Inert/Neutral	LSG	2.74
359	LQ-1047	152	153.7	0.103	0.02	0.329	0.38	0.0734	0.06987	0.14327	Inert/Neutral	LSG	4.182
360	LQ-1047	153.7	156	0.103	0.02	0.329	0.38	0.0734	0.06987	0.14327	Inert/Neutral	LSG	1.353
361	LQ-1047	156	158	0.121	0.02	0.308	0.308	0.0734	0	0.0734	Inert/Neutral	LSG	1.183
362	LQ-1047	158	160	0.121	0.02	0.308	0.308	0.0734	0	0.0734	Inert/Neutral	LSG	1.4
363	LQ-1047	160	162	0.121	0.02	0.308	0.308	0.0734	0	0.0734	Inert/Neutral	LSG	0.73
364	LQ-1047	162	162.8	0.121	0.02	0.308	0.308	0.0734	0	0.0734	Inert/Neutral	LSG	0.315
365	LQ-1047	162.8	164	0.121	0.02	0.308	0.308	0.0734	0	0.0734	Inert/Neutral	LSG	0.717
366	LQ-1047	164	166	0.103	0.02	0.382	0.382	0.0734	0	0.0734	Inert/Neutral	LSG	0.872
367	LQ-944	102	104	0.091	0.02	0.384	0.727	0.0734	0.46991	0.54331	Slightly Basic	ARG	0.26
368	LQ-944	104	106	0.094	0.02	0.07	0.705	0.0734	0.86995	0.94335	Slightly Basic	SMG	0.412
369	LQ-944	106	108	0.094	0.02	0.07	0.705	0.0734	0.86995	0.94335	Slightly Basic	SMG	0.294
370	LQ-944	108	110	0.205	0.02	0.064	0.064	0.0734	0	0.0734	Inert/Neutral	SMG	0.48
371	LQ-944	110	112	0.205	0.02	0.064	0.064	0.0734	0	0.0734	Inert/Neutral	SMG	0.542
372	LQ-944	112	114	0.048	0.02	0.087	0.087	0.0734	0	0.0734	Inert/Neutral	SMG	0.56
373	LQ-944	114	116	0.048	0.02	0.087	0.087	0.0734	0	0.0734	Inert/Neutral	SMG	0.392
374	LQ-944	116	118	0.02	0.02	0.048	0.048	0.0734	0	0.0734	Inert/Neutral	SG	0.628
375	LQ-944	118	120	0.02	0.02	0.048	0.048	0.0734	0	0.0734	Inert/Neutral	SG	0.484
376	TAP-027	250	252	0.06	0.005	0.05	0.05	0.01835	0	0.01835	Inert/Neutral	SGC	0.292
377	TAP-027	252	254	0.06	0.005	0.05	0.05	0.01835	0	0.01835	Inert/Neutral	SM	0.191
378	TAP-027	308	310	0.05	0.01	0.1	0.09	0.0367	-0.0137	0.023	Inert/Neutral	SMG	0.193
379	TAP-109	308	310	0.02	0.02	5.1	5.32	0.0734	0.3014	0.3748	Slightly Basic	SMG	0.589
380	TAP-109	310	312	0.02	0.02	4.13	4.5	0.0734	0.5069	0.5803	Slightly Basic	SMG	0.509
381	TAP-109	312	314	0.02	0.02	4.13	4.5	0.0734	0.5069	0.5803	Slightly Basic	SMG	0.371
382	TAP-109	314	316	0.02	0.02	1.81	1.95	0.0734	0.1918	0.2652	Slightly Basic	SMG	1.053
383	TAP-109	316	318	0.02	0.02	1.81	1.95	0.0734	0.1918	0.2652	Slightly Basic	SMG	3.333
384	TAP-109	318	320	0.02	0.02	0.15	0.19	0.0734	0.0548	0.1282	Inert/Neutral	SMG	1.574
385	TAP-109	320	322	0.02	0.02	0.15	0.19	0.0734	0.0548	0.1282	Inert/Neutral	SMG	1.642
386	TAP-109	322	324	0.02	0.02	0.117	0.117	0.0734	0	0.0734	Inert/Neutral	SMG	3.156
387	TAP-109	324	326	0.02	0.02	0.117	0.117	0.0734	0	0.0734	Inert/Neutral	SMG	4.558
388	TAP-109	326	328	0.02	0.02	0.092	0.092	0.0734	0	0.0734	Inert/Neutral	SMG	3.503
389	TAP-109	328	330	0.02	0.02	0.092	0.092	0.0734	0	0.0734	Inert/Neutral	SMG	2.511
390	TAP-109	330	332	0.02	0.02	0.26	0.26	0.0734	0	0.0734	Inert/Neutral	SMG	3
391	TAP-109	332	334	0.02	0.02	0.26	0.26	0.0734	0	0.0734	Inert/Neutral	SMG	3.458
392	TAP-109	334	336	0.02	0.02	0.167	0.182	0.0734	0.02055	0.09395	Inert/Neutral	SMG	3.754
393	TAP-109	336	338	0.02	0.02	0.167	0.182	0.0734	0.02055	0.09395	Inert/Neutral	SMG	3.097
394	TAP-109	338	340	0.02	0.02	0.058	0.058	0.0734	0	0.0734	Inert/Neutral	SMG	2.203
395	TAP-109	340	342	0.02	0.02	0.058	0.058	0.0734	0	0.0734	Inert/Neutral	SMG	1.613
396	TAP-109	342	344	0.02	0.02	0.056	0.056	0.0734	0	0.0734	Inert/Neutral	SMG	3.546
397	TAP-109	344	346	0.02	0.02	0.056	0.056	0.0734	0	0.0734	Inert/Neutral	SMG	2.372
398	TAP-109	346	348	0.02	0.02	0.17	0.268	0.0734	0.13426	0.20766	Slightly Basic	SMG	1.343
399	TAP-109	348	350.25	0.02	0.02	0.17	0.268	0.0734	0.13426	0.20766	Slightly Basic	SMG	1.431
400	TAP-109	350.25	352	0.02	0.02	1.9	6.14	0.0734	5.8088	5.8822	Highly Basic	SMG	1.559

	HOLE_ID	FROM	TO	C_LECO, %	C_RES%	S_TOT%	S_SO4%	ANP	AGP	NCV	NCV_CLASS	ALTERATION	AU_PREF
401	TAP-109	352	354.15	0.02	0.02	1.9	6.14	0.0734	5.8088	5.8822	Highly Basic	SMG	0.843
402	TAP-109	354.15	356	0.02	0.02	0.956	6	0.0734	6.91028	6.98368	Highly Basic	ARG	0.63
403	TAP-109	358	359.3	0.02	0.02	2.35	6.99	0.0734	6.3568	6.4302	Highly Basic	ARG	0.709
404	TAP-109	360	362	0.02	0.02	2.35	6.99	0.0734	6.3568	6.4302	Highly Basic	ARG	0.301
405	TAP-109	362	364	0.126	0.02	0.38	1.97	0.0734	2.1783	2.2517	Basic	ARG	0.68
406	TAP-109	364	366	0.126	0.02	0.38	1.97	0.0734	2.1783	2.2517	Basic	SMV	0.948
407	TAP-109	366	368	0.113	0.02	0.451	3.03	0.0734	3.53323	3.60663	Basic	SMV	1.075
408	TAP-109	368	370	0.113	0.02	0.451	3.03	0.0734	3.53323	3.60663	Basic	SMV	1.235
409	TAP-109	370	372	0.122	0.02	0.851	4.76	0.0734	5.35533	5.42873	Highly Basic	SMV	0.958
410	TAP-109	372	374	0.122	0.02	0.851	4.76	0.0734	5.35533	5.42873	Highly Basic	SC	1.225
411	TAP-123	302	304	0.056	0.02	0.13	0.133	0.0734	0.00411	0.07751	Inert/Neutral	SM	2.768
412	TAP-123	304	306	0.056	0.02	0.13	0.133	0.0734	0.00411	0.07751	Inert/Neutral	SM	4.321
413	TAP-123	306	308	0.048	0.02	0.057	0.061	0.0734	0.00548	0.07888	Inert/Neutral	SMG	0.814
414	TAP-123	308	310	0.048	0.02	0.057	0.061	0.0734	0.00548	0.07888	Inert/Neutral	SGC	0.644
415	TAP-123	310	312	0.038	0.02	0.047	0.048	0.0734	0.00137	0.07477	Inert/Neutral	SGC	2.836
416	TAP-123	312	314	0.038	0.02	0.047	0.048	0.0734	0.00137	0.07477	Inert/Neutral	SGC	0.833
417	TAP-123	314	316	0.043	0.02	3.248	3.98	0.0734	1.00284	1.07624	Basic	AA	1.453
418	TAP-123	316	318	0.043	0.02	3.248	3.98	0.0734	1.00284	1.07624	Basic	AA	0.512
419	TAP-123	318	320	0.043	0.02	3.248	3.98	0.0734	1.00284	1.07624	Basic	AA	0.299
420	TAP-127	288	290	0.044	0.04	0.087	0.087	0.1468	0	0.1468	Inert/Neutral	SM	0.231
421	TAP-127	296	298	0.056	0.02	0.101	0.103	0.0734	0.00274	0.07614	Inert/Neutral	SM	0.201
422	TAP-127	298	300	0.056	0.02	0.101	0.103	0.0734	0.00274	0.07614	Inert/Neutral	SM	0.255
423	TAP-127	300	302	0.038	0.02	0.079	0.08	0.0734	0.00137	0.07477	Inert/Neutral	SM	0.195
424	TAP-127	302	304.45	0.038	0.02	0.079	0.08	0.0734	0.00137	0.07477	Inert/Neutral	SM	0.219
425	TAP-127	304.45	306	0.125	0.02	0.932	1.17	0.0734	0.32606	0.39946	Slightly Basic	SG	0.236
426	TAP-128	280	282	0.068	0.02	0.079	0.077	0.0734	-0.00274	0.07066	Inert/Neutral	SM	0.29
427	TAP-128	282	284	0.068	0.02	0.079	0.077	0.0734	-0.00274	0.07066	Inert/Neutral	SM	0.213
428	TAP-128	284	286	0.076	0.02	0.109	0.102	0.0734	-0.00959	0.06381	Inert/Neutral	SM	0.298
429	TAP-128	286	288	0.076	0.02	0.109	0.102	0.0734	-0.00959	0.06381	Inert/Neutral	SM	0.307
430	TAP-128	288	290	0.119	0.02	0.111	0.111	0.0734	0	0.0734	Inert/Neutral	SM	0.523
431	TAP-128	290	292	0.119	0.02	0.111	0.111	0.0734	0	0.0734	Inert/Neutral	SM	0.3
432	TAP-128	292	294	0.072	0.02	0.087	0.087	0.0734	0	0.0734	Inert/Neutral	SM	0.524
433	TAP-128	294	296	0.072	0.02	0.087	0.087	0.0734	0	0.0734	Inert/Neutral	SM	0.448
434	TAP-128	296	298	0.049	0.02	0.286	0.288	0.0734	0.00274	0.07614	Inert/Neutral	SM	0.536
435	TAP-128	298	300	0.049	0.02	0.286	0.288	0.0734	0.00274	0.07614	Inert/Neutral	SG	0.381
436	TAP-128	300	302	0.091	0.02	0.109	0.115	0.0734	0.00822	0.08162	Inert/Neutral	SM	0.427
437	TAP-128	302	304	0.091	0.02	0.109	0.115	0.0734	0.00822	0.08162	Inert/Neutral	SM	0.467
438	TAP-128	304	306	0.045	0.02	0.055	0.045	0.0734	-0.0137	0.0597	Inert/Neutral	SM	0.208
439	TAP-128	310	312	0.058	0.02	0.081	0.069	0.0734	-0.01644	0.05696	Inert/Neutral	SM	0.235
440	TAP-128	312	314	0.07	0.028	0.088	0.07	0.10276	-0.02466	0.0781	Inert/Neutral	SM	0.175
441	TAP-128	314	316	0.07	0.028	0.088	0.07	0.10276	-0.02466	0.0781	Inert/Neutral	SM	0.215
442	TAP-128	316	318	0.064	0.02	0.085	0.064	0.0734	-0.02877	0.04463	Inert/Neutral	SM	0.258
443	TAP-128	320	322	0.072	0.02	0.11	0.072	0.0734	-0.05206	0.02134	Inert/Neutral	SM	0.213
444	TAP-128	328	330	0.114	0.02	0.042	0.045	0.0734	0.00411	0.07751	Inert/Neutral	SM	0.213
445	TAP-128	330	332	0.114	0.02	0.042	0.045	0.0734	0.00411	0.07751	Inert/Neutral	SM	0.172
446	TAP-132	262	264	0.071	0.02	2.097	2.61	0.0734	0.70281	0.77621	Slightly Basic	AA	1.091
447	TAP-132	264	266	0.071	0.02	2.097	2.61	0.0734	0.70281	0.77621	Slightly Basic	SM	4.162
448	TAP-132	266	268	0.086	0.02	0.076	0.081	0.0734	0.00685	0.08025	Inert/Neutral	SM	1.571
449	TAP-132	268	270	0.086	0.02	0.076	0.081	0.0734	0.00685	0.08025	Inert/Neutral	SM	0.638
450	TAP-132	270	272	0.071	0.02	0.102	0.126	0.0734	0.03288	0.10628	Inert/Neutral	SM	1.176
451	TAP-132	272	274	0.071	0.02	0.102	0.126	0.0734	0.03288	0.10628	Inert/Neutral	SM	0.861
452	TAP-132	274	276	0.067	0.02	0.064	0.062	0.0734	-0.00274	0.07066	Inert/Neutral	SM	1.389
453	TAP-142	346	348	0.067	0.02	0.221	0.576	0.0734	0.48635	0.55975	Slightly Basic	SM	3.866
454	TAP-142	348	350	0.084	0.02	0.165	0.224	0.0734	0.08083	0.15423	Inert/Neutral	SM	3.237
455	TAP-142	350	352	0.084	0.02	0.165	0.224	0.0734	0.08083	0.15423	Inert/Neutral	SM	1.375
456	TAP-142	352	354	0.081	0.02	1.36	5.02	0.0734	5.0142	5.0876	Highly Basic	SM	0.376
457	TAP-142	354	356	0.081	0.02	1.36	5.02	0.0734	5.0142	5.0876	Highly Basic	SM	1.257
458	TAP-142	356	358	0.078	0.02	1.88	3.44	0.0734	2.1372	2.2106	Basic	SM	1.593
459	TAP-142	358	360	0.078	0.02	1.88	3.44	0.0734	2.1372	2.2106	Basic	SM	0.45
460	TAP-142	362	364	0.055	0.02	3.41	6.08	0.0734	3.6579	3.7313	Basic	SM	0.4
461	TAP-142	364	366	0.049	0.02	3.58	3.99	0.0734	0.5617	0.6351	Slightly Basic	SM	0.304
462	TAP-142	368	370	0.216	0.02	1.3	2.02	0.0734	0.9864	1.0598	Slightly Basic	SM	1.864
463	TAP-142	370	372	0.216	0.02	1.3	2.02	0.0734	0.9864	1.0598	Slightly Basic	SM	1.177
464	TAP-142	372	374	0.051	0.02	5.49	5.49	0.0734	0	0.0734	Inert/Neutral	SM	0.826
465	TAP-142	374	376	0.051	0.02	5.49	5.49	0.0734	0	0.0734	Inert/Neutral	SM	0.178
466	TAP-142	376	378	0.053	0.02	3	3	0.0734	0	0.0734	Inert/Neutral	SM	0.423
467	TAP-145	272	274	0.072	0.02	0.124	0.124	0.0734	0	0.0734	Inert/Neutral	SM	0.631
468	TAP-145	274	276	0.072	0.02	0.124	0.124	0.0734	0	0.0734	Inert/Neutral	SM	0.487
469	TAP-145	276	278	0.078	0.02	0.099	0.099	0.0734	0	0.0734	Inert/Neutral	SM	0.34
470	TAP-145	278	280	0.078	0.02	0.099	0.099	0.0734	0	0.0734	Inert/Neutral	SM	0.381
471	TAP-145	280	282	0.065	0.02	0.096	0.096	0.0734	0	0.0734	Inert/Neutral	SM	0.33
472	TAP-145	282	284	0.065	0.02	0.096	0.096	0.0734	0	0.0734	Inert/Neutral	SM	0.423
473	TAP-145	284	286	0.054	0.02	0.063	0.063	0.0734	0	0.0734	Inert/Neutral	SM	0.179
474	TAP-145	296	298	0.076	0.02	0.089	0.089	0.0734	0	0.0734	Inert/Neutral	SM	0.275
475	TAP-145	298	300	0.076	0.02	0.089	0.089	0.0734	0	0.0734	Inert/Neutral	SM	0.24
476	TAP-145	300	302	0.062	0.02	0.062	0.062	0.0734	0	0.0734	Inert/Neutral	SM	0.174
477	TAP-145	302	304	0.062	0.02	0.062	0.062	0.0734	0	0.0734	Inert/Neutral	SM	0.388
478	TAP-145	304	306	0.068	0.02	0.058	0.062	0.0734	0.00548	0.07888	Inert/Neutral	SM	0.451
479	TAP-145	306	308	0.068	0.02	0.058	0.062	0.0734	0.00548	0.07888	Inert/Neutral	SM	0.694
480	TAP-145	308	310	0.056	0.02	0.076	0.095	0.0734	0.02603	0.09943	Inert/Neutral	SM	0.532
481	TAP-145	310	312	0.056	0.02	0.076	0.095	0.0734	0.02603	0.09943	Inert/Neutral	SM	0.598
482	TAP-145	312	314	0.058	0.02	0.081	0.096	0.0734	0.02055	0.09395	Inert/Neutral	SM	0.812
483	TAP-145	314	316	0.058	0.02	0.081	0.096	0.0734	0.02055	0.09395	Inert/Neutral	SM	0.494
484	TAP-145	316	318	0.066	0.02	0.133	0.144	0.0734	0.01507	0.08847	Inert/Neutral	SM	0.367
485	TAP-145	318	320	0.066	0.02	0.133	0.144	0.0734	0.01507	0.08847	Inert/Neutral	SM	0.365
486	TAP-145	320	322	0.053	0.02	0.065	0.088	0.0734	0.03151	0.10491	Inert/Neutral	SM	0.297
487	TAP-145	322	324	0.053	0.02	0.065	0.088	0.0734	0.03151	0.10491	Inert/Neutral	SM	0.278
488	TAP-145	324	326	0.039	0.02	0.152	0.176	0.0734	0.03288	0.10628	Inert/Neutral	SM	0.716
489	TAP-145	326	328	0.039	0.02	0.152	0.176	0.0734	0.03288	0.10628	Inert/Neutral	SM	1.275
490	TAP-145	328	330	0.091	0.02	0.146	0.159	0.0734	0.01781	0.09121	Inert/Neutral	SM	0.614
491	TAP-145	330	332	0.091	0.02	0.146	0.159	0.0734	0.01781	0.09121	Inert/Neutral	SM	0.983
492	TAP-145	332	334	0.066	0.02	0.186	0.196	0.0734	0.0137	0.0871	Inert/Neutral	SM	0.84
493	TAP-145	334	336	0.066	0.02	0.186	0.196	0.0734	0.0137	0.0871	Inert/Neutral	SM	1.059
494	TAP-145	336	338	0.051	0.02	0.147	0.16	0.0734	0.01781	0.09121	Inert/Neutral	SM	1.701
495	TAP-145	338	340	0.051	0.02	0.147	0.16	0.0734	0.01781	0.09121	Inert/Neutral	SM	0.99
496	TAP-148	308	310	0.093	0.02	0.078	0.096	0.0734	0.02466	0.09806	Inert/Neutral	SM	0.172
497	TAP-148	310	312	0.114	0.02	0.127	0.149	0.0734	0.03014	0.10354	Inert/Neutral	SM	0.2
498	TAP-148	314	316	0.094	0.02	0.111	0.123	0.0734	0.01644	0.08984	Inert/Neutral	SM	0.172
499	TAP-148	316	318	0.094	0.02	0.111	0.123	0.0734	0.01644	0.08984	Inert/Neutral	SM	0.174
500	TAP-148	318	320	0.092	0.02	0.131	0.141	0.0734	0.0137	0.0871	Inert/Neutral	SM	0.191

	HOLE_ID	FROM	TO	C_LECO, %	C_RES%	S_TOT%	S_SO4%	ANP	AGP	NCV	NCV_CLASS	ALTERATION	AU_PREF
501	TAP-148	323.35	324.05	0.108	0.02	0.309	0.37	0.0734	0.08357	0.15697	Inert/Neutral	SM	0.565
502	TAP-148	325.05	326	0.108	0.02	0.309	0.37	0.0734	0.08357	0.15697	Inert/Neutral	SM	0.44
503	TAP-148	326	328	0.136	0.02	0.144	0.15	0.0734	0.00822	0.08162	Inert/Neutral	SM	0.187
504	TAP-148	328	330	0.136	0.02	0.144	0.15	0.0734	0.00822	0.08162	Inert/Neutral	SM	0.313
505	TAP-149	238	240	0.064	0.02	0.094	0.094	0.0734	0	0.0734	Inert/Neutral	SMV	1.027
506	TAP-149	240	242	0.116	0.02	0.1	0.101	0.0734	0.00137	0.07477	Inert/Neutral	SM	0.933
507	TAP-149	242	244	0.116	0.02	0.1	0.101	0.0734	0.00137	0.07477	Inert/Neutral	SM	1.043
508	TAP-149	244	246	0.059	0.02	0.236	0.419	0.0734	0.25071	0.32411	Slightly Basic	SM	1.441
509	TAP-149	246	248	0.059	0.02	0.236	0.419	0.0734	0.25071	0.32411	Slightly Basic	SM	1.803
510	TAP-149	248	250	0.055	0.02	0.347	0.368	0.0734	0.02877	0.10217	Inert/Neutral	SM	0.723
511	TAP-156	352	354	0.079	0.02	0.188	0.196	0.0734	0.01096	0.08436	Inert/Neutral	SM	6.45
512	TAP-156	354	356	0.079	0.02	0.188	0.196	0.0734	0.01096	0.08436	Inert/Neutral	SM	1.263
513	TAP-156	356	357.7	0.064	0.02	1.961	8.14	0.0734	8.46523	8.53863	Highly Basic	SM	3.183
514	TAP-156	357.7	360	0.064	0.02	1.961	8.14	0.0734	8.46523	8.53863	Highly Basic	SM	4.298
515	TAP-156	360	360.75	0.064	0.02	1.961	8.14	0.0734	8.46523	8.53863	Highly Basic	SM	5.733
516	TAP-156	361	362	0.051	0.02	0.797	4.59	0.0734	5.19641	5.26981	Highly Basic	SM	4.808
517	TAP-156	362	364	0.051	0.02	0.797	4.59	0.0734	5.19641	5.26981	Highly Basic	SM	6
518	TAP-156	364	366	0.144	0.02	2.507	10.3	0.0734	10.67641	10.74981	Highly Basic	SM	8.267
519	TAP-156	366	368	0.144	0.02	2.507	10.3	0.0734	10.67641	10.74981	Highly Basic	SM	8.467
520	TAP-156	368	370	0.07	0.02	1.946	8.54	0.0734	9.03378	9.10718	Highly Basic	SM	7.467
521	TAP-156	370	372	0.07	0.02	1.946	8.54	0.0734	9.03378	9.10718	Highly Basic	SG	9.867
522	TAP-156	372	374	0.045	0.02	4.085	14.3	0.0734	13.99455	14.06795	Highly Basic	SG	7.133
523	TAP-156	374	376	0.045	0.02	4.085	14.3	0.0734	13.99455	14.06795	Highly Basic	SG	7.6
524	TAP-156	376	378	0.057	0.02	2.32	8.37	0.0734	8.2885	8.3619	Highly Basic	SM	6.4
525	TAP-156	378	380	0.057	0.02	2.32	8.37	0.0734	8.2885	8.3619	Highly Basic	SM	1.972
526	TAP-156	380	382	0.052	0.02	1.538	8.06	0.0734	8.93514	9.00854	Highly Basic	SM	2.075
527	TAP-156	382	384	0.052	0.02	1.538	8.06	0.0734	8.93514	9.00854	Highly Basic	SM	1.865
528	TAP-156	384	386	0.069	0.02	0.325	1.82	0.0734	2.04815	2.12155	Basic	SM	2.042
529	TAP-156	386	388	0.069	0.02	0.325	1.82	0.0734	2.04815	2.12155	Basic	SM	3.236
530	TAP-158	282	283	0.064	0.02	0.115	0.119	0.0734	0.00548	0.07888	Inert/Neutral	SM	0.446
531	TAP-158	283.6	286	0.064	0.02	0.115	0.119	0.0734	0.00548	0.07888	Inert/Neutral	SM	0.861
532	TAP-158	286	288.3	0.079	0.02	0.6	0.63	0.0734	0.0411	0.1145	Inert/Neutral	SM	1.059
533	TAP-158	288.5	290	0.079	0.02	0.6	0.63	0.0734	0.0411	0.1145	Inert/Neutral	SM	1.158
534	TAP-158	290	292	0.085	0.02	0.643	0.676	0.0734	0.04521	0.11861	Inert/Neutral	SM	1.459
535	TAP-158	292	294	0.085	0.02	0.643	0.676	0.0734	0.04521	0.11861	Inert/Neutral	SM	1.218
536	TAP-158	294	296	0.079	0.02	0.083	0.093	0.0734	0.0137	0.0871	Inert/Neutral	SM	1.132
537	TAP-158	296	298	0.079	0.02	0.083	0.093	0.0734	0.0137	0.0871	Inert/Neutral	SM	0.82
538	TAP-158	298	300	0.089	0.02	0.105	0.181	0.0734	0.10412	0.17752	Slightly Basic	SM	0.794
539	TAP-158	300	302	0.089	0.02	0.105	0.181	0.0734	0.10412	0.17752	Slightly Basic	SM	1.146
540	TAP-158	302	304	0.104	0.02	0.109	0.117	0.0734	0.01096	0.08436	Inert/Neutral	SM	1.48
541	TAP-158	304	306	0.104	0.02	0.109	0.117	0.0734	0.01096	0.08436	Inert/Neutral	SM	1.9
542	TAP-158	306	308	0.099	0.02	0.14	0.156	0.0734	0.02192	0.09532	Inert/Neutral	SM	2.786
543	TAP-158	308	310	0.099	0.02	0.14	0.156	0.0734	0.02192	0.09532	Inert/Neutral	SM	1.693
544	TAP-158	310	312	0.085	0.02	0.208	0.208	0.0734	0	0.0734	Inert/Neutral	SM	0.875
545	TAP-158	312	314	0.085	0.02	0.208	0.208	0.0734	0	0.0734	Inert/Neutral	SM	0.723
546	TAP-158	314	316	0.095	0.02	0.774	0.905	0.0734	0.17947	0.25287	Slightly Basic	SM	0.641
547	TAP-158	316	318	0.095	0.02	0.774	0.905	0.0734	0.17947	0.25287	Slightly Basic	SM	0.388
548	TAP-158	318	320	0.077	0.02	2.055	2.33	0.0734	0.37675	0.45015	Slightly Basic	AA	0.227
549	TAP-158	320	322	0.077	0.02	2.055	2.33	0.0734	0.37675	0.45015	Slightly Basic	AA	0.399
550	TAP-158	324	326	0.165	0.02	0.95	2.59	0.0734	2.2468	2.3202	Basic	PROP	0.829
551	TAP-158	330	332	0.091	0.02	1.174	2.41	0.0734	1.69332	1.76672	Basic	PROP	0.205
552	TAP-161	286	288	0.078	0.02	0.072	0.077	0.0734	0.00685	0.08025	Inert/Neutral	SM	0.975
553	TAP-161	288	290	0.093	0.048	0.098	0.111	0.17616	0.01781	0.19397	Inert/Neutral	SM	1.024
554	TAP-161	290	292	0.093	0.048	0.098	0.111	0.17616	0.01781	0.19397	Inert/Neutral	SM	1.458
555	TAP-161	292	294	0.174	0.02	0.107	0.122	0.0734	0.02055	0.09395	Inert/Neutral	SM	2.029
556	TAP-161	294	296	0.174	0.02	0.107	0.122	0.0734	0.02055	0.09395	Inert/Neutral	SM	1.43
557	TAP-161	296	298	0.099	0.02	0.085	0.106	0.0734	0.02877	0.10217	Inert/Neutral	SM	1.265
558	TAP-161	298	300	0.099	0.02	0.085	0.106	0.0734	0.02877	0.10217	Inert/Neutral	SM	0.828
559	TAP-161	300	302	0.078	0.02	0.111	0.128	0.0734	0.02329	0.09669	Inert/Neutral	SM	2.043
560	TAP-161	302	304	0.078	0.02	0.111	0.128	0.0734	0.02329	0.09669	Inert/Neutral	SM	3.857
561	TAP-161	304	306	0.106	0.02	0.147	0.248	0.0734	0.13837	0.21177	Slightly Basic	SM	1.461
562	TAP-161	306	308	0.106	0.02	0.147	0.248	0.0734	0.13837	0.21177	Slightly Basic	SM	1.593
563	TAP-161	308	310	0.06	0.02	0.303	0.679	0.0734	0.51512	0.58852	Slightly Basic	SM	2.079
564	TAP-161	310	312	0.06	0.02	0.303	0.679	0.0734	0.51512	0.58852	Slightly Basic	SM	1.103
565	TAP-161	312	314	0.068	0.02	0.519	1.43	0.0734	1.24807	1.32147	Basic	SM	1.492
566	TAP-161	314	316	0.068	0.02	0.519	1.43	0.0734	1.24807	1.32147	Basic	SM	1.055
567	TAP-161	316	318	0.07	0.02	0.384	0.392	0.0734	0.01096	0.08436	Inert/Neutral	SM	0.742
568	TAP-163	290	292	0.072	0.02	0.078	0.078	0.0734	0	0.0734	Inert/Neutral	SM	0.485
569	TAP-163	292	294	0.062	0.02	0.055	0.102	0.0734	0.06439	0.13779	Inert/Neutral	SM	1.134
570	TAP-163	294	296	0.062	0.02	0.055	0.102	0.0734	0.06439	0.13779	Inert/Neutral	SM	1.867
571	TAP-163	296	298	0.067	0.02	0.083	0.083	0.0734	0	0.0734	Inert/Neutral	SM	1.039
572	TAP-163	298	300	0.067	0.02	0.083	0.083	0.0734	0	0.0734	Inert/Neutral	SM	1.857
573	TAP-163	300	302	0.043	0.02	0.061	0.062	0.0734	0.00137	0.07477	Inert/Neutral	SM	0.468
574	TAP-163	302	304	0.043	0.02	0.061	0.062	0.0734	0.00137	0.07477	Inert/Neutral	SM	0.259
575	TAP-163	304	306	0.053	0.02	2.18	2.24	0.0734	0.0822	0.1556	Inert/Neutral	SM	0.425
576	TAP-163	306	308	0.053	0.02	2.18	2.24	0.0734	0.0822	0.1556	Inert/Neutral	AA	0.713
577	TAP-163	308	310	0.054	0.02	0.157	0.158	0.0734	0.00137	0.07477	Inert/Neutral	SM	0.528
578	TAP-163	310	312	0.054	0.02	0.157	0.158	0.0734	0.00137	0.07477	Inert/Neutral	SM	0.306
579	TAP-163	312	312.5	0.054	0.02	0.157	0.158	0.0734	0.00137	0.07477	Inert/Neutral	SM	0.328
580	TAP-163	313	314	0.028	0.02	5.41	5.41	0.0734	0	0.0734	Inert/Neutral	AA	1.645
581	TAP-163	314	316	0.028	0.02	5.41	5.41	0.0734	0	0.0734	Inert/Neutral	AA	0.246
582	TAP-163	316	318	0.028	0.02	5.41	5.41	0.0734	0	0.0734	Inert/Neutral	AA	0.406
583	TAP-163	318	320	0.042	0.02	3.76	4.44	0.0734	0.9316	1.005	Slightly Basic	AA	0.379
584	TAP-205	22.3	22.8	0.085	0.028	1.004	1.203	0.10276	0.27263	0.37539	Slightly Basic	FERR	0.295
585	TAP-205	22.8	23.55	0.092	0.02	0.501	0.506	0.0734	0.00685	0.08025	Inert/Neutral	MSG	0.249
586	TAP-205	23.55	24.35	0.157	0.068	0.527	2.422	0.24956	2.59615	2.84571	Basic	MSG	0.584
587	TAP-205	26	26.85	0.087	0.028	1.612	1.765	0.10276	0.20961	0.31237	Slightly Basic	LSG	0.205
588	TAP-205	26.85	28.05	0.12	0.032	0.983	2.12	0.11744	1.55769	1.67513	Basic	LSG	0.341
589	TAP-205	28.05	29.1	0.181	0.039	0.982	1.784	0.14313	1.09874	1.24187	Basic	LSG	0.21
590	TAP-205	34	35.05	0.054	0.02	2.713	3.544	0.0734	1.13847	1.21187	Basic	SA	0.242
591	TAP-205	35.05	36.5	0.085	0.038	1.529	2.108	0.13946	0.79323	0.93269	Slightly Basic	SVG	0.306
592	TAP-205	54.9	56	0.049	0.02	1.031	2.474	0.0734	1.97691	2.05031	Basic	C	0.248
593	TAP-205	56	58	0.058	0.02	0.978	3.076	0.0734	2.87426	2.94766	Basic	C	0.389
594	TAP-205	58	59.4	0.044	0.02	0.487	2.561	0.0734	2.84138	2.91478	Basic	C	0.299
595	TO-013	310	312	0.02	0.02	0.219	0.704	0.0734	0.66445	0.73785	Slightly Basic	SM	5.16
596	TO-013	312	314	0.02	0.02	0.219	0.704	0.0734	0.66445	0.73785	Slightly Basic	SM	2.856
597	TO-013	314	314.6	0.02	0.02	0.219	0.704	0.0734	0.66445	0.73785	Slightly Basic	SM	3.116
598	TO-013	314.6	316	0.02	0.02	0.219	0.704	0.0734	0.66445	0.73785	Slightly Basic	SM	1.494
599	TO-013	316	318	0.02	0.02	0.219	0.704	0.0734	0.66445	0.73785	Slightly Basic	SM	1.404
600	TO-013	318	320	0.02	0.02	0.219	0.704	0.0734	0.66445	0.73785	Slightly Basic	SM	0.57

	HOLE_ID	FROM	TO	C_LECO, %	C_RES%	S_TOT%	S_SO4%	ANP	AGP	NCV	NCV_CLASS	ALTERATION	AU_PREF
601	TO-013	320	322	0.025	0.02	0.124	0.124	0.0734	0	0.0734	Inert/Neutral	SM	0.793
602	TO-013	322	324	0.025	0.02	0.124	0.124	0.0734	0	0.0734	Inert/Neutral	SM	1.016
603	TO-013	324	325	0.025	0.02	0.124	0.124	0.0734	0	0.0734	Inert/Neutral	SM	0.527
604	TO-016	264	266	0.02	0.02	0.049	0.285	0.0734	0.32332	0.39672	Slightly Basic	SMV	0.916
605	TO-016	266	267	0.02	0.02	0.02	0.067	0.0734	0.06439	0.13779	Inert/Neutral	SMV	0.726
606	TO-016	267	268	0.02	0.02	0.02	0.067	0.0734	0.06439	0.13779	Inert/Neutral	SG	0.894
607	TO-016	268	270	0.02	0.02	0.02	0.067	0.0734	0.06439	0.13779	Inert/Neutral	SG	1.291
608	TO-016	270	272	0.02	0.02	0.02	0.067	0.0734	0.06439	0.13779	Inert/Neutral	SG	0.832
609	TO-016	272	274	0.02	0.02	0.02	0.067	0.0734	0.06439	0.13779	Inert/Neutral	SMG	1.183
610	TO-016	274	276	0.02	0.02	0.02	0.067	0.0734	0.06439	0.13779	Inert/Neutral	SMG	1.024
611	TO-016	276	278	0.02	0.02	0.02	0.038	0.0734	0.02466	0.09806	Inert/Neutral	SG	1.348
612	TO-016	278	280	0.02	0.02	0.02	0.038	0.0734	0.02466	0.09806	Inert/Neutral	SG	1.27
613	TO-018	230.05	232	0.134	0.029	0.592	0.592	0.10643	0	0.10643	Inert/Neutral	SMG	0.181
614	TO-018	234	236.1	0.134	0.029	0.592	0.592	0.10643	0	0.10643	Inert/Neutral	SMG	0.218
615	TO-018	236.1	238	0.134	0.029	0.592	0.592	0.10643	0	0.10643	Inert/Neutral	SG	0.25
616	TO-018	238	240	0.134	0.029	0.592	0.592	0.10643	0	0.10643	Inert/Neutral	SG	0.368
617	TO-018	240	242	0.042	0.02	0.465	0.467	0.0734	0.00274	0.07614	Inert/Neutral	SG	0.213
618	TO-018	294	295.05	0.059	0.02	0.253	4.296	0.0734	5.53891	5.61231	Highly Basic	SM	1.094
619	TO-018	295.05	296	0.059	0.02	0.253	4.296	0.0734	5.53891	5.61231	Highly Basic	SM	1.165
620	TO-018	296	298	0.059	0.02	0.253	4.296	0.0734	5.53891	5.61231	Highly Basic	SM	1.096
621	TO-018	298	300	0.059	0.02	0.253	4.296	0.0734	5.53891	5.61231	Highly Basic	SM	2.73
622	TO-018	300	302	0.077	0.02	0.554	2.321	0.0734	2.42079	2.49419	Basic	SM	4.067
623	TO-018	302	304	0.077	0.02	0.554	2.321	0.0734	2.42079	2.49419	Basic	SM	5.33
624	TO-018	304	306	0.077	0.02	0.554	2.321	0.0734	2.42079	2.49419	Basic	SM	5.95
625	TO-018	306	307.2	0.077	0.02	0.554	2.321	0.0734	2.42079	2.49419	Basic	SM	3.541
626	TO-020	260	262	0.031	0.02	0.04	0.192	0.0734	0.20824	0.28164	Slightly Basic	SMV	1.601
627	TO-020	262	263	0.031	0.02	0.04	0.192	0.0734	0.20824	0.28164	Slightly Basic	SMV	1.734
628	TO-020	263	265.15	0.031	0.02	0.04	0.192	0.0734	0.20824	0.28164	Slightly Basic	SM	2.066
629	TO-020	265.15	266.8	0.031	0.02	0.04	0.192	0.0734	0.20824	0.28164	Slightly Basic	SMV	3.069
630	TO-020	266.8	267.8	0.031	0.02	0.04	0.192	0.0734	0.20824	0.28164	Slightly Basic	SMV	1.723
631	TO-020	267.8	270	0.031	0.02	0.04	0.192	0.0734	0.20824	0.28164	Slightly Basic	SMV	0.83
632	TO-020	270	272	0.031	0.02	0.04	0.192	0.0734	0.20824	0.28164	Slightly Basic	SMV	0.414
633	TO-020	272	274	0.033	0.022	0.02	0.061	0.08074	0.05617	0.13691	Inert/Neutral	SMV	0.564
634	TO-020	274	276	0.033	0.022	0.02	0.061	0.08074	0.05617	0.13691	Inert/Neutral	SMV	0.637
635	TO-020	276	278	0.033	0.022	0.02	0.061	0.08074	0.05617	0.13691	Inert/Neutral	SMV	0.429
636	TO-020	278	279.75	0.033	0.022	0.02	0.061	0.08074	0.05617	0.13691	Inert/Neutral	SMV	0.397
637	TO-020	279.75	280	0.033	0.022	0.02	0.061	0.08074	0.05617	0.13691	Inert/Neutral	SM	0.579
638	TO-023	310	311.2	0.036	0.02	2.833	3.058	0.0734	0.30825	0.38165	Slightly Basic	SG	0.905
639	TO-023	311.2	313.35	0.036	0.02	2.833	3.058	0.0734	0.30825	0.38165	Slightly Basic	SG	0.568
640	TO-024	274	276	0.042	0.02	0.134	0.164	0.0734	0.0411	0.1145	Inert/Neutral	SM	0.624
641	TO-024	276	278	0.042	0.02	0.134	0.164	0.0734	0.0411	0.1145	Inert/Neutral	SM	1.019
642	TO-024	278	280	0.042	0.02	0.134	0.164	0.0734	0.0411	0.1145	Inert/Neutral	SM	1.461
643	TO-024	280	282	0.042	0.02	0.134	0.164	0.0734	0.0411	0.1145	Inert/Neutral	SM	3.658
644	TO-024	282	283.3	0.042	0.02	0.134	0.164	0.0734	0.0411	0.1145	Inert/Neutral	SM	5.54
645	TO-024	283.3	284	0.042	0.02	0.134	0.164	0.0734	0.0411	0.1145	Inert/Neutral	SMG	1.725
646	TO-024	284	286	0.042	0.02	0.134	0.164	0.0734	0.0411	0.1145	Inert/Neutral	SMG	2.224
647	TO-024	286	288.35	0.071	0.02	0.218	0.223	0.0734	0.00685	0.08025	Inert/Neutral	SMG	1.281
648	TO-024	288.35	290.15	0.071	0.02	0.218	0.223	0.0734	0.00685	0.08025	Inert/Neutral	SG	3.646
649	TO-024	290.15	292	0.071	0.02	0.218	0.223	0.0734	0.00685	0.08025	Inert/Neutral	SMG	3.396
650	TO-024	292	293.5	0.071	0.02	0.218	0.223	0.0734	0.00685	0.08025	Inert/Neutral	SMG	7.62
651	TO-024	293.5	294.9	0.071	0.02	0.218	0.223	0.0734	0.00685	0.08025	Inert/Neutral	SM	5.46
652	TO-026	292	294	0.049	0.02	0.181	0.737	0.0734	0.76172	0.83512	Slightly Basic	SMG	0.812
653	TO-026	294	296	0.049	0.02	0.181	0.737	0.0734	0.76172	0.83512	Slightly Basic	SMG	1.496
654	TO-026	296	296.75	0.049	0.02	0.181	0.737	0.0734	0.76172	0.83512	Slightly Basic	SMG	1.515
655	TO-026	296.75	297.4	0.049	0.02	0.181	0.737	0.0734	0.76172	0.83512	Slightly Basic	SMG	3.165
656	TO-026	297.4	299.8	0.152	0.02	0.231	0.406	0.0734	0.23975	0.31315	Slightly Basic	SMG	1.398
657	TO-026	299.8	302	0.152	0.02	0.231	0.406	0.0734	0.23975	0.31315	Slightly Basic	SG	0.288
658	TO-026	302	304	0.152	0.02	0.231	0.406	0.0734	0.23975	0.31315	Slightly Basic	SG	0.511
659	TO-026	306	308	0.152	0.02	0.231	0.406	0.0734	0.23975	0.31315	Slightly Basic	SG	0.196
660	TO-026	308	310	0.152	0.02	0.231	0.406	0.0734	0.23975	0.31315	Slightly Basic	SG	0.216
661	TO-026	310	312	0.084	0.02	0.148	0.171	0.0734	0.03151	0.10491	Inert/Neutral	SG	0.198
662	TO-029	254	256	0.044	0.02	0.24	0.293	0.0734	0.07261	0.14601	Inert/Neutral	SMG	0.234
663	TO-029	260	262.15	0.044	0.02	0.24	0.293	0.0734	0.07261	0.14601	Inert/Neutral	SMG	0.313
664	TO-029	262.15	263.35	0.044	0.02	0.24	0.293	0.0734	0.07261	0.14601	Inert/Neutral	SMV	0.216
665	TO-029	263.35	264	0.044	0.02	0.24	0.293	0.0734	0.07261	0.14601	Inert/Neutral	SM	0.188
666	TO-029	264	266	0.042	0.02	0.107	0.446	0.0734	0.46443	0.53783	Slightly Basic	SM	0.266
667	TO-029	266	268.2	0.042	0.02	0.107	0.446	0.0734	0.46443	0.53783	Slightly Basic	SM	0.356
668	TO-029	270	271	0.042	0.02	0.107	0.446	0.0734	0.46443	0.53783	Slightly Basic	SMV	0.241
669	TO-029	271	272	0.042	0.02	0.107	0.446	0.0734	0.46443	0.53783	Slightly Basic	SMG	0.469
670	TO-029	272	274.2	0.042	0.02	0.107	0.446	0.0734	0.46443	0.53783	Slightly Basic	SMG	0.647
671	TO-029	274.2	276	0.042	0.02	0.107	0.446	0.0734	0.46443	0.53783	Slightly Basic	SMG	0.467
672	TO-029	276	278	0.038	0.02	0.18	0.155	0.0734	-0.03425	0.03915	Inert/Neutral	SMG	0.323
673	TO-029	278	279	0.038	0.02	0.18	0.155	0.0734	-0.03425	0.03915	Inert/Neutral	SMG	0.396
674	TO-029	279	280.2	0.038	0.02	0.18	0.155	0.0734	-0.03425	0.03915	Inert/Neutral	SM	0.27
675	TO-029	280.2	282	0.038	0.02	0.18	0.155	0.0734	-0.03425	0.03915	Inert/Neutral	SM	0.271
676	TO-029	282	284	0.038	0.02	0.18	0.155	0.0734	-0.03425	0.03915	Inert/Neutral	SM	0.293
677	TO-029	284	285.9	0.038	0.02	0.18	0.155	0.0734	-0.03425	0.03915	Inert/Neutral	SM	0.184
678	TO-029	285.9	288	0.038	0.02	0.18	0.155	0.0734	-0.03425	0.03915	Inert/Neutral	SMV	0.276
679	TO-029	288	288.9	0.039	0.02	0.253	0.219	0.0734	-0.04658	0.02682	Inert/Neutral	SMV	0.333
680	TO-029	288.9	290	0.039	0.02	0.253	0.219	0.0734	-0.04658	0.02682	Inert/Neutral	SMV	0.219
681	TO-029	290	292	0.039	0.02	0.253	0.219	0.0734	-0.04658	0.02682	Inert/Neutral	SMV	0.323
682	TO-029	292	294.2	0.039	0.02	0.253	0.219	0.0734	-0.04658	0.02682	Inert/Neutral	SMV	0.77
683	TO-029	294.2	294.8	0.039	0.02	0.253	0.219	0.0734	-0.04658	0.02682	Inert/Neutral	SMV	3.019
684	TO-029	294.8	296	0.039	0.02	0.253	0.219	0.0734	-0.04658	0.02682	Inert/Neutral	SMV	3.028
685	TO-029	296	298	0.039	0.02	0.253	0.219	0.0734	-0.04658	0.02682	Inert/Neutral	SMV	4.793
686	TO-029	298	300	0.039	0.02	0.253	0.219	0.0734	-0.04658	0.02682	Inert/Neutral	SMV	3.436
687	TO-029	300	301.55	0.038	0.02	0.379	0.38	0.0734	0.00137	0.07477	Inert/Neutral	SMV	5.59
688	TO-029	301.55	304	0.038	0.02	0.379	0.38	0.0734	0.00137	0.07477	Inert/Neutral	SM	6.93
689	TO-029	304	306	0.038	0.02	0.379	0.38	0.0734	0.00137	0.07477	Inert/Neutral	SM	6.55
690	TO-029	306	308	0.038	0.02	0.379	0.38	0.0734	0.00137	0.07477	Inert/Neutral	SM	8.19
691	TO-029	308	310.4	0.038	0.02	0.379	0.38	0.0734	0.00137	0.07477	Inert/Neutral	SM	7.03
692	TO-029	310.4	311.8	0.038	0.02	0.379	0.38	0.0734	0.00137	0.07477	Inert/Neutral	SM	6.59
693	TO-029	311.8	314	0.037	0.02	0.177	0.182	0.0734	0.00685	0.08025	Inert/Neutral	SM	5.89
694	TO-029	314	315.1	0.037	0.02	0.177	0.182	0.0734	0.00685	0.08025	Inert/Neutral	SM	6.14
695	TO-029	315.1	316.5	0.037	0.02	0.177	0.182	0.0734	0.00685	0.08025	Inert/Neutral	SM	5.14
696	TO-029	316.5	318.6	0.037	0.02	0.177	0.182	0.0734	0.00685	0.08025	Inert/Neutral	SM	7.35
697	TO-029	318.6	320	0.037	0.02	0.177	0.182	0.0734	0.00685	0.08025	Inert/Neutral	SM	5.24
698	TO-030	298	298.9	0.034	0.02	0.087	0.1	0.0734	0.01781	0.09121	Inert/Neutral	SG	0.435
699	TO-030	298.9	300	0.034	0.02	0.087	0.1	0.0734	0.01781	0.09121	Inert/Neutral	SMG	0.274

	HOLE_ID	FROM	TO	C_LECO, %	C_RES%	S_TOT%	S_SO4%	ANP	AGP	NCV	NCV_CLASS	ALTERATION	AU_PREF
700	TO-030	300	302	0.034	0.02	0.087	0.1	0.0734	0.01781	0.09121	Inert/Neutral	SMG	0.278
701	TO-030	302	304	0.034	0.02	0.087	0.1	0.0734	0.01781	0.09121	Inert/Neutral	SMG	0.373
702	TO-030	304	305.3	0.024	0.02	0.094	0.11	0.0734	0.02192	0.09532	Inert/Neutral	SMG	0.346
703	TO-030	305.3	306	0.024	0.02	0.094	0.11	0.0734	0.02192	0.09532	Inert/Neutral	SG	0.528
704	TO-030	306	308	0.024	0.02	0.094	0.11	0.0734	0.02192	0.09532	Inert/Neutral	SG	0.322
705	TO-030	308	310	0.024	0.02	0.094	0.11	0.0734	0.02192	0.09532	Inert/Neutral	SG	0.321
706	TO-030	310	312	0.024	0.02	0.094	0.11	0.0734	0.02192	0.09532	Inert/Neutral	SG	0.607
707	TO-030	312	312.6	0.024	0.02	0.094	0.11	0.0734	0.02192	0.09532	Inert/Neutral	SG	0.279
708	TO-032	318	320	0.053	0.02	0.171	0.239	0.0734	0.09316	0.16656	Inert/Neutral	SM	4.57
709	TO-032	320	322	0.053	0.02	0.171	0.239	0.0734	0.09316	0.16656	Inert/Neutral	SM	3.566
710	TO-032	322	322.9	0.053	0.02	0.171	0.239	0.0734	0.09316	0.16656	Inert/Neutral	SM	2.042
711	TO-032	322.9	324	0.053	0.02	0.171	0.239	0.0734	0.09316	0.16656	Inert/Neutral	SM	4.011
712	TO-032	324	326	0.048	0.02	0.099	0.138	0.0734	0.05343	0.12683	Inert/Neutral	SM	3.018
713	TO-032	326	328	0.048	0.02	0.099	0.138	0.0734	0.05343	0.12683	Inert/Neutral	SM	3.85
714	TO-032	328	330	0.048	0.02	0.099	0.138	0.0734	0.05343	0.12683	Inert/Neutral	SM	0.992
715	TO-032	330	330.5	0.048	0.02	0.099	0.138	0.0734	0.05343	0.12683	Inert/Neutral	SM	3.996
716	TO-033	308	310	0.02	0.02	0.139	0.139	0.0734	0	0.0734	Inert/Neutral	SG	0.434
717	TO-033	310	312	0.02	0.02	0.139	0.139	0.0734	0	0.0734	Inert/Neutral	SG	0.39
718	TO-033	312	314	0.02	0.02	0.126	0.126	0.0734	0	0.0734	Inert/Neutral	SG	0.766
719	TO-033	314	316	0.02	0.02	0.126	0.126	0.0734	0	0.0734	Inert/Neutral	SG	0.805
720	TO-033	316	318	0.02	0.02	0.126	0.126	0.0734	0	0.0734	Inert/Neutral	SG	0.624
721	TO-033	318	320	0.02	0.02	0.126	0.126	0.0734	0	0.0734	Inert/Neutral	SG	0.921
722	TO-033	320	322.35	0.02	0.02	0.126	0.126	0.0734	0	0.0734	Inert/Neutral	SG	0.346
723	TO-033	322.35	324	0.02	0.02	0.126	0.126	0.0734	0	0.0734	Inert/Neutral	SMG	0.231
724	TO-034	228	230	0.027	0.02	0.211	0.214	0.0734	0.00411	0.07751	Inert/Neutral	SMG	0.438
725	TO-034	230	230.7	0.027	0.02	0.211	0.214	0.0734	0.00411	0.07751	Inert/Neutral	SMG	0.459
726	TO-034	240	242	0.031	0.02	0.035	0.216	0.0734	0.24797	0.32137	Slightly Basic	SM	0.234
727	TO-034	246	247.8	0.031	0.02	0.035	0.216	0.0734	0.24797	0.32137	Slightly Basic	SMG	0.194
728	TO-034	254	255.15	0.074	0.02	0.347	0.366	0.0734	0.02603	0.09943	Inert/Neutral	SMG	0.317
729	TO-034	260	262.35	0.062	0.02	0.256	0.256	0.0734	0	0.0734	Inert/Neutral	SMG	0.428
730	TO-034	262.35	264.05	0.062	0.02	0.256	0.256	0.0734	0	0.0734	Inert/Neutral	C	0.554
731	TO-034	264.05	266.35	0.062	0.02	0.256	0.256	0.0734	0	0.0734	Inert/Neutral	SM	0.185
732	TO-034	281.1	282.1	0.04	0.02	0.269	0.269	0.0734	0	0.0734	Inert/Neutral	SMV	0.199
733	TO-034	296	298	0.05	0.02	0.298	0.298	0.0734	0	0.0734	Inert/Neutral	SM	0.237
734	TO-034	298	300	0.05	0.02	0.298	0.298	0.0734	0	0.0734	Inert/Neutral	SM	0.5
735	TO-034	300	300.5	0.05	0.02	0.298	0.298	0.0734	0	0.0734	Inert/Neutral	SM	0.544
736	TO-034	300.5	302	0.05	0.02	0.298	0.298	0.0734	0	0.0734	Inert/Neutral	SM	0.502
737	TO-034	302	303.7	0.05	0.02	0.298	0.298	0.0734	0	0.0734	Inert/Neutral	SM	0.638
738	TO-034	303.7	305.5	0.05	0.02	0.298	0.298	0.0734	0	0.0734	Inert/Neutral	SM	0.86
739	TO-034	305.5	306	0.05	0.02	0.298	0.298	0.0734	0	0.0734	Inert/Neutral	SM	1.598
740	TO-034	306	308.2	0.05	0.02	0.298	0.298	0.0734	0	0.0734	Inert/Neutral	SM	1.05
741	TO-035	312	314	0.038	0.02	0.271	0.32	0.0734	0.06713	0.14053	Inert/Neutral	SM	0.786
742	TO-035	314	316	0.027	0.02	0.097	0.111	0.0734	0.01918	0.09258	Inert/Neutral	SM	0.646
743	TO-035	316	317.3	0.027	0.02	0.097	0.111	0.0734	0.01918	0.09258	Inert/Neutral	SM	1.046
744	TO-035	317.3	318.35	0.027	0.02	0.097	0.111	0.0734	0.01918	0.09258	Inert/Neutral	SM	1.059
745	TO-035	318.35	320	0.027	0.02	0.097	0.111	0.0734	0.01918	0.09258	Inert/Neutral	SMG	0.56
746	TO-035	320	322	0.027	0.02	0.097	0.111	0.0734	0.01918	0.09258	Inert/Neutral	SMG	0.578
747	TO-035	322	324	0.027	0.02	0.097	0.111	0.0734	0.01918	0.09258	Inert/Neutral	SMG	0.705
748	TO-035	324	326	0.027	0.02	0.097	0.111	0.0734	0.01918	0.09258	Inert/Neutral	SMG	0.379
749	TO-035	326	328.1	0.033	0.02	0.079	0.084	0.0734	0.00685	0.08025	Inert/Neutral	SMG	0.586
750	TO-035	328.1	330	0.033	0.02	0.079	0.084	0.0734	0.00685	0.08025	Inert/Neutral	SG	0.943
751	TO-035	330	332	0.033	0.02	0.079	0.084	0.0734	0.00685	0.08025	Inert/Neutral	SG	1.493
752	TO-035	332	333.5	0.033	0.02	0.079	0.084	0.0734	0.00685	0.08025	Inert/Neutral	SG	1.236
753	TO-035	333.5	334	0.033	0.02	0.079	0.084	0.0734	0.00685	0.08025	Inert/Neutral	SG	2.121
754	TO-035	334	336	0.033	0.02	0.079	0.084	0.0734	0.00685	0.08025	Inert/Neutral	SG	1.326
755	TO-035	336	338	0.033	0.02	0.079	0.084	0.0734	0.00685	0.08025	Inert/Neutral	SG	1.638
756	TO-035	338	340.5	0.03	0.02	0.214	0.238	0.0734	0.03288	0.10628	Inert/Neutral	SG	1.486
757	TO-035	340.5	342	0.03	0.02	0.214	0.238	0.0734	0.03288	0.10628	Inert/Neutral	SG	1.225
758	TO-035	342	344	0.03	0.02	0.214	0.238	0.0734	0.03288	0.10628	Inert/Neutral	SG	0.925
759	TO-035	344	344.8	0.03	0.02	0.214	0.238	0.0734	0.03288	0.10628	Inert/Neutral	SG	0.839
760	TO-035	344.8	346	0.03	0.02	0.214	0.238	0.0734	0.03288	0.10628	Inert/Neutral	SM	0.733
761	TO-035	346	347.45	0.03	0.02	0.214	0.238	0.0734	0.03288	0.10628	Inert/Neutral	SM	0.695
762	TO-035	347.45	348.5	0.03	0.02	0.214	0.238	0.0734	0.03288	0.10628	Inert/Neutral	SM	0.479
763	TO-035	348.5	350	0.03	0.02	0.214	0.238	0.0734	0.03288	0.10628	Inert/Neutral	SM	0.711
764	TO-036	266	267.9	0.047	0.02	0.228	0.261	0.0734	0.04521	0.11861	Inert/Neutral	SMV	5.42
765	TO-036	267.9	269.2	0.062	0.02	0.225	0.272	0.0734	0.06439	0.13779	Inert/Neutral	SMG	5.76
766	TO-036	269.2	270	0.062	0.02	0.225	0.272	0.0734	0.06439	0.13779	Inert/Neutral	SMV	3.082
767	TO-036	270	272	0.062	0.02	0.225	0.272	0.0734	0.06439	0.13779	Inert/Neutral	SMV	2.027
768	TO-036	272	274	0.062	0.02	0.225	0.272	0.0734	0.06439	0.13779	Inert/Neutral	SMV	3.407
769	TO-036	274	276	0.062	0.02	0.225	0.272	0.0734	0.06439	0.13779	Inert/Neutral	SMV	4.472
770	TO-036	276	278	0.062	0.02	0.225	0.272	0.0734	0.06439	0.13779	Inert/Neutral	SMV	6.06
771	TO-036	278	280.3	0.096	0.02	0.288	0.299	0.0734	0.01507	0.08847	Inert/Neutral	SMG	3.35
772	TO-036	280.3	282.3	0.096	0.02	0.288	0.299	0.0734	0.01507	0.08847	Inert/Neutral	SMG	5.06
773	TO-036	282.3	284	0.096	0.02	0.288	0.299	0.0734	0.01507	0.08847	Inert/Neutral	SMG	6.91
774	TO-036	284	284.6	0.096	0.02	0.288	0.299	0.0734	0.01507	0.08847	Inert/Neutral	SMG	6.88
775	TO-036	284.6	286	0.096	0.02	0.288	0.299	0.0734	0.01507	0.08847	Inert/Neutral	SMV	6.85
776	TO-036	286	288	0.096	0.02	0.288	0.299	0.0734	0.01507	0.08847	Inert/Neutral	SMV	8.97
777	TO-036	288	290	0.096	0.02	0.288	0.299	0.0734	0.01507	0.08847	Inert/Neutral	SMV	5.5
778	TO-036	290	292	0.05	0.02	0.405	0.473	0.0734	0.09316	0.16656	Inert/Neutral	SM	7.06
779	TO-036	292	294	0.05	0.02	0.405	0.473	0.0734	0.09316	0.16656	Inert/Neutral	SM	6.44
780	TO-036	294	296	0.05	0.02	0.405	0.473	0.0734	0.09316	0.16656	Inert/Neutral	SM	7.19
781	TO-036	296	298	0.05	0.02	0.405	0.473	0.0734	0.09316	0.16656	Inert/Neutral	SMV	5.86
782	TO-036	298	300	0.05	0.02	0.405	0.473	0.0734	0.09316	0.16656	Inert/Neutral	SMV	4.752
783	TO-036	300	302	0.05	0.02	0.405	0.473	0.0734	0.09316	0.16656	Inert/Neutral	SMV	6.71
784	TO-036	302	304	0.043	0.02	0.55	0.659	0.0734	0.14933	0.22273	Slightly Basic	SMV	5.78
785	TO-036	304	306	0.043	0.02	0.55	0.659	0.0734	0.14933	0.22273	Slightly Basic	SMV	8.82
786	TO-036	306	308	0.043	0.02	0.55	0.659	0.0734	0.14933	0.22273	Slightly Basic	SMV	7.31
787	TO-036	308	308.7	0.043	0.02	0.55	0.659	0.0734	0.14933	0.22273	Slightly Basic	SMV	4.842
788	TO-036	308.7	310	0.043	0.02	0.55	0.659	0.0734	0.14933	0.22273	Slightly Basic	SMG	3.434
789	TO-036	310	312.2	0.043	0.02	0.55	0.659	0.0734	0.14933	0.22273	Slightly Basic	SMG	2.671
790	TO-036	312.2	314	0.043	0.02	0.55	0.659	0.0734	0.14933	0.22273	Slightly Basic	SMG	3.245
791	TO-036	314	316	0.054	0.02	0.094	0.129	0.0734	0.04795	0.12135	Inert/Neutral	SMG	1.653
792	TO-036	316	318	0.054	0.02	0.094	0.129	0.0734	0.04795	0.12135	Inert/Neutral	SMG	0.886
793	TO-036	318	320	0.054	0.02	0.094	0.129	0.0734	0.04795	0.12135	Inert/Neutral	SMG	0.616
794	TO-036	320	322	0.054	0.02	0.094	0.129	0.0734	0.04795	0.12135	Inert/Neutral	SMG	0.344
795	TO-037	312	314	0.03	0.02	0.125	0.146	0.0734	0.02877	0.10217	Inert/Neutral	SM	0.211
796	TO-037	314	316	0.03	0.02	0.125	0.146	0.0734	0.02877	0.10217	Inert/Neutral	SM	0.184
797	TO-037	316	317.4	0.03	0.02	0.125	0.146	0.0734	0.02877	0.10217	Inert/Neutral	SM	0.297
798	TO-037	320	320.6	0.03	0.02	0.125	0.146	0.0734	0.02877	0.10217	Inert/Neutral	SM	0.186
799	TO-037	320.6	322	0.03	0.02	0.125	0.146	0.0734	0.02877	0.10217	Inert/Neutral	SM	0.214
800	TO-037	326	327.8	0.024	0.02	0.062	0.082	0.0734	0.0274	0.1008	Inert/Neutral	SM	0.242

	HOLE_ID	FROM	TO	C_LECO, %	C_RES%	S_TOT%	S_SO4%	ANP	AGP	NCV	NCV_CLASS	ALTERATION	AU_PREF
801	TO-037	327.8	330.2	0.024	0.02	0.062	0.082	0.0734	0.0274	0.1008	Inert/Neutral	SM	0.475
802	TO-037	330.2	332	0.024	0.02	0.062	0.082	0.0734	0.0274	0.1008	Inert/Neutral	SM	0.635
803	TO-037	332	334	0.024	0.02	0.062	0.082	0.0734	0.0274	0.1008	Inert/Neutral	SM	0.903
804	TO-037	334	336	0.024	0.02	0.062	0.082	0.0734	0.0274	0.1008	Inert/Neutral	SM	0.45
805	TO-037	336	337.9	0.031	0.02	0.048	0.064	0.0734	0.02192	0.09532	Inert/Neutral	SM	0.33
806	TO-037	337.9	340	0.031	0.02	0.048	0.064	0.0734	0.02192	0.09532	Inert/Neutral	SM	0.209
807	TO-037	340	342	0.031	0.02	0.048	0.064	0.0734	0.02192	0.09532	Inert/Neutral	SM	0.188
808	TO-037	342	344	0.031	0.02	0.048	0.064	0.0734	0.02192	0.09532	Inert/Neutral	SM	0.283
809	TO-037	344	344.8	0.031	0.02	0.048	0.064	0.0734	0.02192	0.09532	Inert/Neutral	SM	0.192

Anexo 2.

A) Ubicación de los taladros de muestras de SPLP y HCT

Sample	Hole_ID	From	To	EASTING	NORTHING	Alteration	ELEVATION	TD	Alteration	Lithology	Type	NCV Class	Hole_ID for SPLP	Hole_ID for HCT
Ore	COR-141	250	252	11762.0	26000.7	SM	3586.7	360	SM	BXH	Oxides	Inert	DS-1238917	DS-1238919
Ore	COR-069	280	282	11823.2	25250.8	SMV	3515.1	401.8	SMV	ULT	Oxides	Inert	DS-1238918	
Ore	COR-074	320	322	11559.8	25760.0	SM	3564.7	390	SM	BXH	Oxides	Inert	DS-1238919	
Ore	COR-081	264	266	11789.7	25953.9	SMG	3586.2	350.1	SMG	BXH	Oxides	Inert	DS-1238920	

B) Resultados de la Prueba HCT sobre una muestra de mineral

Analyte		STD or Goal[1]		SPLP[2]	Humidity Cell Testing - Sample DS-1238919 (Ore material, Silica Massive, NCV: Inert/Neutral)															
					Week 0	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15
PARAMETROS FISICOQUIMICOS																				
Acidez	mg CaCO3/L				49	97	129	147	195	218	233	250	262	273	284	297	309	319	328	336
Alc Total	mg CaCO3/L			<1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CE	uS/cm			50	103	372	650	787	888	1021	1129	1234	1329	1415	1497	1596	1678	1744	1814	1870
Vol Ext	L				0.54	1.36	2.21	3.03	3.81	4.69	5.51	6.29	7.1	7.93	8.78	9.68	10.53	11.24	12.13	12.83
pH		6-9		4.11	4.37	8.07	11.57	15.25	19.06	22.72	26.42	30.07	33.83	37.58	41.29	45.02	48.8	52.59	56.52	60.47
PARAMETROS INORGANICOS					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aniones					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	mg/L	1		<0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
SO4	mg/L	300		9.3	35	127	200	224	238	257	271	282	293	302	309	320	327	333	338	342
Nitrógeno					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N-NH3	mg/L				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N-NO3	mg/L	10		0.075	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
METALES DISUELTOS					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hg	mg/L	0.001	0.002	<0.001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ag	mg/L	0.05		<0.000050	0.00287	0.00287	0.00287	0.002897	0.002942	0.002942	0.002942	0.003034	0.003034	0.003034	0.003034	0.003099	0.003099	0.003099	0.003163	0.00321
Al	mg/L	5		0.0205	0.233	0.937	1.276	1.3414	1.3678	1.395	1.421	1.4468	1.4633	1.4769	1.489	1.5066	1.5177	1.5264	1.541	1.5483
As	mg/L	0.05	0.1	0.0005	0.00033	0.00105	0.00155	0.00175	0.0019	0.00206	0.00221	0.00234	0.00244	0.00254	0.00264	0.00277	0.00295	0.00308	0.00308	0.00308
B	mg/L	0.5	0.5-6	<0.050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ba	mg/L	0.7		0.192	0.0779	0.1263	0.1725	0.2765	0.4315	0.5315	0.6635	0.7955	0.9405	1.1085	1.2735	1.4115	1.5755	1.7685	1.9475	2.1485
Be	mg/L	0.1		<0.0025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bi	mg/L			<0.0025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ca	mg/L	200		0.714	3.56	11.81	18	19.79	20.7	21.596	22.377	22.765	23.117	23.411	23.757	24.055	24.359	24.636	24.944	25.109
Cd	mg/L	0.005	0.05	0.00025	0.00799	0.0121	0.01378	0.01516	0.016136	0.017074	0.017861	0.018871	0.01955	0.020292	0.020814	0.021384	0.021759	0.022075	0.022624	0.022926
Co	mg/L	0.05		0.0703	0.316	1.135	1.702	1.838	1.9005	1.963	2.0045	2.0349	2.0604	2.0808	2.0979	2.1196	2.1365	2.15	2.1621	2.1701
Cr	mg/L	0.1	0.1	0.0161	0.152	0.516	0.77	0.8117	0.8265	0.8435	0.8549	0.86403	0.87173	0.87834	0.8837	0.89082	0.89578	0.89969	0.90389	0.9063
Cu	mg/L	0.2	0.5	0.127	0.499	1.989	3.089	3.431	3.619	3.837	3.998	4.136	4.262	4.377	4.48	4.62	4.736	4.841	4.9361	5.0052
Fe	mg/L	1	2	1.01	2.97	9.74	10.601	10.799	10.933	10.983	11.056	11.096	11.13	11.16	11.19	11.22	11.251	11.281	11.281	11.312
K	mg/L			<2.0	0.111	0.111	0.111	0.221	0.365	0.537	0.708	0.879	1.056	1.207	1.366	1.59	1.81	2.009	2.203	2.366
Li	mg/L	2.5		<0.0050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mg	mg/L	150		<0.10	0.504	1.664	2.47	2.675	2.787	2.874	2.9591	3.0099	3.0545	3.087	3.1172	3.154	3.1861	3.2137	3.2397	3.2588
Mn	mg/L	0.2		1.28	5.93	20.13	30.13	32.5	33.59	34.65	35.313	35.84	36.264	36.605	36.869	37.225	37.491	37.726	37.947	38.075
Mo	mg/L			<0.00025	0.000143	0.000143	0.000393	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	0.00052	0.00052	0.00052	0.00052
Na	mg/L	200		<2.0	1.54	6.66	12.1	14.3	15.95	17.3	18.274	19.169	19.887	20.375	20.882	21.524	21.953	22.348	22.683	22.93
Ni	mg/L	0.2		0.0425	0.174	0.662	1.001	1.0822	1.1179	1.1559	1.1793	1.197	1.211	1.2224	1.23176	1.24436	1.25382	1.26145	1.2682	1.27275
P	mg/L			<0.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pb	mg/L	0.05	0.2	0.00458	0.000854	0.003464	0.005504	0.007804	0.010794	0.014474	0.017704	0.021804	0.026224	0.030684	0.036254	0.042154	0.048744	0.055314	0.062654	0.068714
Sb	mg/L	0.006		<0.00050	0.00264	0.00264	0.00264	0.00277	0.00288	0.00288	0.00301	0.00301	0.00301	0.00301	0.00301	0.00301	0.00315	0.00315	0.00315	0.00315
Se	mg/L	0.05		<0.0050	0.0015	0.0015	0.0015	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028	0.0028
Si	mg/L			0.468	0.161	1.411	3.301	4.471	5.374	6.444	7.221	7.909	8.525	9.102	9.635	10.299	10.856	11.312	11.853	12.241
Sn	mg/L			<0.00050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sr	mg/L			0.0107	0.0155	0.049	0.0967	0.1261	0.1463	0.1695	0.1878	0.2057	0.2208	0.2349	0.2491	0.2653	0.2796	0.2917	0.3051	0.31426
Ti	mg/L			<0.010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tl	mg/L			<0.00050	0.00021	0.00021	0.00098	0.00165	0.00231	0.00313	0.00381	0.00454	0.00522	0.0059	0.00654	0.00735	0.00816	0.00878	0.00937	0.00988
U	mg/L			0.000084	0.000434	0.002174	0.003864	0.004367	0.004649	0.005074	0.005392	0.005615	0.00579	0.00595	0.00606	0.006221	0.006318	0.006384	0.006447	0.006481
V	mg/L	0.1		0.005	0.001	0.006	0.011	0.012	0.013	0.014	0.015	0.016	0.017	0.018	0.019	0.02	0.021	0.022	0.022	0.022
Zn	mg/L	2	1.5	0.0667	0.278	0.987	1.502	1.651	1.7251	1.8009	1.8736	1.9302	1.9676	2.0135	2.0545	2.1034	2.1312	2.165	2.1858	2.2137
					0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

SPLP

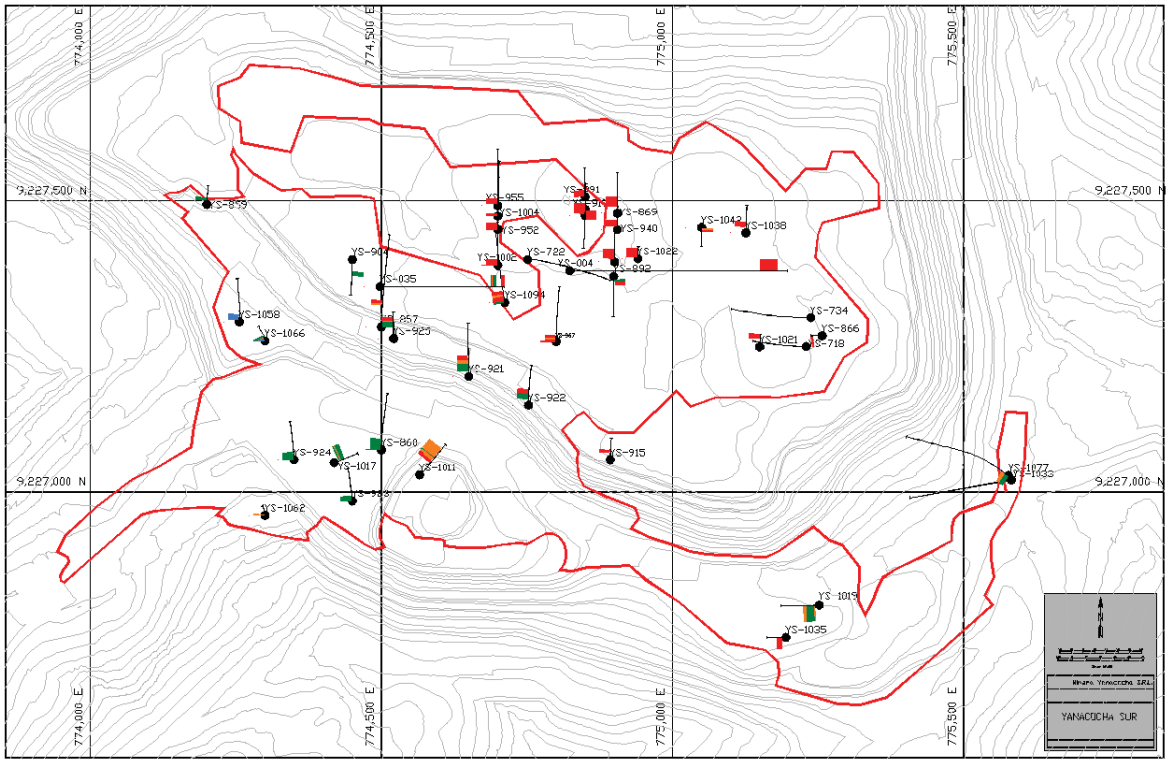
1 Values are those specified in the Decreto Supremo No. 002-2008-MINAM for category 3 waters.
2 Synthetic Precipitation Leaching Procedure (SPLP) results.

7.2.2. Geoquimica de materiales de Yanacocha Sur Layback (YSLB)

Caracterización de Mineral

Se realizaron 31 análisis de NCV para el mineral de YS Layback, estas muestras fueron provenientes de 37 taladros que fueron representativos en extensión y profundidad al depósito.

Mapa No. 1: Ubicación de muestras de taladros en el depósito YS Layback



Los estudios geoquímicos del depósito son enfocados principalmente en definir el potencial de acidificación del material (PAG y NPAG), para esto es necesario realizar la clasificación del NCV.

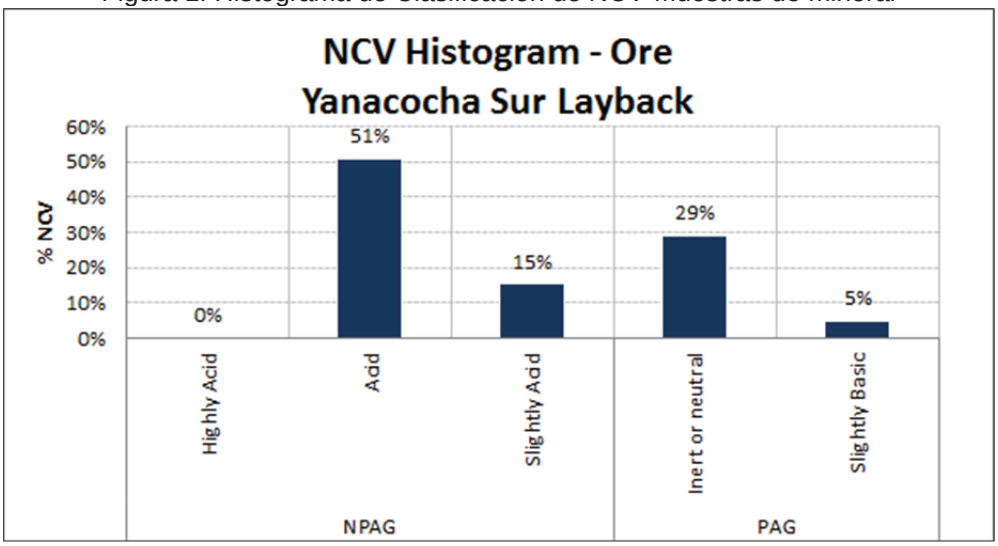
Tabla I. Taladros seleccionados para análisis de NCV

HOLE_ID	ALTERATION_EQ	LITHOLOGY_EQ	HOLE_ID	ALTERATION_EQ	LITHOLOGY_EQ
YS-004	Silica Massive	BXH	YS-866	Silica Massive	TEUT
YS-035	Silica Massive	TEUT	YS-869	Silica Massive	TEUT
YS-1002	Silica Massive	BXH	YS-874	Silica Massive	TEUT
YS-1004	Silica Massive	BXH	YS-892	Silica Massive	
YS-1011	Silica Massive	TEUT	YS-904	Silica Massive	BXF
YS-1017	Silica Massive	ULT	YS-915	Silica Massive	TEUT
YS-1019	Silica Massive	ULT	YS-917	Silica Massive	TEUT
YS-1021	Silica Massive	TEUT	YS-921	Silica Massive	TEUT
YS-1022	Silica Massive	TEUT	YS-922	Silica Massive	TEUT
YS-1035	Silica Alunite	Ypq	YS-923	Silica Massive	BXF
YS-1038	Silica Massive	TEUT	YS-924	Silica Massive	BXF
YS-1042	Silica Massive	TEUT	YS-925	Silica Massive	BXH
YS-1058	Silica Massive	TEUT	YS-940	Silica Massive	TEUT
YS-1062	Silica Massive	ULT	YS-952	Silica Massive	TEUT
YS-1066	Silica Massive		YS-955	Silica Alunite	BXH
YS-857	Silica Massive	TEUT	YS-962	Silica Massive	TEUT
YS-859	Silica Massive	TEUT	YS-967	Silica Massive	TEUT
YS-860	Silica Massive	ULT	YS-991	Silica Massive	BXH
YS-1033	PROP	Yp			

Clasificación NCV Mineral YS Layback

La figura 1 muestra el histograma de clasificación NCV para el depósito YS Layback, el mineral tiene un comportamiento ácido, por lo tanto puede formar solución ácida en contacto con agua de proveniente de precipitación, si la acidificación es agresiva podría producir una disolución de algunos metales presentes. Sin embargo, si el material es mezclado con suficiente cal y adicionalmente luego es regado con solución alcalina, el pH de la solución drenada podría volverse básica permitiendo la disolución del oro. El histograma muestra que el 51% de las muestras son clasificadas como ácidas, 15% ligeramente ácidas, 29% inerte y solo el 5% ligeramente básica.

Figura 1: Histograma de Clasificación de NCV-Muestras de mineral



Pruebas de SPLP

Con el propósito de evaluar la solución de drenaje proveniente del depósito de almacenamiento de arenas TSF, se seleccionaron muestras de mineral Deep transicional fresco y de Stocks para desarrollar pruebas de SPLP y celdas de humedad (HCT), en la siguiente tabla se muestra los compositos formados para elaborar las respectivas pruebas.

Tabla II: Muestras de mineral DT Stock para pruebas SPLP y HCT

Met. Lab. Code	Sample Code	BRT's CN	Mesh Size	SPLP	HCT
		g/m3	M		
34707	Comp. Master B- Stock Kathia	250	200	X	X
34707	Comp. Master B- Stock Kathia	1,000	200	X	
34708	Comp. Master B- Stock Huamanchumo	1,750	200	X	X
34708	Comp. Master B- Stock Huamanchumo	2,500	200	X	
34709	Comp. Master C- Stock Kathia	3,250	200	X	X
34709	Comp. Master C- Stock Kathia	4,000	200	X	
34710	Comp. Master C- Stock Huamanchumo	4,750	200	X	X
34710	Comp. Master C- Stock Huamanchumo	5,500	200	X	

Tabla III: Muestras de mineral DT Stock para pruebas SPLP y HCT

Drill hole	Met Lab	Alteración	Clasification According to NCV	ANP %	AGP %	NCV %	# Humidity	SPLP test
YS1137	34814	SM	Highly Acid	0.0734	-12.7547	-12.6813	1	1
YS1021	34808	SM	Highly Acid	0.0734	-8.6721	-8.5987		2
YS1175	34816	SM	Highly Acid	0.0734	-11.3573	-11.2839		3
YS719	34817	SM	Highly Acid	0.0734	-7.9049	-7.8315		4
YS730	34818	SM	Highly Acid	0.0734	-11.2751	-11.2017		5
YS750	34819	SM	Highly Acid	0.0734	-5.2471	-5.1737	2	6
YS751	34820	SM	Moderately Acid	0.0734	-2.5756	-2.5022		7
YS798	34824	SMV	Moderately Acid	0.0734	-4.2607	-4.1873		8
YS1000	34806	SM	Moderately Acid	0.0734	-2.2742	-2.2008	3	-
YS756	34821	SM	Slightly Acid	0.0734	-0.6713	-0.5979		9
YS1094	34812	SMV	Moderately Acid	0.0734	-1.1645	-1.0911	4	10
YS967	34828	SM	Moderately Acid	0.0734	-3.3565	-3.2831		-
YS1022	34809	SM	Highly Acid	0.0734	-5.343	-5.2696	5	11
YS1174	34815	SMV	Moderately Acid	0.0734	-4.1785	-4.1051		12
YSPZ005	34830	SM	Moderately Acid	0.0734	-3.6442	-3.5708		13
YS943	34826	SM	Highly Acid	0.0734	-19.3581	-19.2847	6	14
YS950	34827	SM	Highly Acid	0.0734	-10.0284	-9.955		-
YS1015	34807	SM	Moderately Acid	0.0734	-4.4251	-4.3517	7	15
YS1091	34811	SM	Slightly Acid	0.0734	-0.6165	-0.5431		16
YS761	34822	SMV	Moderately Acid	0.0734	-2.8085	-2.7351		17
YS1063	34810	SM	Moderately Acid	0.0734	-1.6988	-1.6254	8	18
YS771	34823	SM	Moderately Acid	0.0734	-1.507	-1.4336		19
YS853	34825	SM	Moderately Acid	0.0734	-1.9043	-1.8309		20
YS994	34829	SM	Moderately Acid	0.0734	-4.5758	-4.5024		21

Las pruebas de SPLP fueron elaboradas poniendo en contacto el material con una solución acidificada a pH=1.5 (SPLP modificado), para observar la concentración de metales en la solución lixiviante en un caso extremo de acidez, (El test estándar de SPLP se realiza a pH 4.3).

Tabla IV: Resultados de prueba SPLP-Material DT Stocks

SPLP- YSL DT STOCKS ORE			MINERA YANACOCHA S.R.L.							
Identificación			DS-1257527	DS-1257528	DS-1257529	DS-1257530	DS-1257531	DS-1257532	DS-1257533	DS-1257534
Fecha de Muestreo			04-abr-13	04-abr-13	04-abr-13	04-abr-13	04-abr-13	04-abr-13	04-abr-13	04-abr-13
Compositos			Comp. Maestro B-Stock Kathia	Comp. Maestro B-Stock Kathia	Comp. Maestro B-Stock	Comp. Maestro B-Stock	Comp. Maestro C-Stock Kathia	Comp. Maestro C-Stock Kathia	Comp. Maestro C-Stock	Comp. Maestro C-Stock
Código ALS			LE1301113-001	LE1301113-002	LE1301113-003	LE1301113-004	LE1301113-005	LE1301113-006	LE1301113-007	LE1301113-008
Tipo de Muestra			RO	RO	RO	RO	RO	RO	RO	RO
Parámetro / LD	**Analito**	**Unidades**								
ANALISIS EN EXTRACTO SPLP										
PARAMETROS FISICOQUIMICOS										
EALCT-VOL304 / 1	Alc Total	mg CaCO3/L	<1	<1	<1	<1	<1	<1	<1	<1
ECE-POT401 / 2	CE	uS/cm	6410	6110	6490	6630	4290	3840	7340	7700
EPH-POT414a / 0.01	pH		1.93	1.96	1.88	1.89	2.44	2.72	1.82	1.8
ESTD-GRA203 / 10	STD	mg/L	2140	2260	1820	1970	3310	3310	1820	1440
PARAMETROS INORGANICOS										
Aniones										
EMA-CRO536Br / 0.01	Br	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
EMA-CRO536Cl / 0.2	Cl	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.8	<2.0	<2.0
EMA-CRO536F / 0.02	F	mg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
EMA-CRO536NO2 / 0.001	N-NO2	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
EMA-CRO536NO3 / 0.005	N-NO3	mg/L	NR	NR	NR	NR	NR	NR	NR	NR
EMA-CRO536SO4 / 0.2	SO4	mg/L	NR	NR	NR	NR	NR	NR	NR	NR
Fósforo										
EP-COL109 / 0.01	P React D	mg/L	NR	NR	NR	NR	NR	NR	NR	NR
METALES										
EHG-VF87 / 0.001	Hg	mg/L	0.003	<0.001	0.001	<0.001	<0.001	0.004	<0.001	<0.001
METALES DISUELTOS										
EMA-MS680Ag / 0.000050	Ag	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
EMA-MS680Al / 0.0050	Al	mg/L	10	10.4	6.81	7.35	12.9	15.4	5.92	6.13
EMA-MS680As / 0.00050	As	mg/L	0.298	0.386	1.33	1.8	0.277	0.186	2.31	3.67
EMA-MS680B / 0.050	B	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
EMA-MS680Ba / 0.00025	Ba	mg/L	0.024	0.0236	0.0226	0.0203	0.0233	0.0224	0.0163	0.0156
EMA-MS680Be / 0.0025	Be	mg/L	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680Bi / 0.0025	Bi	mg/L	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680Ca / 0.050	Ca	mg/L	190	197	117	117	482	573	97.1	103
EMA-MS680Cd / 0.00025	Cd	mg/L	0.00509	0.00456	0.0114	0.00671	0.022	0.0208	0.0137	0.0139
EMA-MS680Co / 0.00050	Co	mg/L	0.107	0.082	0.0905	0.0836	0.21	0.147	0.113	0.104
EMA-MS680Cr / 0.0025	Cr	mg/L	4.67	3.68	3.35	3.41	3.23	1.26	3.46	3.62
EMA-MS680Cu / 0.00050	Cu	mg/L	1.27	0.243	1.68	0.747	4.51	0.41	3.53	2.69
EMA-MS680Fe / 0.030	Fe	mg/L	127	135	110	128	206	151	125	120
EMA-MS680K / 2.0	K	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
EMA-MS680Li / 0.0050	Li	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.005	<0.0050
EMA-MS680Mg / 0.10	Mg	mg/L	8.2	9.03	6.22	5.89	17.8	21.2	5.42	5.51
EMA-MS680Mn / 0.00025	Mn	mg/L	1.17	1.12	0.927	1.06	1.56	1.54	0.898	0.899
EMA-MS680Mo / 0.00025	Mo	mg/L	0.00059	0.00073	0.00371	0.00342	0.00038	0.00096	0.00196	0.00269
EMA-MS680Na / 2.0	Na	mg/L	2.3	2.5	2.4	3.3	3	9.7	<2.0	2.3
EMA-MS680Ni / 0.0025	Ni	mg/L	0.344	0.24	0.286	0.252	0.433	0.172	0.304	0.3
EMA-MS680P / 0.30	P	mg/L	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
EMA-MS680Pb / 0.00025	Pb	mg/L	0.527	0.514	2.31	2.77	1.88	1.29	2.99	2.75
EMA-MS680Sb / 0.00050	Sb	mg/L	0.0256	0.0366	0.041	0.0536	0.0109	0.0286	0.0636	0.114
EMA-MS680Se / 0.0050	Se	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EMA-MS680Si / 0.050	Si	mg/L	27.6	29.7	23.6	21.7	43.4	47.4	20.5	19.3
EMA-MS680Sn / 0.00050	Sn	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
EMA-MS680Sr / 0.00050	Sr	mg/L	0.204	0.217	0.165	0.16	0.371	0.446	0.14	0.149
EMA-MS680Ti / 0.010	Ti	mg/L	0.021	0.017	0.019	0.015	0.011	<0.010	0.024	0.021
EMA-MS680Tl / 0.00050	Tl	mg/L	0.00963	0.00201	0.00425	0.00179	0.0028	<0.00050	0.00861	0.00611
EMA-MS680U / 0.000050	U	mg/L	0.00412	0.00444	0.00387	0.00373	0.00668	0.00658	0.00489	0.00478
EMA-MS680V / 0.0050	V	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EMA-MS680Zn / 0.0050	Zn	mg/L	0.389	0.349	1.29	1.38	1.59	1.61	1.02	0.62

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Tabla V: Resultados de prueba SPLP-Material DT Fresco (Parte 1)

SPLP- YSL DT FRESH ORE			MINERA YANACOCHA S.R.L.											
Code ALS			DS-1270282	DS-1270283	DS-1270284	DS-1270285	DS-1270286	DS-1270287	DS-1270288	DS-1270289	DS-1270290	DS-1270291	DS-1270292	DS-1270293
Fecha de Muestreo			22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13
Hora de Muestreo														
Código ALS			LE1301747-001	LE1301747-002	LE1301747-003	LE1301747-004	LE1301747-005	LE1301747-006	LE1301747-007	LE1301747-008	LE1301747-009	LE1301747-010	LE1301747-011	LE1301747-012
Tipo de Muestra			RO	RO	RO	RO	RO	RO	RO	RO	RO	RO	RO	RO
Parámetro / LD	**Analito**	**Unidades**												
ANÁLISIS EN EXTRACTO SPLP														
PARAMETROS FISICOQUIMICOS														
EALCT-VOL304 / 1	Alc Total	mg CaCO3/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	109	57
ECE-POT401 / 2	CE	uS/cm	1130	1300	1140	2150	1800	2260	2180	1350	1410	1320	2140	1470
EPH-POT414a / 0.01	pH		3.47	3.4	3.44	2.67	2.84	2.8	2.74	3.26	3.25	3.49	7.05	6.82
ESTD-GRA203 / 10	STD	mg/L	928	752	874	600	856	8200	3760	952	592	1140	1490	1020
PARAMETROS INORGANICOS														
Aniones														
EMA-CRO536Br / 0.01	Br	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.28	0.2	5.85	1.5
EMA-CRO536Cl / 0.2	Cl	mg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
EMA-CRO536F / 0.02	F	mg/L	0.1	0.14	0.12	<0.02	0.08	0.12	0.34	0.06	0.4	0.26	0.45	0.1
EMA-CRO536NO2 / 0.001	N-NO2	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EMA-CRO536NO3 / 0.005	N-NO3	mg/L	<0.005	<0.005	0.026	<0.005	<0.005	<0.005	0.034	<0.005	<0.005	<0.005	<0.005	<0.005
EMA-CRO536SO4 / 0.2	SO4	mg/L	34.4	121	47.4	18.5	0.6	12.4	203	20	98.6	133	660	516
Fósforo														
EP-COL109 / 0.01	P React D	mg/L	<0.01	<0.01	<0.01	<0.01	0.03	0.02	<0.01	<0.01	0.01	<0.01	0.01	<0.01
METALES														
EHG-VF87 / 0.001	Hg	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
METALES DISUELTOS														
EMA-MS680Ag / 0.000050	Ag	mg/L	0.000421	<0.000050	0.0015	0.00117	0.00156	0.000993	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
EMA-MS680Al / 0.0050	Al	mg/L	1.52	3.58	2.24	2.69	3.17	1.82	3.56	1.53	3.64	5.28	0.0079	0.0078
EMA-MS680As / 0.00050	As	mg/L	0.879	3.58	0.123	0.598	0.0262	1.86	1.93	0.017	1.71	0.0539	0.134	0.00348
EMA-MS680B / 0.050	B	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
EMA-MS680Ba / 0.00025	Ba	mg/L	0.24	0.0704	0.258	0.572	10.1	0.829	0.0715	0.477	0.128	0.0655	0.0295	0.0327
EMA-MS680Be / 0.0025	Be	mg/L	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680Bi / 0.0025	Bi	mg/L	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680Ca / 0.050	Ca	mg/L	42.7	42	50.5	40.6	59.9	39	56.9	42	53.7	136	400	341
EMA-MS680Cd / 0.00025	Cd	mg/L	0.00116	0.01	0.00147	0.00266	0.00094	0.00182	0.039	0.00123	0.00401	0.0018	0.00077	0.00281
EMA-MS680Co / 0.00050	Co	mg/L	0.0423	0.183	0.0492	0.0469	0.0117	0.0414	0.299	0.0359	0.0938	0.162	0.122	0.0133
EMA-MS680Cr / 0.0025	Cr	mg/L	2.02	2.17	2.27	0.596	0.348	0.422	1.67	0.566	1.56	0.44	<0.0025	<0.0025
EMA-MS680Cu / 0.00050	Cu	mg/L	0.728	4.65	1.32	2.16	1.17	4.28	13.1	76.7	12.2	2.59	0.299	0.00474
EMA-MS680Fe / 0.030	Fe	mg/L	136	139	128	35.1	21.1	29.5	84.4	40.9	73.1	36.1	0.076	<0.030
EMA-MS680K / 2.0	K	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
EMA-MS680Li / 0.0050	Li	mg/L	<0.0050	<0.0050	0.0147	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EMA-MS680Mg / 0.10	Mg	mg/L	1.72	2.18	2.62	1.56	2.17	1.96	2.76	2.04	2.74	7.26	14.2	11.5
EMA-MS680Mn / 0.00025	Mn	mg/L	1.02	1.35	1.14	0.677	0.381	0.829	1.38	0.486	1.33	0.937	0.899	0.366
EMA-MS680Mo / 0.00025	Mo	mg/L	0.00104	0.0123	0.00045	0.00173	<0.00025	0.00233	0.00046	<0.00025	0.00044	<0.00025	0.0191	<0.00025
EMA-MS680Na / 2.0	Na	mg/L	<2.0	<2.0	2.7	2.2	<2.0	3.1	<2.0	2.7	<2.0	<2.0	<2.0	<2.0
EMA-MS680Ni / 0.0025	Ni	mg/L	0.408	0.319	0.301	0.103	0.0695	0.108	0.62	0.115	0.571	0.27	0.219	0.0341
EMA-MS680P / 0.30	P	mg/L	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.72	<0.30	<0.30	<0.30	<0.30
EMA-MS680Pb / 0.00025	Pb	mg/L	0.00942	0.0136	0.517	0.0783	0.257	0.061	2.71	0.472	0.0373	0.0624	0.00055	0.00069
EMA-MS680Sb / 0.00050	Sb	mg/L	0.0613	0.16	0.00861	0.0121	0.00055	0.0237	0.0935	0.00083	0.0555	0.00489	0.244	0.00644
EMA-MS680Se / 0.0050	Se	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EMA-MS680Si / 0.050	Si	mg/L	11.6	10.9	11.8	8.04	9.86	7.48	8.35	10.3	13.9	15.8	11.9	10.9
EMA-MS680Sn / 0.00050	Sn	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
EMA-MS680Sr / 0.00050	Sr	mg/L	0.214	0.162	0.106	0.15	0.386	0.0932	0.201	0.144	0.155	0.188	0.228	0.263
EMA-MS680Ti / 0.010	Ti	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
EMA-MS680Tl / 0.00050	Tl	mg/L	0.00479	0.044	0.00733	0.00282	0.00093	0.00173	0.0409	0.0155	0.0053	0.0114	0.00529	0.00573
EMA-MS680U / 0.000050	U	mg/L	0.000853	0.00351	0.00146	0.00144	0.00159	0.00241	0.0112	0.00286	0.00409	0.00366	0.00157	0.000163
EMA-MS680V / 0.0050	V	mg/L	0.006	0.0083	<0.0050	<0.0050	<0.0050	<0.0050	0.0121	<0.0050	0.0074	<0.0050	<0.0050	<0.0050
EMA-MS680Zn / 0.0050	Zn	mg/L	0.16	0.496	0.144	0.0993	0.0749	0.166	2.68	0.316	0.686	0.215	0.053	0.0197

Tabla VI: Resultados de prueba SPLP-Material DT Fresco (Parte 2)

SPLP- YSL DT FRESH ORE			MINERA YANACOCHA S.R.L.								
Code ALS			DS-1270294	DS-1270295	DS-1270296	DS-1270297	DS-1270298	DS-1270299	DS-1270300	DS-1270301	DS-1270302
Fecha de Muestreo			22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13	22-may-13
Hora de Muestreo											
Código ALS			LE1301747-013	LE1301747-014	LE1301747-015	LE1301747-016	LE1301747-017	LE1301747-018	LE1301747-019	LE1301747-020	LE1301747-021
Tipo de Muestra			RO	RO	RO	RO	RO	RO	RO	RO	RO
Parámetro / LD	**Analito**	**Unidades**									
ANÁLISIS EN EXTRACTO SPLP											
PARAMETROS FISICOQUIMICOS											
EALCT-VOL304 / 1	Alc Total	mg CaCO3/l	<1	140	108	<1	<1	<1	<1	<1	<1
ECE-POT401 / 2	CE	uS/cm	1720	1520	1770	1650	1680	1300	2250	1460	2350
EPH-POT414a / 0.01	pH		2.91	7.21	7.23	2.85	2.75	3.18	2.6	2.89	2.56
ESTD-GRA203 / 10	STD	mg/L	932	1320	1490	932	814	906	458	362	592
PARAMETROS INORGANICOS											
Aniones											
EMA-CRO536Br / 0.01	Br	mg/L	0.22	2.05	1.05	0.14	<0.01	0.12	<0.01	0.24	0.4
EMA-CRO536Cl / 0.2	Cl	mg/L	NR	NR	NR	NR	NR	NR	NR	NR	NR
EMA-CRO536F / 0.02	F	mg/L	0.14	<0.02	0.2	0.12	0.04	0.06	<0.02	0.06	<0.02
EMA-CRO536NO2 / 0.001	N-NO2	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
EMA-CRO536NO3 / 0.005	N-NO3	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
EMA-CRO536SO4 / 0.2	SO4	mg/L	14	168	362	8	9	139	26	20	22.5
Fósforo											
EP-COL109 / 0.01	P React D	mg/L	<0.01	0.1	0.03	0.04	<0.01	<0.01	0.02	<0.01	<0.01
METALES											
EHG-VF87 / 0.001	Hg	mg/L	<0.001	<0.001	0.016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
METALES DISUELTOS											
EMA-MS680Ag / 0.000050	Ag	mg/L	0.00105	0.00212	0.00195	0.000647	0.00253	<0.000050	0.00597	0.00127	0.000672
EMA-MS680Al / 0.0050	Al	mg/L	1.53	0.0132	0.0096	1.43	1.17	1.51	0.715	4.61	0.68
EMA-MS680As / 0.00050	As	mg/L	0.0446	0.239	0.0583	0.0285	0.229	0.0504	0.0134	0.41	0.0491
EMA-MS680B / 0.050	B	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
EMA-MS680Ba / 0.00025	Ba	mg/L	1.09	0.0852	0.0441	2.72	1.16	0.0723	0.978	0.406	1.21
EMA-MS680Be / 0.0025	Be	mg/L	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680Bi / 0.0025	Bi	mg/L	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
EMA-MS680Ca / 0.050	Ca	mg/L	64.4	240	301	73.7	35.8	74.1	30.9	41.1	31.5
EMA-MS680Cd / 0.00025	Cd	mg/L	0.00508	<0.00025	<0.00025	0.00131	0.0021	0.00085	0.00114	0.0014	0.00074
EMA-MS680Co / 0.00050	Co	mg/L	0.0357	0.00159	0.00227	0.0431	0.0371	0.164	0.0942	0.0616	0.0231
EMA-MS680Cr / 0.0025	Cr	mg/L	0.511	<0.0025	<0.0025	0.493	1.15	1.49	0.975	0.892	1.12
EMA-MS680Cu / 0.00050	Cu	mg/L	4.1	0.0235	0.0102	0.828	4.36	0.143	7.84	2.13	1.46
EMA-MS680Fe / 0.030	Fe	mg/L	37.6	0.248	0.255	32.7	76.3	135	39.4	78.8	40.7
EMA-MS680K / 2.0	K	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
EMA-MS680Li / 0.0050	Li	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EMA-MS680Mg / 0.10	Mg	mg/L	3.68	8.18	11.2	3.02	1.59	3.81	1.3	1.5	1.23
EMA-MS680Mn / 0.00025	Mn	mg/L	0.383	0.00444	0.309	0.477	0.537	0.886	0.667	0.563	0.675
EMA-MS680Mo / 0.00025	Mo	mg/L	<0.00025	0.00146	0.0019	<0.00025	0.00094	<0.00025	<0.00025	0.00035	<0.00025
EMA-MS680Na / 2.0	Na	mg/L	<2.0	13	4.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
EMA-MS680Ni / 0.0025	Ni	mg/L	0.144	<0.0025	0.0044	0.331	0.251	0.481	0.392	0.193	0.162
EMA-MS680P / 0.30	P	mg/L	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
EMA-MS680Pb / 0.00025	Pb	mg/L	0.445	0.00252	0.00113	1.12	0.103	0.0915	0.282	0.0992	0.335
EMA-MS680Sb / 0.00050	Sb	mg/L	0.00147	0.0344	0.0396	0.00078	0.00697	0.0122	0.00226	0.0104	0.00114
EMA-MS680Se / 0.0050	Se	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
EMA-MS680Si / 0.050	Si	mg/L	10.6	7.04	12.2	12.2	7.56	16.8	7.76	7.49	8.32
EMA-MS680Sn / 0.00050	Sn	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
EMA-MS680Sr / 0.00050	Sr	mg/L	0.0813	0.17	0.221	0.222	0.114	0.123	0.058	0.219	0.0659
EMA-MS680Ti / 0.010	Ti	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
EMA-MS680Tl / 0.00050	Tl	mg/L	0.00224	<0.00050	<0.00050	0.00262	0.0017	0.0132	0.00676	0.00252	0.00458
EMA-MS680U / 0.000050	U	mg/L	0.00271	0.00101	0.000256	0.00339	0.0016	0.00363	0.00143	0.00118	0.00209
EMA-MS680V / 0.0050	V	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0071	<0.0050	0.0055	<0.0050
EMA-MS680Zn / 0.0050	Zn	mg/L	0.0907	0.0147	0.0142	0.0624	0.252	0.125	0.138	0.153	0.173

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Celdas de Humedad (HCT)

Para el proyecto Yanacocha Sur Layback se han desarrollado pruebas de Celdas de humedad para mineral deep transitional fresco y Stocks, para evaluar el potencial de generación de acidez o neutralización de acidez bajo condiciones de clima naturales bajo un medio oxidante.

Cuatro compósitos fueron preparados para mineral DT Stocks, la clasificación de NCV de dichas muestras van de ácidas a altamente ácidas (los resultados preliminares hasta la semana 14 de la prueba son mostrados en la Figura N°3)

- Composito 1: Master B- Stock Kathia (Muestras: DS-1257527/DS-1257528)
- Composito 2: Master B- Stock Huamanchumo (Muestras: DS-1257529/DS-1257530)
- Composito 3: Master C- Stock Kathia (Muestras: DS-1257531/DS-1257532)
- Composito 4: Master C- Stock Huamanchumo (Muestras: DS-1257533/DS-1257534)

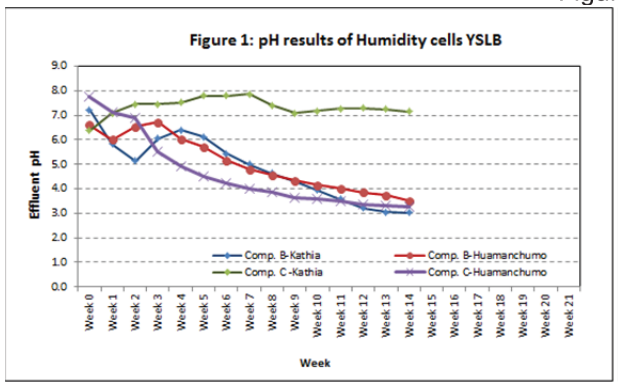
A su vez ocho compósitos fueron preparados para mineral DT fresco, los resultados preliminares hasta la semana número 4 se muestran en la Figura N°4.

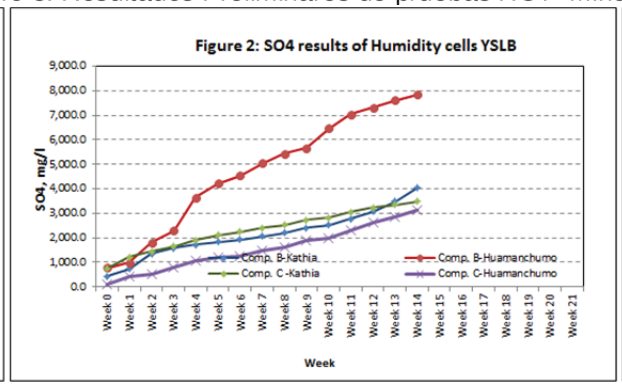
HC CODE	# Composite	Drill hole	Met Lab	Alteración	Clasification According to NCV	ANP %	AGP %	NCV %
DS-1270274	1	YS1137	34814	SM	Highly Acid	0.0734	-12.7547	-12.6813
		YS1021	34808	SM	Highly Acid	0.0734	-8.6721	-8.5987
		YS1175	34816	SM	Highly Acid	0.0734	-11.3573	-11.2839
		YS719	34817	SM	Highly Acid	0.0734	-7.9049	-7.8315
		YS730	34818	SM	Highly Acid	0.0734	-11.2751	-11.2017
DS-1270275	2	YS750	34819	SM	Highly Acid	0.0734	-5.2471	-5.1737
		YS751	34820	SM	Moderately Acid	0.0734	-2.5756	-2.5022
		YS798	34824	SMV	Moderately Acid	0.0734	-4.2607	-4.1873
DS-1270276	3	YS1000	34806	SM	Moderately Acid	0.0734	-2.2742	-2.2008
		YS756	34821	SM	Slightly Acid	0.0734	-0.6713	-0.5979
DS-1270277	4	YS1094	34812	SMV	Moderately Acid	0.0734	-1.1645	-1.0911
		YS967	34828	SM	Moderately Acid	0.0734	-3.3565	-3.2831
DS-1270278	5	YS1022	34809	SM	Highly Acid	0.0734	-5.343	-5.2696
		YS1174	34815	SMV	Moderately Acid	0.0734	-4.1785	-4.1051
		YSPZ005	34830	SM	Moderately Acid	0.0734	-3.6442	-3.5708
DS-1270279	6	YS943	34826	SM	Highly Acid	0.0734	-19.3581	-19.2847
		YS950	34827	SM	Highly Acid	0.0734	-10.0284	-9.955
DS-1270280	7	YS1015	34807	SM	Moderately Acid	0.0734	-4.4251	-4.3517
		YS1091	34811	SM	Slightly Acid	0.0734	-0.6165	-0.5431
		YS761	34822	SMV	Moderately Acid	0.0734	-2.8085	-2.7351
DS-1270281	8	YS1063	34810	SM	Moderately Acid	0.0734	-1.6988	-1.6254
		YS771	34823	SM	Moderately Acid	0.0734	-1.507	-1.4336
		YS853	34825	SM	Moderately Acid	0.0734	-1.9043	-1.8309
		YS994	34829	SM	Moderately Acid	0.0734	-4.5758	-4.5024

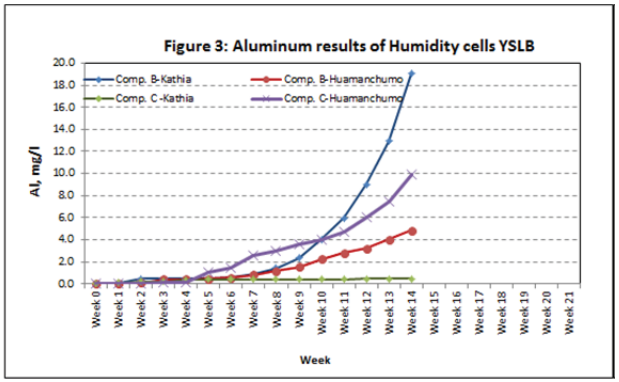
Los efluentes de las pruebas continuarán siendo evaluados hasta la semana número 21.

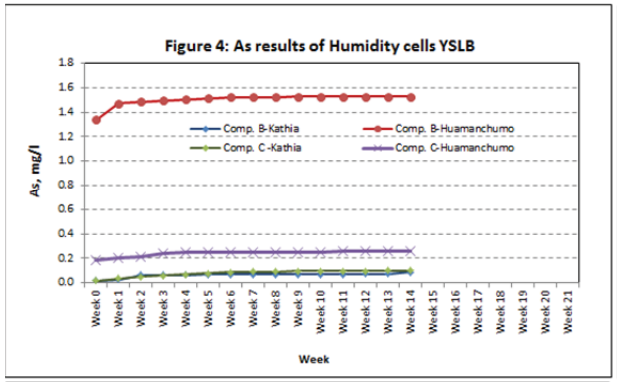
Un estudio más detallado por medio del área de Planeamiento de Aguas será desarrollado usando estos resultados para definir los finales conclusiones en cuanto a la solución de descarga del DAM (depósito de arenas de molienda) y definir un plan de acción en caso fuera necesario en las plantas de tratamiento de agua (modificaci0ones y/o incremento de capacidades).

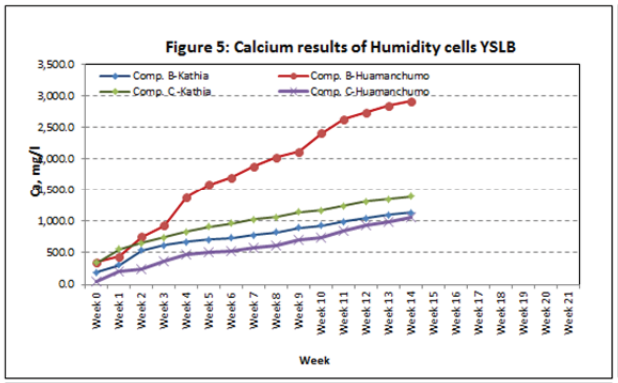
Figure 3: Resultados Preliminares de pruebas HCT- Mineral DT Stocks

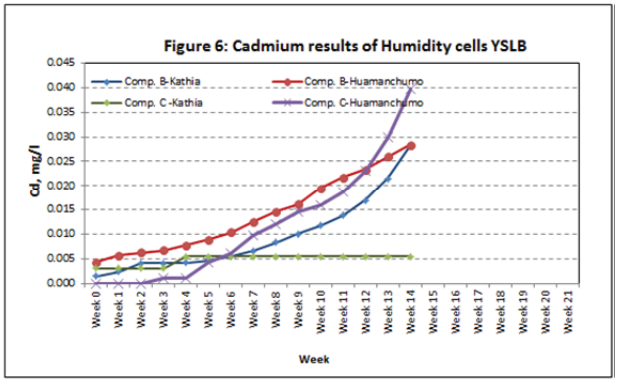


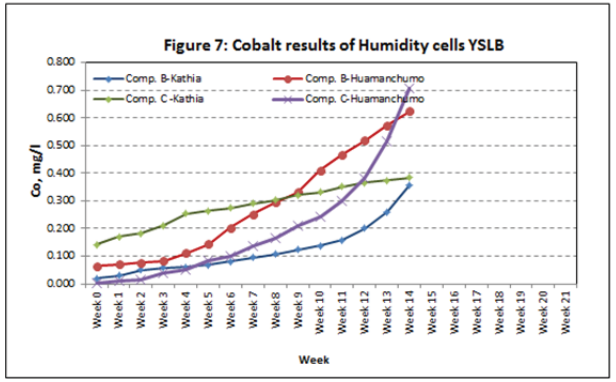


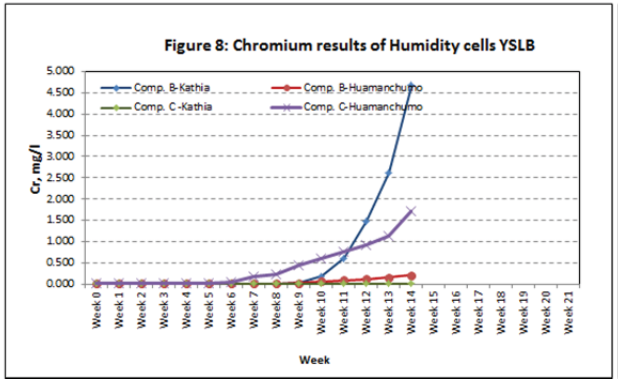


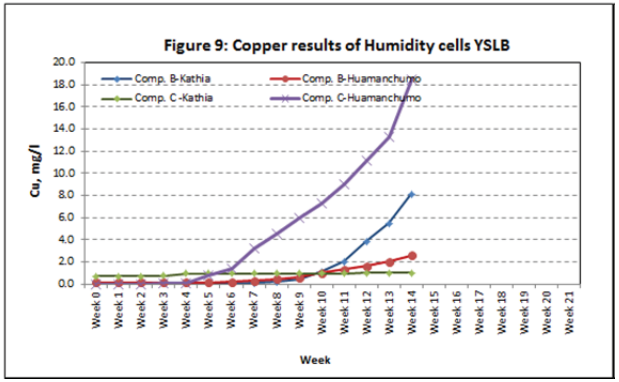




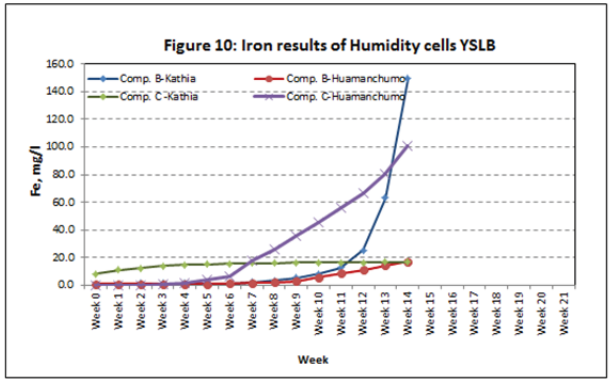


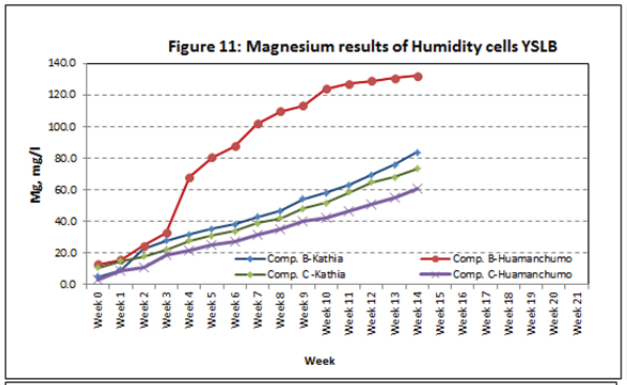


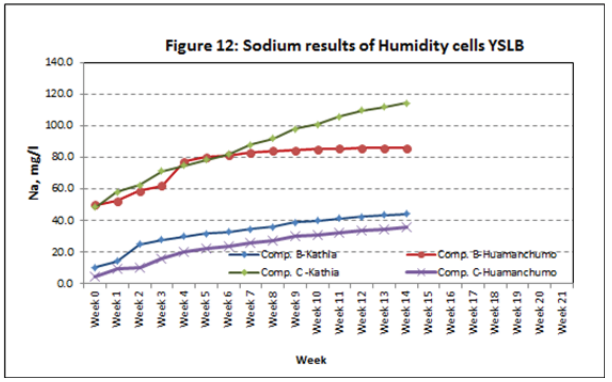


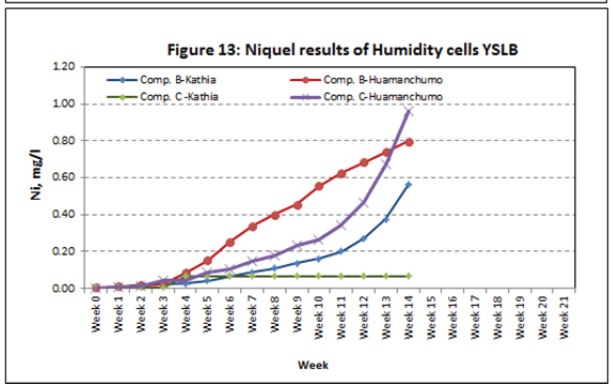


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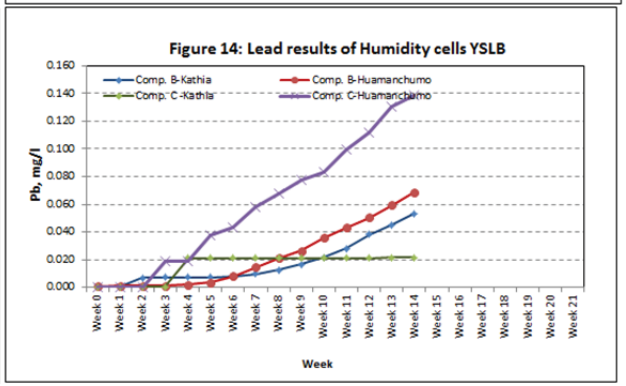


Figure 4: Resultados Preliminares de pruebas HCT- Mineral DT Fresco

Yanacocha

Fecha de Publicación:
03/06/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/07/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/08/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Al	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
As	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ba	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Be	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bi	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ca	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cd	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Co	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cu	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ga	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hg	ppb	N/A	N/A	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
K	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Li	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mg	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mo	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Na	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ni	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sb	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sc	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Se	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Te	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ti	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tl	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
W	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zn	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

Fecha de Publicación:
01/09/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0.002	0	0.212
Al	mg/L	35.141	11.298	7.478	65.482	15.039	48.938	24.913	61.936	43.334	21.258	24.793	34.86	N/A	38.631	2.719	0.475	132.969
As	mg/L	30.316	34.451	17.562	30.17	49.553	41.385	64.741	17.933	16.083	20.353	8.485	16.343	N/A	59.039	0.065	0.071	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	2.081	1.556	0.279
Ba	mg/L	0.295	0.233	0.091	0.138	0.248	0.258	0.187	0.106	0.152	0.272	0.199	0.267	N/A	0.259	0.036	0.09	0.019
Be	mg/L	0	0	0	0.002	0	0	0	0.002	0.001	0	0	0	N/A	0	0.004	0.001	0.142
Bi	mg/L	0.49	0.718	0.167	0	4.877	0.029	0	0	0	0	0	1.933	N/A	1.337	0.019	0.045	0.049
Ca	mg/L	224.758	39.091	107.576	22.621	49.511	40.011	118.948	15.277	12.554	79.248	103.131	109.669	N/A	239.028	98.66	23.209	443.741
Cd	mg/L	2.365	1.89	2.196	0.458	0.023	0.074	1.224	1.828	0.395	0.017	0.036	0.032	N/A	4.855	0.212	0	0.943
Co	mg/L	1.77	1.304	2.122	0.822	1.565	3.175	1.314	0.815	1.428	1.595	1.859	1.773	N/A	2.937	0.044	0.001	0.97
Cr	mg/L	0.812	0.596	0.8	0.232	0.304	0.096	1.186	0.093	0.113	0.886	0.425	0.56	N/A	0.934	0.048	0.031	0.084
Cu	mg/L	194.906	65.415	29.557	303.84	83.607	445.949	108.568	45.147	199.572	132.656	129.915	348.112	N/A	96.662	2.514	0.088	71.958
Fe	mg/L	2690.496	2677.633	2025.415	7474.237	12528.05	12996.71	9316.055	2281.327	2539.475	2697.403	10548.17	13171.81	N/A	12722.86	1.268	0.573	409.159
Ga	mg/L	0.932	0.767	0.203	0.594	0.798	1.631	0.535	0.638	0.939	0.897	0.737	1.064	N/A	0.737	0	0	0
Hg	ppb	10.841	5.017	1.237	2.682	3.986	3.67	2.262	6.727	6.048	7.701	4.915	5.002	N/A	3.285	0	0	0.018
K	mg/L	3.679	2.193	0.859	3.603	2.27	7.191	2.499	2.334	4.005	2.205	2.428	3.568	N/A	4.348	7.641	0.436	0.68
Li	mg/L	0.014	0.005	0.004	0.014	0.008	0.005	0.009	0.004	0.004	0.006	0.008	0.012	N/A	0.012	0.01	0.017	0.039
Mg	mg/L	11.818	0.03	2.863	0.74	0.507	0	4.419	1.228	0	1.107	5.285	4.038	N/A	9.404	6.694	1.422	55.16
Mn	mg/L	13.701	5.367	5.894	4.143	5.859	5.565	5.206	4.823	3.794	10.981	7.588	7.63	N/A	10.181	22.844	0.163	2007.887
Mo	mg/L	0.048	0	0.071	2.762	1.09	0.845	0.415	0.011	1.674	3.07	0.194	0.216	N/A	0.576	0	0.005	0
Na	mg/L	6.503	4.067	3.381	3.442	4.104	3.38	4.285	3.129	2.691	3.555	3.977	4.153	N/A	4.862	4.939	2.448	3.068
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0	0
Ni	mg/L	1.13	1.226	1.354	0.457	0.79	1.186	0.889	0.424	0.951	1.506	1.241	1.097	N/A	2.685	0.092	0.014	0.508

Yanacocha

Fecha de Publicación:
01/09/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.744	2.003	0.849	2.092	1.995	2.267	2.098	1.979	1.899	1.602	0.924	1.899	N/A	2.365	0.02	0.009	0.218
Sb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0	0
Sc	mg/L	0	0	0	0	0	0.008	0	0	0	0	0	0	N/A	0	0	0	0.072
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0.051	0	0.399
Sn	mg/L	0.185	0.129	0.137	0.064	0.179	0.142	0.162	0.119	0.091	0.309	0.139	0.111	N/A	0.266	0.006	0.008	0.002
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.303	0.036	0.116	0.073	0.108	0.176	0.173	0.04	0.094	0.251	0.262	0.301	N/A	0.249	1.777	0.123	1.104
Te	mg/L	2.37	2.04	0.654	0.874	1.429	1.542	1.024	0.879	1.357	1.582	1.145	1.434	N/A	2.442	0.004	0	0.081
Ti	mg/L	0.589	0.34	0.144	0.015	0.082	0.043	0.305	0.009	0.01	0.095	0.084	0.174	N/A	0.71	0.004	0.003	0.003
Tl	mg/L	0.828	4.327	0.856	0	0.021	0.13	0.389	0	0	0.149	0.038	0.076	N/A	7.043	0.014	0	0.856
V	mg/L	1.408	0.891	0.295	1.281	1.394	1.655	0.729	0.58	1.704	1.631	1.32	2.997	N/A	1.055	0	0	0.008
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0	0
Zn	mg/L	38.585	56.882	4.472	113.814	4.245	7.056	5.065	290.396	88.849	4.656	4.022	5.564	N/A	37.309	17.103	0.033	194.353

Yanacocha

Fecha de Publicación:
03/10/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.025	0.002	0.039	0.015	0.015	0.022	0.013	0.011	0.013	0.074	0.029	0.033	0.009	0.003	0.045	0.045	0.334
Al	mg/L	24.078	4.118	61.182	14.093	36.694	11.342	46.953	30.172	12.496	20.454	25.779	28.847	8.064	14.064	2.004	2.004	129.578
As	mg/L	47.561	9.205	28.393	41.808	25.685	38.784	13.43	9.501	8.675	7.954	12.409	13.109	39.68	31.758	0.057	0.057	0.143
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.48	2.48	1.885
Ba	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.027	0.027	0
Be	mg/L	0	0	0.001	0	0	0	0.001	0	0	0	0	0	0	0	0.002	0.002	0.147
Bi	mg/L	1.544	0.086	0.036	2.872	0.001	0	0	0	0	0	2.413	2.633	1.009	0.567	0.007	0.007	0.119
Ca	mg/L	54.579	62.889	22.86	49.222	36.402	168.719	11.298	11.283	58.477	60.23	51.328	55.201	55.124	57.395	92.772	92.772	409.573
Cd	mg/L	2.733	1.292	0.21	0	0	0.545	1.407	0.225	0	0	0	0	3.585	1.492	0.209	0.209	0.97
Co	mg/L	2.62	1.314	0.83	1.261	2.253	0.961	0.691	1.17	0.877	1.747	1.592	1.719	2.236	1.334	0.035	0.035	0.965
Cr	mg/L	0.662	0.218	0.167	0.249	0.053	0.724	0.033	0.054	0.537	0.258	0.274	0.293	0.436	0.548	0	0	0.032
Cu	mg/L	261.966	14.944	248.355	60.071	293.26	70.874	36.396	144.166	55.864	99.563	275.598	303.899	57.017	54.265	2.041	2.041	73.161
Fe	mg/L	2829.161	1576.67	2513.383	2791.681	2753.511	2438.361	2165.986	2401.602	2607.954	2741.844	2823.587	2784.094	2695.787	2824.702	9.59	9.59	349.723
Ga	mg/L	1.901	0.248	0.807	0.955	1.404	0.557	0.649	0.836	0.707	0.996	1.286	1.379	0.746	1.097	0.007	0.007	0
Hg	ppb	15.037	5.212	1.339	5.355	7.637	6.778	4.517	3.048	3.921	4.237	8.216	7.429	11.009	2.96	0.007	0.013	0.223
K	mg/L	14.055	2.207	14.478	18.888	7.737	2.302	5.8	14.527	4.152	4.322	4.091	4.53	5.921	6.405	131.384	131.384	4.308
Li	mg/L	0.01	0.005	0.006	0.006	0.004	0.004	0.003	0.003	0.003	0.006	0.008	0.01	0.003	0.006	0.009	0.009	0.035
Mg	mg/L	3.054	1.782	1.559	1.953	1.223	2.05	1.511	0.522	2.229	3.846	2.973	3.281	1.562	1.931	6.413	6.413	54.338
Mn	mg/L	8.105	3.741	3.574	4.453	3.464	2.912	3.657	2.448	6.38	5.019	5.742	6.113	3.615	4.561	6.794	6.794	1891.241
Mo	mg/L	0.112	0.03	2.849	0.634	0.627	0.18	0.037	1.259	1.342	0.132	0.133	0.122	0.172	0.044	0	0	0
Na	mg/L	8.194	3.667	3.837	4.681	4.229	4.295	3.337	3.937	3.542	3.822	4.147	4.619	3.97	4.95	6.186	6.186	4.639
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ni	mg/L	1.211	0.746	0.385	0.584	0.77	0.573	0.308	0.657	0.761	0.906	0.886	0.95	1.785	1.118	0.068	0.068	0.456

Yanacocha

Fecha de Publicación:
03/10/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	3.203	0.947	2.305	2.041	2.061	2.12	1.969	1.966	1.176	1.046	2.077	2.237	2.369	2.461	0	0	0.242
Sb	mg/L	2.008	0	0	0	0	0	0	0	0	0	0	0	0	0.395	0	0	0
Sc	mg/L	0	0	0.013	0	0.032	0	0.008	0	0	0	0	0	0	0	0	0	0.059
Se	mg/L	0.651	0	0.203	0.377	0	0	0.043	0.137	0.162	0.238	0.253	0.519	0.192	0	0	0	0.65
Sn	mg/L	0.233	0.054	0.063	0.095	0.015	0.043	0.022	0.004	0.04	0.069	0.071	0.115	0.177	0.082	0	0	0.023
SO4	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sr	mg/L	0.045	0.064	0.059	0.082	0.128	0.147	0.026	0.072	0.142	0.19	0.182	0.204	0.036	0.036	1.803	1.803	0.944
Te	mg/L	5.152	0.435	1.199	1.585	1.598	1.009	0.975	1.287	1.159	1.482	1.86	2.001	2.108	2.586	0	0	0.016
Ti	mg/L	0.601	0.048	0.014	0.05	0.019	0.087	0.014	0.005	0.042	0.041	0.041	0.078	0.153	0.256	0.003	0.003	0.006
Tl	mg/L	1.347	0.543	0	0	0	0.153	0.01	0	0	0	0	0.05	5.331	3.974	0	0	0.104
V	mg/L	1.882	0.181	1.183	1.03	1.102	0.45	0.468	1.19	0.777	1.038	2.812	3.045	0.631	0.854	0	0	0.086
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	mg/L	46.966	2.358	108.365	3.1	4.242	2.821	291.171	72.866	3.522	3.038	3.874	4.197	27.438	55.218	16.248	16.248	216.422

Yanacocha

Fecha de Publicación:
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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001	0	0.218
Al	mg/L	20.216	7.672	4.161	48.694	16.439	33.903	12.335	39.093	24.208	11.879	38.967	60.516	27.982	8.399	1.348	0.153	116.933
As	mg/L	33.288	17.898	9.125	17.575	32.023	19.028	35.819	9.372	6.801	7.203	11.107	24.525	13.66	33.878	0.027	0.03	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.716	0.469	0
Ba	mg/L	0.308	0.137	0.081	0.098	0.173	0.155	0.129	0.069	0.09	0.147	0.358	0.555	0.237	0.177	0.024	0.095	0.015
Be	mg/L	0	0	0	0.001	0	0	0	0.001	0	0	0	0	0	0	0.003	0	0.118
Bi	mg/L	1.679	0.711	0.231	0.241	2.15	0.375	0.244	0.085	0.244	0.199	0.506	5.902	0.481	1.386	0.018	0.014	0.1
Ca	mg/L	38.978	40.545	30.367	19.286	41.544	23.071	66.628	9.986	11.578	28.11	100.076	65.409	46.597	42.058	105.447	20.663	374.5
Cd	mg/L	2.094	0.911	1.289	0.278	0.045	0.058	0.702	1.228	0.229	0.023	0.067	0.032	0.035	3.264	0.237	0.002	0.926
Co	mg/L	1.651	0.697	1.622	0.59	0.932	1.709	0.837	0.522	0.85	0.754	2.307	2.404	1.297	1.946	0.045	0	0.815
Cr	mg/L	0.465	0.281	0.342	0.121	0.239	0.049	0.646	0.033	0.031	0.221	0.838	0.426	0.324	0.41	0	0.001	0.027
Cu	mg/L	231.269	39.802	19.073	205.805	69.568	286.357	86.725	33.376	131.802	57.735	211.184	756.069	245.813	60.925	2.354	0.059	73.638
Fe	mg/L	7100.606	4522.922	2996.019	3738.81	5487.173	5119.246	4471.659	2853.981	3402.852	4720.883	7031.384	7644.022	6020.404	5061.972	3.525	1.404	282.204
Ga	mg/L	0.852	0.38	0.168	0.417	0.517	0.932	0.345	0.374	0.468	0.396	1.079	1.966	0.619	0.389	0	0	0
Hg	ppb	3.353	0.717	0.331	0.565	0.622	0.54	0.39	1.015	0.626	0.578	1.178	1.371	0.479	0.154	0	0	0.054
K	mg/L	6.18	3.613	5.489	11.856	6.021	7.176	2.7	3.255	4.634	2.44	5.464	9.252	3.218	1.524	12.705	2.399	1.615
Li	mg/L	0.009	0.003	0.002	0.005	0.007	0.003	0.004	0.002	0.003	0.003	0.016	0.027	0.008	0.003	0.01	0.016	0.039
Mg	mg/L	0.815	0.503	0.693	0.799	2.041	0	1.064	0.905	0	0.214	6.712	3.525	6.257	0.724	7.361	1.171	51.486
Mn	mg/L	5.985	2.824	5.674	2.707	4.382	2.828	2.789	2.96	1.983	5.168	14.474	10.68	7	4.185	7.552	0.009	2086.67
Mo	mg/L	0	0	0	2.372	0.431	0.408	0.124	0.005	1.098	1.289	0.128	0.041	0.041	0.102	0.004	0.007	0
Na	mg/L	4.941	1.944	1.491	1.57	2.332	1.589	1.763	1.322	1.284	1.655	3.585	4.515	2.309	1.812	3.567	1.049	1.609
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0
Ni	mg/L	0.777	0.623	0.916	0.285	0.498	0.591	0.531	0.256	0.539	0.605	1.642	1.267	0.723	1.586	0.077	0.002	0.406

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	1.761	1.295	0.753	1.602	1.201	1.406	1.563	1.591	1.481	0.903	0.827	2.046	1.317	1.72	0.013	0.008	0.179
Sb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.023	0
Sc	mg/L	0	0	0	0.001	0	0.013	0	0.001	0	0	0	0	0	0	0	0	0.043
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.028	0.02	0.436
Sn	mg/L	0.175	0.062	0.049	0.046	0.057	0.043	0.042	0.027	0.03	0.043	0.089	0.119	0.123	0.108	0.013	0.002	0
SO4	%	N/A	2.34	N/A	N/A	N/A	3.24	N/A	1.34	N/A	N/A	6.85	N/A	4.14	3.47	0.02	0.02	0.75
Sr	mg/L	0.034	0.032	0.033	0.048	0.099	0.106	0.089	0.025	0.067	0.132	0.333	0.351	0.264	0.033	2.069	0.113	0.857
Te	mg/L	2.928	1.068	0.474	0.641	0.991	0.944	0.704	0.566	0.708	0.773	2.051	3.397	1.291	1.562	0	0	0.005
Ti	mg/L	0.411	0.13	0.044	0	0.104	0.013	0.075	0	0.004	0.025	0.141	0.105	0.126	0.14	0.001	0.001	0.001
Tl	mg/L	0.965	2.078	0.588	0.015	0.032	0.087	0.24	0.021	0	0.073	0.025	0.102	0.089	4.18	0.024	0.011	0.715
V	mg/L	1.542	0.512	0.267	0.917	0.901	0.936	0.472	0.381	1	0.796	1.928	6.241	1.238	0.658	0	0	0.028
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	mg/L	30.563	29.011	3.072	63.836	3.372	4.597	7.065	140.657	49.499	2.98	8.354	14.096	5.607	21.606	17.709	0	121.916

Yanacocha

Fecha de Publicación:
02/12/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0.023	0.005	0.009	0.009	0.021	0.018	0.02	0	0.006	0.014	-	0.017	N/A	0.015	0.001	0	0.273
Al	mg/L	25.529	7.006	4.753	4.753	14.409	30.889	8.041	35.759	21.392	12.017	-	16.747	N/A	8.022	1.864	0.813	87.669
As	mg/L	33.497	19.705	8.44	8.44	35.071	16.456	20.838	8.023	5.757	7.315	-	5.458	N/A	23.783	0	0.063	0.114
B	mg/L	0	0	0	0	0	0	0	0	0	0	-	0	N/A	0	1.74	2.044	1.775
Ba	mg/L	0	0	0	0	0	0	0	0	0	0	-	0	N/A	0	0.024	0.112	0.004
Be	mg/L	0	0	0	0	0	0	0	0	0	0	-	0.001	N/A	0	0.003	0	0.114
Bi	mg/L	0.712	0.389	0.093	0.093	1.66	0	0	0	0.077	0.058	-	0.002	N/A	0.704	0.007	0.015	0.026
Ca	mg/L	53.884	31.382	30.355	30.355	36.09	21.458	41.659	12.382	13.91	18.633	-	41.159	N/A	28.466	98.863	18.455	407.855
Cd	mg/L	1.608	0.647	0.955	0.955	0	0	0.119	1.156	0.149	0	-	0	N/A	1.808	0.235	0.007	0.863
Co	mg/L	2.243	0.94	1.749	1.749	1.12	1.835	0.625	0.575	0.88	0.877	-	0.761	N/A	1.758	0.043	0.014	0.772
Cr	mg/L	0.541	0.301	0.333	0.333	0.256	0.043	0.406	0.03	0.016	0.189	-	0.331	N/A	0.376	0	0.009	0.04
Cu	mg/L	213.156	39.639	18.79	18.79	56.394	239.693	55.598	29.852	115.852	49.116	-	105.106	N/A	38.808	1.083	0	64.311
Fe	mg/L	3299.874	2887.861	2116.01	2116.01	3013.816	2843.465	2311.786	1963.205	2253.962	2698.717	-	2499.633	N/A	2691.212	1.3	1.181	175.101
Ga	mg/L	0.124	0.074	0.002	0.002	0.04	0.464	0	0.205	0.224	0.055	-	0.02	N/A	0.007	0	0.016	0
Hg	ppb	2.257	0.452	0.34	0.34	0.406	0.211	0.449	0.165	0.142	0.17	-	0.962	N/A	0.392	0	0.027	0.027
K	mg/L	4.596	1.518	5.677	5.677	1.451	6.117	1.111	2.604	3.69	1.383	-	1.024	N/A	1.098	9.884	0.97	2.237
Li	mg/L	0.008	0.002	0.001	0.001	0.005	0.002	0.002	0.002	0.002	0.003	-	0.005	N/A	0.003	0.009	0.014	0.03
Mg	mg/L	3.292	1.022	1.001	1.001	2.13	0.818	1.009	1.382	0.626	0.791	-	4.6	N/A	1.661	6.904	1.115	46.594
Mn	mg/L	7.475	3.245	5.846	5.846	4.443	2.643	1.906	2.877	1.787	3.908	-	5.791	N/A	4.88	11.522	0.02	1647.895
Mo	mg/L	0.123	0	0.052	0.052	0.473	0.477	0.164	0.037	1.114	1.409	-	0.049	N/A	0.098	0.014	0.019	0.002
Na	mg/L	6.81	5.036	4.659	4.659	4.581	4.886	4.657	4.852	4.399	4.69	-	4.413	N/A	3.891	5.176	3.515	4.522
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	-	0	N/A	0	0	0.007	0
Ni	mg/L	1.094	0.789	1.168	1.168	0.55	0.593	0.384	0.247	0.507	0.543	-	0.561	N/A	1.489	0.071	0	0.366

Yanacocha

Fecha de Publicación:
02/12/2014

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	3.392	2.114	1.207	1.207	1.805	2.052	2.159	2.057	1.951	1.238	-	0.904	N/A	2.205	0.015	0.028	0.216
Sb	mg/L	1.605	0.171	0.009	0.009	0	0	0	0	0	0	-	0	N/A	0	0	0	0
Sc	mg/L	0	0	0	0	0	0.021	0	0.007	0	0	-	0	N/A	0	0.001	0	0.02
Se	mg/L	0.363	0.235	0.216	0.216	0	0.175	0	0.124	0.511	0	-	0	N/A	0.257	0	0	0.432
Sn	mg/L	0.198	0.135	0.032	0.032	0.089	0.085	0.132	0.094	0.003	0.132	-	0.045	N/A	0.093	0.018	0.021	0.031
SO4	%	N/A	1.63	0.89	N/A	2.64	2.21	1.41	1	1.32	2.31	N/A	1.65	N/A	2.59	0.02	0.02	0.65
Sr	mg/L	0.042	0.028	0.036	0.036	0.093	0.106	0.087	0.032	0.071	0.133	-	0.158	N/A	0.027	1.946	0.107	0.817
Te	mg/L	3.64	1.649	0.65	0.65	1.393	1.09	0.648	0.683	0.87	1.04	-	0.728	N/A	1.51	0	0	0
Ti	mg/L	0.441	0.121	0.045	0.045	0.072	0.013	0.05	0.003	0.004	0.024	-	0.065	N/A	0.105	0.003	0.002	0.006
Tl	mg/L	0.991	2.722	0.46	0.46	0	0	0.16	0	0	0.084	-	0.01	N/A	3.603	0	0	0.082
V	mg/L	1.761	0.604	0.288	0.288	0.953	0.894	0.328	0.374	0.936	0.783	-	0.637	N/A	0.544	0	0	0.064
W	mg/L	0	0	0	0	0	0	0	0	0	0	-	0	N/A	0	0	0	0
Zn	mg/L	32.809	32.622	2.828	2.828	2.764	3.767	4.06	271.206	53.344	2.152	-	3.717	N/A	16.678	18.555	0	195.665

Yanacocha

Fecha de Publicación:
03/01/2015

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002	0	0.133
Al	mg/L	11.718	2.177	2.546	19.119	8.34	18.694	3.437	19.884	11.915	6.485	24.054	13.788	14.878	5.463	1.237	0.499	54.38
As	mg/L	16.749	11.572	7.794	4.798	23.516	10.546	9.862	3.423	2.666	4.276	6.051	5.081	3.109	12.792	0	0	0
B	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.349	1.174	1.045
Ba	mg/L	0.115	0.062	0.038	0.036	0.083	0.062	0.034	0.025	0.036	0.063	0.225	0.081	0.07	0.058	0.024	0.101	0.011
Be	mg/L	0	0.001	0.001	0.001	0	0.001	0.001	0.001	0.001	0.001	0	0	0.001	0	0.002	0.001	0.079
Bi	mg/L	0.789	0.452	0.211	0.073	1.123	0.21	0.084	0.083	0.058	0.229	0.457	0.918	0.32	0.478	0	0	0.074
Ca	mg/L	31.71	6.69	8.093	24.904	18.777	9.69	9.545	7.553	7.572	6.364	47.745	12.86	134.588	31.517	63.539	13.688	376.488
Cd	mg/L	0.884	0.372	0.589	0.112	0.022	0.028	0.147	0.691	0.104	0.01	0.046	0.011	0.018	0.947	0.146	0	0.604
Co	mg/L	1.149	0.539	1.617	0.324	0.667	1.101	0.297	0.323	0.458	0.491	1.624	0.769	0.538	1.078	0.029	0	0.493
Cr	mg/L	0.298	0.196	0.132	0.064	0.144	0.023	0.202	0.018	0.019	0.086	0.442	0.078	0.411	0.245	0	0	0.009
Cu	mg/L	112.88	26.039	19.875	90.605	38.144	163.212	33.397	19.829	71.729	33.197	114.572	151.432	94.106	25.953	1.412	0	54.528
Fe	mg/L	8601.268	4591.244	1383.752	1157.761	5429.662	1584.565	1185.785	1001.361	1168.161	4081.212	9259.475	1578.001	4339.779	4270.255	0	0	86.782
Ga	mg/L	0.427	0.221	0.107	0.122	0.288	0.468	0.092	0.151	0.182	0.202	0.534	0.361	0.212	0.169	0	0	0
Hg	ppb	35.657	1.825	0.698	0.531	1.562	0.688	0.519	0.175	0.868	0.567	4.93	0.626	0.129	0.04	0.006	0.032	0.034
K	mg/L	7.236	9.102	8.651	9.664	13.533	7.862	0.912	2.869	3.315	1.793	61.079	2.929	2.414	1.396	8.914	2.104	1.361
Li	mg/L	0.004	0.001	0.001	0.002	0.003	0.002	0.001	0.002	0.001	0.002	0.008	0.004	0.005	0.003	0.006	0.009	0.021
Mg	mg/L	0	0	0	0.814	0	0	0.05	0.582	0.033	0	2.618	0.204	3.613	0.486	4.497	0.788	33.707
Mn	mg/L	4.95	2.164	2.472	1.831	3.031	1.806	1.025	1.674	1.045	2.121	8.457	2.931	8.246	3.586	4.741	0.01	1277.168
Mo	mg/L	0.022	0	0.035	1.163	0.285	0.425	0.088	0.011	0.696	0.973	0.03	0.025	0	0.025	0.009	0.082	0
Na	mg/L	3.263	2.268	2.059	2.249	2.566	2.146	1.928	1.909	1.958	2.26	3.438	2.348	2.008	2.079	3.468	1.769	2.633
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.014	0.012	0
Ni	mg/L	0.633	0.515	0.798	0.172	0.355	0.399	0.198	0.155	0.281	0.315	1.093	0.422	0.642	0.956	0.044	0	0.259

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.017	1.798	1.649	1.1	1.23	1.196	1.633	1.584	1.236	0.804	0.809	0.899	0.484	1.718	0.008	0	0.13
Sb	mg/L	0.026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sc	mg/L	0	0	0	0.001	0	0.006	0	0.003	0	0	0	0	0	0	0	0	0.012
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.027	0.037	0.348
Sn	mg/L	0	0.002	0.024	0.034	0	0	0.006	0.016	0	0	0	0	0.014	0	0.04	0.03	0.024
SO4	%	3.03	1.66	0.95	0.66	1.89	1.55	0.75	0.58	0.73	1.48	3.07	1.76	1.15	1.7	0.02	0.02	0.48
Sr	mg/L	0.03	0.011	0.013	0.039	0.057	0.068	0.051	0.024	0.046	0.097	0.222	0.088	0.213	0.033	1.361	0.084	0.676
Te	mg/L	1.27	0.603	0.325	0.214	0.473	0.378	0.177	0.224	0.281	0.35	0.744	0.436	0.322	0.562	0.011	0.03	0.024
Ti	mg/L	0.196	0.055	0.034	0.002	0.024	0.007	0.023	0.001	0.002	0.015	0.279	0.018	0.047	0.069	0	0	0
Tl	mg/L	0.646	1.701	0.661	0.007	0.08	0.089	0.185	0.03	0.009	0.086	0.083	0.079	0.08	2.045	0.042	0.016	0.64
V	mg/L	0.802	0.268	0.159	0.347	0.513	0.473	0.112	0.156	0.483	0.391	0.902	1.358	0.496	0.252	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.026	0.038	0
Zn	mg/L	15.531	16.126	2.443	30.9	1.567	2.239	0.872	147.585	26.258	0.952	9.715	1.934	2.478	8.647	10.884	0	125.015

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.034	0.071	0.002
Al	mg/L	5.394	2.116	2.142	18.505	7.593	17.544	3.84	16.14	7.531	2.584	2.969	8.404	5.015	3.325	13.724	27.269	1.571
As	mg/L	10.304	13.597	9.646	4.732	25.569	11.973	15.143	7.26	1.345	1.497	0.2	3.559	2.206	15.55	0	0	0
B	mg/L	0	0	0	0	0	0	0	0	0.569	0	1.368	0	0	0	3.649	3.059	3.435
Ba	mg/L	0.126	0.105	0.079	0.05	0.14	0.108	0.077	0.067	0.034	0.05	0.068	0.092	0.072	0.089	0.019	0.105	0.044
Be	mg/L	0	0	0	0.001	0.001	0.001	0	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.03	0.061	0.002
Bi	mg/L	0.403	0.358	0.209	0.065	1.108	0.2	0.074	0.203	0.155	0.067	0.023	0.71	0.211	0.585	0.024	0.232	0
Ca	mg/L	5.787	4.893	14.835	16.442	12.846	9.966	14.355	9.505	3.192	2.186	3.687	11.285	8.547	10.078	182.681	306.14	6.888
Cd	mg/L	0.429	0.383	0.598	0.112	0.018	0.028	0.185	0.786	0.066	0	0.003	0.007	0	0.797	0.248	0.313	0
Co	mg/L	0.761	0.588	1.94	0.335	0.748	1.189	0.409	0.665	0.297	0.225	0.216	0.574	0.416	1.174	0.128	0.244	0.004
Cr	mg/L	0.163	0.189	0.084	0.055	0.143	0.044	0.243	0.078	0.003	0.019	0.046	0.064	0.046	0.199	0	0.016	0.003
Cu	mg/L	63.643	23.867	21.896	88.147	38.468	154.183	46.485	23.129	41.442	11.994	10.708	91.297	61.776	24.236	15.184	31.875	0
Fe	mg/L	2371.596	2282.047	1943.687	1430.068	2417.13	2266.734	1864.175	1717.658	1067.637	1372.152	912.537	2056.352	1785.911	2125.901	19.183	41.736	0
Ga	mg/L	0.323	0.282	0.162	0.147	0.348	0.479	0.159	0.204	0.121	0.107	0.068	0.279	0.151	0.206	0	0	0
Hg	ppb	41.962	21.203	7.138	3.397	5.546	3.411	2.069	1.433	1.279	1.081	0.824	1.519	1.256	0.156	0.197	0.211	0.083
K	mg/L	1.868	0.943	0.967	2.226	1.348	3.413	0.9	1.944	1.934	0.748	0.928	1.348	1.016	8.876	5.987	1.569	0.705
Li	mg/L	0.004	0.004	0.004	0.004	0.005	0.004	0.003	0.004	0.002	0.002	0.003	0.004	0.002	0.003	0.01	0.022	0.002
Mg	mg/L	0	0	0	0.653	0	0	0.155	0.456	0.125	0	0.262	0.224	0.166	0	10.49	17.129	0.424
Mn	mg/L	2.363	2.109	1.483	1.584	2.713	1.888	1.373	1.965	0.624	1.356	1.258	3.085	1.882	1.929	308.145	638.19	11.337
Mo	mg/L	0	0	0	1.1	0.361	0.526	0.139	0	0.432	0.431	0	0.006	0	0.017	0	0.045	0
Na	mg/L	4.426	4.243	7.196	4.065	4.483	4.074	4.281	4.324	3.94	3.894	4.26	4.218	4.32	4.443	6.129	5.006	4.189
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016
Ni	mg/L	0.389	0.54	0.839	0.176	0.382	0.432	0.277	0.441	0.199	0.164	0.147	0.363	0.267	0.978	0.097	0.148	0.005

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.052	2.052	1.98	1.441	1.446	1.366	2.172	2.449	1.187	0.495	0.109	0.563	0.563	2.197	0.075	0.1	0
Sb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.026
Sc	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003	0.007	0
Se	mg/L	0	0	0	0	0	0	0	0	0.017	0	0	0	0	0	0.063	0.257	0
Sn	mg/L	0	0	0	0	0	0	0.011	0	0	0	0.039	0	0	0	0.002	0.02	0.038
SO4	%	2.86	1.23	1.15	0.74	1.8	1.58	1.1	0.59	0.8	1.19	0.86	1.2	1.1	1.25	0.098	0.07	0.5
Sr	mg/L	0.011	0.015	0.041	0.035	0.042	0.071	0.059	0.03	0.03	0.045	0.027	0.062	0.097	0.016	1.014	0.49	0.008
Te	mg/L	0.844	0.727	0.406	0.192	0.571	0.488	0.248	0.405	0.166	0.179	0.102	0.374	0.262	0.721	0	0.022	0.035
Ti	mg/L	0.092	0.056	0.031	0.004	0.021	0.012	0.051	0.018	0.004	0.01	0.013	0.014	0.017	0.054	0.004	0.006	0.006
Tl	mg/L	0.385	1.535	0.652	0	0	0	0.212	0.667	0	0	0	0	0.034	2.217	0	0	0
V	mg/L	0.56	0.34	0.222	0.359	0.617	0.551	0.19	0.234	0.294	0.168	0.07	0.921	0.238	0.291	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.033
Zn	mg/L	10.027	18.4	3.07	34.948	1.761	2.412	1.232	153.217	17.912	0.273	0.137	1.318	0.654	9.734	52.884	89.556	1.433

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Ag	mg/L	0	0	0	0	0	0	0	0	0	0	0.001	0	0	0	0	0	0.121
Al	mg/L	5.088	1.655	1.831	10.257	5.418	11.472	2.243	11.964	7.365	2.729	2.808	6.236	3.07	2.172	1.296	1.006	43.783
As	mg/L	9.41	7.123	3.92	1.826	14.254	7.219	6.055	1.531	1.211	1.464	0.319	2.258	1.076	7.716	0.017	0	0
B	mg/L	0	0	0	1.041	0	0	0	1.389	0.599	0	1.195	0	0	0	2.836	2.966	3.612
Ba	mg/L	0.106	0.065	0.042	0.027	0.088	0.072	0.035	0.027	0.039	0.05	0.04	0.071	0.047	0.054	0.02	0.089	0.01
Be	mg/L	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.004	0.003	0.098
Bi	mg/L	0.446	0.26	0.095	0	0.677	0.205	0.05	0.022	0	0.083	0.034	0.341	0.086	0.313	0.007	0	0.026
Ca	mg/L	5.488	1.227	3.637	8.035	7.361	4.247	4.272	3.655	3.033	2.063	3.326	3.871	3.897	3.209	38.71	9.976	459.426
Cd	mg/L	0.414	0.199	0.267	0.058	0.008	0.012	0.082	0.457	0.06	0	0.001	0.004	0.001	0.39	0.089	0	0.511
Co	mg/L	0.691	0.329	0.96	0.182	0.474	0.769	0.193	0.209	0.287	0.212	0.197	0.406	0.254	0.683	0.019	0.002	0.401
Cr	mg/L	0.161	0.13	0.049	0.017	0.067	0.018	0.12	0	0	0.004	0.017	0.017	0.025	0.108	0	0	0.003
Cu	mg/L	60.351	14.384	10.333	52.024	23.817	99.287	22.834	11.806	40.66	11.654	10.511	66.279	35.73	13.708	0.345	0	52.861
Fe	mg/L	2283.667	1785.149	1276.559	839.537	1991.362	1790.162	1171.218	788.728	1007.463	1303.825	853.507	1674.373	1282.194	1595.288	0	0	66.944
Ga	mg/L	0.277	0.171	0.067	0.061	0.213	0.298	0.073	0.076	0.109	0.089	0.056	0.181	0.09	0.135	0	0	0
Hg	ppb	1.196	0.696	0.43	1.703	2.052	1.213	0.695	0.239	0.397	0.447	0.308	0.689	0.563	0.677	0.052	0.023	0.092
K	mg/L	1.782	0.794	0.761	1.544	1.071	2.455	0.644	1.539	1.922	0.855	0.889	1.133	0.814	0.821	4.687	0.647	1.352
Li	mg/L	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.005	0.006	0.018
Mg	mg/L	0	0	0	0.439	0	0	0.058	0.491	0.098	0	0.221	0.066	0.07	0	2.662	0.62	26.477
Mn	mg/L	2.255	1.305	1.485	0.855	1.761	1.21	0.658	1.019	0.589	1.269	1.173	1.286	1.012	1.137	2.743	0.016	1001.352
Mo	mg/L	0	0	0	0.51	0.163	0.341	0.041	0	0.387	0.419	0.006	0.02	0	0	0	0.042	0.029
Na	mg/L	4.296	3.661	3.827	3.917	4.096	4.167	3.523	3.898	3.844	3.866	3.946	4.001	4.074	3.876	4.582	3.668	5.173
Nb	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.014	0.012	0
Ni	mg/L	0.376	0.317	0.485	0.089	0.234	0.275	0.146	0.111	0.18	0.168	0.122	0.196	0.14	0.578	0.022	0	0.232

Yanacocha

Fecha de Publicación:
02/03/2015

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
Pb	mg/L	2.031	1.733	1.508	0.944	1.095	1.03	1.86	1.674	1.157	0.448	0.082	0.395	0.333	1.619	0.039	0.003	0.183
Sb	mg/L	0.027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sc	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.012
Se	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.195
Sn	mg/L	0	0	0	0	0	0	0	0.02	0	0	0.028	0	0	0	0	0.053	0
SO4	%	2.33	N/A	0.73	0.45	1.29	1.21	0.68	0.46	0.56	0.74	0.4	1.09	0.79	1.13	0.1	0.1	0.45
Sr	mg/L	0.01	0.004	0.006	0.018	0.03	0.043	0.035	0.018	0.029	0.043	0.025	0.038	0.063	0.004	0.78	0.053	0.645
Te	mg/L	0.873	0.469	0.311	0.129	0.395	0.318	0.152	0.148	0.208	0.186	0.135	0.275	0.177	0.398	0.022	0.001	0.014
Ti	mg/L	0.087	0.031	0.014	0.004	0.012	0.007	0.014	0.004	0.004	0.01	0.011	0.008	0.012	0.029	0.002	0.007	0.004
Tl	mg/L	0.411	0.956	0.372	0.038	0	0	0.186	0	0.058	0.08	0.076	0	0.014	1.238	0	0.053	0
V	mg/L	0.524	0.179	0.082	0.159	0.361	0.322	0.055	0.062	0.268	0.14	0.038	0.601	0.096	0.12	0	0	0
W	mg/L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zn	mg/L	9.608	10.848	1.425	20.794	1.047	1.5	0.499	128.004	17.146	0.269	0.143	0.883	0.332	5.167	7.169	0	134.016

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Ag	mg/L	0.003	0.003
Al	mg/L	0.931	0.974
As	mg/L	0.03	0.066
B	mg/L	3.25	3.101
Ba	mg/L	0.044	0.153
Be	mg/L	0	0
Bi	mg/L	0	0
Ca	mg/L	99.439	33.727
Cd	mg/L	0.177	0.003
Co	mg/L	0.04	0
Cr	mg/L	0.004	0.01
Cu	mg/L	0.158	0.052
Fe	mg/L	0.067	0.076
Ga	mg/L	0	0
Hg	ppb	N/A	N/A
K	mg/L	10.708	0.88
Li	mg/L	0.01	0.013
Mg	mg/L	6.227	1.285
Mn	mg/L	6.157	0.006
Mo	mg/L	0.003	0.099
Na	mg/L	7.22	4.591
Nb	mg/L	0	0
Ni	mg/L	0.069	0.01

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		13042	13044
Pb	mg/L	0.006	0
Sb	mg/L	0	0.016
Sc	mg/L	0.001	0
Se	mg/L	0	0
Sn	mg/L	0.032	0.05
SO4	%	0.04	0.02
Sr	mg/L	1.604	0.126
Te	mg/L	0	0.007
Ti	mg/L	0.002	0.002
Tl	mg/L	0	0
V	mg/L	0	0
W	mg/L	0	0
Zn	mg/L	13.138	0

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		13042	13044
Ag	mg/L	0.002	0.004
Al	mg/L	0.95	0.985
As	mg/L	0.029	0.075
B	mg/L	3.02	3.173
Ba	mg/L	0.033	0.106
Be	mg/L	0	0
Bi	mg/L	0	0
Ca	mg/L	63.96	24.429
Cd	mg/L	0.049	0.005
Co	mg/L	0.005	0
Cr	mg/L	0.007	0.003
Cu	mg/L	0.109	0.043
Fe	mg/L	0.303	0.192
Ga	mg/L	0	0
Hg	ppb	N/A	N/A
K	mg/L	9.86	3.417
Li	mg/L	0.007	0.01
Mg	mg/L	5.761	2.085
Mn	mg/L	2.987	0.01
Mo	mg/L	0	0.063
Na	mg/L	5.904	4.354
Nb	mg/L	0	0.001
Ni	mg/L	0.04	0.01

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		13042	13044
Pb	mg/L	0.007	0
Sb	mg/L	0	0
Sc	mg/L	0	0
Se	mg/L	0	0
Sn	mg/L	0.052	0.071
SO4	%	0.03	0.02
Sr	mg/L	1.134	0.101
Te	mg/L	0	0
Ti	mg/L	0.003	0.002
Tl	mg/L	0	0
V	mg/L	0	0
W	mg/L	0	0
Zn	mg/L	3.309	0

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X-ref. bat ID: MYSRL

		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

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		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

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		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

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		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

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		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

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		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

Yanacocha

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		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

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Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

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Al	mg/L	N/A	N/A
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B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

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Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

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Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

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		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

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		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Ag	mg/L	0.007	0
Al	mg/L	0.819	0.987
As	mg/L	0.01	0
B	mg/L	2.517	2.135
Ba	mg/L	0.02	0.135
Be	mg/L	0	0.002
Bi	mg/L	0.024	0
Ca	mg/L	68.125	10.256
Cd	mg/L	0.22	0
Co	mg/L	0.088	0
Cr	mg/L	0.008	0
Cu	mg/L	0	0
Fe	mg/L	0.465	0
Ga	mg/L	0	0
Hg	ppb	0.123	0.035
K	mg/L	7.845	0.745
Li	mg/L	0.019	0.009
Mg	mg/L	5.623	1.025
Mn	mg/L	8.126	0.01
Mo	mg/L	0.01	0.061
Na	mg/L	5.268	1.985
Nb	mg/L	0	0.012
Ni	mg/L	0.035	0

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Pb	mg/L	0.009	0
Sb	mg/L	0	0
Sc	mg/L	0	0
Se	mg/L	0.029	0
Sn	mg/L	0	0.03
SO4	%	0.056	0.08
Sr	mg/L	1.356	0.084
Te	mg/L	0	0.03
Ti	mg/L	0.005	0.005
Tl	mg/L	0.004	0.016
V	mg/L	0	0
W	mg/L	0	0.038
Zn	mg/L	7.456	0

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Ag	mg/L	0	N/A
Al	mg/L	1.521	N/A
As	mg/L	0.016	N/A
B	mg/L	1.123	N/A
Ba	mg/L	0.028	N/A
Be	mg/L	0	N/A
Bi	mg/L	0.018	N/A
Ca	mg/L	70.152	N/A
Cd	mg/L	0.216	N/A
Co	mg/L	0.074	N/A
Cr	mg/L	0.005	N/A
Cu	mg/L	0.162	N/A
Fe	mg/L	0.078	N/A
Ga	mg/L	0.1	N/A
Hg	ppb	0.247	N/A
K	mg/L	5.842	N/A
Li	mg/L	0.001	N/A
Mg	mg/L	4.123	N/A
Mn	mg/L	7.562	N/A
Mo	mg/L	0.02	N/A
Na	mg/L	4.956	N/A
Nb	mg/L	0	N/A
Ni	mg/L	0.048	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Pb	mg/L	0.01	N/A
Sb	mg/L	0	N/A
Sc	mg/L	0	N/A
Se	mg/L	0	N/A
Sn	mg/L	0.023	N/A
SO4	%	0.07	N/A
Sr	mg/L	1.568	N/A
Te	mg/L	0.035	N/A
Ti	mg/L	0.028	N/A
Tl	mg/L	0.006	N/A
V	mg/L	0	N/A
W	mg/L	0	N/A
Zn	mg/L	6.456	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Ag	mg/L	0	0
Al	mg/L	2.054	2.025
As	mg/L	0	0.212
B	mg/L	4.549	4.248
Ba	mg/L	0.031	0.074
Be	mg/L	0.005	0.006
Bi	mg/L	0	0
Ca	mg/L	49.19	19.779
Cd	mg/L	0.098	0.001
Co	mg/L	0	0
Cr	mg/L	0.012	0.014
Cu	mg/L	0.311	0.15
Fe	mg/L	0	0
Ga	mg/L	0	0.005
Hg	ppb	0	0.173
K	mg/L	6.661	11.278
Li	mg/L	0.008	0.01
Mg	mg/L	3.537	1.175
Mn	mg/L	3.647	0.039
Mo	mg/L	0.018	0.083
Na	mg/L	7.502	6.145
Nb	mg/L	0.111	0.078
Ni	mg/L	0.042	0

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Pb	mg/L	0	0
Sb	mg/L	0	0
Sc	mg/L	0	0
Se	mg/L	0.086	0
Sn	mg/L	0	0
SO4	%	0.03	0.02
Sr	mg/L	1.023	0.094
Te	mg/L	0.059	0.003
Ti	mg/L	0.001	0
Tl	mg/L	0	0
V	mg/L	0	0
W	mg/L	0.281	0.254
Zn	mg/L	9.098	0

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Laboratory Data
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Ag	mg/L	0	0
Al	mg/L	1.678	1.913
As	mg/L	0.241	0.211
B	mg/L	4.519	5.224
Ba	mg/L	0.014	0.067
Be	mg/L	0.005	0.004
Bi	mg/L	0.018	0.01
Ca	mg/L	43.991	21.298
Cd	mg/L	0.072	0
Co	mg/L	0	0
Cr	mg/L	0	0
Cu	mg/L	0	0
Fe	mg/L	0.137	0.112
Ga	mg/L	0.027	0.024
Hg	ppb	0	0
K	mg/L	6.079	1.575
Li	mg/L	0	0
Mg	mg/L	2.739	0.798
Mn	mg/L	2.919	0
Mo	mg/L	0.028	0.071
Na	mg/L	7.987	7.472
Nb	mg/L	0.051	0.025
Ni	mg/L	0.023	0

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Pb	mg/L	0	0
Sb	mg/L	0.013	0.058
Sc	mg/L	0.001	0.001
Se	mg/L	0.107	0
Sn	mg/L	0	0
SO4	%	0.02	0.02
Sr	mg/L	0.888	0.079
Te	mg/L	0	0
Ti	mg/L	0.007	0.006
Tl	mg/L	0.047	0
V	mg/L	0	0
W	mg/L	0	0
Zn	mg/L	7.553	0

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X-ref. bat ID: MYSRL

		13042	13044
Ag	mg/L	0	0
Al	mg/L	1.341	1.274
As	mg/L	0.272	0.104
B	mg/L	3.169	2.926
Ba	mg/L	0.023	0.097
Be	mg/L	0	0
Bi	mg/L	0.019	0
Ca	mg/L	56.361	28.767
Cd	mg/L	0.12	0
Co	mg/L	0.025	0.003
Cr	mg/L	0.037	0.08
Cu	mg/L	0.925	0.327
Fe	mg/L	0.01	0.247
Ga	mg/L	0	0
Hg	ppb	0	0
K	mg/L	9.275	15.034
Li	mg/L	0.008	0.013
Mg	mg/L	3.609	1.377
Mn	mg/L	3.694	0.017
Mo	mg/L	0.028	0.066
Na	mg/L	7.208	5.252
Nb	mg/L	0.079	0.034
Ni	mg/L	0.054	0.016

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Samples submitted at: LA QUINUA - MYSRL
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		13042	13044
Pb	mg/L	0.099	0.087
Sb	mg/L	0	0
Sc	mg/L	0	0
Se	mg/L	0	0
Sn	mg/L	0.058	0.044
SO4	%	0.03	0.02
Sr	mg/L	1.025	0.114
Te	mg/L	0	0
Ti	mg/L	0.006	0.01
Tl	mg/L	0.345	0.002
V	mg/L	0	0
W	mg/L	0	0
Zn	mg/L	10.318	0

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Informe Interno de Analisis
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
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Laboratory name: LABORATORIO QUIMICO MYSRL
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		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
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Laboratory name: LABORATORIO QUIMICO MYSRL
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		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

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		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

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		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

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Informe Interno de Analisis
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X-ref. bat ID: MYSRL

		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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		13042	13044
Ag	mg/L	N/A	N/A
Al	mg/L	N/A	N/A
As	mg/L	N/A	N/A
B	mg/L	N/A	N/A
Ba	mg/L	N/A	N/A
Be	mg/L	N/A	N/A
Bi	mg/L	N/A	N/A
Ca	mg/L	N/A	N/A
Cd	mg/L	N/A	N/A
Co	mg/L	N/A	N/A
Cr	mg/L	N/A	N/A
Cu	mg/L	N/A	N/A
Fe	mg/L	N/A	N/A
Ga	mg/L	N/A	N/A
Hg	ppb	N/A	N/A
K	mg/L	N/A	N/A
Li	mg/L	N/A	N/A
Mg	mg/L	N/A	N/A
Mn	mg/L	N/A	N/A
Mo	mg/L	N/A	N/A
Na	mg/L	N/A	N/A
Nb	mg/L	N/A	N/A
Ni	mg/L	N/A	N/A

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
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Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13042	13044
Pb	mg/L	N/A	N/A
Sb	mg/L	N/A	N/A
Sc	mg/L	N/A	N/A
Se	mg/L	N/A	N/A
Sn	mg/L	N/A	N/A
SO4	%	N/A	N/A
Sr	mg/L	N/A	N/A
Te	mg/L	N/A	N/A
Ti	mg/L	N/A	N/A
Tl	mg/L	N/A	N/A
V	mg/L	N/A	N/A
W	mg/L	N/A	N/A
Zn	mg/L	N/A	N/A

APÉNDICE 9

Reporte de Monitoreo del Laboratorio Analítico de MYSRL

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.87	3.87	3.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	272.3	272.3	280	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	9.56	9.56	6.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	690	690	9600	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	2020	2020	3500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	0.2962	0.2962	0.138	N/A	0	0	N/A	0	N/A	N/A	N/A	0	0	0	0	0	0
pH		2.97	2.97	2.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	1382	1291	1477	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	4.77	4.77	3.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	15.7	15.7	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	0	0	0	N/A	0	0	N/A	0	N/A	N/A	N/A	0	0	0	0	0	0
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	3.64	N/A	3.83	3.62	N/A	N/A	N/A	N/A	N/A	3.58	N/A	3.89	3.75	3.69	N/A
Eh	mV	N/A	N/A	207.3	N/A	372	383	N/A	N/A	N/A	N/A	N/A	388	N/A	372	445	408	N/A
Electrical Conductivity	ms/cm	N/A	N/A	5.16	N/A	0.365	0.412	N/A	N/A	N/A	N/A	N/A	0.26	N/A	3.6	0.222	1.169	N/A
HACH, Sulfate	mg/L	N/A	N/A	5500	N/A	800	700	N/A	N/A	N/A	N/A	N/A	56	N/A	800	39	800	N/A
HACH, Total Fe	mg/L	N/A	N/A	776	N/A	31	14	N/A	N/A	N/A	N/A	N/A	0.31	N/A	11	0.16	11	N/A
Leachate Volume	L	0	0	0.1672	N/A	0.4029	0.1939	N/A	0	N/A	N/A	N/A	0.2423	0	0.2432	0.6864	0.1163	0
pH		N/A	N/A	3.27	N/A	7.82	7.88	N/A	N/A	N/A	N/A	N/A	7.32	N/A	7.16	7.89	7.28	N/A
Rock Height in Column	mm	N/A	N/A	1476	N/A	1395	1390	N/A	N/A	N/A	N/A	N/A	1440	N/A	1485	1476	1497	N/A
TDS	ppt	N/A	N/A	2.51	N/A	0.182	0.203	N/A	N/A	N/A	N/A	N/A	0.127	N/A	1.79	0.116	0.638	N/A
Temperature	°C	N/A	N/A	17.7	N/A	17.1	17.7	N/A	N/A	N/A	N/A	N/A	17.6	N/A	17.7	17.7	18	N/A

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X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.78	3.89	3.77	3.63	3.81	3.68	3.65	3.63	3.64	3.69	3.67	3.66	3.64	3.81	3.72	3.76	3.82
Eh	mV	294.7	423.4	341.8	310.5	305.1	315.1	304.6	306	302.1	293.2	285.3	287	269.5	409.6	241.5	163.2	260.9
Electrical Conductivity	ms/cm	1.268	24.4	0.81	1.332	1.043	1.09	0.728	1.331	1.452	2.28	1.139	1.283	1.097	16.456	1.492	0.456	1.762
HACH, Sulfate	mg/L	900	400	700	900	800	1400	400	1300	1400	2000	800	1100	900	1400	900	400	1600
HACH, Total Fe	mg/L	292	94	286	7	14	146	174	24	21	18	2	45	90	74	221	22	37
Leachate Volume	L	3.7687	3.97	3.0573	2.1368	4.2791	6.333	4.1977	3.3916	4.2574	4.3564	3.4	3.662	1.575	3.9819	2.8188	4.1617	4.0265
pH		3.5	1.69	3.4	4.2	4.11	3.65	4.19	3.89	3.73	4.66	4.13	4.32	4.67	1.91	6.37	7.67	4.18
Rock Height in Column	mm	1376	1288	1470	1490	1390	1372	1468	1488	1489	1383	1490	1427	1380	1479	1441	1479	1489
TDS	ppt	0.363	12.3	0.401	0.667	0.522	0.546	0.336	0.667	0.726	1.14	0.568	0.643	0.547	8.2	0.748	0.228	0.879
Temperature	°C	17.5	17.3	17.3	17.4	17.4	17.6	17.7	17.7	17.9	18	18.1	18.2	18.4	18.3	18.5	18.6	18.7

Yanacocha

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X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.65	3.54	3.79	3.75	3.7	3.71	3.77	3.72	3.71	3.73	3.74	3.58	3.73	3.75	3.7	3.71	3.74
Eh	mV	318.4	559.3	493.2	331.7	401.9	408.4	388	388.9	401.5	415.9	415.7	417.9	395.8	549.4	459..3	363.4	418.2
Electrical Conductivity	ms/cm	9.85	17.76	0.841	0.925	0.769	1.038	0.447	1.011	0.905	1.569	0.836	1.215	0.736	8.95	1.057	0.225	1.48
HACH, Sulfate	mg/L	800	1400	500	1000	700	900	200	1300	1000	1600	700	1000	600	6000	700	400	1500
HACH, Total Fe	mg/L	95	3020	55	7	17	39	6	20	18	8	4	5	1	1850	1	1	2
Leachate Volume	L	1.7877	2.109	2.0223	1.7108	2.2551	2.373	2.2517	2.2706	2.3004	2.2554	1.701	2.15	1.199	1.8539	1.9528	2.3457	2.2985
pH		3.23	1.51	3.4	4.25	4.05	3.49	4.21	3.95	3.81	4.49	4.01	4.34	5	1.88	7.01	7.84	5.21
Rock Height in Column	mm	1372	1285	1466	1471	1382	1361	1455	1467	1470	1364	1473	1413	1353	1470	1409	1471	1468
TDS	ppt	1.93	8.97	0.363	0.385	0.385	0.523	0.215	0.505	0.439	0.756	0.413	0.598	0.375	4.43	0.513	0.111	0.734
Temperature	°C	18.6	18.6	18.4	18.5	18.5	18.7	18.7	18.7	18.6	18.7	18.8	18.8	18.7	18.7	18.7	18.7	18.8

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.86	3.82	3.9	3.82	3.82	3.81	3.89	3.68	3.69	3.8	3.84	3.73	3.78	3.83	3.68	3.79	3.85
Eh	mV	580	580.3	519.5	492.3	501.4	548.3	515.1	514.1	505.5	502.5	523.6	496.2	477.3	574.1	443.5	404	448.3
Electrical Conductivity	ms/cm	4.47	12.21	0.708	0.783	0.62	0.861	0.381	0.818	0.747	1.178	0.607	0.661	0.548	8.23	0.517	0.1702	1.128
HACH, Sulfate	mg/L	1750	6100	300	550	400	550	100	950	500	800	650	400	300	3400	250	100	650
HACH, Total Fe	mg/L	342	1400	44	5	21.5	8	6.5	14.5	13.5	5	4	3	1.5	840	0.5	1	0.5
Leachate Volume	L	1.4789	2.9215	3.1897	3.8169	3.6906	4.3783	3.6328	3.5737	3.6161	3.6411	2.1573	4.9711	2.5366	0.8464	5.053	3.5242	3.6152
pH		2.11	1.64	3.12	4.16	3.69	3.17	3.86	3.65	3.66	4.53	3.79	4.55	4.93	1.82	6.25	7.37	5.47
Rock Height in Column	mm	1368	1279	1461	1458	1376	1345	1449	1435	1451	1345	1456	1398	1344	1463	1365	1463	1445
TDS	ppt	2.21	6.14	0.356	0.392	0.311	0.431	0.185	0.409	0.373	0.587	0.302	0.33	0.274	4.13	0.266	0.853	0.562
Temperature	°C	18.8	19.1	18.3	18.4	18.4	18.3	18.3	18.4	18.4	18.3	18.6	18.3	18.3	18.3	18.1	18.4	18.2

Yanacocha

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.59	3.95	3.91	3.58	3.85	3.69	3.67	3.62	3.73	3.75	3.78	3.59	3.69	N/A	3.76	3.81	3.74
Eh	mV	775.2	652.3	658.6	585.6	563.2	804.8	447.9	628	646.2	598.5	587.5	594.6	589.1	N/A	479.2	498.1	571.5
Electrical Conductivity	ms/cm	2.45	39.2	1.181	1.554	0.941	10.44	0.505	1.403	1.293	2.18	0.824	1.108	0.747	N/A	0.586	0.1397	0.1542
HACH, Sulfate	mg/L	2500	11600	800	1800	1000	900	800	1300	1100	1800	700	800	500	N/A	300	100	900
HACH, Total Fe	mg/L	466.5	1350	209	10	62	1020	17	9	8	24	9	31	4	N/A	2	2	3
Leachate Volume	L	0.569	0.3534	0.4628	0.475	0.5901	0.743	0.474	0.678	0.622	0.5434	0.2692	0.3259	0.244	0	0.563	0.7	0.5242
pH		2.27	0.8	2.62	3.63	3.03	1.54	3.36	3.2	3.05	3.83	3.58	3.81	4.08	N/A	6.71	7.34	5.38
Rock Height in Column	mm	1365	1271	1454	1432	1368	1329	1446	1422	1423	1338	1440	1383	1329	1458	1346	1460	1423
TDS	ppt	1.29	20.4	0.606	0.8	0.493	4.98	0.241	0.704	0.639	1.09	0.409	0.556	0.377	N/A	0.302	0.609	0.774
Temperature	°C	17.9	17.9	17.9	17.8	17.8	17.8	17.8	17.8	17.7	17.8	17.8	17.8	17.7	N/A	17.7	17.6	17.9

Yanacocha

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.88	3.69	3.86	3.77	3.86	3.65	3.81	3.71	3.73	3.81	3.82	3.64	3.86	N/A	3.62	3.88	3.82
Eh	mV	812.3	686	726	673.1	738.3	807	646.8	684.3	713	642.3	683.6	647.6	578	N/A	568.2	581.7	600
Electrical Conductivity	ms/cm	2.64	36.4	1.1976	1.586	2.61	11.6	0.557	1.803	2.09	1.49	1.282	0.869	0.797	N/A	0.511	0.0913	1.226
HACH, Sulfate	mg/L	3200	9500	900	2300	11000	2700	2100	2400	2300	1700	700	300	600	N/A	220	140	700
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	2.493	2.193	3.214	2.603	3.362	2.453	2.287	2.3926	2.432	2.45	1.664	2.2075	0.634	0	2.337	2.493	2.3075
pH		1.83	1.2	2.41	3.46	2.22	1.31	3.09	3.11	3.1	4.02	3.27	3.75	4.35	N/A	6.1	6.82	5.17
Rock Height in Column	mm	1363	1264	1450	1399.6	1362	1312	1444	1398	1399	1334	1436	1378	1316	1453	1324	1453	1412
TDS	ppt	1.4	18.3	0.622	0.793	1.3	5.76	0.282	0.904	1.04	0.746	0.641	0.434	0.398	N/A	0.255	0.458	0.61
Temperature	°C	15.5	15.5	15.6	15.6	15.6	15.8	15.5	15.6	15.7	15.7	15.7	15.6	15.5	N/A	15.5	15.5	15.6

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.86	3.67	3.87	3.74	3.82	3.59	3.74	3.65	3.67	3.78	3.83	3.68	3.77	3.76	3.69	3.85	3.77
Eh	mV	863.1	703.1	843.4	753.1	875	845.8	728	755.2	786.9	741.2	841.1	721.8	721	568.2	660.4	652.4	676.8
Electrical Conductivity	ms/cm	7.73	21.1	2.12	1.858	4.23	10.34	0.701	2.74	2.54	1.681	3.1	0.782	0.926	8.51	0.457	0.0789	1.141
HACH, Sulfate	mg/L	2700	9375	1000	2125	7000	5600	500	5375	3125	1625	3500	250	875	6200	250	250	1000
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	3.542	1.232	2.9603	2.825	3.148	3.1624	3.025	3.0636	3.092	3.105	2.71	2.723	1.802	0.968	3.077	3.149	3.0701
pH		1.93	1.5	2.25	3.61	2.09	1.6	2.99	2.9	3	3.68	2.5	3.63	3.85	1.84	5.16	5.35	4.79
Rock Height in Column	mm	1360	1255	1445	1395	1360	1295	1440	1390	1395	1330	1435	1365	1315	1450	1320	1440	1390
TDS	ppt	3.75	10.3	1.06	0.927	2.13	5.12	0.351	1.35	1.27	0.841	1.55	0.388	0.471	4.26	0.227	0.0392	0.57
Temperature	°C	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16

Yanacocha

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.4	3.27	3.41	3.19	3	3.15	3.33	3.25	3.18	3.18	3.05	3.15	3.2	2.44	3.26	3.28	3.36
Eh	mV	828.8	694.7	854	679.9	859.8	825.9	688.5	746.5	809.6	738.8	850.3	809.2	622.4	701.6	560.1	520.3	509.2
Electrical Conductivity	ms/cm	16.34	45.8	3.97	2.48	8.71	17.49	1.056	3.47	4.55	5.96	4.51	2.34	1.23	9.27	0.39	108.3	1.461
HACH, Sulfate	mg/L	43000	22500	5750	2600	16000	19000	700	4500	6166.66 6667	6200	6000	1833.3	950	4200	150	0	1050
HACH, Total Fe	mg/L	204000	84500	13875	10200	42600	52000	86	10.3	79	57.75	10800	57	103	1160	0.09	0.04	0.14
Leachate Volume	L	0.5288	0.3758	0.8311	0.1828	0.769	0.826	0.7584	0.7942	0.7421	0.7519	0.7359	0.762	0.5732	0.3475	0.661	0.8227	0.6975
pH		1.8	1.52	2.13	3.25	1.9	1.66	2.7	3.03	2.67	3.04	2.28	2.69	3.84	1.96	3.79	4.39	4.5
Rock Height in Column	mm	1365	1257	1443	1401	1349	1305	1429	1390	1412	1323	1429	1367	1312	1449	1319	1458	1386
TDS	ppt	8.01	22.2	1.99	1.23	4.29	8.54	0.525	1.71	2.26	2.93	2.24	1.17	0.607	4.6	0.192	0.0535	0.716
Temperature	°C	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.2	17.2	17.2	17.2

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	3.96	2.23	N/A	2.35	3.74	3.95	3.86	3.76	3.76	3.64	3.76	3.49	2.16	3.26	2.16	3.43	1.62
Eh	mV	794	660.2	867.9	404.6	858.3	815.9	728.4	782.1	826.2	791.5	831.4	804.7	388.8	696.3	348.7	505	286.5
Electrical Conductivity	ms/cm	2.83	57.3	4.07	1.67	9.33	14.24	1.146	2.76	4.5	7.46	3.83	3.35	N/A	12.98	0.431	118.9	N/A
HACH, Sulfate	mg/L	160000	55000	14000	2125	36666.66667	30833.33333	700	4625	10000	20000	7750	4750	800	6666.666667	237.5	39	1000
HACH, Total Fe	mg/L	19500	10250	3000	N/A	6900	N/A	88.5	0.34	239.1666667	250.8333333	1555	554	5.625	4625	3.871428571	0.79	N/A
Leachate Volume	L	0.0939	0.0275	0.199	0.0268	0.259	0.275	0.192	0.298	0.288	0.241	0.083	0.224	0.019	0.112	12.9	0.262	0.012
pH		1.41	1.18	2.27	4.02	1.87	1.66	3.02	3.32	2.73	2.88	2.43	2.53	4.88	1.79	6.13	7.32	7.09
Rock Height in Column	mm	1365	1256	1442	1398.6	1348	1302.6	1428.6	1389	1410.6	1320.6	1429	1366.6	1310.9	1449	1316.6	1458	1386
TDS	ppt	14.1	29.2	2.04	0.838	4.66	7.12	0.573	1.36	2.25	3.72	1.91	1.67	N/A	6.49	0.216	59.3	N/A
Temperature	°C	16.9	17.1	16.8	16.9	17	17.1	16.8	16.7	16.9	17	17.2	17.1	17.1	17.1	16.9	16.9	16.9

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	6.14	N/A	7.01	N/A	6.48	6.9	6.37	7.09	6.89	7.05	5.85	6.07	N/A	6.77	N/A	6.2	N/A
Eh	mV	667.6	N/A	758.9	N/A	770.3	788.5	740.5	672.4	760.8	751.6	770.9	743.6	N/A	613.9	N/A	450.8	N/A
Electrical Conductivity	ms/cm	42.3	N/A	6.78	N/A	13.62	16.29	2.24	3.05	7.26	10.05	4.51	3.76	N/A	32.1	N/A	0.1155	N/A
HACH, Sulfate	mg/L	177500	N/A	24500	N/A	43750	25000	1900	5214	18333	12500	9667	7000	N/A	31818	N/A	33	N/A
HACH, Total Fe	mg/L	25250	N/A	3075	N/A	8531	21625	190	1	1329	1367	3450	1880	N/A	11417	N/A	0	N/A
Leachate Volume	L	0.482	0.01	0.03	0.013	0.456	0.679	0.338	0.673	0.468	0.291	0.29	0.431	0.013	0.157	0.002	0.486	0.017
pH		1.22	N/A	2.07	N/A	1.65	1.56	2.56	3.19	2.37	2.3	2.27	2.47	N/A	1.28	N/A	6.28	N/A
Rock Height in Column	mm	1364	1255.1	1436.6	1396.8	1348	1290.3	1418.6	1387.6	1387.6	1318.6	1426.6	1360.4	1310	1448.6	1316.1	1453.6	1383.6
TDS	ppt	20.7	N/A	3.33	N/A	6.67	8	1.07	1.48	3.56	4.93	2.18	1.84	N/A	15.8	N/A	0.0524	N/A
Temperature	°C	12.6	N/A	12.6	N/A	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	N/A	12.6	N/A	12.6	N/A

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.13	N/A	N/A	N/A	N/A	5.58	N/A	N/A	6.3	6.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	240.8	703.2	754.9	N/A	734	672.6	717	673	761.8	758	749	745.2	738.9	699.4	557.9	515.3	N/A
Electrical Conductivity	ms/cm	59.5	1.104	5.13	N/A	18.97	34.4	0.891	6.12	3.85	8.59	1.348	2.32	0.349	1.351	0.747	0.1212	N/A
HACH, Sulfate	mg/L	100000	3000	12000	N/A	76250	75000	1429	13750	21500	26250	5750	5167	500	10000	538	50	N/A
HACH, Total Fe	mg/L	39250	1170	7100	N/A	21000	24700	134	38	14600	12000	5600	3200	2.6	13150	9.1	0.6	N/A
Leachate Volume	L	0.049	0.007	0.04	0	0.035	0.06	0.014	0.053	0.101	0.055	0.012	0.021	0.01	0.013	0.039	0.135	0.006
pH		0.93	2.25	2.24	N/A	1.45	1.17	2.52	3.33	2.25	2.37	2.73	2.49	3.45	2.4	5.62	6.82	N/A
Rock Height in Column	mm	1361.6	1250.6	1430.2	1396	1348	1277.6	1405.6	1386.6	1387	1315.6	1420.6	1361.6	1309.6	1448.6	1315.6	1375.6	1369.6
TDS	ppt	29.7	0.688	2.56	N/A	9.41	17.2	0.508	3.09	3.9	4.3	0.706	N/A	1.21	0.43	0.411	0.0615	N/A
Temperature	°C	13.9	13.8	14	N/A	14	14	14	14.2	14.2	14.1	14.3	14	14.1	14.6	14.2	14.3	N/A

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	0.0346	0.2479	0.1192	N/A	0.2626	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	1351.6	1250.6	1428.6	N/A	1338.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Laboratory Data
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.76	4.1	5.78	6.34	5.75	5.2	6.02	6.31	5.93	5.68	5.92	6.25	5.78	4.5	6.05	5.9	5.94
Eh	mV	623.7	604.9	737.7	655.2	735.7	653.2	757.9	744.5	769.2	767.6	782.9	759.4	497.3	610.8	313.1	146	357.2
Electrical Conductivity	ms/cm	33.7	59.9	9.54	6.2	13.36	21.1	5.78	6.4	17.92	10.26	9.56	4.9	1.702	42.6	1.243	0.0927	0.227
HACH, Sulfate	mg/L	40833.3	72000	32000	12083.3	32000	111666.7	15666.7	14583.3	63750	71666.7	31000	10750	1843.8	45714.3	1475	31	1300
HACH, Total Fe	mg/L	8642.86	11642.86	4982.1	442.5	6725	20666.67	3466.7	1000	8666.7	6900	7875	1881.25	0.88	9281.25	0.64	0.11	0.03
Leachate Volume	L	2.1217	1.2	1.6957	0.501	1.813	0.097	1.427	2.64	1.866	2.145	1.003	1.79	1.1962	0.8608	1.448	1.497	1.689
pH		1.2	0.92	1.65	2.52	1.53	0.96	1.99	2.3	1.45	1.96	1.77	2.19	3.48	1.08	4.78	6.96	5.14
Rock Height in Column	mm	1349.2	1245.1	1415.3	1382.1	1335.7	1264.1	1395.1	1370.8	1380.6	1297.2	1418.4	1360.5	1542.1	1345.7	1297.4	1366.4	1367.9
TDS	ppt	16.9	30.3	4.8	3.11	6.68	10.5	2.9	3.19	8.97	5.11	4.79	2.45	0.851	21.3	0.631	0.046	0.114
Temperature	°C	16	15.6	16.9	16.8	16.8	17.1	17.3	16.6	16.8	17.1	17.4	17.4	17.2	16.9	17	17	17.1

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Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.55	5.52	6.44	6.75	6.07	4.51	6.36	6.2	5.96	6.15	4.75	6.15	6.59	5.95	6.43	6.48	6.37
Eh	mV	709.6	701.9	870.5	841.3	864.3	854.7	868.2	847.3	871.5	866.6	882.5	843.8	741.3	696.9	403.4	346.7	460
Electrical Conductivity	ms/cm	21.9	24.2	11.5	4.64	11.1	11.03	6	4.16	6.76	13.24	10.63	4.5	1.74	24	0.548	0.083	1.278
HACH, Sulfate	mg/L	1350	15250	12500	9750	22500	14000	12500	8000	21500	15500	24000	11000	2150	16000	400	25	1050
HACH, Total Fe	mg/L	3850	4850	6950	1433	7500	4600	3550	1266.67	9533.3	7500	7500	2825	266	4933	1.63	0.52	0.12
Leachate Volume	L	3.2164	2.5007	2.0205	1.609	2.4263	2.0482	2.168	4.8295	2.8038	2.498	1.6247	2.2264	1.8284	1.3583	3.19	1.9438	2.2542
pH		1.42	1.38	1.67	2.57	1.67	1.66	1.96	2.41	1.63	2.11	1.75	2.31	3.2	1.37	4.11	6.51	5.01
Rock Height in Column	mm	1400.2	1243.4	1414.2	1380.1	1336.2	1262.7	1393.3	1367.4	1381.1	1397.1	1420.3	1359.6	1541.8	1344.9	1297.1	1366.8	N/A
TDS	ppt	11	12.1	5.75	2.32	5.55	5.51	3	2.08	3.38	6.61	5.33	2.25	0.87	12	0.274	0.0415	0.639
Temperature	°C	14.5	14.5	14.5	14.6	14.5	15.1	15.2	15	15	15.1	15.1	14.8	14.9	14.9	15.1	15.1	15.1

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.78	5.58	5.93	5.68	5.43	6.41	5.17	6.35	5.84	6.53	5.48	5.44	5.83	1.2	5.9	5.23	6.4
Eh	mV	861.4	719.3	885.8	910.6	908.6	898.5	912.3	908.9	926.9	922.4	937.9	913.2	888.2	791.7	797.5	620.2	616.4
Electrical Conductivity	ms/cm	10.95	22.9	12.25	5.2	12.37	9.84	8.27	5.09	10.92	5.94	8.22	8.47	2.69	16.35	0.488	0.0597	1.033
HACH, Sulfate	mg/L	7500	12500	17000	9500	19500	11000	11500	8750	15500	16000	10500	9500	4000	10500	300	14	1000
HACH, Total Fe	mg/L	1800	3950	5550	1925	6650	3566.67	3375	1291.67	4275	5850	4175	2550	250	3050	0.58	0.1	0.1
Leachate Volume	L	5.6151	3.4441	3.486	5.592	3.6962	3.5366	3.7383	5.1634	3.6952	4.2574	3.2109	3.7352	2.3576	2.4579	3.953	3.3178	3.8679
pH		1.8	1.44	1.66	2.23	1.66	1.75	1.83	2.22	1.68	2.05	1.81	2.2	2.73	1.51	4.36	5.99	4.53
Rock Height in Column	mm	1329.7	1242.9	1429.7	1372.3	1329.7	1359.6	1387.6	1360.1	1375.2	1387.6	1400.2	1346.2	1537.8	1340.6	1295.9	1365.6	1365.8
TDS	ppt	2.6	11.4	6.11	2.6	6.17	4.92	4.12	2.54	5.46	2.97	4.11	2.4	1.34	8.18	0.244	0.0298	0.516
Temperature	°C	15.6	15.7	15	15.8	14.1	14.7	15.8	15.6	15.7	15.7	15.7	16.2	16.1	16	16.2	15.2	15.4

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	6.53	7.15	7.74	6.6	6.5	6.63	6.9	7.49	6.52	6.25	6.04	6.08	5.76	5.73	6	5.82	5.74
Eh	mV	843.5	743.2	852.8	864.4	875.2	871.2	876.5	866.1	880	887.7	883.9	878.3	858.1	867.4	826.8	690.9	600.1
Electrical Conductivity	ms/cm	6.59	17.84	11.57	4.6	12.03	9.62	7.48	3.65	9.78	6.67	6.89	5.69	2.59	13.21	0.999	0.1367	0.654
HACH, Sulfate	mg/L	5000	14000	15750	9265	20000	12200	7833	5000	13500	16000	10250	11333	4100	9000	213	18	575
HACH, Total Fe	mg/L	731.3	2575	2800	1362.5	4350	2475	1558.3	716.7	2487.5	3425	2062.5	2275	725	1481.3	0.1	0	0
Leachate Volume	L	5.0228	2.0614	2.1558	2.2525	2.2397	2.4839	3.3993	5.8238	2.3303	2.8446	2.2143	2.4176	2.6276	1.9135	2.9949	2.0875	2.4621
pH		1.7	1.28	1.99	2.01	1.39	1.65	1.54	2.02	1.56	1.76	1.68	1.78	2.16	1.44	2.44	5.3	5.43
Rock Height in Column	mm	1329.5	1242.5	1428.5	1369.1	1329	1357.3	1384.5	1358.2	1374.1	1386.1	1394.1	1344.5	1531.2	1338.4	1294.3	1363.2	1364.2
TDS	ppt	3.3	8.95	5.8	2.3	6.01	4.8	3.74	1.82	4.88	3.33	3.44	2.84	1.3	6.59	0.488	0.069	0.328
Temperature	°C	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2

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X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	6.6	6.69	6.41	7	5.8	5.5	5.53	5.74	6.42	5.72	6.07	6.15	6.22	6.85	5.8	5.76	5.38
Eh	mV	759.4	734.8	829.1	836.4	845.5	850	847.9	847.3	855	861.2	857.2	859	849.2	846.6	510.1	507	470.2
Electrical Conductivity	ms/cm	10.2	21.1	13.38	6.3	131.13	10.84	12.09	5.19	6.06	8.91	8.63	6.61	3.2	19.15	0.289	0.0607	0.993
HACH, Sulfate	mg/L	7333.33 3333	15357.1 4286	17142.8 5714	11600	20500	13750	12083.3 3333	9038.46 1538	17000	18333.3 3333	12333.3 3333	11666.6 6667	6666.66 6667	11666.6 6667	195.454 5455	17	1000
HACH, Total Fe	mg/L	933.333 3333	2466.66 6667	2533.33 3333	1750	2888.88 8889	2416.66 6667	2012.5	1062.5	2450	2866.66 6667	1933.33 3333	2150	1050	1525	0.08	0.06	0.05
Leachate Volume	L	5.56	3.8011	3.7671	3.0201	3.9576	3.9634	4.135	5.7875	3.5233	4.7352	3.1188	3.9137	3.0663	2.9202	4.2831	3.0501	3.3126
pH		1.71	1.32	1.47	1.96	1.51	1.6	1.51	2	1.57	1.72	1.69	1.87	2.28	1.31	3.9	5.71	5.18
Rock Height in Column	mm	1237	1241	1315	1372	1318	1310	1290	1355	1359	1328	1339	1289	1370	1330	1290	1345	1345
TDS	ppt	5.07	10.6	6.6	3.18	6.55	5.43	6.02	2.6	12.18	4.46	4.31	3.3	1.6	9.59	0.144	0.0303	0.498
Temperature	°C	7.1	8	7	7.8	7.4	7.7	8.4	8.3	6.3	7.6	8.7	8.2	7.6	8.2	8.9	8.8	10.7

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.16	5.65	4.9	5.19	5.14	5.28	5.5	6.13	4.97	5.2	5.27	5.38	5.71	5.58	3.86	5.06	5.52
Eh	mV	888.2	755.2	904.2	908.2	924.9	908.6	942.9	939.7	940.7	949.7	956.5	956.6	948.8	905.3	861.6	825.5	794.5
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	8250	10000	15750	5294.117647	12500	14600	11500	13750	6750	8750	12250	7833.333333	9125	7833.333333	1850	76	1000
HACH, Total Fe	mg/L	2425	2350	3100	1300	4700	3650	3525	1275	2325	3400	2050	3425	2700	1350	0.268	0.128	0.056
Leachate Volume	L	3.8261	3.6146	3.9703	4.378	2.9659	2.7641	2.101	3.4065	4.2102	5.0366	0.8228	3.1533	2.6025	3.9011	6.2941	3.749	3.456
pH		1.46	1.52	1.53	1.53	1.89	1.59	1.48	1.95	1.66	1.62	1.81	1.75	1.98	1.49	3.45	4.71	4.25
Rock Height in Column	mm	1310	1240	1308	1313	1310	1299	1310	1312	1313	1296	1316	1311	1305	1317.5	1284.5	1315.5	1312
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	13.7	13.7	14	13.7	13.7	14	14.1	13.7	14	13.7	14	14.1	14.2	13.7	14	14.2	14.2

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	4.2223	3.9246	3.4417	4.5623	2.7203	0.8974	1.543	1.852	N/A	N/A	0.945	2.054	1.624	1.648	N/A	1.246	0.946
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.55	5.39	5.71	5.75	5.66	5.72	6.27	5.77	5.68	5.58	5.52	5.66	5.58	5.33	5.55	5.2	5.28
Eh	mV	843.1	915.1	922.3	948.2	950.4	960.8	870.8	955.7	965.4	965.1	957.9	975.1	964.1	938.4	866.2	835.1	813.3
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	18437.5	4000	16500	6617.647059	23214.28571	19062.5	65000	7000	17000	24500	14250	25000	15000	15250	120	22	1225
HACH, Total Fe	mg/L	5375	980	4450	1925	8100	6600	14650	1350	4925	6300	4700	7275	4975	3325	0.13	0.61	0.12
Leachate Volume	L	1.5248	N/A	0.02	1.064	0.09	0.742	N/A	1.026	N/A	N/A	0.027	0.0294	0.0284	0.0342	N/A	0.642	0.0276
pH		1.19	1.76	1.36	1.78	1.78	1.35	1.13	2	1.46	1.51	1.83	1.47	1.87	1.22	6.51	5.86	4.71
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	15.6	15.5	15.5	15.6	15.5	15.5	15.5	15.5	15.5	15.6	15.6	15.6	15.7	15.7	15.6	15.5	15.5

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.62	5.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	821.7	798.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	88000	46000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25500	23875	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.746	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.26	1.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.3	13.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Informe Interno de Analisis
CLIENTE: LM-METALURGIA
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Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	5.73	5.51	5.82	N/A	N/A	5.64	N/A	5.58	N/A	N/A	N/A	N/A	N/A	5.8	5.29	5.5	N/A
Eh	mV	678.3	652	645.4	N/A	N/A	731.1	N/A	779.7	N/A	N/A	N/A	N/A	N/A	635.2	720.6	563.4	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	88750	70000	121666.6667	N/A	N/A	83333.33333	N/A	142000	N/A	N/A	N/A	N/A	N/A	45000	3375	41	N/A
HACH, Total Fe	mg/L	14550	12600	54166.66667	N/A	N/A	30375	N/A	12300	N/A	N/A	N/A	N/A	N/A	11700	780	1.35	N/A
Leachate Volume	L	0.3583	0.1724	0.0448	N/A	N/A	0.2	N/A	0.026	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.031	N/A
pH		1.23	1.19	1.14	N/A	N/A	1.22	N/A	1.7	N/A	N/A	N/A	N/A	N/A	1.09	1.74	6.72	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	13	13	13.1	N/A	N/A	13.2	N/A	13.2	N/A	N/A	N/A	N/A	N/A	13.4	13.4	13.5	N/A

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
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CLIENTE: LM-METALURGIA
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Samples submitted at: LA QUINUA - MYSRL
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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	708.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	1.1264	0.0419	2.3554	0.6707	0.8709	0	0	0.9934	1.2884	1.314	0.2679	0.7841	0	0	0.6164	0.2359	0.2519
pH		N/A	N/A	N/A	N/A	1.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	1307.6	1238.4	1306.8	1312.5	1308.6	1297.6	1307	1309.4	1310.5	1292.9	1314.8	1308.9	1294.8	1315.2	1280.3	1312.5	1308.9
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	691.2	655.8	755.6	852.8	708.6	855.8	780.6	832.1	842.6	866	865.6	708.1	786.8	714.3	709.3	705.1	688.5
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	58000	29000	11000	58000	31000	32500	18500	30000	36500	37000	27500	47000	8500	57000	900	388	1325
HACH, Total Fe	mg/L	9529.571	6108.403	1993.755	9962.996	6957.916	6871.231	3559.864	6062.171	7703.407	8136.832	6437.806	9541.129	1566.109	9552.687	260.055	202.265	138.696
Leachate Volume	L	1.0347	0.19478	4.56839	1.82741	2.13254	2.17754	2.6496	1.88733	1.53846	2.89292	5.627	2.18958	2.99024	2.7678	1.62991	1.12117	1.59876
pH		1.01	1.16	1.5	1.33	1.3	1.33	1.36	1.54	1.33	1.32	1.55	1.47	1.95	1.23	3.01	2.68	3.7
Rock Height in Column	mm	1306.9	1237.5	1305.7	1311.5	1307.8	1296.8	1306.8	1308.4	1310.2	1291.7	1313.5	1307.8	1293.4	1314.8	1270.6	1311.2	1307.6
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	688	652.6	810.3	876.9	845.1	884.8	826.9	869.2	N/A	877.7	869.8	850.3	874.5	628	700.1	615.3	709.3
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	58333	19500	13500	32500	25000	40000	25833	35833	N/A	22500	8500	8000	35833	21500	625	33	2500
HACH, Total Fe	mg/L	8640	3740	2260	4090	4050	6870	1650	3340	N/A	6140	3710	1670	6480	3700	150	150	150
Leachate Volume	L	1.0525	0.2652	3.0379	1.785	1.7105	1.7238	2.7246	2.3943	N/A	1.9939	4.022	6.1302	1.424	1.1546	1.4206	2.0957	0.6354
pH		1.19	1.24	1.35	1.42	1.56	1.42	1.83	1.62	N/A	1.5	1.66	1.93	1.59	1.36	3.25	5.95	3.45
Rock Height in Column	mm	1306.8	1236.2	1305.2	1311.1	1307.5	1296.4	1306.6	1308.1	1310	1291.5	1313.2	1307.7	1293.4	1314.7	1270.1	1311.2	1307.4
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	13	13	13	13	13	13	13	13	N/A	13	13	13	13	13	13	13	13

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D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	471.5	735.3	785.1	824.1	816.7	867.7	822.7	857.6	N/A	874.6	880.2	881.9	881.5	655	722.9	744.1	758.7
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	25500	12000	7000	14500	10500	20000	12500	12500	N/A	18500	10500	9000	13000	9500	330	20	1625
HACH, Total Fe	mg/L	4919.5	2232.96	1151.37	2477.19	2267.85	3768.12	2192.255	1930.58	N/A	3640.19	2453.93	2483.005	3140.1	1657.275	215.155	226.785	290.75
Leachate Volume	L	1.4948	0.6795	9.6249	4.3019	1.7244	4.8568	8.6143	6.6438	7.9278	7.5348	12.1284	7.3384	5.5661	6.7215	4.3074	5.2476	4.3726
pH		1.66	2.17	2.24	1.7	2.49	2.05	2.15	2.31	N/A	2.12	2.34	2.29	2.25	2.01	4.31	6.19	4.4
Rock Height in Column	mm	1306.5	1235.1	1304.4	1310.6	1307.1	1296.1	1306.2	1307.9	1309.8	1291.2	1313.1	1307.6	1293.2	1314.6	1269.6	1311.1	1307.3
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	N/A	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	736.8	860	N/A	881.9	814.6	N/A	874.9	883.1	880.9	883.2	886.3	694	N/A	654.3	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	11250	19000	N/A	28500	13000	N/A	16500	18500	11000	15500	20000	10750	N/A	55	N/A
HACH, Total Fe	mg/L	N/A	N/A	2105.03	3680.895	N/A	6105.75	2698.16	N/A	3169.175	4111.205	2430.67	3483.185	4419.4	2000.36	N/A	226.785	N/A
Leachate Volume	L	N/A	N/A	4.3598	2.0943	N/A	2.2856	5.1216	N/A	1.0215	N/A	4.516	2.2016	1.5412	1.3216	N/A	1.7416	N/A
pH		N/A	N/A	1.74	1.67	N/A	1.51	1.62	N/A	1.64	1.55	1.81	1.76	1.54	1.58	N/A	6.64	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	14.2	14.2	N/A	14.2	14.2	N/A	14.2	14.2	14.2	14.2	14.2	14.2	N/A	14.2	N/A

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D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	707	691.4	740	844.1	845.9	812	813.6	N/A	850	870.9	875.7	871.4	889.8	826.3	725.4	697.3	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	34166.66667	25833.33333	19166.66667	16500	17500	34166.66667	16666.66667	N/A	23333.33333	33333.33333	15000	19166.66667	32500	14166.66667	4250	13333.33333	N/A
HACH, Total Fe	mg/L	8008.224	5692.12	3757.36	3880.9	3605.944	8159.64	3628.376	N/A	4693.896	7559.584	2848.864	5804.28	7598.84	2719.88	168.635	122.115	N/A
Leachate Volume	L	0.3873	0.48996	0.3826	1.0779	0.3483	0.2501	1.8766	0	1.6087	2.6902	2.69	1.0932	1.0341	1.4983	0.476	1.0477	1.8312
pH		2.01	2.07	2.17	1.62	2.18	1.98	2.28	N/A	2.24	2.15	2.53	1.55	1.57	1.49	4.72	6.95	N/A
Rock Height in Column	mm	1306.2	1234.6	1304.2	1309.1	1306.5	1295.6	1305.9	1307.6	1309.2	1290.9	1312.9	1307.4	1292.9	1314.1	1269.1	1311	1307.1
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	13	13	13	14.2	13	13	13	N/A	13	13	13	13	13	13	13	13	N/A

Fecha de Reporte:
01/04/2012

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.41	4.41	4.68	4.93	4.76	4.88	4.99	6.14	4.99	6	4.94	4.93	4.75	4.81	5.88	4.83	4.9
Eh	mV	921.2	921.2	1064.8	1121.1	1109.2	1124.5	1030.6	1115.3	1124.8	1130	1142	1152.6	1147.9	1046.6	964.8	937.1	1017.8
Electrical Conductivity	ms/cm	0.0352	0.0195	0.0141	0.0163	0.0154	0.02	0.0169	0.0118	0.0158	2.31	2.05	1.932	2.065	2.888	0.939	0.0816	0.0032
HACH, Sulfate	mg/L	59167	29167	13750	34375	28125	38125	26250	23125	28125	43750	21875	38125	37500	23125	525	20	5500
HACH, Total Fe	mg/L	8776.52	4492.01	2991.97	5960.06	5303.14	6718.5	4479	4001.24	5279.25	8086.09	3953.46	7029.04	7900.96	3517.51	143.33	143.33	143.33
Leachate Volume	L	1.111	0.2529	2.2877	1.4471	1.0185	1.4385	2.4659	1.2171	1.699	2.1814	2.5595	1.9658	1.3227	1.9839	0.6787	1.6322	1.1074
pH		1.41	1.55	1.67	1.65	1.68	1.6	1.65	1.79	1.67	1.54	1.8	1.6	1.58	1.68	3	6.75	4.16
Rock Height in Column	mm	1306	1234.6	1304.2	1309.1	1306.5	1295.4	1305.9	1307.6	1309.2	1290.9	1312.9	1307.4	1292.7	1314.1	1269.1	1311	1307.1
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13

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		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.54	4.19	3.99	4.35	4.36	4.47	4.52	4.51	4.46	4.47	4.54	4.51	4.51	4.43	4.19	4.38	4.54
Eh	mV	719.1	747.7	780.3	861.7	857.4	873.6	868	871.3	875.2	885	875.4	886	876.8	689.2	713.8	670.9	684.3
Electrical Conductivity	ms/cm	48.9	39.8	22.14	25.17	18.44	27.63	26.47	21.49	27.5	35.1	16.64	31.6	28.7	41.4	13.4	131.1	5.38
HACH, Sulfate	mg/L	28333.33333	11538.46154	23333.33333	33333.33333	35833.33333	35000	30833.33333	36667	40000	54166.66667	26666.66667	48333.33333	42500	31666.66667	2500	1667	13333
HACH, Total Fe	mg/L	7537.152	5978.128	2561.468	3763.214	3323.138	3306.212	3509.324	3548.8	4423.328	5794.334	2685.592	4998.812	4750.564	2894.346	141.05	141.1	141.05
Leachate Volume	L	1.6069	0.7952	2.6405	2.095	0.7417	2.1123	2.6583	2.4066	2.2037	2.1658	4.0581	2.0737	1.9727	2.0961	0.7232	1.8607	2.0957
pH		1.28	1.34	1.54	1.5	1.64	1.47	1.47	1.58	1.47	1.36	1.65	1.42	1.45	1.27	3.32	6.5	3.98
Rock Height in Column	mm	1306	1234.6	1304.2	1309.1	1306.5	1295.4	1305.8	1307.6	1309.2	1290.9	1312.9	1307.4	1292.7	1314.1	1269.1	1311	1307.1
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13

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D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Eh	mV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electrical Conductivity	ms/cm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Sulfate	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HACH, Total Fe	mg/L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Leachate Volume	L	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pH		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rock Height in Column	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TDS	ppt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Temperature	°C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Yanacocha

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Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.33	4.49	4.58	4.53	4.76	4.72	4.83	4.98	4.2	5.017	4.63	4.86	4.48	4.5	N/A	4.08	4.64
Eh	mV	545.1	544.6	517.7	523.6	530.1	527.3	525.3	522.4	504.4	534.1	520.6	527.4	920.1	549.9	N/A	562.6	781.2
Electrical Conductivity	ms/cm	108.4	114.1	29.1	36.7	60.1	59	36.5	36.8	19.3	71.5	19.6	40.5	47.9	135.2	N/A	197.2	7.16
HACH, Sulfate	mg/L	43299.8	49297.8	14247	35981.6	30870.7	32529.1	24595.4	42619.1	18587.5	44355.6	30327.6	30924.2	52013.6	46409	N/A	65.8	5995.6
HACH, Total Fe	mg/L	14400	15650	4900	11150	9900	10000	8050	12650	5850	0.133	10050	9150	10450	12150	N/A	0.22	0.6
Leachate Volume	L	0.524	0.756	0.85	0.563	0.5	0.752	1.12	1.152	1.234	1.12	1.5	1.52	1.525	1.52	N/A	1.5	1.52
pH		0.98	0.94	1.37	1.26	1.147	1.19	1.23	1.28	1.59	1.08	1.31	1.19	1.13	0.8	N/A	7.2	3.41
Rock Height in Column	mm	1306	1234.5	1304.2	1309.1	1306.5	1295.4	1305.8	1307.6	1309.2	1290.5	1312.9	1307.4	1292.7	1314.1	1269.1	1310.4	1306.4
TDS	ppt	5.5915	55.915	14.247	17.966	29.915	28.88	18.037	18.05	9.472	35.005	15.684	19.837	30.7	55.84	N/A	0.097	0.351
Temperature	°C	17.9	17.6	17.8	18	18	17.9	18	17.9	17.9	19.2	17.9	17.9	17.8	19.2	N/A	17.8	17.8

Yanacocha

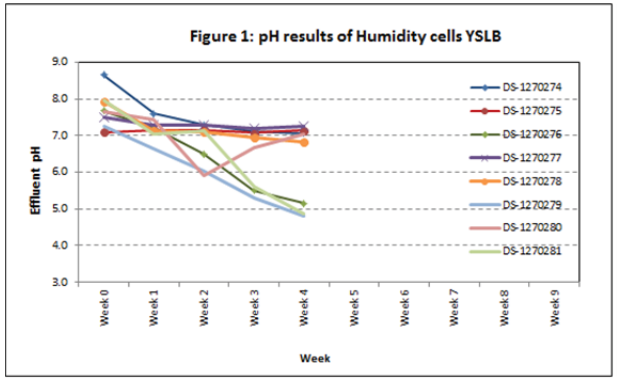
MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
Laboratory Data
Laboratory name: LABORATORIO QUIMICO MYSRL
Samples submitted at: LA QUINUA - MYSRL
X-ref. bat ID: MYSRL

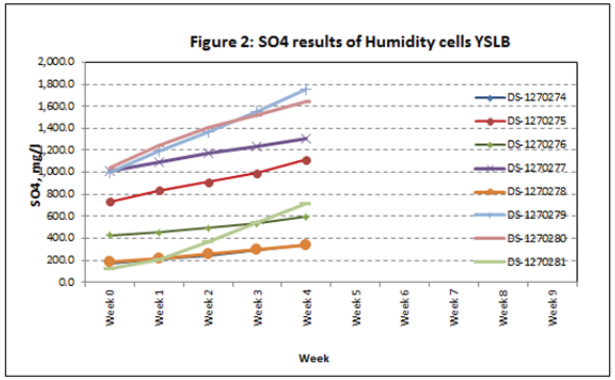
		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.27	4.21	4.18	4.28	4.4	4.07	4.21	4.38	4.55	4.53	4.55	4.33	3.9	4.62	4.29	4.6	4.7
Eh	mV	436.2	522.6	506.6	514.8	510.7	522.9	511.9	515.8	516.9	516.6	511.8	518.6	917.9	534.9	547.3	570.4	748.3
Electrical Conductivity	ms/cm	39.5	23.49	11.46	16.91	14.32	22.73	13.74	18.18	17.44	16.56	14.93	19.59	19.48	34.9	14.74	111.3	4.01
HACH, Sulfate	mg/L	18250	7750	2750	10250	8000	13750	6500	7382	10500	9750	11750	12500	15750	9250	1500	85	4600
HACH, Total Fe	mg/L	4.36	5.36	1270	4275	3420	5700	2420	4540	3980	3880	4940	4920	10200	2840	0.94	0.13	0.25
Leachate Volume	L	0.55	0.654	0.95	0.568	0.524	0.781	0.85	0.856	0.856	0.85	0.85	1.02	0.86	0.856	0.856	0.856	0.85
pH		1.13	1.37	1.65	1.51	1.58	1.38	1.58	1.45	1.48	1.5	1.57	1.45	1.15	1.16	6.75	6.55	3.63
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1305.8	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1269.1	1310.4	1306.4
TDS	ppt	19.671	14.494	6.951	10.564	9.123	13.957	8.479	7.382	6.975	6.837	6.045	7.989	7.957	14.246	0.594	0.046	1.631
Temperature	°C	18.5	18.4	18.5	18.4	18.4	18.4	18.6	17.9	17.8	17.7	17.7	17.8	17.7	17.6	17.6	17.7	17.6

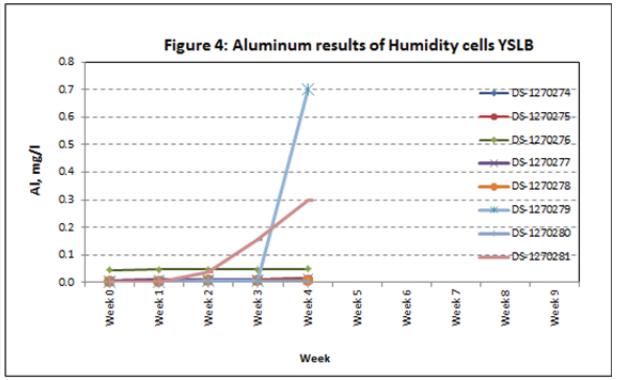
Yanacocha

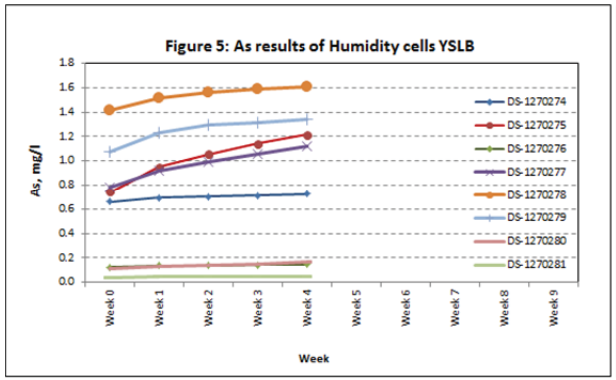
MINERA YANACOCHA S.R.L - LABORATORIO QUIMICO
Informe Interno de Analisis
CLIENTE: LM-METALURGIA
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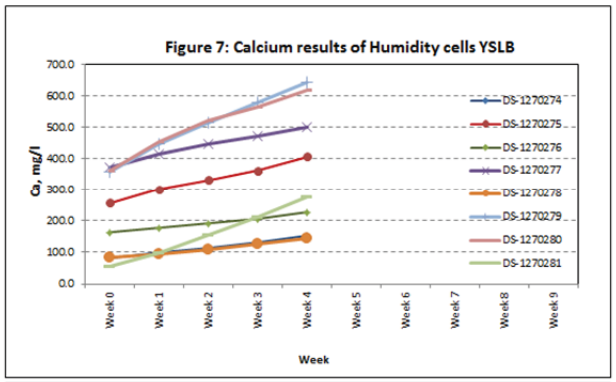
		13022	13024	13028	13029	13030	13031	13032	13033	13034	13035	13036	13037	13038	13041	13042	13044	13046
D.O	mg/L	4.65	4.65	4.17	4.81	4.24	4.32	4.55	4.62	4.53	4.53	4.25	4.44	3.59	4.02	4.99	4.3	4.68
Eh	mV	529.7	543.6	520.6	516.6	515.1	524.3	516.4	516.9	519.9	529.9	513.3	521.2	915.3	535.4	541.8	562.1	768.8
Electrical Conductivity	ms/cm	25.59	50.24	14.09	16.24	14.26	21.17	15.11	16.29	19.59	21.22	15.65	19.34	20.41	33.6	9.48	97.6	3.39
HACH, Sulfate	mg/L	25200	37800	12600	19600	12900	23800	12900	18400	27100	23800	25600	23400	27400	18200	1800	1400	5000
HACH, Total Fe	mg/L	7839.6	14159.6	4311.5	6178.6	4417.5	7262.4	3828.5	5412.4	9365.1	8240	9376.9	8134.1	9565.4	4229	312.2	206.2	191.4
Leachate Volume	L	0.55	0.5	0.524	0.524	0.526	0.5	0.5	0.524	0.525	0.525	0.525	0.525	0.524	0.525	0.55	0.55	0.525
pH		1.34	1.04	1.51	1.57	1.6	1.44	1.58	1.57	1.55	1.45	1.63	1.49	1.48	1.24	6.73	6.27	3.51
Rock Height in Column	mm	1306.1	1234.5	1304.2	1308.5	1305.2	1294	1305.6	1307.6	1308.6	1290.5	1312.5	1307.4	1292.4	1313.5	1261.9	1310.4	1306.4
TDS	ppt	12.539	24.622	6.903	7.957	6.986	10.371	7.402	7.982	9.601	10.397	7.671	9.474	10	16.488	0.466	0.048	1.662
Temperature	°C	19.9	19.5	19.5	19.5	19.5	19.5	19.6	19.6	19.5	19.7	19.5	19.2	19.4	19.4	19.8	19.7	19.8

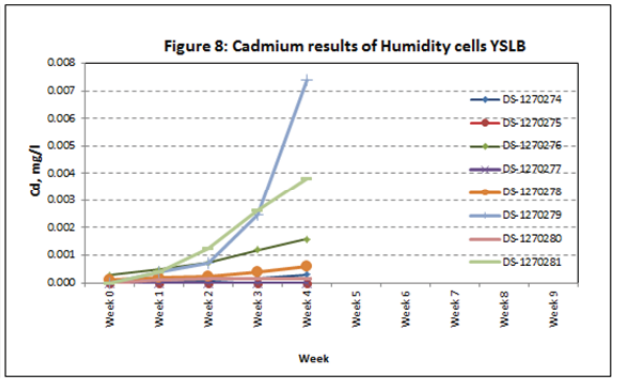

Figure 1: pH results of Humidity cells YSLB
Effluent pH
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281

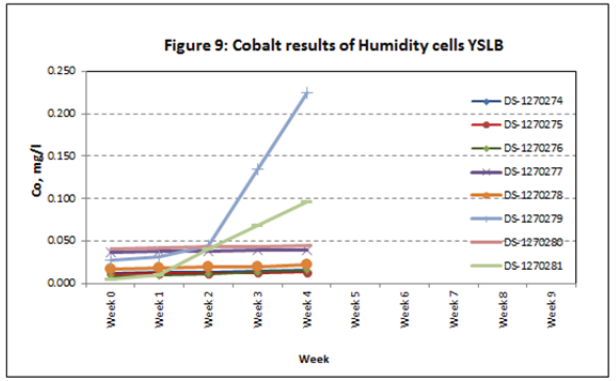

Figure 2: SO4 results of Humidity cells YSLB
SO4, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281

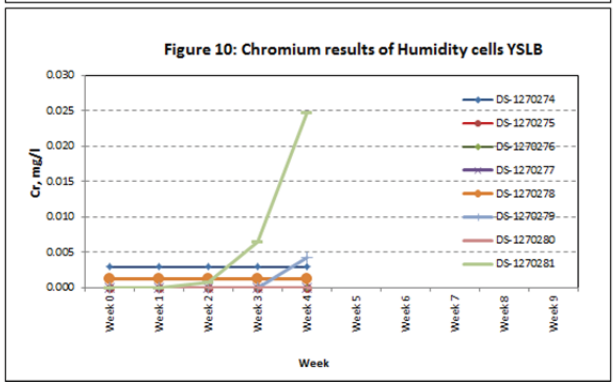

Figure 4: Aluminum results of Humidity cells YSLB
Al, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281

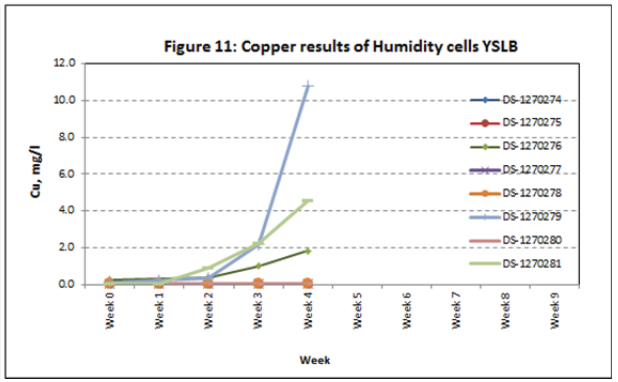

Figure 5: As results of Humidity cells YSLB
As, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281

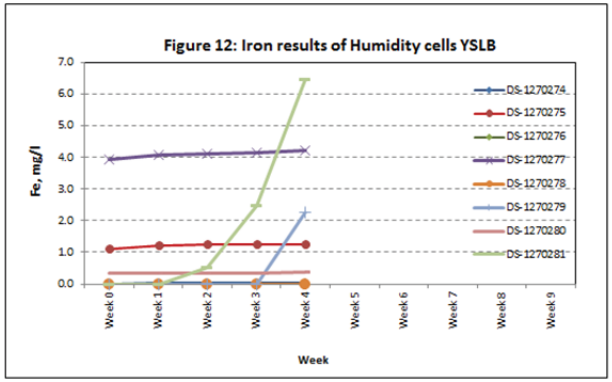

Figure 7: Calcium results of Humidity cells YSLB
Ca, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281

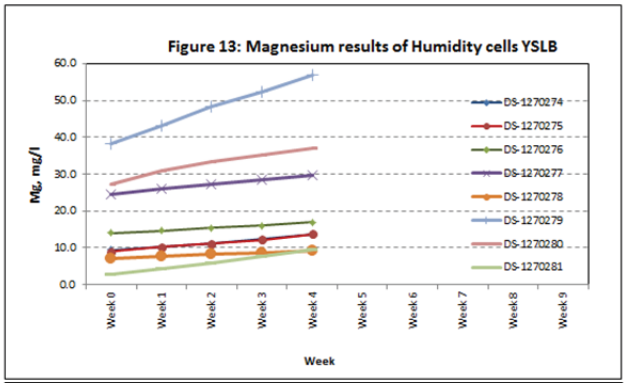

Figure 8: Cadmium results of Humidity cells YSLB
Cd, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281

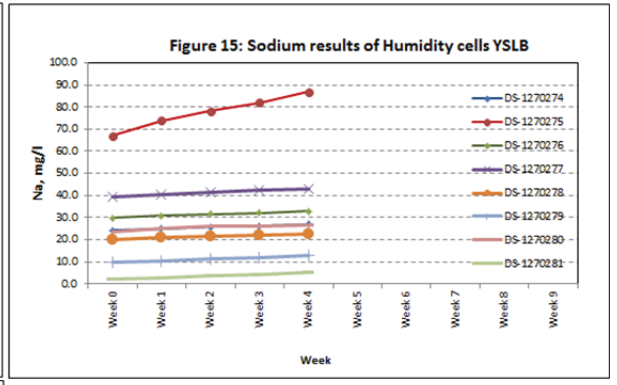

Figure 9: Cobalt results of Humidity cells YSLB
Co, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281

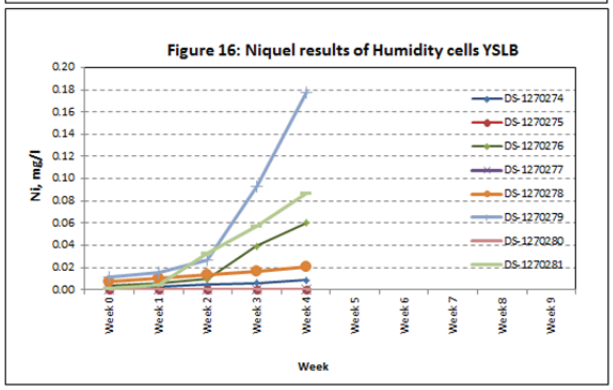

Figure 10: Chromium results of Humidity cells YSLB
Cr, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281

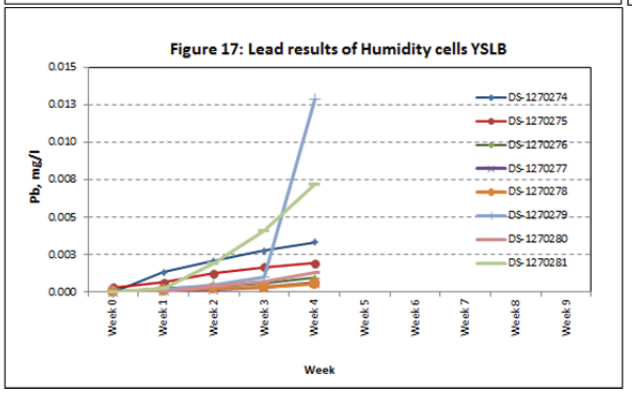

Figure 11: Copper results of Humidity cells YSLB
Cu, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281


Figure 12: Iron results of Humidity cells YSLB
Fe, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281


Figure 13: Magnesium results of Humidity cells YSLB
Mg, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281


Figure 15: Sodium results of Humidity cells YSLB
Na, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281


Figure 16: Niquel results of Humidity cells YSLB
Ni, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281


Figure 17: Lead results of Humidity cells YSLB
Pb, mg/l
Week
DS-1270274
DS-1270275
DS-1270276
DS-1270277
DS-1270278
DS-1270279
DS-1270280
DS-1270281

Conclusiones y Recomendaciones:

1. Se desarrollaron pruebas medioambientales de lixiviación por precipitación sintética (SPLP), celdas húmedas (HCT) y análisis de carbonatos (NCV) para todos los materiales que se depositaran en los DAN Sur y Norte.
2. Las muestras seleccionadas para estas pruebas son representativas de los materiales a depositar, tanto en el **d**epósito de **a**renas de **m**olienda (DAM) Sur como en el Norte
3. Los análisis de NCV determinan las características medioambientales naturales de las muestras (acidas, neutras o básicas).
4. Las pruebas de SPLP y HCT simulan condiciones de oxidación de los materiales depositados en el DAM y un cambio en el pH de estos materiales de 7-8 hasta 4.2.
5. Para el caso de los materiales de stock Katia y Huamanchumo se simulo un SPLP modificado a pH de 1.8 con el fin de obtener una máxima oxidación/acidificación de estos materiales.
6. Los resultados de las pruebas SPLP indican las máximas concentración de elementos orgánicos e inorgánicos que se podrían obtener ante una acidificación del DAM hasta un pH de 1.8 y 4.2.
7. Las pruebas de HCT nos indican la cinética o el tiempo en que se produciría la acidificación del DAM y cuáles serían sus concentraciones en el tiempo, siendo las máximas iguales a las reportadas en las prueba de SPLP.
8. De acuerdo a la configuración del DAM Sur el agua contenida en la pulpa depositada es captada rápidamente por las torres de decantación, otra porción es captada por las tuberías de colección que se ubican al pie del DAM y una pequeña porción se infiltra por las paredes del DAM hacia la parte baja del PAD La Quinua, pero todas estas soluciones son direccionadas hacia la pozas de menores eventos para su posterior tratamiento.
9. El pH de las soluciones captadas por las torres de decantación en de 10 a 10.5 (conforme a la descarga de las arenas de molienda), las soluciones que drenas por la parte inferior y las que se infiltran son las que se podrían impactar al haber una oxidación de estos materiales (acidificación) y contendrían los metales que se indican en los ensayos de SPLP.
10. No se prevé una acidificación después de alcanzar el punto de saturación de material en el DAM, porque las condiciones necesarias para producir acidez son mínimas (oxigeno, aire y flujo de solución).
11. La geoquímica del material depositado en el DAM después de la máxima saturación será estable, por las condiciones descritas en el punto anterior.
12. Para el caso del DAM Norte la solución contenida en la pulpa depositada es captada rápidamente por el sistema de captación de soluciones y bombeado a las pozas de menores eventos, así como también de las soluciones que se infiltran en la parte inferior del DAM, las paredes del DAM norte serán conformadas con material de arcilla en donde la infiltración será menor por las condición de baja permeabilidad de la arcilla. Sin embargo esta solución es captada en la parte inferior del PAD La Quinua y descargada en la poza de menores eventos.
13. La operación del DAM Norte será posterior al DAM Sur, no se prevé su operación en simultaneo, además se recomienda cerrar el DAM Sur (reclamar) para así evitar la infiltración del agua de lluvia por este depósito.
14. Se seleccionaron los SPLP más extremos en calidad de estos materiales para que sean simulados en el balance de aguas de Yanacocha y ver su impacto en las plantas de tratamiento.
15. Los volumen de soluciones que drenaran de ambos DAM son descritos en el informe del balance de aguas de Yanacocha, así como su calidad final.

TAJO CARACHUGO MARLENY NORTE

Yanacocha

Metallurgical Services

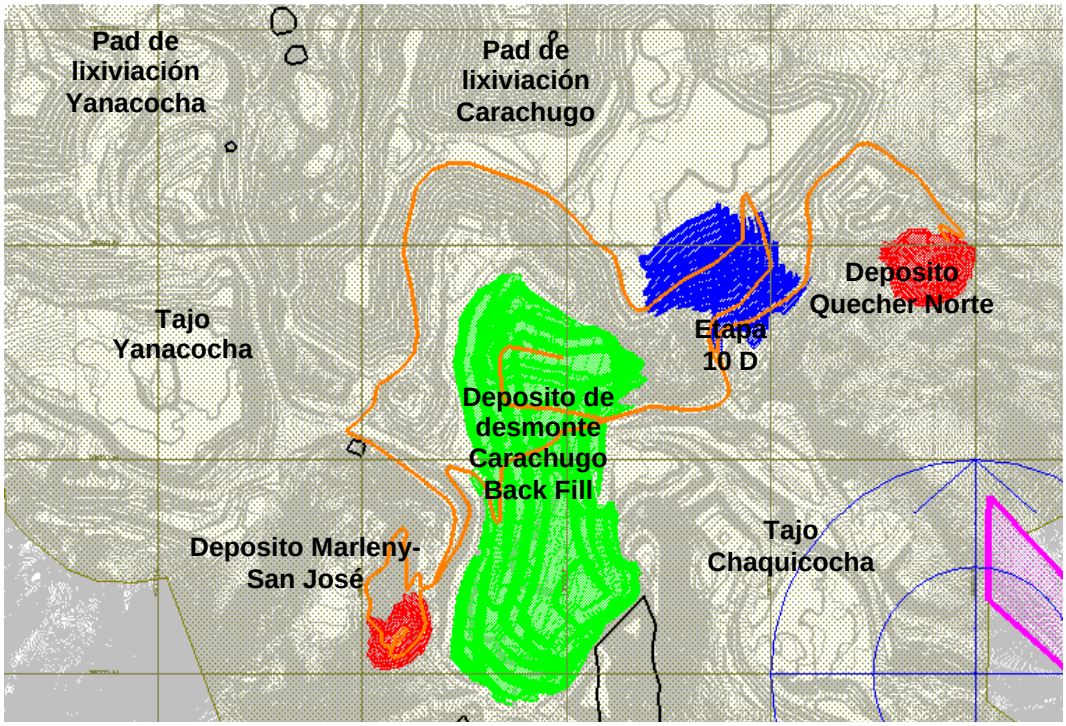
Memorándum

To	:	Carla Telles
From	:	José Guerra
Copy	:	Gilmar Guzmán, Harold Camero, Lelis Abanto; Sandro Oyarce
Date	:	15-01-13
Subject	:	Geoquímica de mineral y desmonte del proyecto Marleny – San José

1. Introducción:

El Deposito Marleny-San José, es un depósito de alta sulfurización con baja ley de oro. Está ubicado al Sur Este del Cerro Yanacocha, detalles se pueden observar en la Figura 1.
Aproximadamente 7.9 millones de toneladas de mineral se enviaran desde este depósito hacia la pila de lixiviación de Carachugo 10D y aproximadamente 1.6 millones de toneladas de desmonte se enviaran hacia el depósito de desmonte ***Carachugo Backfill*** durante los años 2013 al 2015.

Figura 1. Mapa de ubicación del proyecto Marleny – San José



La parte superior del cuerpo del depósito donde se ubica la mineralización oxidada es dominada por la alteración Silice Alunita y en menor cantidad Silice Masiva además de pequeños cuerpos de Silice Granular y Silice Vuggy. En la parte media y baja del cuerpo

mineralizado la alteración es dominada por la presencia de Argilico Avanzado el cual incluye a la Pirofilita y Diáspora. En los bordes del depósito las alteraciones que predominan son el Argilico y Profilitico. La Figura 2 y 3, muestran el diseño del tajo y las alteraciones dominantes del cuerpo mineralizado

Figura 2. Vista de planta del depósito y las principales alteraciones

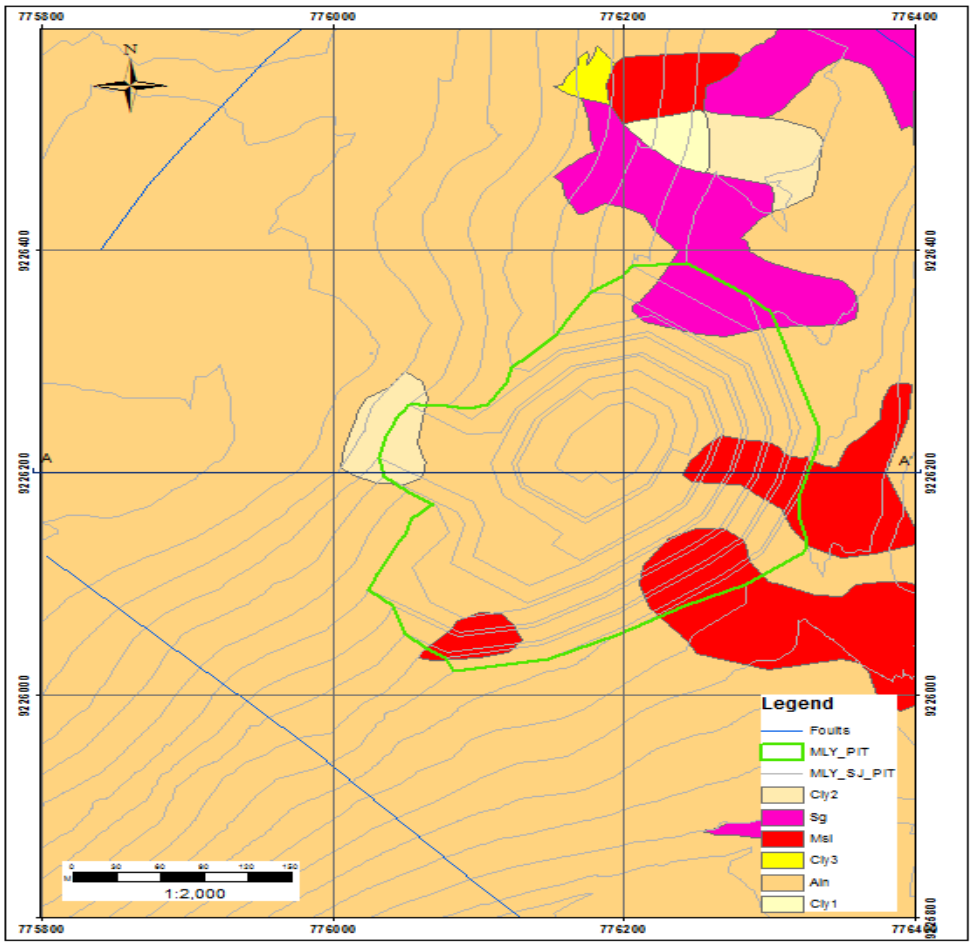
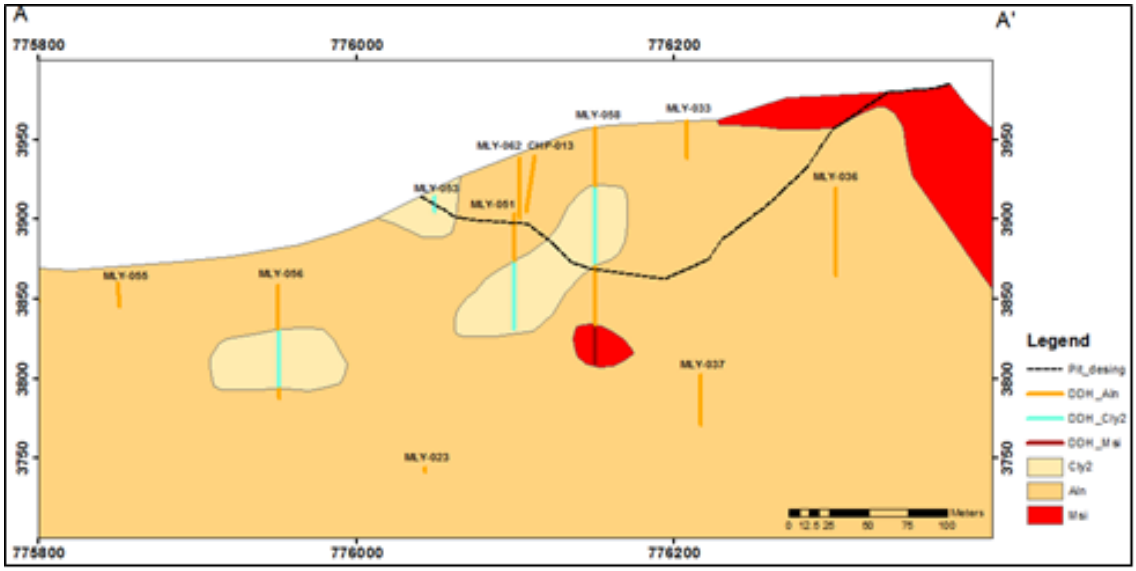


Figura 3. Vista Este Oeste del depósito y las principales alteraciones



2. Estudios Geoquímicos:

Los estudios geoquímicos de este depósito se orientan básicamente a ensayos de Valor de Carbonato Neto (NCV) y a la evaluación de Pruebas de Precipitación por Lixiviación Sintética.

2.1. Evaluación de NCV para mineral:

El NCV se determina a través de ensayos químicos de muestras minerales y desmonte para la determinación del Carbón Total y Carbón Residual después de pirolisis, del mismo modo se ensaya el Azufre Total y el Azufre residual después de pirolisis, con estos resultado determinamos el Potencial de Neutralización Acida (ANP) y el Potencial de Generación de Acido (AGP).

$$ANP = 3.67*(Ctotal - Cresidual)$$

$$AGP = -1.37*(Stotal - Sresidual)$$

$$\mathbf{NCV = ANP + AGP}$$

El valor de NCV se clasifica de acuerdo a la siguiente Tabla 1.

Tabla 1. Clasificación NCV

Classification	NCV
Highly Acid	<= -5.0
Moderately Acid	> -5.0 y <= -1.0
Slightly Acid	> -1.0 y <= -0.1
Inert or Neutral	> -0.1 y <= 0.1
Slightly Basic	> 0.1 y <= 1.0
Basic	> 1.0 y <= 5.0
Highly Basic	> 5.0

Se realizó la evaluación de los resultados de los análisis de NCV de los taladros que están dentro del depósito, de un total de 53 muestras que fueron enviados a laboratorio durante los años 2011 y 2012.

A. Resultados de clasificación NCV para el mineral:

De acuerdo a la clasificación de NCV el mineral, Los resultados indicaron que el mineral es “ligeramente acido” en un 74%, un 23% de la muestras indicaron que el mineral es “moderadamente acido” y un 4%

indico que el mineral es “Neutral”. Esto se observa en histograma de la figura 4.

En la Tabla 2, se muestra los taladros y el intervalo desde donde se extrajeron muestras.

Tabla 2. Taladros e intervalos usados para la determinación NCV

Number	HOLE_ID	Easting	Northing	Elevation	Td	FROM	TO	NCV_Type	ALTERATION
1	MLY-033	776207	9226201	3964	231.1	34	37.4	Slightly Acid	SA
2	MLY-033	776207	9226201	3964	231.1	85.4	90	Slightly Acid	SM
3	MLY-033	776207	9226201	3964	231.1	10	19.9	Slightly Acid	
4	MLY-033	776207	9226201	3964	231.1	30	40	Moderately Acid	
5	MLY-033	776207	9226201	3964	231.1	60	70.4	Moderately Acid	
6	MLY-033	776207	9226201	3964	231.1	80.15	90	Moderately Acid	
7	MLY-033	776207	9226201	3964	231.1	100	110	Slightly Acid	
8	MLY-033	776207	9226201	3964	231.1	120.4	130	Moderately Acid	
9	MLY-033	776207	9226201	3964	231.1	130	140	Moderately Acid	
10	MLY-036	776300	9226100	4000	196.1	12	16	Neutral	SA
11	MLY-049	776151	9226043	3983	100.5	42	47.35	Slightly Acid	SM
12	MLY-051	776100	9226154	3951	130.8	6	10	Slightly Acid	SP
13	MLY-051	776100	9226154	3951	130.8	67.2	70.3	Slightly Acid	SM
14	MLY-051	776100	9226154	3951	130.8	126.6	130	Moderately Acid	SM
15	MLY-051	776100	9226154	3951	130.8	1.1	10	Slightly Acid	
16	MLY-051	776100	9226154	3951	130.8	20	30	Moderately Acid	
17	MLY-051	776100	9226154	3951	130.8	40	50	Moderately Acid	
18	MLY-051	776100	9226154	3951	130.8	70.25	80	Moderately Acid	
19	MLY-052	776151	9226290	3939	120.4	24	28	Slightly Acid	SA
20	MLY-058	776150	9226200	3959	150.0	0	9.5	Moderately Acid	SA
21	MLY-058	776150	9226200	3959	150.0	9.5	20	Slightly Acid	SA
22	MLY-058	776150	9226200	3959	150.0	20	30	Moderately Acid	SA
23	MLY-058	776150	9226200	3959	150.0	30	39	Slightly Acid	SA
24	MLY-058	776150	9226200	3959	150.0	39	50	Slightly Acid	SP
25	MLY-058	776150	9226200	3959	150.0	50	60	Slightly Acid	SP
26	MLY-058	776150	9226200	3959	150.0	60	69.6	Moderately Acid	SP
27	MLY-060	776176	9226308	3945	130.1	6.3	12	Slightly Acid	SA
28	MLY-060	776176	9226308	3945	130.1	12	20.4	Slightly Acid	SA
29	MLY-060	776176	9226308	3945	130.1	20.4	30	Slightly Acid	SA
30	MLY-061	776293	9226307	3980	130.0	0	10	Slightly Acid	COB
31	MLY-061	776293	9226307	3980	130.0	10	20	Slightly Acid	COB
32	MLY-061	776293	9226307	3980	130.0	15.8	20	Slightly Acid	SA
33	MLY-062	776103	9226214	3939	100.0	0	10.15	Slightly Acid	SA
34	MLY-062	776103	9226214	3939	100.0	10.15	20	Slightly Acid	SA
35	MLY-062	776103	9226214	3939	100.0	20	30	Slightly Acid	SA
36	MLY-062	776103	9226214	3939	100.0	30	40	Slightly Acid	SA
37	MLY-063	776062	9226153	3941	90.0	0	10	Slightly Acid	SA
38	MLY-063	776062	9226153	3941	90.0	10	20	Slightly Acid	SA
39	MLY-063	776062	9226153	3941	90.0	20	30	Slightly Acid	SA
40	MLY-063	776062	9226153	3941	90.0	30	40	Slightly Acid	SA
41	MLY-063	776062	9226153	3941	90.0	40	50	Slightly Acid	SA
42	MLY-063	776062	9226153	3941	90.0	50	60	Slightly Acid	SA
43	MLY-063	776062	9226153	3941	90.0	60	70	Slightly Acid	SA
44	MLY-064	776318	9226243	3987	100.0	0	10	Slightly Acid	COB
45	MLY-064	776318	9226243	3987	100.0	10	20	Slightly Acid	COB
46	MLY-064	776318	9226243	3987	100.0	18	22	Slightly Acid	SA
47	MLY-064	776318	9226243	3987	100.0	20	30	Slightly Acid	SA
48	MLY-064	776318	9226243	3987	100.0	30	40	Slightly Acid	SA
49	MLY-064	776318	9226243	3987	100.0	40	50	Slightly Acid	SA
50	MLY-066	776055	9226066	3957	105.0	0	10	Slightly Acid	SA
51	MLY-066	776055	9226066	3957	105.0	10	20	Slightly Acid	SA
52	MLY-066	776055	9226066	3957	105.0	20	30	Slightly Acid	SA
53	MLY-066	776055	9226066	3957	105.0	30	40	Neutral	SA

En general se puede decir que el mineral tiene comportamiento "ligeramente acido".

Figura 4. Histograma de la clasificación NCV para muestras de mineral

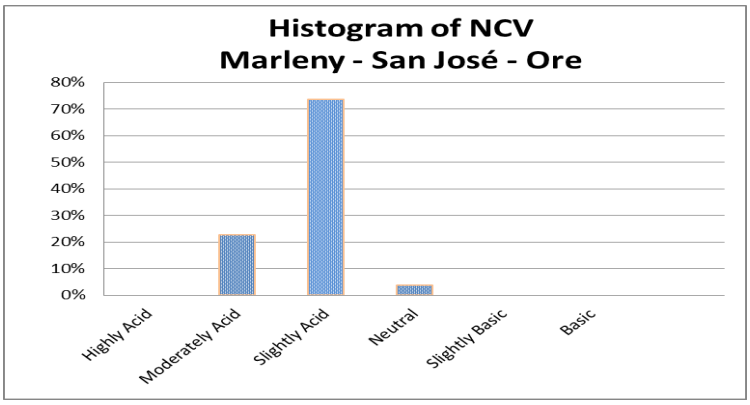


Tabla 3. Resumen de clasificación NCV del Mineral de Marleny-San José

NCV	Ore	%
Highly Acid	0	0%
Moderately Acid	12	23%
Slightly Acid	39	74%
Neutral	2	4%
Slightly Basic	0	0%
Basic	0	0%

B. Resultados de clasificación NCV para el Waste:

En el apéndice 1 y el apéndice 2, se detalla los puntos de las perforaciones y las coordenadas de las muestras utilizadas para la caracterización de Waste.
En total se evaluó 302 muestras que de acuerdo a su contenido de AuFA es considerado como waste (cutoff < 0.22 gAu/t).

Los resultados indicaron que el Waste en un 50 % tiene un comportamiento "ligeramente Acido" y un 39 % indico que es "moderamente acido". Solo un 12 % indico que el mineral es "altamente acido". Esto se observa en la figura 5 y tabla 4.

Figura 5. Histograma de la clasificación NCV para muestras de Waste

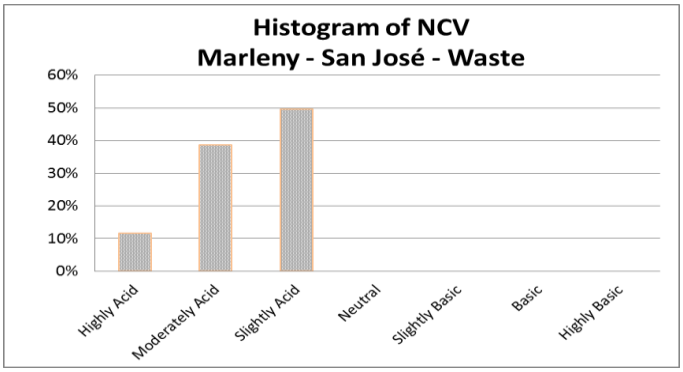


Tabla 4. Resumen de clasificación NCV del Waste de Marleny-San José

NCV	Waste	%
Highly Acid	35	12%
Moderately Acid	117	39%
Slightly Acid	150	50%
Neutral	0	0%
Slightly Basic	0	0%
Basic	0	0%
Highly Basic	0	0%

2.2. Pruebas de Precipitación por Lixiviación Sintética SPLP EPA-1312.

Se realizaron pruebas de SPLP para seis muestras del proyecto Marleny-San Jose. Identificadas como: MLY-036 (12-16), MLY-064 (18-22), MLY-033 (34-36), MLY-033 (85.4-90), MLY-049 (36.3-42), MLY-061 (40-46).

Las cuatro primeras muestras están descritas como minerales con alteración Sílice alunita y las dos últimas como desmonte con alteración Sílice Masiva y Sílice Alunita, respectivamente.

Tabla 5: Muestras utilizadas en la evaluación de SPLP

Code	Hole	From	To	Average Grade	ALTERATION	Material Type
MLY_Fines, Ore & Waste-01 (MLY-036)	MLY-036	12	16	0.62	SA	Ore
MLY_Fines, Ore & Waste-02 (MLY-064)	MLY-064	18	22	0.31	SA	Ore
MLY_Fines, Ore & Waste-03 (MLY-033)	MLY-033	34	36	0.44	SA	Ore
MLY_Fines, Ore & Waste-04 (MLY-033)		85.4	90	0.44	SA	Ore
MLY_Fines, Ore & Waste-05 (MLY-049)	MLY-049	36.3	42	0.14	SM	Waste
MLY_Fines, Ore & Waste-06 (MLY-061)	MLY-061	40	46	0.12	SA	Waste

El Test SPLP, está diseñado para simular la lixiviación a la que podría estar expuesto un residuo que se dispone en un botadero.

Consiste en la lixiviación de cada muestra en un fluido extractante, solución diluida de ácido sulfúrico/ácido nítrico. La muestra es puesta en contacto con el líquido extractante durante 18 + 2 horas. El extracto obtenido después de la lixiviación es analizado químicamente para

determinar si presenta cualquiera de los elementos considerados como peligrosos, en concentraciones superiores a los valores establecidos por la EPA. Los elementos inorgánicos que se regulan son: As, Ba, Cd, Cr, Pb, Hg, Se, Ag. Ver tabla 6.

Tabla 6, Valores Regulados por la EPA

As, mg/L	Ba, mg/L	Cd, mg/L	Cr, mg/L	Pb, mg/L	Hg, mg/L	Se, mg/L	Ag, mg/L
5.0	100.0	1.0	5.0	5.0	0.2	1.0	5.0

De los resultados obtenidos, la aplicación del test SPLP, entregó como resultado la obtención de un lixiviado con contenido de los elementos regulados menores a los niveles máximos fijados por la EPA, lo cual **indica que dichas muestras no presentan características de toxicidad por lixiviación.** Ver tabla 7.

3. Conclusiones

- De acuerdo a los resultados de NCV que reportaron que el mineral es "ligeramente ácido" y de los resultados de la evaluación de SPLP que reportaron un valor de pH al término de la prueba de 4.2 a 6.3. Se concluye que, durante el proceso de lixiviación no existirá una disminución considerable en el valor del pH en la descarga del Pad y que el proceso de lixiviación puede ser controlado por la adición de cal.

- Referente al desmonte que se enviara a Carachugo Backfill, debido a la alteración dominante Silice Alunita, puede ser posible que se genere Aluminio en el drenaje del depósito de desmonte. Los resultados de las pruebas de SPLP reportaron valores Aluminio en la solución de 0.183 hasta 0.488 mg/L, valores que son menores a la regulación del agua para uso en la agricultura (Al = 5 ml/L).

- Los resultados emitidos en este reporte, varían del reporte anterior, debido a que se filtró la data, considerando solo la data que está dentro del depósito.

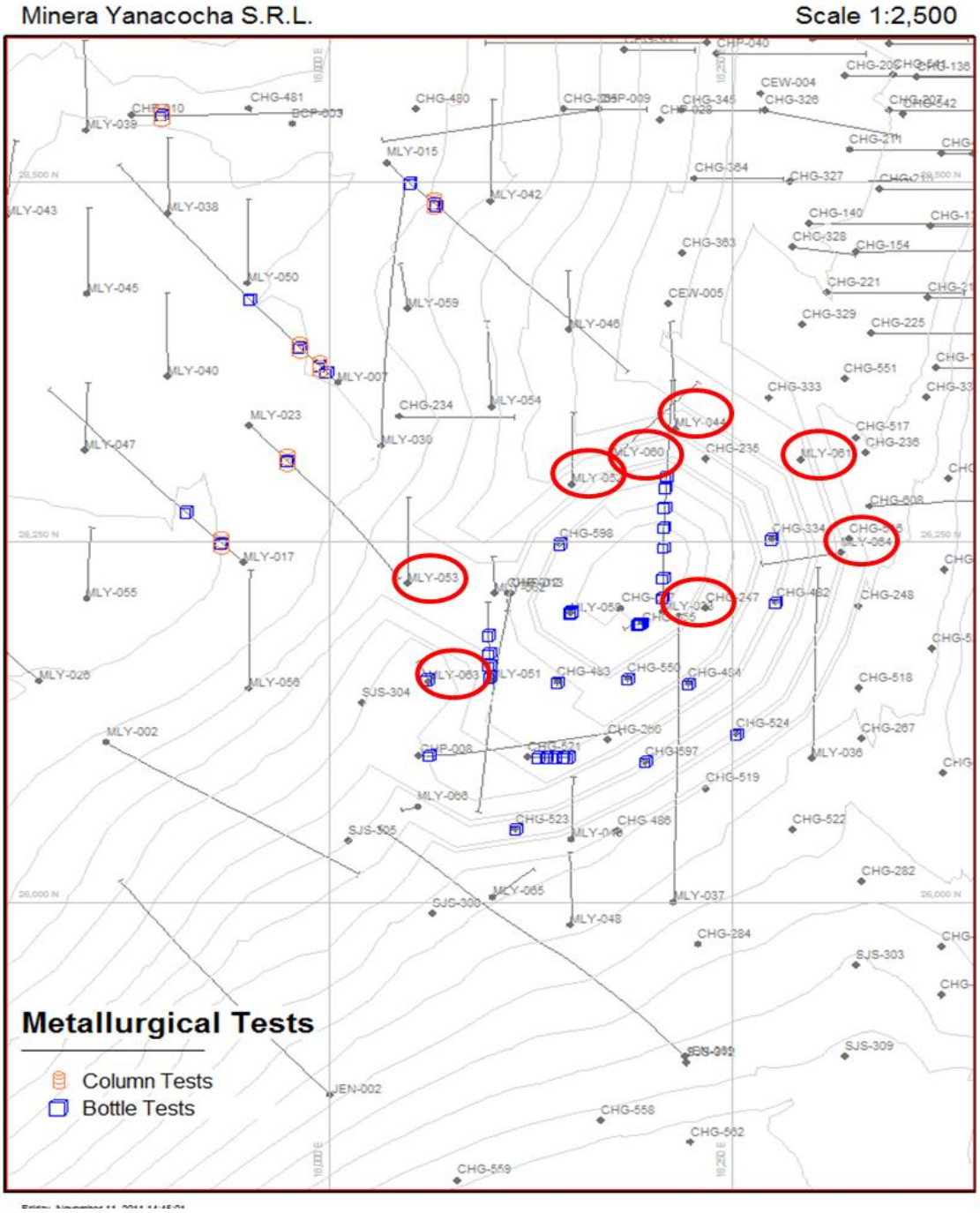
Tabla 7, Resultados de SPSL

Analito	Unidad	30986 DS_1228389 MYL-036(12-16)	30987 DS_1228390 MYL-064(18-22)	30988 DS_1228391 MYL-033(34-36)	30989 DS_1228392 MYL-033(85.4-90)	30990 DS_1228393 MYL-049(36.3-42)	30991 DS_1228394 MYL-061(40-46)
Cloruro	mg/L	1.284	1.174	1.683	1.312	1.607	2.303
Floruro	mg/L	0.536	0.532	0.535	0.579	0.255	3.000<
$N\text{-}NO_2$	mg/L	3.000<	3.000<	3.000<	3.000<	3.000<	3.000<
$N\text{-}NO_3$	mg/L	3.000<	3.000<	3.000<	3.000<	3.000<	3.000<
SO_4	mg/L	28.1	28.1	25.5	27.5	24.6	31.4
pH	mg/L	4.28	4.72	4.42	5.34	6.17	6.36
Conductividad	µs/cm	36.4	36.6	30.1	35	29.8	49.5
TDS	mg/L	18.0	18.0	15.0	17.0	15.0	24.0
Hg	mg/L	0.0003	0.0000	0.0009	0.0000	0.0001	0.0000
Ag	mg/L	0.000	0.001	0.001	0.001	0.000	0.001
Al	mg/L	0.198	0.236	0.488	0.330	0.183	0.220
As	mg/L	0.008	0.009	0.022	0.000	0.000	0.015
B	mg/L	0.282	0.273	0.268	0.162	0.314	0.270
Ba	mg/L	0.040	0.119	0.034	0.019	0.050	0.046
Be	mg/L	0.000	0.000	0.000	0.000	0.000	0.000
Bi	mg/L	0.002	0.007	0.000	0.005	0.000	0.009
Ca	mg/L	2.736	2.606	1.390	1.678	1.477	1.810
Cd	mg/L	0.001	0.001	0.001	0.001	0.000	0.001
Co	mg/L	0.008	0.001	0.000	0.000	0.000	0.000
Cr	mg/L	0.000	0.000	0.000	0.000	0.000	0.000
Cu	mg/L	0.010	0.004	0.014	0.004	0.001	0.001
Fe	mg/L	0.532	0.742	0.545	0.718	0.059	0.043
Ga	mg/L	0.000	0.000	0.001	0.000	0.000	0.000
K	mg/L	1.355	1.645	1.169	1.583	1.066	0.902
Li	mg/L	0.001	0.001	0.001	0.001	0.002	0.006
Mg	mg/L	0.365	0.270	0.361	0.339	0.275	0.345
Mn	mg/L	0.026	0.017	0.008	0.027	0.035	0.036
Mo	mg/L	0.000	0.001	0.010	0.000	0.000	0.000
Na	mg/L	1.736	1.393	3.781	1.481	2.730	6.018
Nb	mg/L	0.004	0.005	0.009	0.005	0.004	0.006
Ni	mg/L	0.004	0.004	0.001	0.003	0.002	0.003
Pb	mg/L	0.003	0.003	0.009	0.000	0.001	0.003
Sb	mg/L	0.010	0.000	0.001	0.001	0.000	0.000
Sc	mg/L	0.000	0.000	0.000	0.000	0.000	0.000
Se	mg/L	0.010	0.000	0.000	0.000	0.000	0.000
Sn	mg/L	0.000	0.001	0.006	0.001	0.002	0.000
Sr	mg/L	0.064	0.091	0.028	0.075	0.031	0.024
Te	mg/L	0.000	0.000	0.000	0.000	0.000	0.000
Ti	mg/L	0.002	0.002	0.010	0.001	0.001	0.028
Tl	mg/L	0.000	0.008	0.002	0.000	0.001	0.005
V	mg/L	0.000	0.000	0.000	0.000	0.000	0.000
W	mg/L	0.000	0.000	0.000	0.000	0.000	0.000
Zn	mg/L	0.694	0.052	0.327	0.147	0.016	0.007

**Análisis realizados por Lab Analítico MYSRL*

Apéndice 1:
Deposito Marleny – San José

Taladros evaluados del depósito de Marleny para la caracterización del Waste



Yanacocha

Metallurgical Services

Apéndice 2:
Muestras para la caracterización del Waste

Number	Hole_Id	Easting	Northing	Elevation	Td	From	To	Au	NCV	NCV Type
1	MLY-036	776300	9226100	4000	196.1	164	164.8	0.209	-0.71505	Slightly Acid
2	MLY-036	776300	9226100	4000	196.1	156	158	0.208	-0.81095	Slightly Acid
3	MLY-036	776300	9226100	4000	196.1	86	88	0.202	-0.85205	Slightly Acid
4	MLY-036	776300	9226100	4000	196.1	141.45	142	0.198	-0.90685	Slightly Acid
5	MLY-036	776300	9226100	4000	196.1	75.4	76	0.192	-0.85205	Slightly Acid
6	MLY-036	776300	9226100	4000	196.1	132	134	0.19	-1.49595	Moderately Acid
7	MLY-036	776300	9226100	4000	196.1	168	170	0.187	-0.46845	Slightly Acid
8	MLY-036	776300	9226100	4000	196.1	140.2	141.45	0.186	-0.90685	Slightly Acid
9	MLY-036	776300	9226100	4000	196.1	174	175.8	0.186	-0.46845	Slightly Acid
10	MLY-036	776300	9226100	4000	196.1	42.2	44	0.18	-0.70135	Slightly Acid
11	MLY-036	776300	9226100	4000	196.1	110	112	0.18	-0.34515	Slightly Acid
12	MLY-036	776300	9226100	4000	196.1	76	78	0.179	-0.85205	Slightly Acid
13	MLY-036	776300	9226100	4000	196.1	92	94	0.173	-1.05755	Moderately Acid
14	MLY-036	776300	9226100	4000	196.1	6	8	0.171	-0.52325	Slightly Acid
15	MLY-036	776300	9226100	4000	196.1	88	90	0.169	-1.05755	Moderately Acid
16	MLY-036	776300	9226100	4000	196.1	124	126	0.167	-1.20825	Moderately Acid
17	MLY-036	776300	9226100	4000	196.1	16	16.5	0.164	-1.40005	Moderately Acid
18	MLY-036	776300	9226100	4000	196.1	154	154.65	0.162	-0.81095	Slightly Acid
19	MLY-036	776300	9226100	4000	196.1	102	104	0.161	-1.09865	Moderately Acid
20	MLY-036	776300	9226100	4000	196.1	172	174	0.161	-0.46845	Slightly Acid
21	MLY-036	776300	9226100	4000	196.1	44.65	46	0.152	-0.70135	Slightly Acid
22	MLY-036	776300	9226100	4000	196.1	13.6	14.65	0.15	-0.75615	Slightly Acid
23	MLY-036	776300	9226100	4000	196.1	5.2	6	0.144	-0.52325	Slightly Acid
24	MLY-036	776300	9226100	4000	196.1	126	128	0.142	-1.20825	Moderately Acid
25	MLY-036	776300	9226100	4000	196.1	50	52	0.14	-1.05755	Moderately Acid
26	MLY-036	776300	9226100	4000	196.1	122	124	0.138	-1.20825	Moderately Acid
27	MLY-036	776300	9226100	4000	196.1	78	79.35	0.133	-0.85205	Slightly Acid
28	MLY-036	776300	9226100	4000	196.1	10	12	0.132	-0.75615	Slightly Acid
29	MLY-036	776300	9226100	4000	196.1	136	138	0.131	-0.90685	Slightly Acid
30	MLY-036	776300	9226100	4000	196.1	35.7	38	0.13	-0.94795	Slightly Acid
31	MLY-036	776300	9226100	4000	196.1	74	75.4	0.127	-0.85205	Slightly Acid
32	MLY-036	776300	9226100	4000	196.1	112	114	0.123	-1.45485	Moderately Acid
33	MLY-036	776300	9226100	4000	196.1	46	48	0.121	-0.70135	Slightly Acid
34	MLY-036	776300	9226100	4000	196.1	130.35	132	0.12	-1.49595	Moderately Acid
35	MLY-036	776300	9226100	4000	196.1	23.7	26	0.12	-1.11235	Moderately Acid
36	MLY-036	776300	9226100	4000	196.1	94	96	0.12	-1.05755	Moderately Acid
37	MLY-036	776300	9226100	4000	196.1	148	150	0.118	-0.96165	Slightly Acid
38	MLY-036	776300	9226100	4000	196.1	32	33.3	0.117	-0.94795	Slightly Acid
39	MLY-036	776300	9226100	4000	196.1	66	68	0.116	-0.23555	Slightly Acid
40	MLY-036	776300	9226100	4000	196.1	82	84	0.113	-0.85205	Slightly Acid
41	MLY-036	776300	9226100	4000	196.1	33.3	34	0.112	-0.94795	Slightly Acid
42	MLY-036	776300	9226100	4000	196.1	96	96.9	0.111	-1.09865	Moderately Acid
43	MLY-036	776300	9226100	4000	196.1	26	28	0.11	-1.11235	Moderately Acid
44	MLY-036	776300	9226100	4000	196.1	40.45	42.2	0.107	-0.70135	Slightly Acid
45	MLY-036	776300	9226100	4000	196.1	68	69.3	0.107	-0.23555	Slightly Acid
46	MLY-036	776300	9226100	4000	196.1	56	58	0.102	-0.86575	Slightly Acid
47	MLY-036	776300	9226100	4000	196.1	58	60	0.1	-0.86575	Slightly Acid
48	MLY-036	776300	9226100	4000	196.1	90	92	0.097	-1.05755	Moderately Acid
49	MLY-036	776300	9226100	4000	196.1	80	81.3	0.097	-0.85205	Slightly Acid
50	MLY-036	776300	9226100	4000	196.1	34	35.7	0.096	-0.94795	Slightly Acid
51	MLY-036	776300	9226100	4000	196.1	44	44.65	0.091	-0.70135	Slightly Acid
52	MLY-036	776300	9226100	4000	196.1	72	74	0.09	-0.85205	Slightly Acid
53	MLY-036	776300	9226100	4000	196.1	84	86	0.089	-0.85205	Slightly Acid
54	MLY-036	776300	9226100	4000	196.1	60	62	0.088	-0.86575	Slightly Acid
55	MLY-036	776300	9226100	4000	196.1	52	54	0.084	-1.05755	Moderately Acid
56	MLY-036	776300	9226100	4000	196.1	134	136	0.083	-1.49595	Moderately Acid
57	MLY-036	776300	9226100	4000	196.1	28	30	0.083	-1.11235	Moderately Acid
58	MLY-036	776300	9226100	4000	196.1	81.3	82	0.082	-0.85205	Slightly Acid
59	MLY-036	776300	9226100	4000	196.1	30	32	0.081	-1.11235	Moderately Acid
60	MLY-036	776300	9226100	4000	196.1	116	117.25	0.08	-1.45485	Moderately Acid
61	MLY-036	776300	9226100	4000	196.1	69.3	70	0.079	-0.23555	Slightly Acid
62	MLY-036	776300	9226100	4000	196.1	20	22	0.077	-1.40005	Moderately Acid
63	MLY-036	776300	9226100	4000	196.1	16.5	18	0.074	-1.40005	Moderately Acid
64	MLY-036	776300	9226100	4000	196.1	22	23.7	0.07	-1.40005	Moderately Acid
65	MLY-036	776300	9226100	4000	196.1	54	56	0.07	-1.05755	Moderately Acid
66	MLY-036	776300	9226100	4000	196.1	18	20	0.067	-1.40005	Moderately Acid
67	MLY-036	776300	9226100	4000	196.1	70	72	0.065	-0.23555	Slightly Acid
68	MLY-036	776300	9226100	4000	196.1	38	40.45	0.061	-0.94795	Slightly Acid
69	MLY-036	776300	9226100	4000	196.1	62	64	0.06	-0.86575	Slightly Acid
70	MLY-036	776300	9226100	4000	196.1	64	65.2	0.052	-0.23555	Slightly Acid
71	MLY-036	776300	9226100	4000	196.1	65.2	66	0.051	-0.23555	Slightly Acid
72	MLY-036	776300	9226100	4000	196.1	48	50	0.045	-1.05755	Moderately Acid
73	MLY-044	776215	9226328	3961	130.0	40.85	42	0.213	-0.38625	Slightly Acid
74	MLY-044	776215	9226328	3961	130.0	40	40.85	0.199	-0.38625	Slightly Acid
75	MLY-044	776215	9226328	3961	130.0	106	108.4	0.196	-0.64655	Slightly Acid
76	MLY-044	776215	9226328	3961	130.0	67.4	68	0.196	-0.41365	Slightly Acid
77	MLY-044	776215	9226328	3961	130.0	57.2	58	0.181	-0.42735	Slightly Acid
78	MLY-044	776215	9226328	3961	130.0	58	60	0.18	-0.42735	Slightly Acid
79	MLY-044	776215	9226328	3961	130.0	61.35	62.45	0.177	-0.42735	Slightly Acid
80	MLY-044	776215	9226328	3961	130.0	120	122	0.175	-0.41365	Slightly Acid
81	MLY-044	776215	9226328	3961	130.0	60	61.35	0.173	-0.42735	Slightly Acid
82	MLY-044	776215	9226328	3961	130.0	88	88.7	0.168	-0.78355	Slightly Acid
83	MLY-044	776215	9226328	3961	130.0	90.45	92	0.15	-0.78355	Slightly Acid
84	MLY-044	776215	9226328	3961	130.0	72	74	0.149	-0.59175	Slightly Acid
85	MLY-044	776215	9226328	3961	130.0	128	130	0.142	-0.41365	Slightly Acid
86	MLY-044	776215	9226328	3961	130.0	42	43.1	0.141	-0.38625	Slightly Acid
87	MLY-044	776215	9226328	3961	130.0	68	70	0.139	-0.41365	Slightly Acid
88	MLY-044	776215	9226328	3961	130.0	51.6	54	0.138	-0.68765	Slightly Acid
89	MLY-044	776215	9226328	3961	130.0	47.7	49.05	0.13	-0.68765	Slightly Acid
90	MLY-044	776215	9226328	3961	130.0	32.7	34.35	0.13	-0.52325	Slightly Acid
91	MLY-044	776215	9226328	3961	130.0	82	84	0.124	-0.66025	Slightly Acid
92	MLY-044	776215	9226328	3961	130.0	86.5	88	0.118	-0.66025	Slightly Acid
93	MLY-044	776215	9226328	3961	130.0	126.9	128	0.111	-0.41365	Slightly Acid
94	MLY-044	776215	9226328	3961	130.0	38	40	0.109	-0.52325	Slightly Acid
95	MLY-044	776215	9226328	3961	130.0	44.15	44.7	0.107	-0.38625	Slightly Acid
96	MLY-044	776215	9226328	3961	130.0	36.75	38	0.106	-0.52325	Slightly Acid
97	MLY-044	776215	9226328	3961	130.0	84	86	0.105	-0.66025	Slightly Acid
98	MLY-044	776215	9226328	3961	130.0	50	51.6	0.104	-0.68765	Slightly Acid
99	MLY-044	776215	9226328	3961	130.0	47.1	47.7	0.094	-0.38625	Slightly Acid
100	MLY-044	776215	9226328	3961	130.0	123.4	124	0.092	-0.41365	Slightly Acid
101	MLY-044	776215	9226328	3961	130.0	46	47.1	0.092	-0.38625	Slightly Acid

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Number	Hole_Id	Easting	Northing	Elevation	Td	From	To	Au	NCV	NCV Type
102	MLY-044	776215	9226328	3961	130.0	94.8	96	0.09	-0.78355	Slightly Acid
103	MLY-044	776215	9226328	3961	130.0	108.4	110	0.087	-0.64655	Slightly Acid
104	MLY-044	776215	9226328	3961	130.0	110	112.15	0.086	-0.64655	Slightly Acid
105	MLY-044	776215	9226328	3961	130.0	92.85	94	0.085	-0.78355	Slightly Acid
106	MLY-044	776215	9226328	3961	130.0	94	94.8	0.082	-0.78355	Slightly Acid
107	MLY-044	776215	9226328	3961	130.0	98	99.2	0.081	-0.61915	Slightly Acid
108	MLY-044	776215	9226328	3961	130.0	118	120	0.078	-0.52325	Slightly Acid
109	MLY-044	776215	9226328	3961	130.0	44.7	46	0.075	-0.38625	Slightly Acid
110	MLY-044	776215	9226328	3961	130.0	96	98	0.074	-0.61915	Slightly Acid
111	MLY-044	776215	9226328	3961	130.0	102.5	104	0.07	-0.61915	Slightly Acid
112	MLY-044	776215	9226328	3961	130.0	104	106	0.069	-0.64655	Slightly Acid
113	MLY-044	776215	9226328	3961	130.0	116	116.6	0.066	-0.52325	Slightly Acid
114	MLY-044	776215	9226328	3961	130.0	92	92.85	0.065	-0.78355	Slightly Acid
115	MLY-044	776215	9226328	3961	130.0	116.6	118	0.058	-0.52325	Slightly Acid
116	MLY-044	776215	9226328	3961	130.0	43.1	44.15	0.055	-0.38625	Slightly Acid
117	MLY-044	776215	9226328	3961	130.0	112.15	114	0.054	-0.52325	Slightly Acid
118	MLY-044	776215	9226328	3961	130.0	114	114.8	0.05	-0.52325	Slightly Acid
119	MLY-044	776215	9226328	3961	130.0	114.8	116	0.043	-0.52325	Slightly Acid
120	MLY-052	776151	9226290	3939	120.4	70	72	0.196	-1.40005	Moderately Acid
121	MLY-052	776151	9226290	3939	120.4	80	82	0.196	-0.94795	Slightly Acid
122	MLY-052	776151	9226290	3939	120.4	66	66.65	0.192	-1.40005	Moderately Acid
123	MLY-052	776151	9226290	3939	120.4	103.25	104	0.173	-3.66055	Moderately Acid
124	MLY-052	776151	9226290	3939	120.4	60	62	0.172	-0.86575	Slightly Acid
125	MLY-052	776151	9226290	3939	120.4	6	8	0.171	-0.71505	Slightly Acid
126	MLY-052	776151	9226290	3939	120.4	41	42	0.17	-0.59175	Slightly Acid
127	MLY-052	776151	9226290	3939	120.4	42	44	0.169	-0.59175	Slightly Acid
128	MLY-052	776151	9226290	3939	120.4	44	45.9	0.169	-0.59175	Slightly Acid
129	MLY-052	776151	9226290	3939	120.4	118	120.4	0.166	-4.8045	Moderately Acid
130	MLY-052	776151	9226290	3939	120.4	69.45	70	0.166	-1.40005	Moderately Acid
131	MLY-052	776151	9226290	3939	120.4	108	110	0.161	-3.83865	Moderately Acid
132	MLY-052	776151	9226290	3939	120.4	82	82.5	0.157	-0.94795	Slightly Acid
133	MLY-052	776151	9226290	3939	120.4	0	1.6	0.153	-0.71505	Slightly Acid
134	MLY-052	776151	9226290	3939	120.4	11.8	14	0.152	-0.81095	Slightly Acid
135	MLY-052	776151	9226290	3939	120.4	52	54	0.148	-0.86575	Slightly Acid
136	MLY-052	776151	9226290	3939	120.4	32	34	0.144	-0.76985	Slightly Acid
137	MLY-052	776151	9226290	3939	120.4	35.4	36	0.144	-0.76985	Slightly Acid
138	MLY-052	776151	9226290	3939	120.4	26	27	0.143	-0.87945	Slightly Acid
139	MLY-052	776151	9226290	3939	120.4	65.05	66	0.14	-1.40005	Moderately Acid
140	MLY-052	776151	9226290	3939	120.4	18	20	0.134	-0.79725	Slightly Acid
141	MLY-052	776151	9226290	3939	120.4	58	60	0.133	-0.86575	Slightly Acid
142	MLY-052	776151	9226290	3939	120.4	82.5	84	0.132	-7.64725	Highly Acid
143	MLY-052	776151	9226290	3939	120.4	78	80	0.132	-0.94795	Slightly Acid
144	MLY-052	776151	9226290	3939	120.4	34	35.4	0.131	-0.76985	Slightly Acid
145	MLY-052	776151	9226290	3939	120.4	48	50	0.127	-0.86575	Slightly Acid
146	MLY-052	776151	9226290	3939	120.4	24	26	0.125	-0.87945	Slightly Acid
147	MLY-052	776151	9226290	3939	120.4	64	65.05	0.123	-1.40005	Moderately Acid
148	MLY-052	776151	9226290	3939	120.4	29	30	0.123	-0.87945	Slightly Acid
149	MLY-052	776151	9226290	3939	120.4	117.1	118	0.122	-5.6265	Highly Acid
150	MLY-052	776151	9226290	3939	120.4	22	24	0.119	-0.79725	Slightly Acid
151	MLY-052	776151	9226290	3939	120.4	62	64	0.118	-0.86575	Slightly Acid
152	MLY-052	776151	9226290	3939	120.4	8	9.7	0.11	-0.81095	Slightly Acid
153	MLY-052	776151	9226290	3939	120.4	14	16	0.109	-0.81095	Slightly Acid
154	MLY-052	776151	9226290	3939	120.4	4	6	0.108	-0.71505	Slightly Acid
155	MLY-052	776151	9226290	3939	120.4	16	18	0.107	-0.79725	Slightly Acid
156	MLY-052	776151	9226290	3939	120.4	20	22	0.107	-0.79725	Slightly Acid
157	MLY-052	776151	9226290	3939	120.4	37.75	40	0.106	-0.76985	Slightly Acid
158	MLY-052	776151	9226290	3939	120.4	40	41	0.106	-0.59175	Slightly Acid
159	MLY-052	776151	9226290	3939	120.4	51.2	52	0.096	-0.86575	Slightly Acid
160	MLY-052	776151	9226290	3939	120.4	54	56	0.095	-0.86575	Slightly Acid
161	MLY-052	776151	9226290	3939	120.4	30	32	0.093	-0.87945	Slightly Acid
162	MLY-052	776151	9226290	3939	120.4	84	86	0.092	-6.83895	Highly Acid
163	MLY-052	776151	9226290	3939	120.4	9.7	11.8	0.083	-0.81095	Slightly Acid
164	MLY-052	776151	9226290	3939	120.4	45.9	48	0.082	-0.59175	Slightly Acid
165	MLY-052	776151	9226290	3939	120.4	1.6	4	0.08	-0.71505	Slightly Acid
166	MLY-052	776151	9226290	3939	120.4	56	58	0.074	-0.86575	Slightly Acid
167	MLY-052	776151	9226290	3939	120.4	107.5	108	0.073	-5.09905	Highly Acid
168	MLY-052	776151	9226290	3939	120.4	110	112	0.073	-2.22205	Moderately Acid
169	MLY-053	776049	9226221	3914	120.0	86	88	0.212	-0.97535	Slightly Acid
170	MLY-053	776049	9226221	3914	120.0	54.2	56	0.212	-0.68765	Slightly Acid
171	MLY-053	776049	9226221	3914	120.0	78	80	0.199	-1.00275	Moderately Acid
172	MLY-053	776049	9226221	3914	120.0	34	36	0.195	-0.87945	Slightly Acid
173	MLY-053	776049	9226221	3914	120.0	8	10	0.193	-1.19455	Moderately Acid
174	MLY-053	776049	9226221	3914	120.0	38	40	0.179	-0.87945	Slightly Acid
175	MLY-053	776049	9226221	3914	120.0	58	60	0.167	-0.92055	Slightly Acid
176	MLY-053	776049	9226221	3914	120.0	20	22	0.166	-0.83835	Slightly Acid
177	MLY-053	776049	9226221	3914	120.0	96.1	98	0.161	-0.76985	Slightly Acid
178	MLY-053	776049	9226221	3914	120.0	28	29.15	0.161	-0.66025	Slightly Acid
179	MLY-053	776049	9226221	3914	120.0	98	100	0.158	-0.76985	Slightly Acid
180	MLY-053	776049	9226221	3914	120.0	29.15	30	0.158	-0.66025	Slightly Acid
181	MLY-053	776049	9226221	3914	120.0	80	82	0.155	-1.00275	Moderately Acid
182	MLY-053	776049	9226221	3914	120.0	84	86	0.145	-0.97535	Slightly Acid
183	MLY-053	776049	9226221	3914	120.0	18.5	20	0.138	-0.83835	Slightly Acid
184	MLY-053	776049	9226221	3914	120.0	40	42	0.125	-1.08495	Moderately Acid
185	MLY-053	776049	9226221	3914	120.0	88	90	0.125	-0.97535	Slightly Acid
186	MLY-053	776049	9226221	3914	120.0	24	28	0.12	-0.66025	Slightly Acid
187	MLY-053	776049	9226221	3914	120.0	60	60.5	0.11	-0.92055	Slightly Acid
188	MLY-053	776049	9226221	3914	120.0	61.45	62	0.107	-0.92055	Slightly Acid
189	MLY-053	776049	9226221	3914	120.0	60.5	61.45	0.098	-0.92055	Slightly Acid
190	MLY-060	776176	9226308	3945	130.1	48	50	0.212	-5.34565	Highly Acid
191	MLY-060	776176	9226308	3945	130.1	50	52	0.21	-3.23585	Moderately Acid
192	MLY-060	776176	9226308	3945	130.1	78	80	0.193	-3.42765	Moderately Acid
193	MLY-060	776176	9226308	3945	130.1	65.8	66.5	0.19	-3.74275	Moderately Acid
194	MLY-060	776176	9226308	3945	130.1	6.3	8	0.16	-4.09895	Moderately Acid
195	MLY-060	776176	9226308	3945	130.1	80.95	81.5	0.157	-3.90715	Moderately Acid
196	MLY-060	776176	9226308	3945	130.1	16	17.25	0.156	-4.03045	Moderately Acid
197	MLY-060	776176	9226308	3945	130.1	116.9	117.9	0.153	-5.22235	Highly Acid
198	MLY-060	776176	9226308	3945	130.1	84	86	0.153	-3.90715	Moderately Acid
199	MLY-060	776176	9226308	3945	130.1	100	102	0.148	-6.85265	Highly Acid

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Number	Hole_Id	Easting	Northing	Elevation	Td	From	To	Au	NCV	NCV Type
200	MLY-060	776176	9226308	3945	130.1	106	108	0.141	-6.85265	Highly Acid
201	MLY-060	776176	9226308	3945	130.1	92	93.9	0.14	-5.71555	Highly Acid
202	MLY-060	776176	9226308	3945	130.1	54.4	56.4	0.138	-3.23585	Moderately Acid
203	MLY-060	776176	9226308	3945	130.1	80	80.95	0.134	-3.90715	Moderately Acid
204	MLY-060	776176	9226308	3945	130.1	60.05	61.05	0.131	-3.74275	Moderately Acid
205	MLY-060	776176	9226308	3945	130.1	64	65.8	0.123	-3.74275	Moderately Acid
206	MLY-060	776176	9226308	3945	130.1	68	70	0.119	-3.74275	Moderately Acid
207	MLY-060	776176	9226308	3945	130.1	40	42	0.109	-5.34565	Highly Acid
208	MLY-060	776176	9226308	3945	130.1	90	92	0.108	-5.71555	Highly Acid
209	MLY-060	776176	9226308	3945	130.1	112.35	114.35	0.103	-5.22235	Highly Acid
210	MLY-060	776176	9226308	3945	130.1	26	28	0.101	-6.59235	Highly Acid
211	MLY-060	776176	9226308	3945	130.1	52	54.4	0.099	-3.23585	Moderately Acid
212	MLY-060	776176	9226308	3945	130.1	82.35	84	0.096	-3.90715	Moderately Acid
213	MLY-060	776176	9226308	3945	130.1	42	44	0.095	-5.34565	Highly Acid
214	MLY-060	776176	9226308	3945	130.1	44	46	0.09	-5.34565	Highly Acid
215	MLY-060	776176	9226308	3945	130.1	70	72.35	0.09	-3.42765	Moderately Acid
216	MLY-060	776176	9226308	3945	130.1	61.05	62	0.088	-3.74275	Moderately Acid
217	MLY-060	776176	9226308	3945	130.1	104	106	0.087	-6.85265	Highly Acid
218	MLY-060	776176	9226308	3945	130.1	58	60.05	0.086	-3.23585	Moderately Acid
219	MLY-060	776176	9226308	3945	130.1	33.7	34.5	0.084	-5.66075	Highly Acid
220	MLY-060	776176	9226308	3945	130.1	88	90	0.084	-3.90715	Moderately Acid
221	MLY-060	776176	9226308	3945	130.1	30	31.5	0.082	-5.66075	Highly Acid
222	MLY-060	776176	9226308	3945	130.1	86	88	0.081	-3.90715	Moderately Acid
223	MLY-060	776176	9226308	3945	130.1	76	78	0.081	-3.42765	Moderately Acid
224	MLY-060	776176	9226308	3945	130.1	17.25	18.5	0.08	-4.03045	Moderately Acid
225	MLY-060	776176	9226308	3945	130.1	66.5	68	0.077	-3.74275	Moderately Acid
226	MLY-060	776176	9226308	3945	130.1	56.4	58	0.076	-3.23585	Moderately Acid
227	MLY-060	776176	9226308	3945	130.1	97.1	98	0.067	-5.71555	Highly Acid
228	MLY-060	776176	9226308	3945	130.1	74	76	0.062	-3.42765	Moderately Acid
229	MLY-060	776176	9226308	3945	130.1	72.35	74	0.058	-3.42765	Moderately Acid
230	MLY-060	776176	9226308	3945	130.1	22	24	0.054	-6.59235	Highly Acid
231	MLY-060	776176	9226308	3945	130.1	36	38	0.046	-5.66075	Highly Acid
232	MLY-060	776176	9226308	3945	130.1	24	26	0.045	-6.59235	Highly Acid
233	MLY-061	776293	9226307	3980	130.0	56	58	0.214	-3.24955	Moderately Acid
234	MLY-061	776293	9226307	3980	130.0	120	122	0.209	-5.00315	Highly Acid
235	MLY-061	776293	9226307	3980	130.0	46	47.6	0.204	-3.08515	Moderately Acid
236	MLY-061	776293	9226307	3980	130.0	36.4	38	0.202	-2.56455	Moderately Acid
237	MLY-061	776293	9226307	3980	130.0	126	128	0.199	-5.00315	Highly Acid
238	MLY-061	776293	9226307	3980	130.0	47.6	49	0.198	-3.08515	Moderately Acid
239	MLY-061	776293	9226307	3980	130.0	104	106	0.194	-9.14055	Highly Acid
240	MLY-061	776293	9226307	3980	130.0	10	12	0.184	-1.64665	Moderately Acid
241	MLY-061	776293	9226307	3980	130.0	49	50.8	0.183	-3.08515	Moderately Acid
242	MLY-061	776293	9226307	3980	130.0	96	98	0.176	-5.03055	Highly Acid
243	MLY-061	776293	9226307	3980	130.0	128	130	0.173	-5.00315	Highly Acid
244	MLY-061	776293	9226307	3980	130.0	84	86	0.173	-3.34545	Moderately Acid
245	MLY-061	776293	9226307	3980	130.0	92	94	0.17	-5.03055	Highly Acid
246	MLY-061	776293	9226307	3980	130.0	80	82	0.163	-3.34545	Moderately Acid
247	MLY-061	776293	9226307	3980	130.0	86	88	0.157	-3.34545	Moderately Acid
248	MLY-061	776293	9226307	3980	130.0	88	90	0.155	-3.34545	Moderately Acid
249	MLY-061	776293	9226307	3980	130.0	40	42	0.15	-3.08515	Moderately Acid
250	MLY-061	776293	9226307	3980	130.0	90	92	0.149	-5.03055	Highly Acid
251	MLY-061	776293	9226307	3980	130.0	98	100	0.137	-5.03055	Highly Acid
252	MLY-061	776293	9226307	3980	130.0	8	10	0.13	-2.35905	Moderately Acid
253	MLY-061	776293	9226307	3980	130.0	2	4	0.119	-2.35905	Moderately Acid
254	MLY-061	776293	9226307	3980	130.0	82	84	0.118	-3.34545	Moderately Acid
255	MLY-061	776293	9226307	3980	130.0	42	44	0.114	-3.08515	Moderately Acid
256	MLY-061	776293	9226307	3980	130.0	6	8	0.11	-2.35905	Moderately Acid
257	MLY-061	776293	9226307	3980	130.0	38	40	0.095	-2.56455	Moderately Acid
258	MLY-061	776293	9226307	3980	130.0	4	6	0.091	-2.35905	Moderately Acid
259	MLY-061	776293	9226307	3980	130.0	44	46	0.083	-3.08515	Moderately Acid
260	MLY-061	776293	9226307	3980	130.0	15.8	18	0.069	-1.64665	Moderately Acid
261	MLY-061	776293	9226307	3980	130.0	14	15.8	0.052	-1.64665	Moderately Acid
262	MLY-061	776293	9226307	3980	130.0	0	2	0.051	-2.35905	Moderately Acid
263	MLY-061	776293	9226307	3980	130.0	18	20	0.043	-1.64665	Moderately Acid
264	MLY-061	776293	9226307	3980	130.0	12	14	0.041	-1.64665	Moderately Acid
265	MLY-061	776293	9226307	3980	130.0	20	21.6	0.031	-3.00295	Moderately Acid
266	MLY-061	776293	9226307	3980	130.0	21.6	23.3	0.028	-3.00295	Moderately Acid
267	MLY-063	776062	9226153	3941	90.0	36.2	38	0.213	-4.49625	Moderately Acid
268	MLY-063	776062	9226153	3941	90.0	38	40	0.209	-4.49625	Moderately Acid
269	MLY-063	776062	9226153	3941	90.0	8	10	0.201	-3.12625	Moderately Acid
270	MLY-063	776062	9226153	3941	90.0	10	12	0.194	-5.86625	Highly Acid
271	MLY-063	776062	9226153	3941	90.0	18	20	0.189	-5.86625	Highly Acid
272	MLY-063	776062	9226153	3941	90.0	60.6	62	0.183	-3.82495	Moderately Acid
273	MLY-063	776062	9226153	3941	90.0	32	33.35	0.175	-4.49625	Moderately Acid
274	MLY-063	776062	9226153	3941	90.0	0	1.8	0.174	-3.12625	Moderately Acid
275	MLY-063	776062	9226153	3941	90.0	58	60	0.16	-3.66055	Moderately Acid
276	MLY-063	776062	9226153	3941	90.0	5.5	6	0.154	-3.12625	Moderately Acid
277	MLY-063	776062	9226153	3941	90.0	40	42	0.144	-3.78385	Moderately Acid
278	MLY-063	776062	9226153	3941	90.0	6	8	0.127	-3.12625	Moderately Acid
279	MLY-063	776062	9226153	3941	90.0	54	54.95	0.12	-3.66055	Moderately Acid
280	MLY-064	776318	9226243	3987	100.0	46	48	0.214	-3.82495	Moderately Acid
281	MLY-064	776318	9226243	3987	100.0	76	78	0.205	-4.55105	Moderately Acid
282	MLY-064	776318	9226243	3987	100.0	92	93.6	0.204	-6.34575	Highly Acid
283	MLY-064	776318	9226243	3987	100.0	28	30	0.195	-4.60585	Moderately Acid
284	MLY-064	776318	9226243	3987	100.0	33.5	34	0.18	-2.66045	Moderately Acid
285	MLY-064	776318	9226243	3987	100.0	71.3	72	0.176	-4.55105	Moderately Acid
286	MLY-064	776318	9226243	3987	100.0	4	6	0.16	-0.83835	Slightly Acid
287	MLY-064	776318	9226243	3987	100.0	0	2	0.148	-0.83835	Slightly Acid
288	MLY-064	776318	9226243	3987	100.0	45	46	0.134	-3.82495	Moderately Acid
289	MLY-064	776318	9226243	3987	100.0	40	42	0.124	-3.82495	Moderately Acid
290	MLY-064	776318	9226243	3987	100.0	42	44	0.121	-3.82495	Moderately Acid
291	MLY-064	776318	9226243	3987	100.0	6	8	0.119	-0.83835	Slightly Acid
292	MLY-064	776318	9226243	3987	100.0	93.6	95	0.118	-6.34575	Highly Acid
293	MLY-064	776318	9226243	3987	100.0	14	16	0.114	-1.97545	Moderately Acid
294	MLY-064	776318	9226243	3987	100.0	34	36	0.113	-2.66045	Moderately Acid
295	MLY-064	776318	9226243	3987	100.0	8	10	0.113	-0.83835	Slightly Acid
296	MLY-064	776318	9226243	3987	100.0	2	4	0.103	-0.83835	Slightly Acid
297	MLY-064	776318	9226243	3987	100.0	95	96	0.1	-6.34575	Highly Acid
298	MLY-064	776318	9226243	3987	100.0	44	45	0.087	-3.82495	Moderately Acid
299	MLY-064	776318	9226243	3987	100.0	10	12	0.087	-1.97545	Moderately Acid
300	MLY-064	776318	9226243	3987	100.0	36	38	0.085	-2.66045	Moderately Acid
301	MLY-064	776318	9226243	3987	100.0	12	14	0.085	-1.97545	Moderately Acid
302	MLY-064	776318	9226243	3987	100.0	16	17.05	0.074	-1.97545	Moderately Acid

TAJO CARACHUGO FASE III

Yanacocha **Metallurgical Services**

Memorándum

To : Lelis Abanto.

From : José Guerra

Copy : Gilmar Guzmán, Harold Camero, Sandro Oyarce.

Date : 15-04-13

Subject : Geoquímica de mineral y del desmonte del proyecto Carachugo Upper-3

1. Introducción:

El yacimiento de Yanacocha se describe como un depósito epitermal de alta sulfuración formada por rocas de origen piroclástico en el cual ocurrió alteración hidrotermal y múltiples eventos de mineralización. Las alteraciones hidrotermales más dominantes en la superficie y en la profundidad en la zona Carachugo Upper es la sílice (sílice masiva, granular y vuggy).

En la zona superior Carachugo suelen producirse fracturas en forma diseminada, que se refieren principalmente a las zonas de alteración de sílice vuggy y Masiva.

Este proyecto actualmente se calcula que contiene 123,7 koz de oro, de las cuales 89 koz de oro, son recuperables.

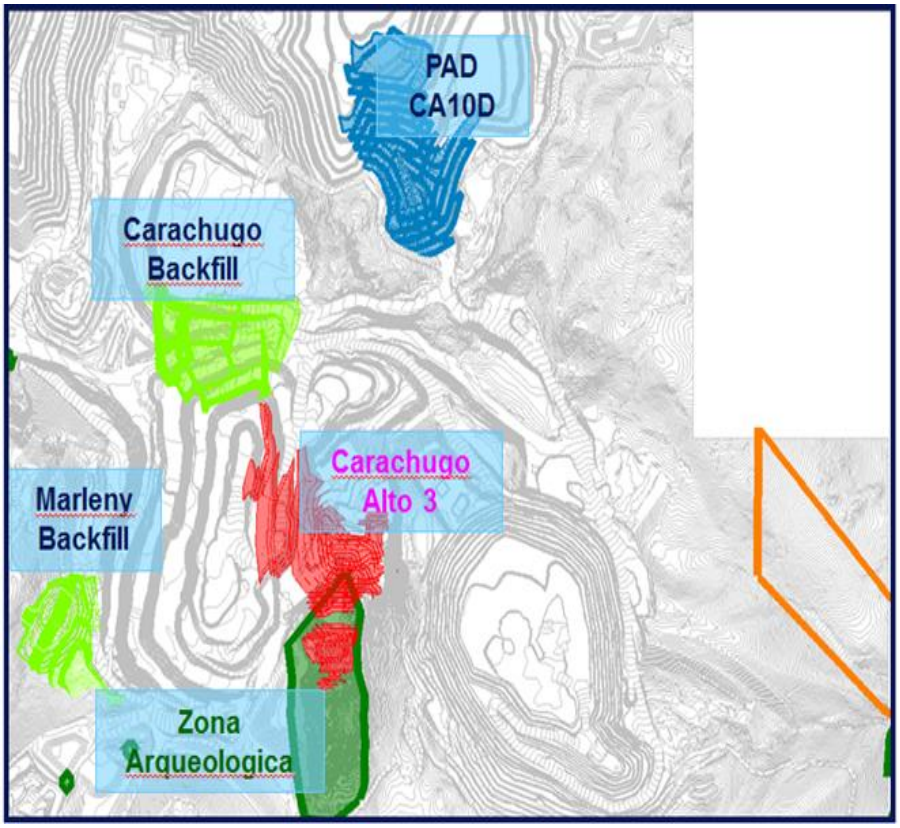


Figure 1: Carachugo Upper Phase 3 localización.

2. Estudios Geoquímicos:

Los estudios geoquímicos de este depósito se orientan básicamente a ensayos de Valor de Carbonato Neto (NCV) para minerales y desmonte, y de valores de No PAG y PAG para los desmontes.

2.1. Evaluación de NCV para Mineral y el Desmonte:

El NCV se determina a través de ensayos químicos de muestras minerales y desmonte para la determinación del Carbón Total y Carbón Residual después de pirolisis, del mismo modo se ensaya el Azufre Total y el Azufre residual después de pirolisis, con estos resultado determinamos el Potencial de Neutralización Acida (ANP) y el Potencial de Generación de Acido (AGP).

$$ANP = 3.67*(Ctotal - Cresidual)$$

$$AGP = -1.37*(Stotal - Sresidual)$$

$$\mathbf{NCV = ANP + AGP}$$

El valor de NCV se clasifica de acuerdo a la siguiente Tabla 1.

Tabla 1. Clasificación NCV

Classification	NCV
Highly Acid	<= -5.0
Moderately Acid	> -5.0 y <= -1.0
Slightly Acid	> -1.0 y <= -0.1
Inert or Neutral	> -0.1 y <= 0.1
Slightly Basic	> 0.1 y <= 1.0
Basic	> 1.0 y <= 5.0
Highly Basic	> 5.0

En total se han realizado 91 análisis de NCV de 8 perforaciones (realizadas el 2012) el cual se muestra en la figura 2.

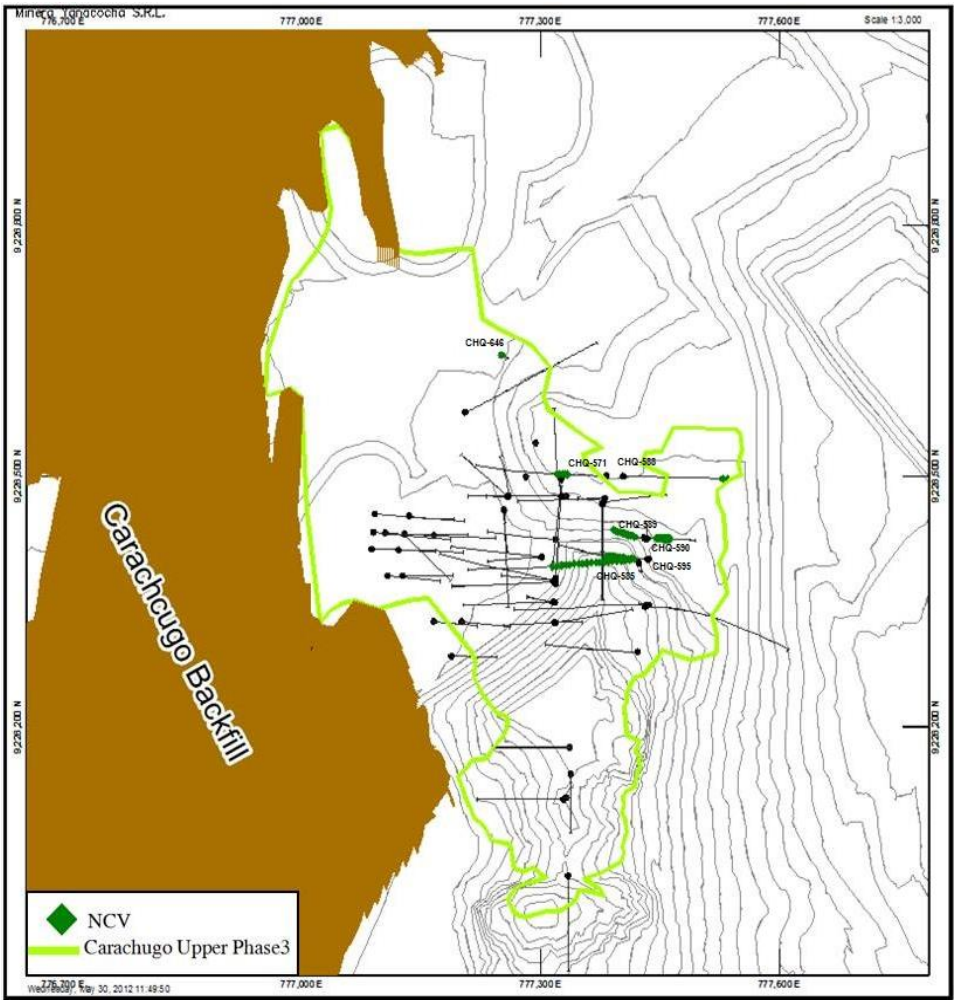


Figure 2: Perforaciones realizadas en Carachugo Upper Phase 3 project.

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A. Resultados de clasificación NCV para el mineral:

Las coordenadas de las muestras de mineral que fueron analizados por NCV se muestran en la siguiente Tabla 2 y los resultados de NCV de cada muestra se muestra en el apéndice 1 (los tramos que se consideran como mineral).

Tabla 2. Coordenadas de las perforaciones del mineral.

HOLE_ID	EASTING	NORTHING	ELEVATION	TD
CHQ-571	17382.028	26500.023	4120.323	405.4
CHQ-585	17433.738	26400.348	4115.593	333.65
CHQ-588	17402.842	26499.734	4120.124	202.5
CHQ-589	17433.541	26425.01	4113.225	140
CHQ-590	17432.066	26424.93	4113.507	386.1
CHQ-595	17435.308	26400.514	4115.835	376.1
CHG-694	17479.150	26394.750	4049.830	210
CHG-695	17281.890	26471.500	4060.270	120

Los resultados de NCV indicaron que de los 6,623 kton de mineral, un 96.5% es clasificado como “neutral”, el 1.8% es “ligeramente ácido” y el 1.8% es “ligeramente básico”.

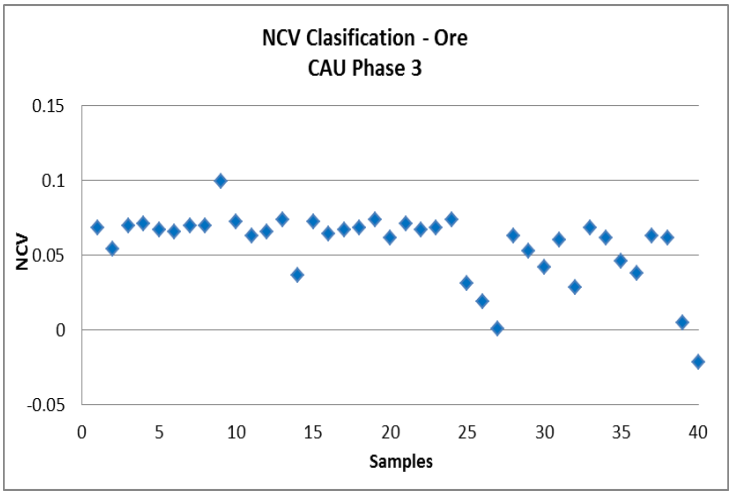


Figura 3. Resultados de las pruebas de NCV para el mineral

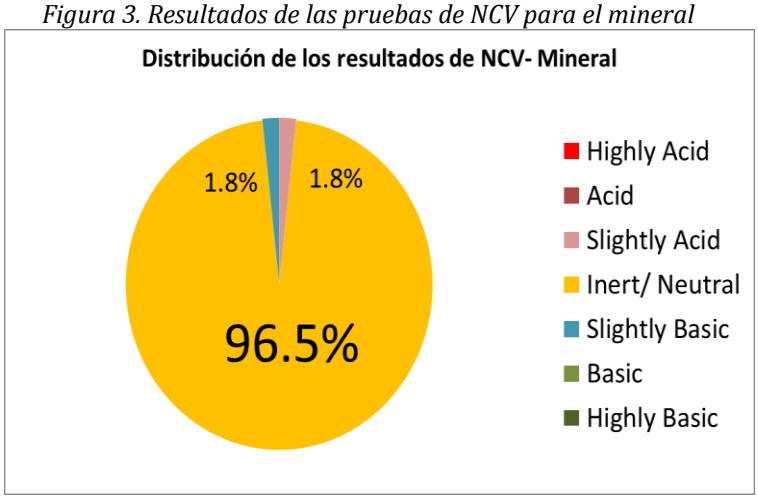


Figura 4. Distribución de NCV para el mineral

Figure 5, Muestra el histograma de la clasificación de las muestras por alteración. La principal alteración es la Silica Masiva y la Silica Vuggy.

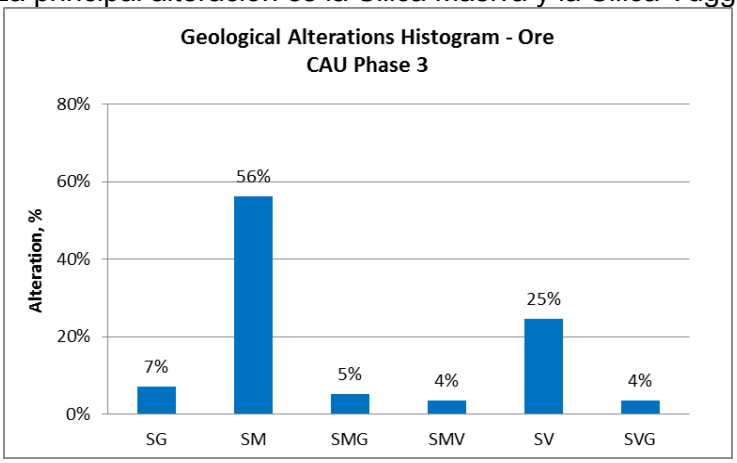


Figure 5. Histograma de la alteración de las muestras.

Silica Granular (7%), Silica Massive (56%), Silica Massive Granular (5%), Silica Massive Vuggy (4%), Compact Silica Granular (1%), Silica Vuggy (25%), Silica Vuggy Granular (4%).

B. Resultados de clasificación No PAG y PAG para desmonte:

La cantidad de desmonte que será minado del depósito de Carachugo Upper 3 es 7.01 Mt de los cuales 5,912 kton (85%) es clasificado como No PAG y 1,102 kton (15%) es clasificado como PAG (tabla 1) (según el criterio de si: -0.1 < NCV < de 0.0 es NPAG; NCV < -0.1 es PAG).
Las coordenadas de las muestras de desmonte, para la evaluación de NCV se muestran en la siguiente tabla 3 y los resultados de NCV se muestra en el Apéndice 2.

Tabla 3.Coordenadas de las perforaciones de las muestras para NCV.

HOLE_ID	EASTING	NORTHING	ELEVATION	TD
CHQ-571	17382.028	26500.023	4120.323	405.4
CHQ-585	17433.738	26400.348	4115.593	333.65
CHQ-588	17402.842	26499.734	4120.124	202.5
CHQ-589	17433.541	26425.01	4113.225	140
CHQ-590	17432.066	26424.93	4113.507	386.1
CHQ-595	17435.308	26400.514	4115.835	376.1
CHG-694	17479.150	26394.750	4049.830	210
CHG-695	17281.890	26471.500	4060.270	120

Los resultados indicaron que el 79.4% es clasificado como Neutral y el 17.6% es ligeramente ácido y solamente el 2.9% es ácido (figuras 6 y 7).

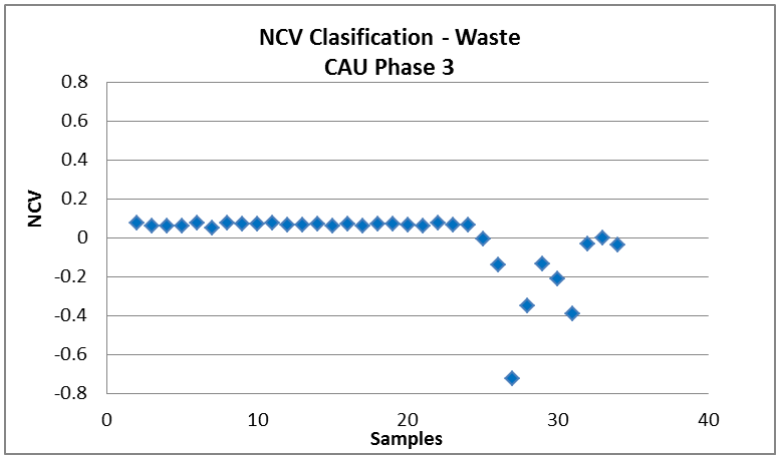


Figure 6. NCV de las muestras de desmonte.

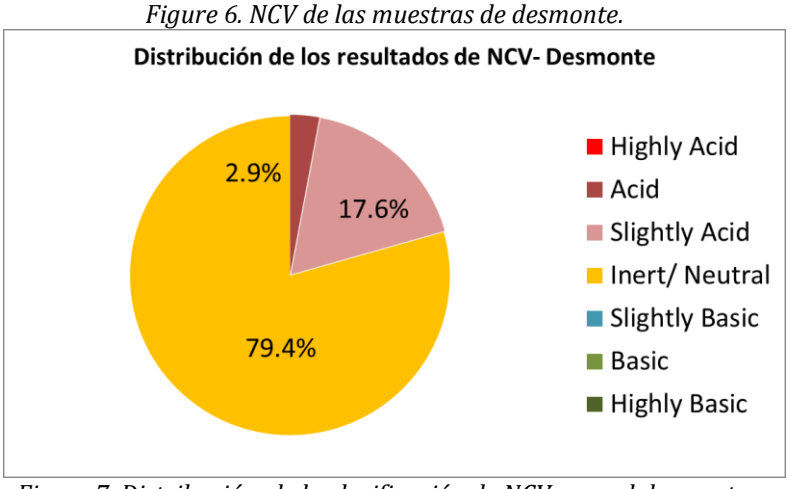


Figure 7. Distribución de la clasificación de NCV para el desmonte.

Figura 8, muestra la alteración de las muestras del desmonte. Silica Granular (9%), Compact Silica Granular (3%), Silica Massive (47%), Silica Massive Granular (6%), Silica Massive Vuggy (15%), Silica Vuggy (21%).

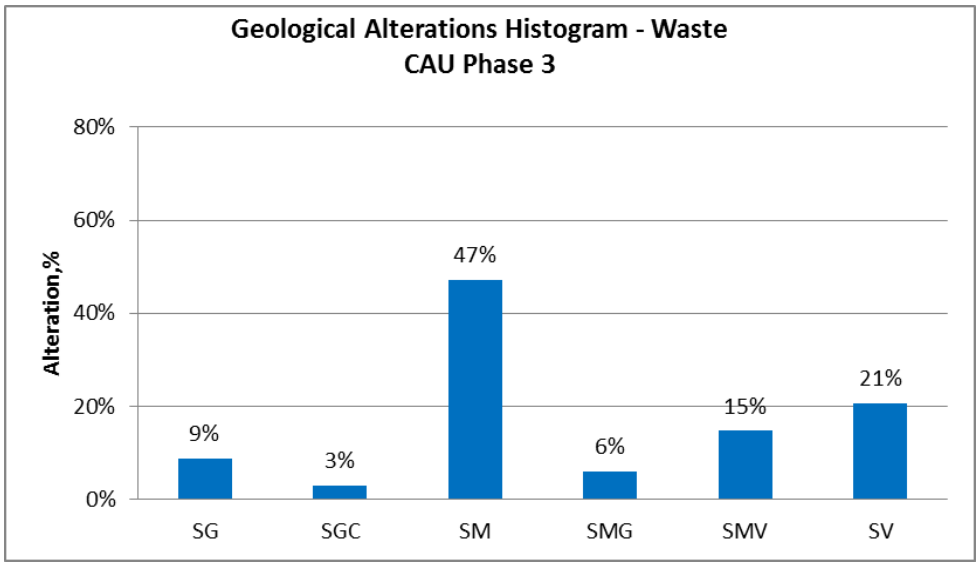


Figure 8. Histograma de la alteración geológica de las muestras de desmonte.

3. Conclusiones

Para el Mineral:

- De acuerdo a los resultados de NCV, reportaron que el mineral es clasificado como “Neutro” en un 96.5%.

Para el Desmonte:

- Existe 1,102 kton de material PAG el cual representa el 15.7% del total del desmonte.
- Los resultados de NCV indicaron que un 17.6% de las muestras es clasificado como “Ligeramente Acido” y 2.9% de las muestras como “Acido”.

Apéndice 1
NCV para el mineral

#	HOLE_ID	FROM	TO	EASTING	NORTHING	ELEVATION	AGP	ANP	NCV	Type Ore	LTERATIO
1	CHG-694	20	30	17479.2	26394.8	4049.8	0.0734	-0.0685	0.0049	Neutral (inerte)	SM
2	CHG-694	30	40	17479.2	26394.8	4049.8	0.08808	-0.1096	-0.02152	Neutral (inerte)	SM
3	CHG-694	40	50	17479.2	26394.8	4049.8	0.0734	-0.1507	-0.0773	Neutral (inerte)	SM
4	CHG-694	50	62	17479.2	26394.8	4049.8	0.08074	-0.0959	-0.01516	Neutral (inerte)	SM
5	CHG-694	62	68	17479.2	26394.8	4049.8	0.0734	-0.1096	-0.0362	Neutral (inerte)	SM
6	CHG-694	68	74	17479.2	26394.8	4049.8	0.0734	-0.1233	-0.0499	Neutral (inerte)	SM
7	CHG-694	74	84	17479.2	26394.8	4049.8	0.0734	-0.0959	-0.0225	Neutral (inerte)	SM
8	CHG-694	84	94	17479.2	26394.8	4049.8	0.0734	-0.1233	-0.0499	Neutral (inerte)	SM
9	CHG-694	94	104	17479.2	26394.8	4049.8	0.0734	-0.1644	-0.091	Neutral (inerte)	SM
10	CHG-694	104	114.15	17479.2	26394.8	4049.8	0.0734	-0.137	-0.0636	Neutral (inerte)	SG
11	CHG-695	8	20	17281.9	26471.5	4060.3	0.0734	-0.2466	-0.1732	Ligeramente Acido	SM
12	CHG-695	30	38.6	17281.9	26471.5	4060.3	0.30094	-0.137	0.16394	Ligeramente Básico	SM
13	CHG-695	45.45	56	17281.9	26471.5	4060.3	0.0734	-0.1096	-0.0362	Neutral (inerte)	SM
14	CHG-695	56	70	17281.9	26471.5	4060.3	0.0734	-0.1096	-0.0362	Neutral (inerte)	SM
15	CHG-695	70	80	17281.9	26471.5	4060.3	0.10276	-0.1507	-0.04794	Neutral (inerte)	SM
16	CHG-695	80	90	17281.9	26471.5	4060.3	0.0734	-0.1096	-0.0362	Neutral (inerte)	SM
17	CHG-695	90	100.5	17281.9	26471.5	4060.3	0.0734	-0.1233	-0.0499	Neutral (inerte)	SG
18	CHG-695	106	112	17281.9	26471.5	4060.3	0.08441	-0.137	-0.05259	Neutral (inerte)	SM
19	CHG-695	140	150	17281.9	26471.5	4060.3	0.0734	-0.1233	-0.0499	Neutral (inerte)	SV
20	CHQ-571	120	128	17382.0	26500.0	4120.3	0	0.0734	0.0734	INERTE	SMG
21	CHQ-585	166	174	17433.7	26400.3	4115.6	-0.00548	0.0734	0.06792	INERTE	SG
22	CHQ-585	86	94	17433.7	26400.3	4115.6	-0.00411	0.0734	0.06929	INERTE	SM
23	CHQ-585	94	102	17433.7	26400.3	4115.6	-0.00274	0.0734	0.07066	INERTE	SM
24	CHQ-585	102	110	17433.7	26400.3	4115.6	-0.00685	0.0734	0.06655	INERTE	SM
25	CHQ-585	110	118.25	17433.7	26400.3	4115.6	-0.00822	0.0734	0.06518	INERTE	SM
26	CHQ-585	118.25	126.1	17433.7	26400.3	4115.6	-0.00411	0.0734	0.06929	INERTE	SM
27	CHQ-585	126.1	134	17433.7	26400.3	4115.6	-0.00411	0.0734	0.06929	INERTE	SM
28	CHQ-585	134	142	17433.7	26400.3	4115.6	-0.01096	0.1101	0.09914	INERTE	SM
29	CHQ-585	142	149.95	17433.7	26400.3	4115.6	-0.00137	0.0734	0.07203	INERTE	SM
30	CHQ-585	149.95	158	17433.7	26400.3	4115.6	-0.01096	0.0734	0.06244	INERTE	SM
31	CHQ-585	158	166	17433.7	26400.3	4115.6	-0.00822	0.0734	0.06518	INERTE	SM
32	CHQ-585	174	182	17433.7	26400.3	4115.6	0	0.0734	0.0734	INERTE	SM
33	CHQ-588	184	192	17402.8	26499.7	4120.1	0	0.0734	0.0734	INERTE	SV
34	CHQ-588	192	202.5	17402.8	26499.7	4120.1	-0.04247	0.0734	0.03093	INERTE	SV
35	CHQ-589	96	104	17433.5	26425.0	4113.2	-0.03699	0.0734	0.03641	INERTE	SM
36	CHQ-589	112	120	17433.5	26425.0	4113.2	-0.01233	0.0734	0.06107	INERTE	SMG
37	CHQ-589	120	128	17433.5	26425.0	4113.2	-0.00274	0.0734	0.07066	INERTE	SMG
38	CHQ-589	104	112	17433.5	26425.0	4113.2	-0.00685	0.0734	0.06655	INERTE	SMV
39	CHQ-589	80	88	17433.5	26425.0	4113.2	-0.01096	0.0734	0.06244	INERTE	SVG
40	CHQ-589	88	96	17433.5	26425.0	4113.2	-0.01233	0.0734	0.06107	INERTE	SVG
41	CHQ-590	152	160.2	17432.1	26424.9	4113.5	-0.01918	0.0734	0.05422	INERTE	SG
42	CHQ-590	96	104	17432.1	26424.9	4113.5	-0.00137	0.0734	0.07203	INERTE	SM
43	CHQ-590	104	112	17432.1	26424.9	4113.5	-0.00959	0.0734	0.06381	INERTE	SM
44	CHQ-590	112	120	17432.1	26424.9	4113.5	-0.00685	0.0734	0.06655	INERTE	SM
45	CHQ-590	120	128	17432.1	26424.9	4113.5	-0.00548	0.0734	0.06792	INERTE	SM
46	CHQ-590	128	136	17432.1	26424.9	4113.5	-0.0548	0.0734	0.0186	INERTE	SV
47	CHQ-590	144	152	17432.1	26424.9	4113.5	-0.07261	0.0734	0.00079	INERTE	SV
48	CHQ-595	110	118	17435.3	26400.5	4115.8	-0.00548	0.0734	0.06792	INERTE	SMV
49	CHQ-595	70	78	17435.3	26400.5	4115.8	-0.01096	0.0734	0.06244	INERTE	SV
50	CHQ-595	78	86	17435.3	26400.5	4115.8	-0.02055	0.0734	0.05285	INERTE	SV
51	CHQ-595	86	94	17435.3	26400.5	4115.8	-0.03151	0.0734	0.04189	INERTE	SV
52	CHQ-595	94	101.8	17435.3	26400.5	4115.8	-0.0137	0.0734	0.0597	INERTE	SV
53	CHQ-595	101.8	110	17435.3	26400.5	4115.8	-0.04521	0.0734	0.02819	INERTE	SV
54	CHQ-595	118	126.7	17435.3	26400.5	4115.8	-0.00548	0.0734	0.06792	INERTE	SV
55	CHQ-595	126.7	134	17435.3	26400.5	4115.8	-0.01233	0.0734	0.06107	INERTE	SV
56	CHQ-595	134	142	17435.3	26400.5	4115.8	-0.0274	0.0734	0.046	INERTE	SV
57	CHQ-595	142	150	17435.3	26400.5	4115.8	-0.03562	0.0734	0.03778	INERTE	SV

Yanacocha

Metallurgical Services

Apéndice 2
NCV para el Desmonte

#	HOLE_I	FROM	TO	EASTING	NORTHI	ELEVATI	AGP	ANP	NCV	Tipodesmonte	ALTERATI
1	CHG-694	10	20	17479.2	26394.8	4049.8	0.0734	-0.2877	-0.2143	Ligeramente Acido	SM
2	CHG-695	20	30	17281.9	26471.5	4060.3	0.0734	-0.4658	-0.3924	Ligeramente Acido	SM
3	CHG-695	38.6	45.45	17281.9	26471.5	4060.3	0.10276	-0.137	-0.03424	Neutral (inerte)	SV
4	CHG-695	124	130.85	17281.9	26471.5	4060.3	0.08074	-0.0822	-0.00146	Neutral (inerte)	SV
5	CHG-695	130.45	140	17281.9	26471.5	4060.3	0.0734	-0.1096	-0.0362	Neutral (inerte)	SV
6	CHQ-571	112	120	17382.0	26500.0	4120.3	0	0.0734	0.0734	INERTE	SMG
7	CHQ-571	128	136	17382.0	26500.0	4120.3	-0.0137	0.0734	0.0597	INERTE	SMV
8	CHQ-571	136	143.7	17382.0	26500.0	4120.3	-0.0137	0.0734	0.0597	INERTE	SG
9	CHQ-571	143.7	152	17382.0	26500.0	4120.3	-0.0137	0.0734	0.0597	INERTE	SMV
10	CHQ-585	46	54	17433.7	26400.3	4115.6	0	0.0734	0.0734	INERTE	SM
11	CHQ-585	54	62	17433.7	26400.3	4115.6	-0.02603	0.0734	0.04737	INERTE	SM
12	CHQ-585	62	70	17433.7	26400.3	4115.6	0	0.0734	0.0734	INERTE	SM
13	CHQ-585	70	78	17433.7	26400.3	4115.6	-0.00548	0.0734	0.06792	INERTE	SM
14	CHQ-585	78	86	17433.7	26400.3	4115.6	-0.00411	0.0734	0.06929	INERTE	SM
15	CHQ-585	30.35	38	17433.7	26400.3	4115.6	-0.21372	0.0734	-0.14032	LIGERAMENTE ACIDO	SM
16	CHQ-585	38	46	17433.7	26400.3	4115.6	-0.79597	0.0734	-0.72257	LIGERAMENTE ACIDO	SM
17	CHQ-589	48	56	17433.5	26425.0	4113.2	0	0.0734	0.0734	INERTE	SM
18	CHQ-589	56	64	17433.5	26425.0	4113.2	-0.00685	0.0734	0.06655	INERTE	SMV
19	CHQ-589	64	72	17433.5	26425.0	4113.2	-0.00959	0.0734	0.06381	INERTE	SMV
20	CHQ-589	72	80	17433.5	26425.0	4113.2	-0.00137	0.0734	0.07203	INERTE	SMV
21	CHQ-589	128	140	17433.5	26425.0	4113.2	-0.01233	0.0734	0.06107	INERTE	SMG
22	CHQ-590	72	80	17432.1	26424.9	4113.5	-0.00548	0.0734	0.06792	INERTE	SM
23	CHQ-590	80	88	17432.1	26424.9	4113.5	-0.01096	0.0734	0.06244	INERTE	SM
24	CHQ-590	88	96	17432.1	26424.9	4113.5	-0.00137	0.0734	0.07203	INERTE	SM
25	CHQ-590	160.2	168	17432.1	26424.9	4113.5	-0.00411	0.0734	0.06929	INERTE	SGC
26	CHQ-590	64	72	17432.1	26424.9	4113.5	-0.4247	0.0734	-0.3513	LIGERAMENTE ACIDO	SM
27	CHQ-590	136	144	17432.1	26424.9	4113.5	-0.20824	0.0734	-0.13484	LIGERAMENTE ACIDO	SV
28	CHQ-595	54	62	17435.3	26400.5	4115.8	-0.00685	0.0734	0.06655	INERTE	SV
29	CHQ-595	62	70	17435.3	26400.5	4115.8	-0.01233	0.0734	0.06107	INERTE	SV
30	CHQ-595	150	158	17435.3	26400.5	4115.8	0	0.0734	0.0734	INERTE	SV
31	CHQ-595	158	166	17435.3	26400.5	4115.8	-0.00685	0.0734	0.06655	INERTE	SG
32	CHQ-595	166	174	17435.3	26400.5	4115.8	-0.00959	0.0734	0.06381	INERTE	SG
33	CHQ-646	8	16	17250.2	26644.2	4063.6	-2.60163	0.0734	-2.52823	ACIDO	SM
34	CHQ-646	0	8	17250.2	26644.2	4063.6	-0.07946	0.0734	-0.00606	INERTE	SM

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Caracterización Ambiental y Valor Neto de Carbonato del Proceso de Sulfuros Yanacocha

Informe técnico 2017-08xx-x

Agosto, 2017

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Científico en Medio Ambiente

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La información contenida en este informe es confidencial y patentada.

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1 INTRODUCCIÓN

El área de Servicios Metalúrgicos de Newmont (NMS por sus iniciales en inglés) realizó un estudio de caracterización ambiental de muestras de descarga del autoclave, relaves de flotación y lodos de tratamiento del proceso de Sulfuros Yanacocha. Las muestras se evaluaron de acuerdo al protocolo de confirmación de NMS mediante el análisis de Valor Neto de Carbonato (NCV por sus iniciales en inglés) para determinar el potencial de generación de ácido, la caracterización geoquímica y la lixivialidad de metales según los lineamientos metalúrgicos.[1,2] Las concentraciones de liberación de aniones y metales se compararon con los estándares de calidad ambiental para agua (ECA) del Ministerio del Ambiente del Perú para determinados puntos de interés. Aunque estos estándares no se aplican actualmente, se espera poder adoptarlos para cuando los sulfuros sean procesados. Estos límites podrían cambiar antes de la implementación.

Se analizaron las muestras por difracción de rayos X (XRD por sus iniciales en inglés) para determinar la composición mineralógica. Los metales y la movilidad de aniones se evaluaron mediante el procedimiento de lixiviación por precipitación sintética (SPLP por sus iniciales in inglés). Se aplicó la Caracterización de Residuos Sólidos (SWDC por sus iniciales en inglés) como método de detección para el Procedimiento de Lixiviación para determinar la Característica de Toxicidad (TCLP por sus iniciales en inglés). La movilidad de los metales y el potencial de generación de acidez se determinaron mediante la prueba de generación de ácido peróxido (PAG por sus iniciales en inglés).

2 RESUMEN

Se prepararon diecinueve muestras de descarga mixta del autoclave, relaves de flotación y lodos de tratamiento provenientes de una planta piloto operada por laboratorios Hazen (12 muestras del autoclave y siete muestras de relaves de flotación). Se secaron y enviaron todas las muestras "tal cual" sin enjuagar. Se aplicaron los protocolos de caracterización ambiental y NCV para la caracterización de los sólidos.

Muestras mixtas de descarga del autoclave

Las muestras de descarga del autoclave se consideran inertes o con un bajo potencial de generación de acidez con excepción de los residuos de lixiviación de las muestras Comp 5 y Comp 6. La mineralogía de las muestras, la especiación de carbono/azufre y los métodos alternativos de confirmación de NCV generan inconsistencias al comparar los datos debido al alto contenido de azufre sulfatado y bajo contenido de azufre sulfatado con potencial de generación de acidez como resultado de la oxidación de las muestras del autoclave. Los residuos de lixiviación de las muestras Comp 5 y Comp 6 son considerados ligeramente básicos por la falta de sulfuros generadores de acidez y gran cantidad de carbonatos neutralizadores de acidez.

Las pruebas de lixiviación de las muestras de descarga del autoclave indican un alto contenido de sales ácidas y significativa lixiviación de metales y otros elementos de importancia en condiciones

[1]Ensayos y Caracterización de Mineral, Residuos y Pilas. GL-MET-STD-002
[2]Ensayos y Caracterización Ambiental de Residuos y Productos del Proceso. GL-MET-STD-003

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oxidativas y en contacto con precipitaciones. Las concentraciones de aluminio, antimonio, arsénico, cadmio, calcio, cobalto, cromo, cobre, hierro, manganeso, mercurio, níquel, plomo, selenio, plata, talio, vanadio, zinc, conductividad, TDS, sulfato y pH ácidos y básicos excedieron los valores establecidos por los ECA de Yanacocha.

Las pruebas de toxicidad por lixiviación según lo determinado por la RCRA indican que cinco de las muestras mixtas de descarga del autoclave se clasificarían como residuos peligrosos si se disponen en un relleno municipal de los EEUU. Las concentraciones de arsénico, cadmio, plomo y selenio excedieron los límites de lixiviado establecidos por la RCRA.

Muestras mixtas de relaves de flotación

Todas las muestras mixtas de relaves de flotación son potenciales generadores de acidez. La mineralogía de las muestras, la especiación de carbono/azufre y los métodos alternativos de confirmación de NCV indican concordancia del potencial de generación de acidez de azufre sulfurado suficiente para pasar de mínimo a potencial indetectable de carbonato neutralizador de acidez de carbonato.

Las pruebas de lixiviación de las muestras de relaves de flotación indican que hay una liberación significativa de metales en condiciones oxidativas y al contacto con precipitaciones. Las concentraciones de aluminio, antimonio, arsénico, cadmio, cobre, hierro, manganeso, níquel, plomo, talio, conductividad, TDS, sulfato y pH ácido excedieron los ECA de Yanacocha.

Los métodos de toxicidad por lixiviación según lo determinado por la RCRA indican que ninguna de las muestras de relaves de flotación clasificaría como residuo peligroso si se dispusieran en un relleno municipal de EEUU.

El resumen de los resultados de la caracterización ambiental de la prueba realizada por NMS se presenta en la Tabla I.

Tabla I. Resumen de Resultados para Protocolo de Caracterización NCV/NNPC

		P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR
NCV	**% CO_2**	0.00	-0.19	-0.15	-0.37	0.00	0.00	-0.26	0.51	0.37
NNPC	**% CO_2**	-1.74	-2.28	-1.75	-1.08	-1.71	-1.85	-1.15	0.95	0.97
NCV Classification	**-**	I	SA	SA	SA	I	I	SA	SB	SB
NNPC Classification	**-**	A	A	A	A	A	A	A	SB	SB
PAG pH	**s.u.**	3.89	3.61	4.35	3.53	3.70	3.66	3.64	9.9	11.1
PAG Classification	**-**	Acid Generating	Acid Generating	Acid Generating	Acid Generating	Acid Generating	Acid Generating	Acid Generating	Not Acid Generating	Not Acid Generating
Paste pH	**s.u.**	1.7	1.5	1.8	2.5	1.6	1.5	2.2	11.0	11.4
Total S	**% CO_2**	-12.48	-2.53	-7.43	-23.61	-12.22	-9.59	-20.67	-9.23	-7.62
AGP (Pyrolysis)	**% CO_2**	-1.47	-1.42	-1.23	0.00	-1.26	-1.37	-0.44	0.00	0.00
AGP (SCIS)	**% CO_2**	0.00	-0.19	-0.15	-0.37	0.00	0.00	-0.26	0.00	0.00
AGP (Pyritic)	**% CO_2**	-0.01	-0.05	0.00	0.00	-0.05	-0.03	0.00	-0.14	-0.05
AGP (XRD)	**% CO_2**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total C	**% CO_2**	0.02	0.55	0.07	0.15	0.07	0.04	0.18	0.70	0.55
ANP (Pyrolysis)	**% CO_2**	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.15
ANP (CAI)	**% CO_2**	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.51	0.37
ANP (XRD)	**% CO_2**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANPA	**% CO_2**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.97

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		Run 1	Run 2	Run 3	CSvT	CSvt/SI	CSvt/SI/LS	ClnrT	ClnrT/SI	ClnrT/SI/LS	ClnrT/SI/Run3
NCV	**% CO_2**	0.00	-0.14	-0.16	-0.53	-0.38	-0.35	-8.41	-7.13	-6.63	-6.85
NNPC	**% CO_2**	-0.48	0.12	1.46	-0.06	-1.01	-0.13	-8.32	-7.77	-6.70	-7.54
NCV Classification	**-**	I	SA	SA	SA	SA	SA	HA	HA	HA	HA
NNPC Classification	**-**	SA	SB	B	N	A	SA	HA	HA	HA	HA
PAG pH	**s.u.**	3.17	3.65	3.77	2.98	2.97	3.36	2.46	3.36	2.47	-
PAG Classification	**-**	Acid Generating	Acid Generating	Acid Generating	Acid Generating	Acid Generating	Acid Generating	Acid Generating	Acid Generating	Acid Generating	N/A
Paste pH	**s.u.**	2.2	2.2	2.2	7.2	4.7	6.4	5.8	4.5	6.9	7.9
Total S	**% CO_2**	-22.61	-21.47	-22.22	-0.66	-2.73	-3.25	-9.01	-9.59	-9.38	-9.18
AGP (Pyrolysis)	**% CO_2**	-1.88	-1.73	-1.63	-0.37	-0.29	-0.19	-8.48	-6.53	-6.06	-5.89
AGP (SCIS)	**% CO_2**	0.00	-0.14	-0.16	-0.53	-0.45	-0.53	-8.41	-7.21	-7.11	-7.18
AGP (Pyritic)	**% CO_2**	0.00	0.00	0.00	-0.21	-0.34	-0.27	-8.49	-6.25	-5.66	-7.40
AGP (XRD)	**% CO_2**	0.00	0.00	0.00	-0.51	-	-	-7.15	-	-	-
Total C	**% CO_2**	0.22	0.22	0.18	0.18	0.11	0.29	0.22	0.11	1.06	0.37
ANP (Pyrolysis)	**% CO_2**	0.02	0.02	0.02	0.02	0.04	0.11	0.02	0.04	0.59	0.04
ANP (CAI)	**% CO_2**	0.00	0.00	0.00	0.00	0.00	0.07	0.04	0.00	0.77	0.15
ANP (XRD)	**% CO_2**	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00
ANPA	**% CO_2**	0.00	0.26	1.62	0.47	0.00	0.40	0.09	0.00	0.41	0.00

3 DESCRIPCIÓN DE LAS MUESTRAS

Las muestras son recolectadas de la descarga del autoclave, relaves de flotación y lodos de tratamiento. Las muestras se secaron a temperatura ambiente (aproximadamente 22-25 ° C) y se enviaron sin enjuagar para su evaluación. La Tabla II presenta la descripción de cada muestra.

Tabla II. Caracterización de Muestras de Sulfuros Sólidos Yanacocha

Sample ID	Sample Description
P5-1	P5-1 Run 20 AC2D +SN 10/19 04:00-06:00
P5-2	P5-2 Run 22 ACDSN 10/19 23:03-10/20 03:03
P6-1	P6-1 Run 21 AC2D 10/19 14:00-10/19 15:00 6.37kg SN-FC, 8.67kg SN-DL, 68.66kg AC2D
P6-2	P6-2 Run 19 Comp, SND-DC Comp2 10/15 23:00-10/16 00:45 SND-FC 10/15 09:45 + Run 21 SND-DL 10/19 17:00-10/19 18:15
P6-3	P6-3 AC2D, Added 20kg SND 10/14 23:45-10/15 09:45, Dilute to 20kg w/ SND-DL Collected 10/15 06:00-10/15 07:15
P6-4	P6-4 AC2D, Added 20kg SND Slurry blend w/ SN recycle 10/11
P6-5	P6-5 Run 23 AC2D, AC2D + SN Sludge
Comp 5 LR	Leach residue of Comp 5 ACD+SN (Composite of P5-1, P6-1, P6-3, P6-4, P6-5)
Comp 6 LR	Leach residue of Comp 6 (Composite of Comp 2 PND, Comp 3 SND, and Comp 4 ACD)
Run 1	1007 83-RN-FC-NMS-Comp Run 1 3/27/17 2115- 3/28/17 0315
Run 2	1041 83-RN-FC-NMS-Comp Run 2 3/28/17 2045-2345
Run 3	1065 83-RN-FC-NMS-Comp Run 3 3/29/17 1230-1530
CSvT	Chimbote Cleaner Scavenger Tails
CSvt/SI	Chimbote Cleaner Scavenger Tails + Sludge
CSvt/SI/LS	Chimbote Cleaner Scavenger Tails + Sludge + 6.1g lime
ClnrT	Chimbote Cleaner Tails
ClnrT/SI	Chimbote Cleaner Tails + Sludge Head
ClnrT/SI/LS	Chimbote Cleaner Tails + Sludge + 29.4g lime
ClnrT/SI/Run3	Chimbote Cleaner Tails + Sludge + Run3 Soln + lime to pH11

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4 CARACTERIZACIÓN AMBIENTAL

A continuación, se describe el protocolo de caracterización ambiental de NMS, que incluye los requisitos de muestreo, procedimientos de prueba y métodos analíticos para llevar a cabo la caracterización según los lineamientos metalúrgicos de Newmont.

Los procedimientos operativos internos de NMS se mencionan en el Anexo A.

4.1 Descripción de ensayos

La siguiente sección describe la naturaleza de los ensayos realizados.

4.1.1 Valor neto de carbonato (NCV)

El potencial de neutralización de acidez (ANP) se obtiene de la diferencia entre el carbono total (C_TOT) y el carbono insoluble en ácido (CAI), multiplicado por 3,67 para convertir el carbono en porcentaje de dióxido de carbono. Cualquier valor ANP negativo se iguala a cero.

El potencial de generación de acidez (AGP) se obtiene de la diferencia entre el azufre total (S_TOT) y el azufre residual de la pirólisis (SAP550), multiplicado por -1,37 para convertir el azufre sulfurado en porcentaje de consumo de dióxido de carbono. Cualquier valor positivo se iguala a cero.

El NCV resulta de la suma de ANP y AGP.

4.1.2 Potencial Neto de Neutralización de Carbonato (NNPC)

La titulación del potencial de neutralización ácida con corrección de acidez se usa para calcular NNPC sustituyendo el ANPA por ANP en la ecuación de NCV. El valor de NNPC reemplaza el valor de NCV para muestras con carbonatos de hierro y/o sales ácidas considerables, según lo indicado por ANPA<ANP. Los carbonatos de hierro no tienen un potencial neto de neutralización significativo, pero aumentan falsamente el valor de ANP para la determinación de NCV y las sales ácidas no se calculan en la estimación de AGP. Los rangos de clasificación de muestras por NCV y NNPC se presentan en la Tabla III.

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Tabla III. Método de Clasificación NCV/NNPC

Classification	NCV or NNPC ($\%CO_2$)				
Highly Acidic (HA)			NCV or NNPC	≤	-5
Acidic (A)	-5	<	NCV or NNPC	≤	-1
Slightly Acidic (SA)	-1	<	NCV or NNPC	≤	-0.1
Neutral (N)	-0.1	<	NCV or NNPC	<	0.1 (ANP or ANPA ≥ 0.1 or AGP ≤ -0.1)
Inert (I)	-0.1	<	NCV or NNPC	<	0.1 (ANP or ANPA < 0.1 and AGP > -0.1)
Slightly Basic (SB)	0.1	≤	NCV or NNPC	<	1
Basic (B)	1	≤	NCV or NNPC	<	5
Highly Basic (HB)	5	≤	NCV or NNPC		

4.1.3 Mineralogía

Las muestras se envían para la identificación de su contenido mineral mediante XRD. Las cantidades semicuantitativas de minerales XRD se determinan mediante el método de Rietveld y el ajuste del patrón, utilizando armónicos esféricos para ayudar a corregir los efectos de orientación y la corrección del tamaño de partícula de Brindley para corregir los factores variables de microabsorción de las fases identificadas.

4.1.4 Potencial de Generación de Ácido (PAG) Peróxido

Las muestras se mezclan con una solución de peróxido de hidrógeno al 15% durante la noche. En caso de presencia del ácido, los minerales reactivos de sulfuro se oxidan a ácido sulfúrico y reaccionan con los elementos neutralizadores del material; el resultado neto es el valor de generación del ácido o consumo del ácido. El pH final por debajo de 4.5 confirma la presencia de sulfuros reactivos netos. Se recoge y analiza la solución lixiviada para determinar el pH y se utiliza la espectrometría de emisión por plasma de acoplamiento inductivo (ICPMS) para determinar la lixiviabilidad de metales bajo estas condiciones. El procedimiento de operación de NMS para realizar pruebas PAG se incluye en el Anexo A.

4.1.5 Procedimiento de Lixiviación por Precipitación Sintética (SPLP)

La reacción de las muestras se genera con un fluido de extracción de agua desionizada durante 18 horas a un ratio líquido a sólido de 20:1. Se filtra y envía el lixiviado final para análisis. La prueba SPLP está diseñada para determinar la movilidad de analitos inorgánicos solubles de residuos sólidos en el agua. Es aplicable solo para extracciones en una sola fase. No se aplica a sustancias orgánicas, materia volátil o muestras biológicamente activas. El procedimiento de operación de NMS para pruebas SPLP se detalla en el Anexo A.

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4.1.6 Caracterización de Residuos Sólidos (SWDC)

La SWDC es una versión modificada de la prueba 1311 del método EPA, *Procedimiento de Lixiviación para determinar la Característica de Toxicidad (TCLP)*, pero solo es de carácter informativo y sin fines normativos. Se agita una cantidad conocida de muestra con un fluido de extracción de una composición específica; la fase líquida se separa y analiza para la determinación de Ag, As, Ba, Cd, Cr, Hg, Pb y Se.

La prueba SWDC está diseñada para detectar materiales de residuos para su eliminación en rellenos municipales o clasificarlos como residuos peligrosos en los EEUU. La prueba pretende reflejar la interacción de la solución de lixiviación y la capacidad de amortiguación de los residuos. Es aplicable solo para extracciones de una sola fase. No se aplica a sustancias orgánicas, materia volátil o muestras biológicamente activas. El procedimiento de operación de NMS para pruebas SWDC se detalla en el Anexo A.

4.1.7 Confirmación NCV

4.1.7.1 Potencial de Generación de Acidez (AGP)

Pérdida por Pirólisis (S_TOT-SAP550): El AGP se obtiene de la diferencia entre azufre total y azufre residual mediante pirólisis. Este método supone que los sulfuros generadores de acidez y el azufre elemental se pierden durante la pirólisis a 550 °C durante una hora, dejando sulfatos que no generan ácido en el residuo. El residuo se sustrae de la concentración total de azufre para determinar el contenido de sulfuro generador de acidez.

Azufre pirítico (SHCl – $SHNO_3$): el cálculo del AGP mediante el método de azufre pirítico resulta de la diferencia entre el ácido clorhídrico residual y el azufre residual de ácido nítrico, asumiendo que el ácido clorhídrico aísla la pirita de los otros minerales y el ácido nítrico disuelve la pirita.

Azufre residual de carbonato de sodio (SCIS): el AGP también se puede estimar mediante el azufre residual de carbonato de sodio. Este método supone que el carbonato de sodio disuelve los minerales de sulfato sin generación de acidez, dejando los sulfuros generadores de acidez en el residuo.

Los valores comparativos de AGP se presentan en % de CO_2, las conversiones se realizan multiplicando por -1,37 para valores porcentuales de azufre y sulfuro y por -0,73 para pirita mineralógica (XRD).

Los resultados del ensayo para estos métodos de referencia se comparan con la mineralogía del azufre. Si no hay consistencia entre los métodos, se concluirá que los resultados son inciertos. Cuando los datos muestran problemas potenciales con los análisis de especiación de azufre, se confirma a través de trabajos mineralógicos posteriores, como el MLA o microscopía óptica. Para seleccionar métodos basados en mineralogía, consultar el *ASTM E1915 Método de Prueba Estándar para el Análisis de Metales con Contenido de Minerales y Materiales Relacionados para Caracterizar Carbono, Azufre y Ácido-Base*[3]

[3] www.astm.org

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4.1.7.2 Potencial de Neutralización de Acidez (ANP)

Pirólisis residual (CAP550): El ANP se calcula regularmente en muestras de mineral y residuos utilizando el carbono residual por pirólisis. Este método supone que las formas orgánicas de carbono se pierden durante la pirólisis a 550°C durante una hora, dejando los carbonatos neutralizadores de acidez en el residuo. Este método se utiliza cuando no hay cantidades significativas de minerales de carbonato o carbono orgánico en las muestras, por ejemplo, cuando la contaminación por petróleo de las actividades de perforación impide el uso del resultado total de carbono.

Pérdida de carbono residual de ácido clorhídrico (C_TOT - CAI): El ANP también se puede estimar obteniendo la diferencia entre el carbono total y el carbono residual del ácido clorhídrico, suponiendo que los carbonatos neutralizadores de acidez se disuelven con el tratamiento ácido, dejando únicamente carbono orgánico no neutralizador en el residuo. Este método tenderá a sobreestimar el potencial de neutralización de las muestras que contienen minerales de carbonato de hierro en grandes cantidades.

Titulación ácido-base con correcciones de acidez (ANPA): El ANP también puede determinarse por titulación con correcciones de acidez (ANPA), que no es específica para minerales de carbonato y corrige los minerales de carbonato del metal. Se hace reaccionar una cantidad conocida de ácido con la muestra. Esta solución se trata con peróxido de hidrógeno para convertir los metales a la forma oxidada y el ácido residual se valora con una base estándar. El resultado positivo indica que el material consumirá ácido y el negativo indica que las sales ácidas netas ya están presentes en la muestra.

Los valores comparativos de ANP se presentan como % de CO_2, las conversiones se realizan multiplicando por 3.67 para valores de % de carbono, por 0.48 para dolomita, 0.41 para ankerita, 0.44 para calcita y 0.45 para siderita. Para determinar los % de carbono en ankerita / dolomita se usa el factor medio 0.45, ya que los minerales se superponen en la detección de XRD.

5 RESULTADOS

La descarga mixta del autoclave, los relaves de flotación y las muestras de lodos de tratamiento del proceso de Sulfuros Yanacocha se sometieron al protocolo de caracterización ambiental de NMS. El protocolo (descrito anteriormente) contiene supuestos y cálculos que pueden hacer que la aplicación directa a sistemas prácticos a veces sea inexacta. Sin embargo, son indicadores útiles de la naturaleza de los tipos de roca y el posible comportamiento en un ambiente de almacenamiento en pilas, relaves o roca estéril.

Los métodos NCV / NNPC sirven para clasificar el material considerando solo el valor del balance carbonato-sulfuro, la lógica es que un tipo de roca que contenga suficiente carbonato (que proporcionará alcalinidad para prevenir reacciones aceleradas de generación de acidez biológica y reaccionará rápidamente con el ácido) no requerirá las reacciones neutralizadoras de otros tipos

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de roca de reacción más lenta (p. ej., clorito). La clasificación NCV es más apropiada para todas las muestras debido a la falta de minerales de carbonato de hierro.

5.1 Especiación Carbono/Azufre

La especiación de carbono/azufre y los métodos de titulación ANPA se usan para calcular el NCV y el NNPC. La Tabla IV presenta los datos para los análisis de especiación de carbono y azufre.

Las muestras presentan niveles bajos de carbonatos que pueden llegar a ser indetectables. Existen niveles bajos en los residuos de lixiviación de las muestras Comp 5 y Comp 6 y en los relaves de flotación con roca caliza añadida. Las muestras tienen valores de carbono totales (incluyendo carbonatos y especies de carbono orgánico) de aproximadamente <0.1-0.3%. El análisis insoluble en ácido carbónico (CAI) presentó un contenido de carbono no carbonatado de <0.1-0.1%.

El análisis del carbono mediante pirólisis a 550 °F (CAP550) presentó un contenido de carbonatos de carbono de <0.1% en todas las muestras, con excepción de la muestra ClnrT/Sl/LS (0.2%).
Los valores de carbono menores de 0.1% se consideran por debajo de los límites de detección aceptables y puede aumentar el margen de error de cálculos de ANP.

Las muestras mixtas del autoclave y lodos de tratamiento tienen valores de azufre total de aproximadamente 1.9-16.2%. El análisis de sulfuros mediante pirólisis a 550 °F (SAP550) presentó un contenido de azufre no sulfurado de 0.8-15.1%. El análisis de azufre insoluble en carbonato sódico (SCIS) presentó un contenido de azufre sulfurado de <0.1-0.3%. El análisis de azufre insoluble en ácido clorhídrico (SHCl) presentó un contenido de azufre sulfurado de <0.1-0.2%. El análisis de azufre insoluble en ácido nítrico (HNO3) presentó un contenido de azufre sulfurado insoluble en HCI de <0.1-0.3%. Los valores de azufre menores del 0,1% están por debajo de los límites de detección aceptables y pueden aumentar los márgenes de error para calcular el AGP.

Las muestras mixtas de relaves de flotación y lodos de tratamiento tienen valores de azufre total de aproximadamente 0.5-7.0%. El análisis de azufre mediante pirólisis a 550 °F (SAP550) identificó un contenido de azufre no sulfurado de 0,2-2,4%. El análisis de azufre insoluble en carbonato de sodio (SCIS) identificó un contenido de azufre sulfurado de 0.3-6.1%. El análisis de azufre insoluble en ácido clorhídrico (SHCl) identificó un contenido de azufre sulfurado de 0.3-6.2%. El análisis de azufre insoluble en ácido nítrico (HNO3) identificó un contenido de azufre sulfatado de 0.1-1.1%. Los valores de azufre menores de 0,1% están por debajo de los límites de detección aceptables y pueden aumentar el margen de error para calcular el AGP.

Tabla IV. Datos del Análisis Carbono/Azufre

		P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR
C_TOTAL	**%**	0.005	0.15	0.02	0.04	0.02	0.01	0.05	0.19	0.15
CAI	**%**	0.06	0.03	0.03	0.06	0.04	0.02	0.06	0.05	0.05
CAP550	**%**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04
S_TOTAL	**%**	9.11	1.85	5.42	17.23	8.92	7	15.09	6.74	5.56
SAP550	**%**	8.04	0.81	4.52	17.34	8	6	14.77	6.77	5.68
SCIS	**%**	<0.1	0.14	0.11	0.27	<0.1	<0.1	0.19	<0.1	<0.1
SHCl	**%**	0.11	0.16	0.12	0.04	0.11	0.08	0.13	0.16	0.13
SHNO3	**%**	0.1	0.12	0.14	0.04	0.07	0.06	0.21	0.06	0.09

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		Run 1	Run 2	Run 3	CSvT	CSvt/Sl	CSvt/Sl/LS	ClnrT	ClnrT/Sl	ClnrT/Sl/LS	ClnrT/Sl/Run3
C_TOTAL	**%**	0.06	0.06	0.05	0.05	0.03	0.08	0.06	0.03	0.29	0.1
CAI	**%**	0.07	0.07	0.06	0.1	0.09	0.06	0.05	0.05	0.08	0.06
CAP550	**%**	0.01	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.16	0.01
S_TOTAL	**%**	16.5	15.67	16.22	0.48	1.99	2.37	6.58	7.00	6.85	6.7
SAP550	**%**	15.13	14.41	15.03	0.21	1.78	2.23	0.39	2.23	2.43	2.40
SCIS	**%**	<0.1	0.1	0.12	0.39	0.33	0.39	6.14	5.26	5.19	5.24
SHCl	**%**	0.02	0.03	0.03	0.39	0.39	0.33	6.20	5.44	5.18	5.40
SHNO3	**%**	0.26	0.08	0.04	0.24	0.14	0.13	-	0.88	1.05	-

5.2 Determinación NCV/NNPC

Los resultados de los datos de especiación carbono/azufre se utilizan para determinar el NCV/ NNPC de acuerdo con los siguientes cálculos. En la Tabla V se detallan los datos de NCV/NNPC.

$$ANP = (CTotal-CAI)*3.67 \text{ (NCV) o ANPA (NNPC)} \quad \text{Eq. 1}$$

$$AGP = (SCIS) \times -1.37 \text{ (valores positivos se igualan a 0)} \quad \text{Eq.2}$$

$$NCV \text{ o } NNPC = ANP + AGP \quad \text{Eq.3}$$

Debido al alto margen de error para calcular los datos de STotal y SAP550, se ha sustituido la determinación del AGP a través del SCIS por STotal-SAP550.

Consulte la Sección 4.1.2 para conocer los requerimientos de clasificación NCV/NNPC.

Tabla V. Clasificación NCV/NNPC de Sólidos de Sulfato Yanacocha

		P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR
AGP	**% CO_2**	0.00	-0.19	-0.15	-0.37	0.00	0.00	-0.26	0.00	0.00
ANP	**% CO_2**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.37
ANPA	**% CO_2**	-1.74	-2.09	-1.60	-0.71	-1.71	-1.85	-0.89	0.95	0.97
NCV	**% CO_2**	0.00	-0.19	-0.15	-0.37	0.00	0.00	-0.26	0.51	0.37
NNPC	**% CO_2**	-1.74	-2.28	-1.75	-1.08	-1.71	-1.85	-1.15	0.95	0.97
NCV Classification	**-**	I	SA	SA	SA	I	I	SA	SB	SB
NNPC Classification	**-**	A	A	A	A	A	A	A	SB	SB

		Run 1	Run 2	Run 3	CSvT	CSvt/Sl	CSvt/Sl/LS	ClnrT	ClnrT/Sl	ClnrT/Sl/LS	ClnrT/Sl/Run3
AGP	**% CO_2**	0.00	-0.14	-0.16	-0.53	-0.45	-0.53	-8.41	-7.21	-7.11	-7.18
ANP	**% CO_2**	0.00	0.00	0.00	0.00	0.07	0.18	0.00	0.07	0.48	0.33
ANPA	**% CO_2**	-0.48	0.26	1.62	0.47	-0.56	0.40	0.09	-0.56	0.41	-0.36
NCV	**% CO_2**	0.00	-0.14	-0.16	-0.53	-0.38	-0.35	-8.41	-7.13	-6.63	-6.85
NNPC	**% CO_2**	-0.48	0.12	1.46	-0.06	-1.01	-0.13	-8.32	-7.77	-6.70	-7.54
NCV Classification	**-**	I	SA	SA	SA	SA	SA	HA	HA	HA	HA
NNPC Classification	**-**	SA	SB	B	N	A	SA	HA	HA	HA	HA

Se recomienda el uso de la clasificación NCV para clasificar todas las muestras.

5.3 Confirmación NCV/NNPC

Los métodos alternativos para estimar el AGP y ANP pueden generar resultados contradictorios dependiendo de los minerales en el material de ensayo. Los métodos alternativos se comparan en

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la Tabla VI y la Tabla VII. La concordancia de los métodos alternativos brinda certeza y una conclusión más sólida.

5.3.1 AGP

Los resultados de las muestras del autoclave y de los lodos de tratamiento no son concluyentes, pero sugieren una capacidad limitada de generación de acidez debido al bajo o indetectable contenido de azufre sulfurado. Las muestras del autoclave tienen valores de azufre (como CO_2) de aproximadamente 2.5-22.6% del azufre total, 0-1.9% de azufre sulfurado por pirólisis, <0.1-0.4% de azufre sulfurado por SCIS, <0.1-0.1% de azufre sulfurado pirítico, y no detectable mediante análisis mineralógico (XRD). Existe buena concordancia entre 3 de los métodos de detección de azufre sulfurado. El método de pirólisis puede mostrar valores más altos a partir de márgenes de error significativos para comparar el total de azufre sulfurado con la oxidación de azufre sulfurado en muestras con alto contenido de sulfato.

Las muestras de relaves de flotación y lodos de tratamiento tienen valores de azufre (como CO_2) de aproximadamente 0.7-9.6% de azufre total, 0.2-8.5% de azufre sulfurado mediante pirólisis, 0.5-8.4% de azufre sulfurado mediante análisis SCIS, 0.2-8.5% de azufre sulfurado pirítico, y 0.5% (relaves de depurador scavenger) y 7.2% (relaves de limpieza) para análisis mineralógico (XRD). Existe concordancia entre todos los métodos de detección de azufre sulfurado.

Tabla VI. Resultados Comparativos y de Confirmación de AGP

		P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR
Total S	**% CO_2**	-12.48	-2.53	-7.43	-23.61	-12.22	-9.59	-20.67	-9.23	-7.62
AGP (Pyrolysis)	**% CO_2**	-1.47	-1.42	-1.23	0.00	-1.26	-1.37	-0.44	0.00	0.00
AGP (SCIS)	**% CO_2**	0.00	-0.19	-0.15	-0.37	0.00	0.00	-0.26	0.00	0.00
AGP (Pyritic)	**% CO_2**	-0.01	-0.05	0.00	0.00	-0.05	-0.03	0.00	-0.14	-0.05
AGP (XRD)	**% CO_2**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		Run 1	Run 2	Run 3	CSvT	CSvt/Sl	CSvt/Sl/LS	ClnrT	ClnrT/Sl	ClnrT/Sl/LS	ClnrT/Sl/Run3
Total S	**% CO_2**	-22.61	-21.47	-22.22	-0.66	-2.73	-3.25	-9.01	-9.59	-9.38	-9.18
AGP (Pyrolysis)	**% CO_2**	-1.88	-1.73	-1.63	-0.37	-0.29	-0.19	-8.48	-6.53	-6.06	-5.89
AGP (SCIS)	**% CO_2**	0.00	-0.14	-0.16	-0.53	-0.45	-0.53	-8.41	-7.21	-7.11	-7.18
AGP (Pyritic)	**% CO_2**	0.00	0.00	0.00	-0.21	-0.34	-0.27	-8.49	-6.25	-5.66	-7.40
AGP (XRD)	**% CO_2**	0.00	0.00	0.00	-0.51	-	-	-7.15	-	-	-

5.3.2 ANP

Las muestras presentan bajos niveles de carbonatos que pueden llegar a ser indetectables. Los residuos de lixiviación de Comp 5 y Comp 6 y relaves de flotación con adición de caliza presentan bajos niveles. Las muestras tienen valores totales de carbono (que incluye carbonatos y especies de carbono orgánico) de aproximadamente <0.1-0.3. Los métodos de análisis de carbonato identificaron la presencia de carbonatos con potencial de neutralización de acidez mediante pirólisis (<0.1-0.6% como CO_2), CAI (<0.1-0.8% como CO_2), ANPA (<0.1-1.6% como CO_2) y XRD (<0.1- 0.1% como CO_2), demostrando que existe concordancia aceptable entre las estimaciones de ANP basadas en métodos de carbono.

La información contenida en este informe es confidencial y está patentada.

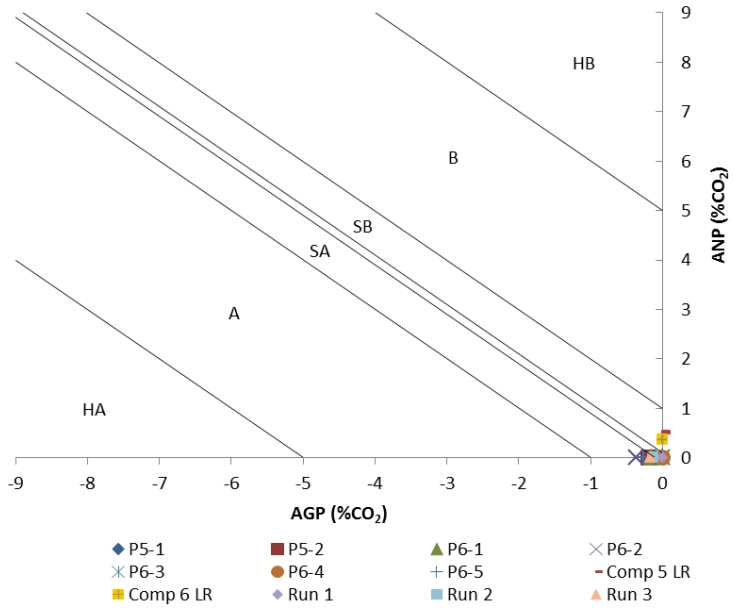
Tabla VII. Resultados Comparativos y de Confirmación de ANP

		P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR
Total C	% CO_2	0.02	0.55	0.07	0.15	0.07	0.04	0.18	0.70	0.55
ANP (Pyrolysis)	% CO_2	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.15
ANP (CAI)	% CO_2	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.51	0.37
ANP (XRD)	% CO_2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANPA	% CO_2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.97

		Run 1	Run 2	Run 3	CSvT	CSvt/Sl	CSvt/Sl/LS	ClnrT	ClnrT/Sl	ClnrT/Sl/LS	ClnrT/Sl/Run3
Total C	% CO_2	0.22	0.22	0.18	0.18	0.11	0.29	0.22	0.11	1.06	0.37
ANP (Pyrolysis)	% CO_2	0.02	0.02	0.02	0.02	0.04	0.11	0.02	0.04	0.59	0.04
ANP (CAI)	% CO_2	0.00	0.00	0.00	0.00	0.00	0.07	0.04	0.00	0.77	0.15
ANP (XRD)	% CO_2	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00
ANPA	% CO_2	0.00	0.26	1.62	0.47	0.00	0.40	0.09	0.00	0.41	0.00

5.3.3 AGP versus ANP

El gráfico AGP versus ANP/ANPA proporciona una presentación visual de la clasificación de muestras NCV/NNPC, es decir presenta la naturaleza de las muestras con potencial de generación de acidez y con potencial de neutralización de acidez. La Figura 1 y la Figura 2 presentan muestras clasificadas según el NCV. Las muestras con potencial de generación de acidez están en la parte inferior izquierda del gráfico y las muestras con acidez decreciente y aumento del potencial de neutralización aparecen en la parte superior derecha. Esta representación visual de la clasificación de muestras de la sección 5.2 divide las categorías en altamente ácidas (HA), levemente ácidas (SA), inertes (I) y ligeramente básicas (SB).



La información contenida en este informe es confidencial y está patentada.

Gráfico 1. Comparación del potencial de generación de acidez con el potencial de neutralización de acidez para muestras de residuos del autoclave y de lodo tratado según clasificación NCV.

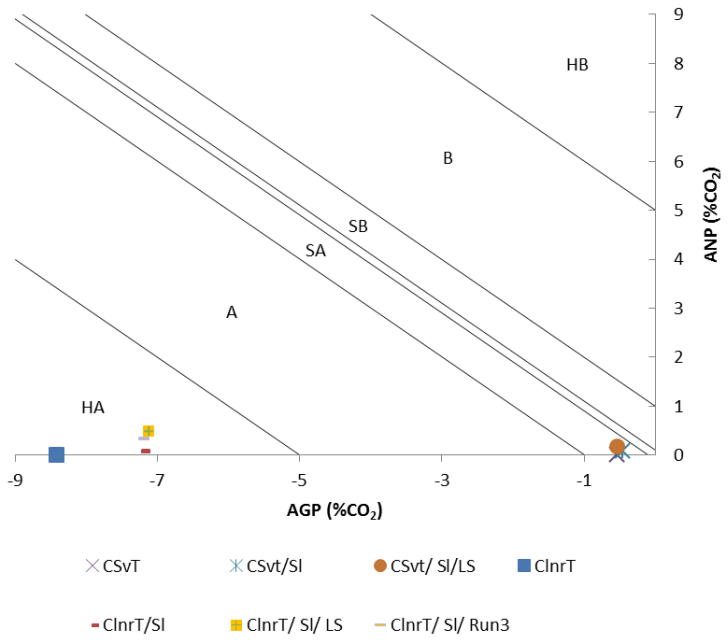


Gráfico 2. Comparación del potencial de generación de acidez con el potencial de neutralización de acidez para muestras de relaves de flotación y lodo tratado según clasificación NCV.

La clasificación NCV se puede confirmar trazando el NCV versus el pH de PAG, presentado en las Figuras 3 y 4. El gráfico se divide en cuatro secciones:

- Muestras con un NCV≥ 0 (neutra a altamente básica) con un pH PAG ≥ 4.5 se consideran **no generadoras de acidez**.
- Muestras con un NCV <0 (neutra a altamente ácida) con un pH PAG <4.5 se consideran **potencialmente generadoras de acidez**.
- Muestras con un NCV≥ 0 con un pH PAG <4.5 se consideran **inciertas**.
- Muestras con una NCV <0 con un pH PAG≥ 4.5 se consideran **inciertas**.

Las muestras Comp 5 y Comp 6 se consideran no generadoras de acidez. Como se mencionó en la Sección 5.3.1., las otras muestras de descarga del autoclave son potencialmente generadoras de acidez o inciertas. Todas las muestras de relaves de flotación son potencialmente generadoras de acidez.

La información contenida en este informe es confidencial y está patentada.

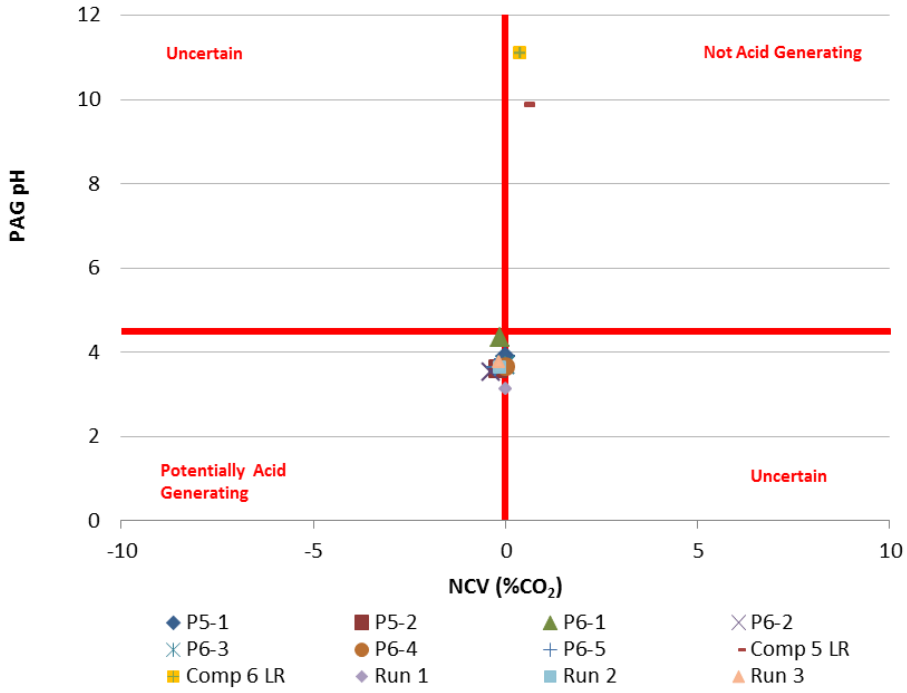


Gráfico 3. Confirmación de clasificación NCV para muestras mixtas de descarga del autoclave usando valores pH de prueba PAG.

La información contenida en este informe es confidencial y está patentada.

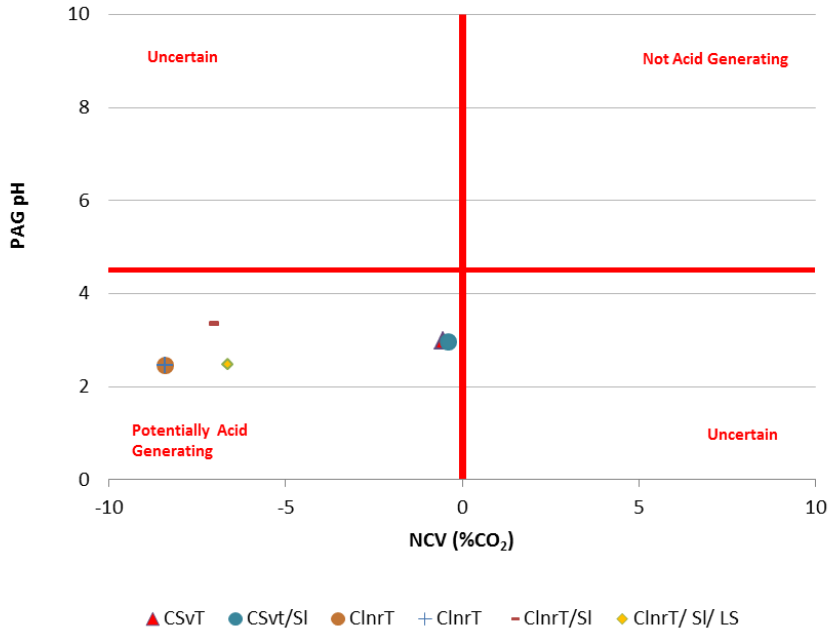


Gráfico 4. Confirmación de clasificación NCV para muestras mixtas de relaves de flotación usando valores pH de prueba PAG.

5.4 Índice de abundancia geoquímica (GAI)

El Índice de Abundancia Geoquímica (GAI) indica cualquier enriquecimiento elemental que pueda ser de importancia ambiental. Los valores GAI se truncan en incrementos enteros donde un GAI de 0 indica que el elemento está presente a una concentración similar o inferior a la abundancia media y un GAI de 6 indica un enriquecimiento de aproximadamente 100 veces mayor que la abundancia media.[4]

La Tabla VIII presenta la química elemental de las muestras como se proporciona para el análisis de caracterización ambiental, en comparación con los valores GAI. Se observa un enriquecimiento significativo en antimonio, arsénico, cobre, mercurio, molibdeno y plomo.

[4]Guía GARD, Capítulo Predicción, Sección 5.4.5

La información contenida en este informe es confidencial y está patentada.

Tabla VIII. Enriquecimiento Elemental GAI para Muestras de Residuos del Autoclave/Relaves de Flotación/Lodos de tratamiento del proceso de Sulfuros Yanacocha

		Median Soil Content	P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR
Ag	ppm		26.1	31.1	29.9	4.50	23.0	69.2	333	20.9	3.10
Al	ppm	71000	3598	3126	2183	869	2791	2920	9635	462	345
As	ppm	6	1835	1229	1165	4166	1298	2405	3321	1778	4939
Ba	ppm	500	3592	2285	2053	103	1311	1256	374	711	789
Be	ppm	6	<2	<2	<2	<2	<2	<2	<2	2.00	3.00
C	%		<0.01	0.15	0.02	0.04	0.02	0.01	0.05	0.19	0.15
Ca	ppm	15000	89390	148	47684	212156	88231	65237	177687	87986	79630
Cd	ppm	0.35	<30	<30	<30	<30	<30	<30	<30	<2	<2
Co	ppm	8	<2	<2	<2	<2	<2	<2	<2	12.0	3.00
Cr	ppm	70	31.0	41.0	60.0	8.00	22.0	22.0	25.0	43.0	38.0
Cu	ppm	30	5589	6450	3972	1690	3918	5471	2516	2706	337
Fe	ppm	40000	5468	6829	10068	5853	3784	5942	13246	6809	12112
Hg	ppm	0.06	4.69	1.58	6.11	4.94	5.12	6.63	33.0	4.36	0.81
K	ppm	14000	2108	848	1414	880	881	909	1135	471	427
Mg	ppm	5000	290	184	298	103	127	128	102	196	163
Mn	ppm	1000	44.0	8.00	24.0	18.0	26.0	19.0	21.0	32.0	20.0
Mo	ppm	2	3.00	2.00	5.00	2.00	<2	6.00	29.0	8.00	9.00
Na	ppm	5000	675	557	595	528	594	579	613	442	307
Ni	ppm	50	<20	<20	<20	<20	<20	<20	<20	6.00	4.00
Pb	ppm	35	1942	7064	6250	81.0	1604	2080	3464	2734	1830
S	%		9.11	1.85	5.42	17.2	8.92	7.00	15.1	6.74	5.56
Sb	ppm	5	292	419	374	31	288	743	3458	411	391
Se	ppm	0.4	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sr	ppm	250	187	50.0	92.0	77.0	95.0	99.0	286	57.0	54.0
Ti	ppm		940	1868	1313	110	1104	1133	605	17	16
Tl	ppm		<20	<20	<20	<20	<20	<20	<20	<20	<20
V	ppm	90	<2	3.00	<2	<2	<2	4.00	14.0	<2	<2
Zn	ppm	90	50.0	46.0	32.0	7.00	20.0	48.0	16.0	94.0	41.0

		Median Soil Content	Run 1	Run 2	Run 3	CSvT	CSvT/ SI	CSvT/ SI/LS	ClnrT	ClnrT/SI	ClnrT/SI /LS	ClnrT/SI /Run3
Ag	ppm		<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	6.00	5.20	6.40	5.20
Al	ppm	71000	1773	2624	2147	14356	13513	12970	21164	12011	11623	12068
As	ppm	6	4080	3734	3089	351	629	676	2121	1954	1910	1887
Ba	ppm	500	52	42	42	228	234	212	306	207	177	183
Be	ppm	6	<2	<2	<2	7.00	7.00	7.00	<2	7.00	7.00	7.00
C	%		0.06	0.06	0.05	0.05	0.03	0.08	0.06	0.03	0.29	0.1
Ca	ppm	15000	174330	165749	177129	9549	20210	26207	14229	21222	28148	23408
Cd	ppm	0.35	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Co	ppm	8	<2	<2	<2	4.00	4.00	3.00	<2	7.00	6.00	7.00
Cr	ppm	70	31.0	40.0	34.0	45.0	42.0	40.0	34.0	40.0	40.0	39.0
Cu	ppm	30	370	572	451	873	820	785	5876	5145	4996	4952
Fe	ppm	40000	80588	105336	94256	21048	29180	30882	70152	74384	70812	71740
Hg	ppm	0.06	1.31	0.26	0.15	0.14	0.12	0.10	0.44	0.41	0.46	
K	ppm	14000	977	1064	1228	2644	2050	2512	1889	2258	1627	1632
Mg	ppm	5000	240	281	195	3583	3392	2906	7334	2682	2933	2935
Mn	ppm	1000	27.0	34.0	31.0	478	428	413	444	381	323	343
Mo	ppm	2	17.0	21.0	19.0	10.0	11.0	10.0	20.0	26.0	25.0	25.0
Na	ppm	5000	615	664	694	3965	3789	3477	3896	3320	2945	3054
Ni	ppm	50	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Pb	ppm	35	25.0	<10	<10	194	187	177	315	236	227	251
S	%		16.5	15.7	16.2	0.48	1.99	2.37	6.58	7.00	6.85	6.70
Sb	ppm	5	<25	<25	<25	57	67	59	173	127	130	122
Se	ppm	0.4	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sr	ppm	250	68.0	78.0	70.0	184	225	198	331	169	156	169
Ti	ppm		126	134	125	928	893	790	1183	715	658	700
Tl	ppm		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
V	ppm	90	11.0	16.0	14.0	40.0	37.0	37.0	35.0	34.0	31.0	31.0
Zn	ppm	90	16.0	28.0	15.0	111	106	93.0	287	219	201	285

GAI=0	< 3 times median soil content
GAI=1	3 to 6 times
GAI=2	6 to 12 times
GAI=3	12 to 24 times
GAI=4	24 to 48 times
GAI=5	48 to 96 times
GAI=6	>96 times

La información contenida en este informe es confidencial y está patentada.

5.5 Mineralogía

Se realizó la mineralogía semicuantitativa de las muestras para identificar los minerales de azufre y carbono presentes (Tabla IX). Los resultados confirman la presencia de calcita neutralizadora de acidez en CSvT (0,3% en peso prom.) y pirita generadora de acidez en CSvT y ClnrT (0,7% y 9,8% respectivamente). Los minerales que predominaron en todas las muestras fueron el cuarzo y/o yeso.

La abundancia de yeso se relaciona con el contenido total de azufre en todas las muestras.

El método ANPA no debe usarse para determinar el ANP. La ausencia de carbonatos de hierro (ankerita y siderita) en todas las muestras indica la falta de potencial de generación significativa de acidez determinado mediante el método de titulación ANPA.

Los resultados confirman la presencia de sulfuros generadores de acidez en las muestras de relaves de flotación. Las muestras contienen una cantidad considerable de sulfuros reactivos como pirita: 0.7% para CSvT y 9.8% para ClnrT. Los niveles de pirita generadora de acidez y la ausencia de carbonatos neutralizantes de acidez indican la probabilidad de que las muestras de relaves de flotación presenten generación de acidez neta en lugar de neutralización neta de acidez.

Tabla IX. Datos semicuantitativos XRD (Wt.%) de Muestras de Residuos del Autoclave/Relaves de Flotación/Lodos de tratamiento del proceso de Sulfuros Yanacocha

		P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR	Run 1	Run 2	Run 3	CSvT	ClnrT
Quartz	%	65.2	96.8	75.3	4.7	67.5	72.7	12.2	70.8	69.4	3.3	3.8	2.6	86.9	77.7
Gypsum	%	32.4		21.7	95.3	30.4	24.3	84.9	28.3	30	96.7	96.2	97.4		
Rhomboclase	%	1.7	1.6	1.5		1.2	1.9	2.4						1.1	
Rutile	%	0.7	0.6	0.7		0.9	1	0.5	0.9	0.6					0.4
Actinolite	%													2.6	5.1
Plagioclase	%													6	4.4
Anglesite	%		0.7	0.8											
Calcite	%													0.3	
Chlorite	%													0.3	0.5
Enargite	%		0.3												0.8
Sericite	%													1.3	0.8
Pyrite	%													0.7	9.8
Zunyite	%													0.9	0.5

5.6 Generación de Ácido Peróxido (PAG)

Las soluciones lixiviadas de la muestra del autoclave fueron ácidas (pH 3,2-4,4) excepto los residuos de lixiviación de las muestras Comp 5 y Comp 6 (pH 9,9 y 11,1). La ausencia de sulfuros para la oxidación y generación de ácido indicaría que la oxidación de otros metales es la fuente de los valores de pH ácido de las soluciones de lixiviación. Las muestras de relaves de flotación fueron generadoras de ácido, con pH ≤ 4.5 (pH 2.5-3.4). Esto corresponde a la clasificación NCV: ligeramente ácido y altamente ácido. El ácido se generó a partir de sulfuros reactivos que

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excedieron el potencial de neutralización de acidez.

La solución de lixiviación PAG de las muestras de descarga del autoclave excede los límites del ECA respecto a las concentraciones de aluminio, antimonio, arsénico, cadmio, cromo, cobre, hierro, mercurio, níquel, plomo, plata y talio. La solución de lixiviación PAG de las muestras de relaves de flotación excede los límites del ECA respecto a las concentraciones de aluminio, antimonio, arsénico, cadmio, cobre, hierro, manganeso, níquel, plomo y talio. La Tabla X presenta los resultados de las soluciones de lixiviación.

Tabla X. Química de la solución final de lixiviación PAG de muestras de relaves de flotación del proceso de Sulfuros Yanacocha

		MYSRL ECA Lowest Standard	P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR
Ag	mg/L	0.05	0.13	0.13	0.20	0.03	0.06	0.39	0.62	0.00	0.00
Al	mg/L	0.2	1.75	0.49	2.54	0.86	2.67	1.53	0.72	0.21	0.44
As	mg/L	0.01	0.54	0.37	0.11	0.32	0.61	0.55	0.52	0.22	0.00
Ba	mg/L	0.7	0.04	0.01	0.00	0.03	0.01	0.01	0.05	0.05	0.05
Be	mg/L	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cd	mg/L	0.003	0.010	0.010	0.013	0.005	0.006	0.008	0.004	0.000	0.000
Co	mg/L	0.05	0.02	0.05	0.06	0.01	0.02	0.02	0.00	0.00	0.00
Cr (Total)	mg/L	0.05	0.14	0.20	0.25	0.06	0.09	0.07	0.01	0.14	0.15
Cu	mg/L	0.02	45.0	37.5	36.2	14.1	25.9	39.4	13.9	0.01	0.01
Fe	mg/L	1	10.4	15.8	10.2	0.87	6.92	8.91	0.63	0.03	0.01
Hg	mg/L	0.001	0.001	0.000	0.005	0.000	<0.0001	0.001	0.004	0.001	<0.0001
Mg	mg/L	150	0.60	0.14	0.23	0.81	0.49	0.29	0.13	0.72	0.13
Mn	mg/L	0.2	0.06	0.05	0.06	0.07	0.05	0.04	0.04	0.00	0.00
Mo	mg/L		0.02	0.01	0.00	0.02	0.02	0.03	0.02	0.02	0.02
Na	mg/L	200	0.67	0.66	0.74	0.80	0.62	0.64	0.64	1.91	1.16
Ni	mg/L	0.025	0.04	0.02	0.04	0.04	0.04	0.04	0.04	0.03	0.03
Pb	mg/L	0.05	3.39	4.08	3.20	0.36	2.84	2.96	0.44	0.00	0.00
Sb	mg/L	0.006	0.72	0.63	0.05	0.03	0.81	1.36	0.16	0.56	0.07
Se	mg/L	0.05	0.02	0.01	0.03	0.04	0.01	0.02	0.05	0.02	0.03
Tl	mg/L	0.0015[(1)]	0.027	0.032	0.081	0.032	0.024	0.025	0.030	0.011	0.004
V	mg/L	0.1	0.01	0.01	0.00	0.01	0.01	0.02	0.01	0.00	0.00
Zn	mg/L	2	0.50	0.44	0.43	0.19	0.31	0.49	0.22	0.01	0.00
pH	-	6.5-8.4	2.51	2.38	2.39	3.00	2.42	2.37	2.90	9.87	11.09

		MYSRL ECA Lowest Standard	Run 1	Run 2	Run 3	CSvT	CSvT/ SI	CSvT/ SI/LS	ClnrT	ClnrT/ SI	ClnrT/ SI/ LS
Ag	mg/L	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	mg/L	0.2	0.35	0.38	0.28	1.51	1.24	0.22	3.24	2.82	2.01
As	mg/L	0.01	0.01	0.01	0.03	0.01	0.01	0.03	0.40	0.12	0.07
Ba	mg/L	0.7	0.18	0.25	0.37	0.10	0.04	0.04	0.08	0.06	0.06
Be	mg/L	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cd	mg/L	0.003	0.002	0.002	0.001	0.011	0.009	0.009	0.016	0.017	0.017
Co	mg/L	0.05	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.02
Cr (Total)	mg/L	0.05	0.07	0.06	0.04	0.03	0.03	0.03	0.03	0.03	0.02
Cu	mg/L	0.02	2.01	2.88	1.96	5.83	5.14	4.12	16.1	15.0	22.9
Fe	mg/L	1	1.43	0.84	1.04	1.67	0.91	1.09	47.0	39.2	14.6
Hg	mg/L	0.001	0.001	0.000	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mg	mg/L	150	1.20	1.16	0.78	0.77	0.64	0.86	0.99	0.75	1.86
Mn	mg/L	0.2	0.09	0.09	0.06	0.72	0.54	0.55	0.85	0.60	0.61
Mo	mg/L		0.01	0.02	0.02	0.00	0.01	0.04	0.01	0.00	0.00
Na	mg/L	200	2.35	2.40	2.75	0.73	0.49	0.44	1.37	0.57	0.44
Ni	mg/L	0.025	0.24	0.04	0.04	0.02	0.02	0.03	0.03	0.04	0.04
Pb	mg/L	0.05	0.01	0.00	0.01	0.44	0.38	0.29	0.89	2.10	0.72
Sb	mg/L	0.006	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00
Se	mg/L	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Tl	mg/L	0.0015[(1)]	0.004	0.003	0.003	0.002	0.003	0.002	0.009	0.007	0.010
V	mg/L	0.1	0.02	0.02	0.03	0.01	0.01	0.03	0.00	0.00	0.00
Zn	mg/L	2	0.38	0.44	0.41	0.74	0.64	0.67	1.27	1.16	1.29
pH	-	6.5-8.4	2.13	2.27	2.42	2.98	2.97	3.36	2.46	3.36	2.47

La información contenida en este informe es confidencial y está patentada.

(1) Newmont Standard
Exceeds ECA standards
Exceeds ECA standards X 10
Exceeds ECA standards X 100

5.7 Procedimiento de Lixiviación por Precipitación Sintética (SPLP)

Las muestras estuvieron en contacto durante 18 horas con agua desionizada usando el método SPLP para determinar las sales, metales y aniones solubles. La caracterización de la solución de lixiviación se presenta en la Tabla XI. Se generó una cantidad de acidez considerable a partir de sulfuros reactivos o sales ácidas en contacto limitado con lluvia sintética en muestras de descarga del autoclave. Los residuos de lixiviación de las muestras Comp 5 y Comp 6 son básicos. Las soluciones de lixiviación SPLP de la descarga del autoclave exceden los ECA respecto a las concentraciones de cromo, mercurio, plomo, selenio, plata, vanadio y zinc. Los relaves de flotación exceden los límites de manganeso. Las muestras del autoclave y flotación superan los límites de aluminio, antimonio, arsénico, calcio, cadmio, cobre, hierro, níquel, talio, conductividad, TDS, sulfato, pH alto y pH bajo.

Tabla XI. Química de la solución final de lixiviación SPLP (1 de 2)

La información contenida en este informe es confidencial y está patentada.

		MYSRL ECA Lowest Standard	P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR
Ag	mg/L	0.05	0.11	0.30	0.10	0.01	0.05	0.37	0.30	0.02	0.00
Al	mg/L	0.2	8.53	2.81	11.58	3.26	13.72	8.06	4.50	1.43	0.06
As	mg/L	0.01	40.3	49.7	32.4	0.47	35.7	42.1	0.86	0.15	0.10
B	mg/L	0.5									
Ba	mg/L	0.7	0.01	0.01	0.00	0.02	0.01	0.02	0.02	0.03	0.02
Be	mg/L	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bi	mg/L		0.08	0.05	0.09	<0.05	<0.05	0.07	<0.05	<0.05	<0.05
Ca	mg/L	200	667	34.6	701	601	703	708	602	858	741
Cd	mg/L	0.003	0.019	0.062	0.047	0.016	0.009	0.017	0.011	0.000	0.000
Co	mg/L	0.05	0.12	0.29	0.29	0.06	0.09	0.08	0.02	0.01	0.00
Cr (Total)	mg/L	0.05	0.67	1.23	1.58	0.17	0.48	0.48	0.05	0.03	0.03
Cu	mg/L	0.02	266	209	214	72.9	152	274	83.5	0.94	0.93
Fe	mg/L	1	229	300	373	24.6	162	218	33.3	0.37	0.31
Ga	mg/L		0.17	0.20	0.29	<0.05	0.14	0.17	<0.05	<0.05	<0.05
Hg	mg/L	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000
K	mg/L		0.80	0.48	0.75	0.47	1.60	1.00	0.50	1.53	0.61
Li	mg/L	2.5									
Mg	mg/L	150	1.88	0.81	0.92	3.95	2.41	1.31	0.55	0.90	0.12
Mn	mg/L	0.2	0.10	0.14	0.13	0.20	0.08	0.07	0.03	0.00	0.00
Mo	mg/L		0.17	0.30	0.13	0.01	0.16	0.25	0.01	0.08	0.06
Na	mg/L	200	1.25	1.58	1.47	1.39	0.91	0.68	1.23	7.21	2.74
Ni	mg/L	0.025	0.10	0.11	0.13	0.06	0.08	0.12	0.04	0.04	0.04
P (Total)	mg/L	0.15									
Pb	mg/L	0.05	2.06	2.50	4.82	0.17	2.01	1.72	1.31	0.00	0.00
S	mg/L		1115	760	1108	580	1058	1173	604	707	545
Sb	mg/L	0.006	1.15	4.62	0.35	0.07	3.01	1.61	0.16	0.17	0.00
Sc	mg/L		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Se	mg/L	0.05	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.02	0.00
Si	mg/L		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.38	0.57
Sn	mg/L		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sr	mg/L		0.41	0.03	0.56	0.55	0.44	0.47	0.48	0.70	0.61
Ti	mg/L		0.55	0.29	0.66	0.52	0.68	0.50	0.50	0.40	0.37
Tl	mg/L	0.0015[1]	0.05	0.15	0.28	0.02	0.07	0.05	0.04	0.005	0.001
U	mg/L	0.02									
V	mg/L	0.1	0.13	0.09	0.07	0.00	0.08	0.21	0.01	0.00	0.00
Zn	mg/L	2	2.50	2.37	2.01	0.75	1.35	2.39	0.96	0.00	0.00
Acid-CaC	mg/L		1993	2575	1981	676	1797	2115	1376	-31.7	-113
Alk-CaCO	mg/L	375	<10	<10	<10	<10	<10	<10	<10	86	163
COND	uS/cm	1600	7565	9411	5203	2632	7505	8041	3180	5496	3945
Hardness	mg/L		1675	89.9	1756	1519	1767	1776	1508	2150	1854
pH	-	6.5-8.4	2.05	1.87	2.27	2.89	2.03	2.03	2.72	9.93	10.91
TDS	mg/L	1000	4460	1780	4570	2420	3660	4220	2490	2978	2530
Cl^-	mg/L	100	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	2.5	2.01
F^-	mg/L	1	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	0.42	4.61
NH_3-N	mg/L	2	0.17	0.23	0.48	0.11	0.20	0.14	0.15	0.94	0.49
NO_2-N	mg/L	0.06	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<0.40	<0.40
NO_3-N	mg/L	10	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.20	<0.20
PO_4-P	mg/L	0.15	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.20	<0.20
SO_4	mg/L	300	3274	2713	2991	<50.0	3159	3563	1788	1825	1498

Tabla XI. Química de la solución final de lixiviación SPLP (2 de 2)

La información contenida en este informe es confidencial y está patentada.

		MYSRL ECA Lowest Standard	Run 1	Run 2	Run 3	CSvT	CSvT/ SI	CSvT/ SI/LS	ClnrT	ClnrT/ SI	ClnrT/ SI/ LS
Ag	**mg/L**	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Al	**mg/L**	0.2	1.22	1.51	1.58	0.03	0.03	0.01	0.00	0.05	0.00
As	**mg/L**	0.01	0.01	0.01	0.02	0.05	0.01	0.00	0.01	0.01	0.00
B	**mg/L**	0.5									
Ba	**mg/L**	0.7	0.04	0.08	0.10	0.09	0.03	0.02	0.07	0.04	0.02
Be	**mg/L**	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bi	**mg/L**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ca	**mg/L**	200	583	582	569	13.1	602	587	19.9	587	569
Cd	**mg/L**	0.003	0.005	0.009	0.006	0.000	0.016	0.000	0.003	0.028	0.000
Co	**mg/L**	0.05	0.04	0.06	0.04	0.00	0.02	0.00	0.01	0.03	0.00
Cr (Total)	**mg/L**	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Cu	**mg/L**	0.02	6.55	10.3	8.75	0.01	1.20	0.07	0.15	5.30	0.02
Fe	**mg/L**	1	11.9	7.21	6.75	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Ga	**mg/L**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Hg	**mg/L**	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
K	**mg/L**		0.75	0.55	0.54	0.75	3.06	2.42	0.91	2.50	1.83
Li	**mg/L**	2.5									
Mg	**mg/L**	150	3.32	4.31	3.54	0.53	1.55	1.78	0.59	1.16	1.53
Mn	**mg/L**	0.2	0.27	0.37	0.27	0.05	1.68	0.14	1.40	1.76	0.17
Mo	**mg/L**		0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01
Na	**mg/L**	200	2.39	2.29	2.08	0.87	1.48	1.68	0.75	1.11	1.10
Ni	**mg/L**	0.025	0.05	0.05	0.05	0.00	0.07	0.05	0.02	0.09	0.05
P (Total)	**mg/L**	0.15									
Pb	**mg/L**	0.05	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.02	0.00
S	**mg/L**		467	464	460	7.94	434	425	17.4	432	430
Sb	**mg/L**	0.006	0.00	0.00	0.00	0.06	0.00	0.01	0.02	0.01	0.01
Sc	**mg/L**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Se	**mg/L**	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Si	**mg/L**		0.93	1.29	1.41	1.79	2.89	0.72	1.83	3.07	0.90
Sn	**mg/L**		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sr	**mg/L**		0.49	0.60	0.54	0.05	0.44	0.45	0.07	0.43	0.44
Ti	**mg/L**		0.34	0.34	0.45	0.01	0.40	0.32	0.02	0.34	0.45
Tl	**mg/L**	0.0015(1)	0.008	0.010	0.01	0.001	0.002	0.001	0.001	0.003	0.001
U	**mg/L**	0.02									
V	**mg/L**	0.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zn	**mg/L**	2	0.56	0.83	0.62	0.01	0.87	0.05	0.27	1.35	0.01
Acid-CaC(	**mg/L**		130	105	101	9.10	19.1	57.0	19.5	-5.20	5.20
Alk-CaCO	**mg/L**	375	<10	<10	<10	30	17	35	18	18	37
COND	**uS/cm**	1600	2300	2610	2569	93.4	2201	2155	142.7	2231	2315
Hardness	**mg/L**		1470	1472	1437	35.0	1512	1475	52.1	1473	1429
pH	**-**	6.5-8.4	2.91	3.01	3.06	7.55	5.96	7.05	6.65	5.76	7.21
TDS	**mg/L**	1000	2082	2090	2180	72.0	2206	2252	106	2160	2218
Cl^-	**mg/L**	100	0.45	0.6	0.59	0.3	0.2	0.8	0.1	0.2	0.4
F^-	**mg/L**	1	<0.02	<0.02	<0.02	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
NH_3-N	**mg/L**	2	0.15	0.18	0.17	0.09	0.10	0.11	0.12	0.09	0.08
NO_2-N	**mg/L**	0.06	<0.04	<0.04	<0.04	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N	**mg/L**	10	<0.02	<0.02	<0.02	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
PO_4-P	**mg/L**	0.15	<0.02	<0.02	<0.02	0.6	<0.20	<0.20	<0.20	<0.20	<0.20
SO_4	**mg/L**	300	1489	1464	1471	19.7	1435	1429	49.2	1477	1442

(1) Newmont Standard
Exceeds ECA standards
Exceeds ECA standards X 10
Exceeds ECA standards X 100

5.8 Caracterización de Residuos Sólidos (SWDC)

Las muestras de roca de desmontese agitaron durante 18 horas con un fluido de extracción de composición específica, utilizando el método TCLP modificado para detectar la clasificación de residuos peligrosos y la idoneidad de los residuos sólidos para su disposición en vertederos municipales. Las soluciones de lixiviación se caracterizaron para determinar la movilidad potencial de los elementos designados por la RCRA como se presenta en la Tabla XII. Cinco muestras excedieron los límites de arsénico, cadmio, plomo y selenio de acuerdo a la RCRA.

La información contenida en este informe es confidencial y está patentada.

Tabla XII. Resumen de Resultados SWDC

		RCRA Limit	P5-1	P5-2	P6-1	P6-2	P6-3	P6-4	P6-5	Comp 5 LR	Comp 6 LR
Ag	**mg/L**	**5**	0.38	0.26	0.07	0.08	0.14	0.54	0.10	0.11	0.11
As	**mg/L**	**5**	36.0	45.7	29.1	0.43	34.4	35.0	0.49	0.11	0.34
Ba	**mg/L**	**100**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08
Cd	**mg/L**	**1**	0.79	1.05	0.67	<0.05	0.74	0.76	<0.05	<0.05	<0.05
Cr	**mg/L**	**5**	0.77	1.30	1.68	0.17	0.52	0.47	<0.05	<0.05	0.05
Hg	**mg/L**	**0.2**	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.03	0.01
Pb	**mg/L**	**5**	1.93	2.56	5.14	<0.05	1.78	1.32	0.78	<0.05	3.10
Se	**mg/L**	**1**	1.26	5.01	0.27	0.06	3.06	1.5	0.05	0.59	0.14
Result			**FAIL**	**FAIL**	**FAIL**	**PASS**	**FAIL**	**FAIL**	**PASS**	**PASS**	**PASS**

		RCRA Limit	Run 1	Run 2	Run 3	CSvT	CSvT/ Sl	CSvT/Sl /LS	ClnrT	ClnrT/S l	ClnrT/S l/LS
Ag	**mg/L**	**5**	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
As	**mg/L**	**5**	<0.05	0.09	0.14	0.07	0.40	0.15	0.07	0.84	0.15
Ba	**mg/L**	**100**	<0.05	<0.05	<0.05	0.13	<0.05	<0.05	0.07	<0.05	<0.05
Cd	**mg/L**	**1**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Cr	**mg/L**	**5**	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	0.1	<0.05
Hg	**mg/L**	**0.2**	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Pb	**mg/L**	**5**	<0.05	<0.05	<0.05	<0.05	0.76	<0.05	<0.05	1.10	<0.05
Se	**mg/L**	**1**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Result			**PASS**	**PASS**	**PASS**	**PASS**	**PASS**	**PASS**	**PASS**	**PASS**	**PASS**

Excede los límites RCRA

6 CONCLUSIONES

Se sometieron doce muestras de descarga del autoclave y seis de relaves de flotación con lodos de tratamiento del proyecto de Sulfuros Yanacocha al protocolo de caracterización ambiental de NMS y confirmación de NCV.

Mineralogía

Principalmente, se identificó cuarzo y/o yeso en todas las muestras. La principal fuente de azufre en las muestras del autoclave es un sulfato no generador de acidez y se presenta como yeso. La principal fuente de azufre en las muestras de relaves de flotación es un ácido que genera sulfuros como la pirita. La pirita aparece en los relaves de flotación scavenger (0.7%) y en los relaves del limpieza (cleaner tails) (9.8%).

Valor Neto de Carbonato (NCV) y Potencial Neto de Neutralización de Carbonatos (NNPC)

Los relaves de flotación se clasifican como Ligeramente Ácidos o Altamente Ácidos según la clasificación NCV. Los residuos de lixiviación de las muestras Comp 5 y Comp 6 de autoclave son Ligeramente Básicos. Las otras muestras de descarga del autoclave no son concluyentes, pero los datos sugieren que pueden ser Ligeramente Ácidas o Inertes.

La información contenida en este informe es confidencial y está patentada.

Balance Ácido-Base (ABA)

Los resultados de las muestras del autoclave no son concluyentes, pero sugieren que la capacidad de generación de acidez es limitada debido al bajo o indetectable contenido de azufre sulfurado. La mayor cantidad de azufre presente se oxida y no presenta capacidad para generar acidez.

Las pruebas para determinar el Potencial de Generación de Acidez (PAG) confirma que las muestras de relaves de flotación presentan suficientes sulfuros generadores de acidez para superar la capacidad de neutralización de acidez. Las muestras de descarga del autoclave no presentan sulfuros para la oxidación y la generación de acidez puede indicar que la oxidación de otros metales es la fuente de los valores de pH ácido de las soluciones de lixiviación.

El Procedimiento de Lixiviación por Precipitación Sintética (SPLP) confirma que la descarga del autoclave y algunos relaves de flotación (con lodo y sin adición de caliza) son ácidos y/o generadores de acidez cuando tienen contacto con precipitaciones. Los relaves de flotación y los relaves con lodo y piedra caliza tienen pH neutro. Los residuos de lixiviación de las muestras Comp 5 y Comp 6 exceden el límite de pH básico.

Movilidad

Se observa un enriquecimiento significativo en antimonio, arsénico, bario (3 muestras), cobre, mercurio, molibdeno y plomo respecto a los criterios GAI. Se detectó la movilidad del antimonio, arsénico, cobre y plomo debido a su enriquecimiento en pruebas de lixiviación cinética.

La solución de lixiviación PAG de las muestras de relaves de flotación excede los límites de aluminio, antimonio, arsénico, cadmio, cobre, hierro, manganeso, níquel, plomo y talio establecidos por el ECA. Las soluciones de lixiviación de las muestras de descarga del autoclave superan los límites de aluminio, antimonio, arsénico, cadmio, cobalto, cromo, cobre, hierro, mercurio, níquel, plomo, plata y talio.

Las soluciones de lixiviación SPLP de las muestras de relaves de flotación exceden los límites de arsénico, calcio, cadmio, cobre, manganeso, níquel, talio, sulfato, TDS y conductividad establecidos por el ECA. Las soluciones de lixiviación de las muestras de descarga del autoclave exceden los límites de aluminio, antimonio, arsénico, calcio, cadmio, cromo, hierro de cobre, níquel, plomo, plata, talio, zinc, conductividad, TDS, sulfato y pH ácido.

La solución de cinco lixiviados de SWDC excede los límites de arsénico, cadmio, plomo y/o selenio según los RCRA.

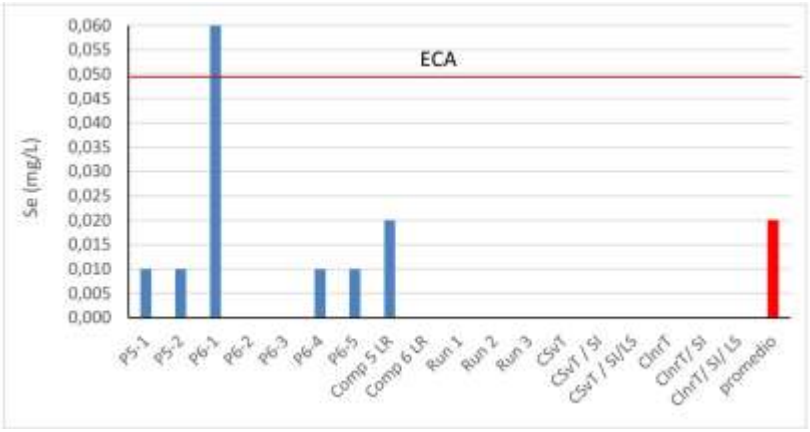
La información contenida en este informe es confidencial y está patentada.

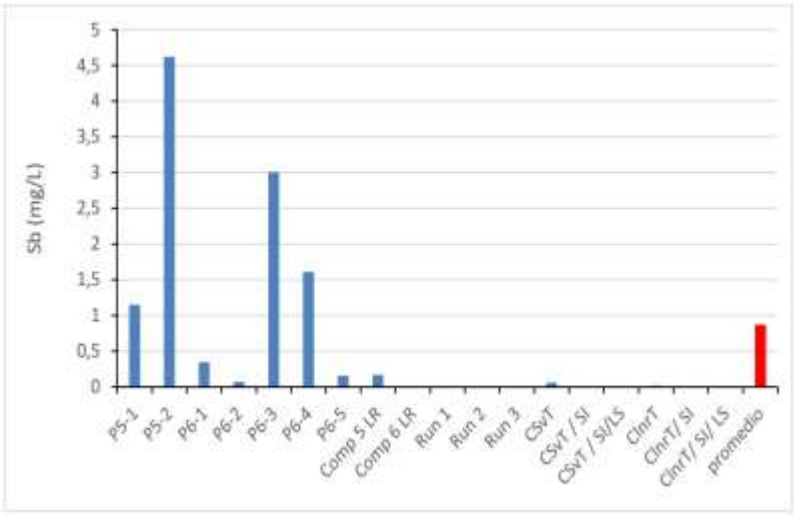
ANEXO A

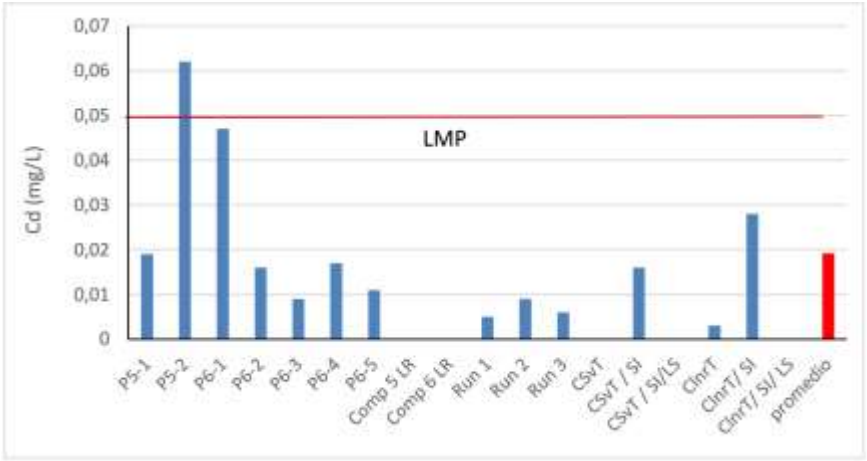
Procedimientos de Prueba Cinética NMS

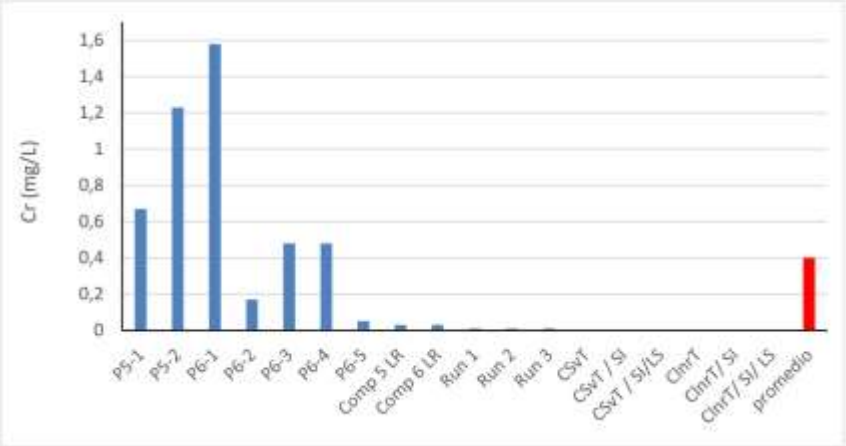
La información contenida en este informe es confidencial y está patentada.

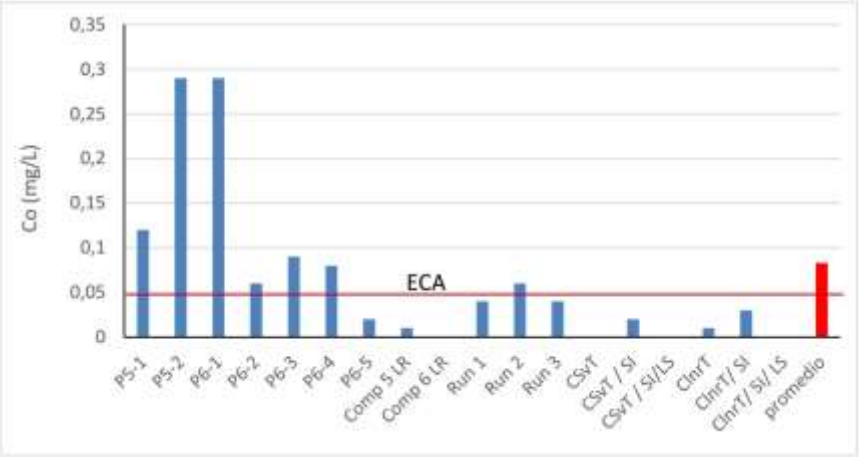
Lixiviación de metales del ensayo SPLP comparados con LMP y ECA

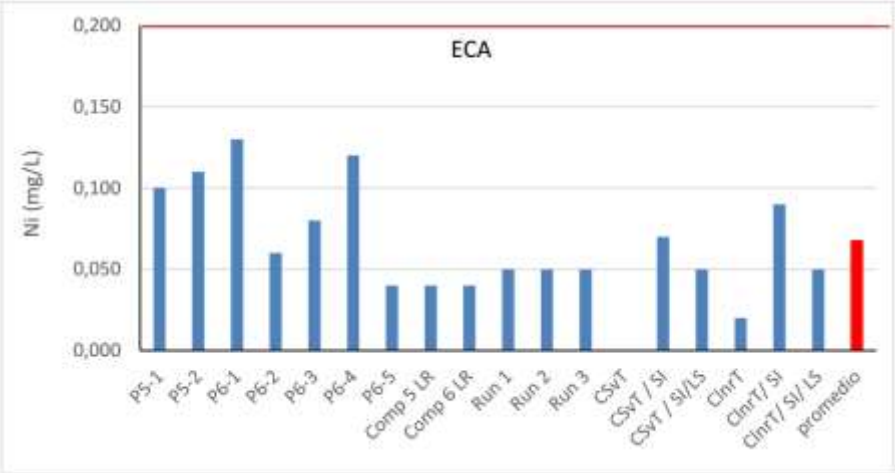


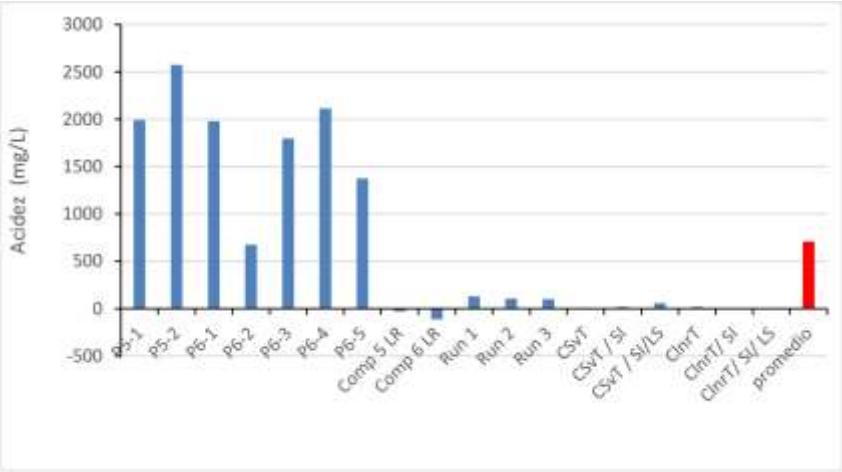


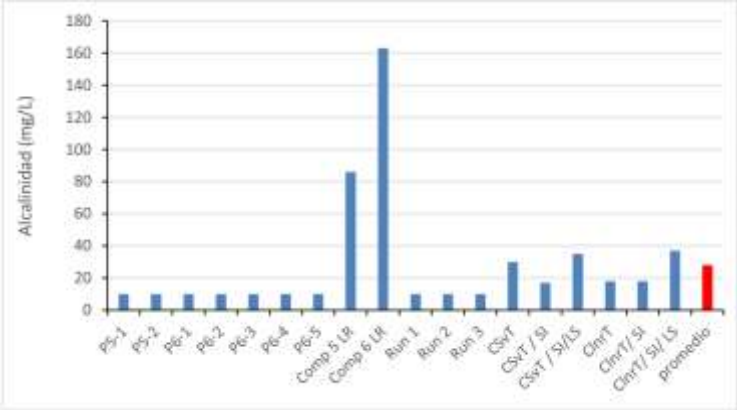



Cr (mg/L)
1,6
1,4
1,2
1
0,8
0,6
0,4
0,2
0
P5-1
P5-2
P6-1
P6-2
P6-3
P6-4
P6-5
Comp 5 LR
Comp 6 LR
Run 1
Run 2
Run 3
CSvT
CSvT / SI
CSvT / SI/LS
ClnrT
ClnrT/ SI
ClnrT/ SI/ LS
promedio


Co (mg/L)
0,35
0,3
0,25
0,2
0,15
0,1
0,05
0
ECA
P5-1
P5-2
P6-1
P6-2
P6-3
P6-4
P6-5
Comp 5 LR
Comp 6 LR
Run 1
Run 2
Run 3
CSvT
CSvT / SI
CSvT / SI/LS
ClnrT
ClnrT/ SI
ClnrT/ SI/ LS
promedio


Ni (mg/L)
0,200
0,150
0,100
0,050
0,000
ECA
P5-1
P5-2
P6-1
P6-2
P6-3
P6-4
P6-5
Comp 5 LR
Comp 6 LR
Run 1
Run 2
Run 3
CSvT
CSvT / SI
CSvT / SI/LS
ClnrT
ClnrT/ SI
ClnrT/ SI/ LS
promedio





Fuente: MYSLR

MEZCLA DE RELAVES

Newmont Goldcorp
Metallurgical Services
10101 E Dry Creek Road
Englewood, CO 80112
www.newmont.com

MEMO

Fecha: 5 de diciembre de 2019

Para: Matt Jeffrey

CC: J. Croall, L. Hafla

De: Daniel Snyder

Asunto: Pruebas de celdas de humedad en relaves mezclados para caracterización ambiental - proyecto Yanacocha Sulfuros

1 INTRODUCCIÓN

Newmont Metallurgical Services (NMS) realizó la caracterización ambiental de compósitos de relaves mezclados para el proyecto Yanacocha Sulfuros. Las muestras fueron sometidas al protocolo de Confirmación del Valor Neto de Carbonato (NCV) de NMS para la determinación del potencial de generación de acidez, la caracterización geoquímica y la lixiviabilidad de metales de acuerdo con los lineamientos metalúrgicos. En el protocolo se incluyó la cinética de lixiviación a través de pruebas de celdas de humedad (HCT). Se compararon las concentraciones de liberación de metales y aniones con los estándares de calidad de agua (ECA) del Ministerio del Ambiente para determinados puntos de interés.

2 RESUMEN

Los relaves mezclados de Yanacocha Sulfuros fueron sometidos a pruebas HCT para observar la transferencia de masa y la capacidad de generación de acidez a partir de una lixiviación a largo plazo. Se realizaron las pruebas en doce muestras de relaves mezclados con la finalidad de incrementar la oxidación de los sulfuros disponibles.

Cabe indicar que 20 semanas pueden no ser suficientes para lograr un estado permanente para la movilidad de los componentes o para iniciar la oxidación de los sulfuros.

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Generación de acidez

- Las muestras no exhiben una capacidad neta de generación de acidez por la oxidación de sulfuros durante un periodo de 20 semanas. La acidez se redujo después del lixiviado inicial.

Movilidad de componentes

- Los componentes que son motivo de preocupación y exceden los límites de los ECA incluyen: aluminio, antimonio, arsénico, calcio, cobre, mercurio, níquel, talio, fosfato, sulfato, conductividad, total de sólidos disueltos (TDS), pH ácido y pH alcalino.
- Se observa una reducción en la concentración de los componentes en todas las muestras a lo largo de las 20 semanas, a excepción del talio (MT 1 a MC 10) y del antimonio/arsénico (MT 11 y MT 12).
- Las concentraciones de calcio, níquel, talio, sulfato y TDS exceden los límites al término de las pruebas en MT 1 a MT 10. El antimonio y el arsénico exceden los límites al término de las pruebas en MT 11 y MT 12.
- La disolución del yeso podría ser el principal factor que contribuye a que las concentraciones de calcio, sulfato y TDS excedan consistentemente los límites de descarga en todas las muestras, a excepción de MT 11 y MT 12.

3 PREPARACIÓN DE LAS MUESTRAS

Se emplearon cuatro tipos de materiales para generar 10 compósitos para la caracterización ambiental (ENV Comp). Estos compósitos se prepararon utilizando: 1) cinco compósitos de relaves de flotación (FT Comp) que fueron generados a partir de 10 compósitos maestros de flotación de Verde (64 muestras) y 2 compósitos maestros de flotación de Sur (19 muestras); 2) dos compósitos residuales de autoclave (AC Comp) que se generaron a partir de 6 compósitos maestros de Chaqui POX (64 muestras); 3) lodos de neutralización de solución de refino (BSN) (lodos de la planta piloto Hazen, 1 muestra); y 4) lodos de neutralización de solución de autoclave (ASN) procedentes del licor de pruebas POX neutralizado. Los relaves de flotación (0.78 kg) fueron mezclados con relaves de lixiviación con cianuro preparados utilizando residuos de autoclave y lodos de neutralización de solución POX (0.19+0.16 kg), y lodos de neutralización de refino (0.13 kg), empleando los mismos ratios que el balance de masa de diseño para la planta de procesamiento. El Apéndice A incluye la identificación de testigos para todas las muestras de cada compósito.

Se generaron dos compósitos adicionales de relaves mezclados (MT Comp) para la caracterización ambiental. Los compósitos se generaron a partir de una mezcla de productos de la planta piloto, incluyendo relaves de cianuro de autoclave (24%), lodos de neutralización de solución de refino (13%) y relaves de flotación (63%). La Tabla I presenta la descripción de los componentes de los compósitos ENV.

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Tabla I. Identificación de compósitos de relaves mezclados para las pruebas HCT – proyecto Yanacocha Sulfuros

HCT	Comp FT (777 g)	Comp AC (185 g)	Lodos ASN (156 g)	Lodos BSN (132 g)
MT 1	1	1	Sí	Sí
MT 2	2	1	Sí	Sí
MT 3	3	1	Sí	Sí
MT 4	4	1	Sí	Sí
MT 5	1	2	Sí	Sí
MT 6	2	2	Sí	Sí
MT 7	3	2	Sí	Sí
MT 8	4	2	Sí	Sí
MT 9	5	1	Sí	Sí
MT 10	5	2	Sí	Sí
MT 11	Comp 1/3/5 + relaves de flotación (lixiviación CN, lodos de neutralización AC, relaves de flotación)			
MT 12	MT 11 + 10 g/kg caliza molida			

4 PROCEDIMIENTO DE PRUEBA

Se coloca 1 kg de muestra en cada celda de humedad. La celda de humedad es colocada en un gabinete con controles ambientales a 25˚C y 65% de humedad. La muestra es sumergida en 1 litro de agua desionizada por 1 hora semanalmente. La solución de lixiviado es recogida, filtrada y analizada para determinar su acidez, alcalinidad, pH, conductividad, total de sólidos disueltos, aniones y metales disueltos. Los datos son analizados para determinar las tendencias en la reducción de componentes y la generación de acidez. Las concentraciones de los componentes del lixiviado se comparan con los ECA del Ministerio del Ambiente.

5 RESULTADOS DE LAS PRUEBAS

Semanalmente se generaron datos de solución para las pruebas de celdas de humedad, los cuales se presentan en el Apéndice A.

Generación de acidez

No se ha observado una generación neta de acidez por la oxidación de sulfuros con alguna de las muestras después de 20 semanas de prueba.

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- Los datos de la titulación de acidez muestran una reducción en la acidez después de los cinco primeros lixiviados. La acidez de nivel bajo (<30 mg/l como CaCO3) después de la Semana 4 se encuentra dentro de la banda de error para el análisis. MT 12 muestra cierto incremento alrededor de la Semana 13 (59 mg/l como CaCO3)
- Los datos de la titulación de alcalinidad son no concluyentes para todas las muestras. La alcalinidad de bajo nivel (<25 mg/l como CaCO3) se encuentra dentro de la banda de error para el análisis.
- El calcio y el sulfato disueltos tienen una relación molar de 1:2.4, lo que indica que la mayor parte del sulfato disuelto puede deberse a la disolución de yeso y no a la oxidación de sulfuros.
- Los valores de pH superan consistentemente el pH 5 después de los cuatro primeros lixiviados para todas las muestras. Las tendencias en los valores han estado incrementándose desde la Semana 8 para todas las muestras.

Movilidad de los componentes

Por lo general, la movilidad de los componentes disminuye con el tiempo por el lavado gradual de sales y la falta de generación de acidez. Algunos componentes se mantienen por encima de los límites de descarga a lo largo de la duración de la prueba:

- El antimonio excede los límites de descarga en MT 11 y MT 12 para el 80-100% de los lixiviados durante las 20 semanas.
- El arsénico excede consistentemente los límites de descarga en MT 11 y MT 12. La concentración promedio en ambas muestras es 0.08 mg/l por cada lixiviado.
- El talio excede consistentemente los límites de descarga en MT1 a MT 10. Las concentraciones promedio se encuentran entre 0.11 y 0.27 mg/l. MT 11 y MT 12 no exceden los límites durante ninguno de los lixiviados.
- El calcio se encuentra consistentemente por encima de los límites de descarga en todas las muestras con excepción de MT 11 y MT 12. Las concentraciones promedio se encuentran entre 340 y 460 mg/l.
- El níquel excede los límites regularmente en MT 1 a MT 10.
- El sulfato excede consistentemente los límites de descarga en MT 1 a MT 10. Las concentraciones promedio se encuentran entre 790 y 1070 mg/l.
- Los TDS exceden los límites en 70 a 100% de los lixiviados en MT 1 a MT 10. Las concentraciones promedio se encuentran entre 780 y 1040 mg/l.
- Otros componentes que exceden los límites de manera intermitente incluyen el aluminio, el cobre, el mercurio y el fosfato.

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APÉNDICE A

Caracterización de la solución de lixiviado

La información contenida en este informe es confidencial y de propiedad exclusiva.

NEWMONT®

		ECA MYSRL Estándar más bajo	MT 1 Semana																				
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ag	mg/L	0.05	0.001	0.001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001 <0.0001 <0.0001 <0.0001 <0.0002 <0.0002 <0.0002 <0.0002 <0.0001								
Al	mg/L	0.2	0.15	0.18	0.22	0.13	0.14	0.14	0.08	0.07	0.11	0.08	0.08	0.07	<0.05 <0.001 <0.001 <0.001 <0.002 <0.002 <0.002 <0.002 <0.001								
As	mg/L	0.01	0.01	0.01	0.005	0.005	0.004	0.003	0.003	0.002	0.002	0.003	0.002	0.002	0.001 0.0031 0.0031 0.0025 0.0025 0.0037 <0.002 <0.002 0.0035								
B	mg/L	0.5	0.052	0.023	0.021	0.020	0.011	0.014	0.010	0.007	0.005	0.004	0.002	0.005	0.002 <0.002 0.0057 0.0058 <0.004 <0.004 <0.004 <0.004 0.0344								
Ba	mg/L	0.7	0.007	0.006	0.015	0.016	0.016	0.013	0.019	0.015	0.012	0.013	0.013	0.009	0.008 0.0132 0.0237 0.0215 0.0247 0.0198 0.0168 <0.0012 0.0184								
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001 <0.0009 <0.0009 <0.0009 <0.0018 <0.0018 <0.0018 <0.0018 <0.0009								
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10								
Ca	mg/L	200	414	482	559	498	471	559	358	425	461	343	380	524	72	585	365	461	405	515	435	413	509
Cd	mg/L	0.003	0.001	0.001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001 <0.0001 <0.0001 <0.0001 <0.0002 <0.0002 <0.0002 <0.0002 <0.0001								
Co	mg/L	0.05	0.01	0.01	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001 0.0011 <0.001 0.001 <0.002 <0.002 <0.002 <0.002 0.0025								
Cr (Total)	mg/L	0.05	0.004	0.004	0.0004	0.0004	0.0014	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004 <0.0004 <0.0004 <0.0004 <0.0008 <0.0008 <0.0008 <0.0008 <0.0004								
Cu	mg/L	0.02	0.015	12.4	0.002	0.004	0.007	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002 <0.0015 0.0038 <0.0015 <0.003 <0.003 <0.003 <0.003 0.0097								
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.07	0.09	<0.10	0.06	<0.05	0.06	<0.05 <0.10 <0.10 <0.10 <0.10 <0.10 0.11 <0.10 <0.10 <0.10								
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10								
Hg	mg/L	0.001	0.0001	0.042	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001 <0.0001								
K	mg/L		3.16	4.35	4.89	5.31	5.73	4.32	2.75	2.96	1.31	1.57	11.95	2.21	0.75	1.58	0.59	0.6	0.68	0.77	0.55	0.39	2.39
Li	mg/L	2.5	0.1	0.1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01 <0.01 <0.01 <0.01 <0.02 <0.02 <0.02 <0.02 <0.01								
Mg	mg/L	150	0.54	0.95	0.99	1.02	1.34	1.55	1.3	1.4	1.19	1.26	1.53	1.77	0.41 2.83 1.72 1.91 1.82 2.63 2.14 1.56 2.39								
Mn	mg/L	0.2	0.005	0.005	0.0005	0.0009	0.0013	0.0027	0.0006	0.0009	0.0012	0.0007	0.0011	0.0009	0.0008 0.0007 0.0006 <0.0005 <0.001 0.0015 <0.001 <0.001 <0.0005								
Mo	mg/L		0.004	0.003	0.0002	0.003	0.004	0.003	0.003	0.0002	0.0002	0.0002	0.0008	0.001	0.0003 0.0021 0.0006 0.0006 0.002 0.0018 0.002 0.0018 0.0011								
Na	mg/L	200	4.08	4.06	4.33	4.22	3.64	3.08	2.02	1.8	1.53	1.33	1.37	1.32	0.95 2.39 1.23 1.27 2.95 1.32 1.11 1.09 1.07								
Ni	mg/L	0.025	0.046	0.076	0.036	0.037	0.036	0.041	0.023	0.019	0.024	0.021	0.022	0.024	0.005 0.0249 0.0205 0.029 0.0248 0.0323 0.0288 <0.0002 0.0269								
Pb	mg/L	0.05	0.007		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001 <0.0007 <0.0007 <0.0007 <0.0014 <0.0014 <0.0014 <0.0014 <0.0007								
S	mg/L		302	405	449	424	397	464	314	347	406	300	348	481	59.1 504.64 299.18 370.05 331.6 413.08 350.63 310.41 400.31								
Sb	mg/L	0.006	0.005	0.005	0.0007	0.0008	0.0007	0.0005	0.0005	0.0005	0.0009	0.0007	0.0006	0.0005	0.0005 <0.0005 <0.0005 <0.0005 <0.001 <0.001 <0.001 <0.001 0.0012								
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10								
Se	mg/L	0.05	0.007	0.007	0.0027	0.0034	0.0048	0.0048	0.0209	0.0045	0.0053	0.0044	0.0081	0.0084	0.0017 0.0248 0.0078 0.0087 0.0098 0.012 0.0097 <0.0014 0.0127								
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.3	0.33	<0.10	0.17	0.32	0.39	<0.05 <0.10 <0.10 <0.10 <0.10 <0.10 0.41 0.32 <0.10 <0.10								
Sn	mg/L		<0.10	0.13	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10								
Sr	mg/L		0.32	0.43	0.45	0.49	0.47	0.49	0.32	0.37	0.37	0.33	0.39	0.51	0.08 0.4186 0.3408 0.4081 0.3572 0.486 0.366 0.3211 0.4092								
Ti	mg/L		0.28	0.34	0.32	0.30	0.30	0.32	0.19	0.15	0.12	0.15	0.24	0.27	0.09 0.2122 0.2231 0.2987 0.2126 0.3604 0.2724 0.329 0.1919								
Tl	mg/L	0.0015[1]	0.008	0.008	0.021	0.022	0.019	0.022	0.017	0.016	0.017	0.018	0.015	0.016	0.001 0.0255 0.0178 0.0179 0.0207 0.0259 0.023 0.0241 0.0223								
U	mg/L	0.02	0.0018	0.0011	0.0002	0.0004	0.0004	0.0001	0.0001	0.0001	0.0011	0.0013	0.0001	0.0001	0.0001 3E-06 0.0001 0.0006 <0.0001 <0.0001 0.0006 <0.0001 0.0005								
V	mg/L	0.1	0.003	0.003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003 <0.0003 <0.0003 <0.0003 <0.0006 <0.0006 <0.0006 <0.0006 <0.0003								
Zn	mg/L	2	0.025	6.593	0.003	0.003	0.003	0.003	0.003	0.004	0.012	0.009	0.027	0.013	0.003 <0.0025 0.04 0.0387 <0.005 <0.005 <0.005 <0.005 <0.0025								
Ácido-$CaCO_3$	mg/L		60.5	77.5	144.7	49.1	83.8	53.3	23.7	64.7	14.1	27.1	48	44.9	15.1 66.8 34.5 27.4 19.1 25.5 23.2 22.6 -450.2								
Alc.-$CaCO_3$	mg/L	375	<10	23	<10	17	<10	13	14	<10	14	<10	15	13	14	21	17	21	18	14	22	21	493
COND	uS/cm	1600	1645	1706	2136	1822	1804	1954	1430	1583	1594	1362	1492	1930	405 1499 1423 1746 1604 1744 1606 5109 1733								
Dureza	mg/L		1038	1210	1402	1250	1184	1403	900	1069	1158	862	957	1317	182 1473.8 919.01 1159.6 1019 1299.2 1095.4 1039.6 1282.1								
pH	-	6.5-8.4	3.5	6.15	3.17	6.63	7.57		5.51	7.06	5.76	5.94	6.29	7.07	7.2	7.11	7.39	7.21	7.86	7.9	6.55	6.19	6.25
TDS	mg/L	1000	1250	1630	1780	1790	1740	1990	1370	1210	1200	1280	1390	2000	230 2290 1010 1700 <50 1888 1608 1460 1765								
Cl^-	mg/L	100	4.7	<0.10	2	0.7	0.5	0.7	<0.10	2.3	<0.10	0.2	10.2	1.2	1.1	0.6	0.3	0.3	<0.10	<0.10	<0.10	<0.10	1.6
F^-	mg/L	1	0.6	<0.20	<0.20	<0.20	<0.20	<0.20	0.4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20								
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40 <0.40								
NO_3-N	mg/L	10	9.6	<0.20	11.9	0.2	2.3	0.7	0.4	3.8	<0.20	3.8	0.4	3.8	<0.20 <0.20 0.5 <0.20 0.4 <0.20 <0.20 <0.20 0.4								
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20								
SO_4	mg/L	300	1186	1222	1147	1077	1194	1304	855	1027	935	717	1140	1181	162	1226	743	1123	916	1179	989	878	1092

(1) Estándar de Newmont

Excede los estándares ECA

Excede los estándares ECA X 10

Excede los estándares ECA X 100

La información contenida en este informe es confidencial y de propiedad exclusiva.

		ECA MYSRL	MT 2																				
		Estándar más bajo	Semana																				
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ag	mg/L	0.05	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Al	mg/L	0.2	0.1296	0.2461	0.0010	0.0091	0.0076	0.0053	0.0126	0.1670	0.0086	0.0010	0.3142	0.0091	0.0010	0.0098	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.001
As	mg/L	0.01	0.010	0.010	0.002	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.0022	0.0015	0.0014	<0.002	0.0026		0.002	<0.002	0.0023
B	mg/L	0.5	0.020	0.020	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.002	0.0073	0.0038	<0.004	<0.004		<0.004	<0.004	0.0075
Ba	mg/L	0.7	0.006	0.006	0.014	0.015	0.016	0.020	0.016	0.015	0.015	0.015	0.014	0.010	0.007	0.0121	0.0133	0.0157	0.0178	0.0179		0.0157	<0.0012	0.0181
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0009
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10		<0.10	<0.10	<0.10
Ca	mg/L	200	440	357	361	504	375	289	313	339	302	280	388	422	173	553	596	416	402	487	428	345	441
Cd	mg/L	0.003	0.0011	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Co	mg/L	0.05	0.0100	0.0100	0.0010	0.0013	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.001	0.0013	<0.001	<0.002	<0.002		<0.002	<0.002	<0.001
Cr (Total)	mg/L	0.05	0.0040	0.0040	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004
Cu	mg/L	0.02	0.015	0.015	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.0015	0.0044	<0.0015	<0.003	<0.003		<0.003	<0.003	<0.0015
Fe	mg/L	1	<0.10	0.37	<0.10	<0.10	<0.10	<0.10	0.06	0.06	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	0.11	<0.10	<0.10	0.11		<0.10	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10		<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0001	0.0217	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
K	mg/L		3.5	3.87	4.21	6.26	4.16	3.13	3.25	3.02	1.89	1.78	1.93	1.4	0.54	1.31	1	0.33	0.38	0.55		0.39	0.25	0.48
Li	mg/L	2.5	0.10	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.02	<0.02		<0.02	<0.02	<0.01
Mg	mg/L	150	0.48	0.58	0.72	0.91	1.04	0.84	0.99	1.1	1.01	1.28	1.55	1.76	0.57	2.44	2.58	1.34	1.48	2.5	1.93	1.21	2.04	
Mn	mg/L	0.2	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003	0.001	0.001	<0.0005	<0.0005	<0.0005	<0.001	<0.001		<0.001	<0.001	<0.0005
Mo	mg/L		0.0036	0.0033	0.0002	0.0046	0.0037	0.0036	0.0037	0.0006	0.0002	0.0002	0.0011	0.0013	0.0011	0.0023	0.0016	0.0016	0.003	0.0029		0.0032	0.0018	0.0014
Na	mg/L	200	3.43	2.68	2.84	3.78	2.48	2.07	1.74	1.64	1.59	1.32	1.26	1.12	0.85	1.61	1.23	1.04	1.88	1.06		1.02	1.03	0.99
Ni	mg/L	0.025	0.05	0.05	0.02	0.04	0.03	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.0215	0.0356	0.0275	0.0227	0.0304		0.0261	<0.0002	0.0235
Pb	mg/L	0.05	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0007	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0007
S	mg/L		326	294	283	428	291	236	271	261	271	249	337	373	144	456.32	481.5	325.24	334.15	382.98		343.25	256.99	339.96
Sb	mg/L	0.006	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0005	<0.0005	0.0006	0.0011	<0.001		<0.001	<0.001	<0.0005
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10		<0.10	<0.10	<0.10
Se	mg/L	0.05	0.007	0.007	0.003	0.003	0.003	0.002	0.011	0.003	0.003	0.004	0.004	0.006	0.003	0.0114	0.007	0.0031	0.0045	0.0079		0.005	<0.0014	0.0062
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.13	0.21	<0.10	0.12	0.24	0.33	<0.05	<0.10	<0.10	<0.10	<0.10	0.35		0.21	<0.10	<0.10
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10		<0.10	<0.10	<0.10
Sr	mg/L		0.3517	0.3462	0.3335	0.4585	0.3751	0.2977	0.3290	0.3117	0.3278	0.3156	0.4074	0.4544	0.1600	0.3756	0.5118	0.3355	0.3243	0.4742		0.3635	0.3011	0.3783
Ti	mg/L		0.2395	0.2350	0.2290	0.2961	0.2215	0.1697	0.1585	0.0985	0.1216	0.1173	0.2321	0.1995	0.2133	0.1862	0.3613	0.2529	0.2429	0.3354		0.2855	0.3065	0.2082
Tl	mg/L	0.0015[1]	0.008	0.008	0.019	0.029	0.022	0.019	0.018	0.019	0.018	0.018	0.020	0.02(	0.002	0.0286	0.0345	0.0197	0.0224	0.0295		0.0263	0.0224	0.0228
U	mg/L	0.02	0.0009	0.0017	0.0001	0.0009	0.0020	0.0006	0.0012	0.0014	0.0018	0.0017	0.0010	0.0009	0.0003	0.0013	0.0104	0.0038	0.0041	0.0068		0.0069	<0.0001	0.0062
V	mg/L	0.1	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0003
Zn	mg/L	2	0.025	0.025	0.003	0.003	0.003	0.003	0.003	0.013	0.009	0.006	0.020	0.003	0.003	<0.0025	0.0373	0.0378	0.0536	<0.005		<0.005	<0.005	<0.0025
Ácido-$CaCO_3$	mg/L		53.9	53.1	68.7	61	24.9	17	18.5	18.8	23.3	25.8	45.1	26.1	11.2	8.5	17.9	18.4	10.4	1.3	18.6	22.8	23.2	
Alc.-$CaCO_3$	mg/L	375	<10	21	<10	12	14	11	10	14	10	12	<10	17	15	23	26	21	20	26	28	22	30	
COND	uS/cm	1600	1637	1402	1393	1815	1476	1190	1325	1326	1225	1178	1499	1701	801	1511	2147	1931	1617	1619		1593	1297	1473
Dureza	mg/L		1101	895	904	1263	942	727	786	852	758	705	976	1063	434	1391.4	1500.2	1045.4	1011.6	1228.6		1077	866.34	1110.4
pH	-	6.5-8.4	3.77	6.33	4.05	6.81	7.14		5.89	5.89	5.67	5.88	6.39	7.04	7.8	7.11	7.3	7.66	7.61	7.88		7	6.59	6.81
TDS	mg/L	1000	1300	1260	1180	1760	1430	1020	1140	810	930	1020	1350	1640	570	2020	1850	1510	240	1768		1644	1256	1575
Cl^-	mg/L	100	3.7	<0.10	1.7	1.1	<0.10	0.4	<0.10	0.5	0.1	0.2	0.4	0.1	0.3	0.1	0.4	0.4	<0.10	<0.10		<0.10	<0.10	1.3
F^-	mg/L	1	0.7	<0.20	<0.20	<0.20	<0.20	<0.20	0.4	0.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		<0.20	<0.20	<0.20
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40		<0.40	<0.40	<0.40
NO_3-N	mg/L	10	6.1	<0.20	2.9	0.8	1.3	1.3	1.6	1.5	1.3	1.6	5.7	1.3	<0.20	<0.20	0.9	0.7	0.6	<0.20		<0.20	<0.20	<0.20
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		<0.20	<0.20	<0.20
SO_4	mg/L	300	1212	959	775	1065	954	657	740	855	645	574	1153	949	405	1151	1331	936	906	1088		985	728	959

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		ECA MYSRL	MT 3																				
		Estándar más bajo	Semana																				
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ag	mg/L	0.05	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Al	mg/L	0.2	0.0100	1.4286	0.0010	0.0084	0.0151	0.0072	0.2232	0.0608	0.0010	0.0010	0.0010	0.0106	0.0010	<0.001	<0.001	0.1076	<0.002	<0.002	<0.002	0.0247	<0.001
As	mg/L	0.01	0.010	0.010	0.003	0.002	0.003	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.0014	0.0019	0.0014	<0.002	<0.002	0.0022	<0.002	0.0014
B	mg/L	0.5	0.020	0.020	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.002	0.0064	0.0047	<0.004	<0.004	<0.004	<0.004	0.0063
Ba	mg/L	0.7	0.007	0.006	0.016	0.015	0.015	0.014	0.014	0.015	0.015	0.017	0.013	0.009	0.005	0.0138	0.0143	0.016	0.0173	0.0162	<0.0012	0.0159	0.0149
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018	<0.0018	<0.0018	<0.0018	<0.0009
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ca	mg/L	200	370	290	352	332	458	368	403	380	266	238	305	306	184	504	563	362	381	440	423	448	484
Cd	mg/L	0.003	0.0010	0.0010	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Co	mg/L	0.05	0.0100	0.0100	0.0010	0.0010	0.0012	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	<0.001	0.0013	<0.001	<0.002	<0.002	<0.002	<0.002	<0.001
Cr (Total)	mg/L	0.05	0.0040	0.0040	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004
Cu	mg/L	0.02	0.015	0.015	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.0015	0.0039	<0.0015	<0.003	<0.003	<0.003	0.0203	<0.0015
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.07	0.07	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0001	0.0233	0.0008	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
K	mg/L		5.49	5.14	6.96	5.89	4.63	3.53	4.87	2.33	1.53	1.57	1.43	1.32	0.77	1.1	1.55	2.37	1.05	0.83	0.58	0.34	0.54
Li	mg/L	2.5	0.10	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01
Mg	mg/L	150	0.45	0.58	0.85	0.98	1.24	0.96	1.32	0.9	0.8	0.84	0.85	0.84	0.53	1.93	2.13	1.64	1.96	2.31	2.08	1.41	2.1
Mn	mg/L	0.2	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005
Mo	mg/L		0.0048	0.0024	0.0002	0.0032	0.0032	0.0032	0.0033	0.0003	0.0002	0.0002	0.0012	0.0011	0.0005	0.0015	0.0009	0.0008	0.0022	0.0022	0.0018	0.0026	0.0003
Na	mg/L	200	4.83	3.41	4.31	3.64	2.79	2.44	3.11	1.43	1.45	1.07	0.94	0.89	0.98	1.41	1.87	1.4	1.77	1.11	1.04	1.05	1.01
Ni	mg/L	0.025	0.04	0.04	0.02	0.02	0.04	0.03	0.03	0.02	0.01	0.02	0.02	0.02	0.01	0.0207	0.0362	0.0225	0.025	0.0302	0.0247	0.0318	0.026
Pb	mg/L	0.05	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0007	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0014	<0.0007
S	mg/L		274	263	270	282	366	301	356	285	237	211	262	269	146	414.53	457.48	286.26	311.46	355.16	338.66	341.31	375.07
Sb	mg/L	0.006	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0005	0.0007	<0.0005	<0.001	<0.001	<0.001	<0.001	0.0008
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Se	mg/L	0.05	0.007	0.010	0.002	0.003	0.004	0.004	0.009	0.001	0.003	0.002	0.001	0.002	0.001	0.0167	0.0147	0.01	0.0132	0.0106	0.003	0.0069	0.0133
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.26	0.2	<0.10	0.06	0.16	0.18	<0.05	<0.10	<0.10	<0.10	<0.10	0.28	0.29	<0.10	<0.10
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sr	mg/L		0.2657	0.3055	0.3656	0.3801	0.4927	0.3865	0.4421	0.3374	0.3183	0.3122	0.3910	0.3942	0.2163	0.3507	0.4983	0.3747	0.3892	0.476	0.4011	0.358	0.4054
Ti	mg/L		0.2261	0.2048	0.1924	0.2083	0.3037	0.2400	0.1951	0.0906	0.1311	0.0785	0.1966	0.1663	0.2326	0.1729	0.3655	0.2407	0.2409	0.3006	0.3047	0.308	0.2095
Tl	mg/L	0.0015[1]	0.008	0.008	0.015	0.013	0.018	0.015	0.020	0.013	0.011	0.010	0.008	0.005	0.001	0.0229	0.0373	0.0266	0.0317	0.0365	0.0185	0.0259	0.0291
U	mg/L	0.02	0.0015	0.0018	0.0001	0.0005	0.0016	0.0003	0.0012	0.0008	0.0013	0.0011	0.0002	0.0001	0.0001	3E-06	0.0034	0.0014	0.0013	0.0022	0.0018	0.0007	0.0012
V	mg/L	0.1	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0003
Zn	mg/L	2	0.025	0.025	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.007	0.012	0.003	0.003	<0.0025	0.037	0.039	<0.005	<0.005	<0.005	0.16	<0.0025
Ácido-$CaCO_3$	mg/L		55.2	77.4	45.8	19.4	76.2	13.3	6.3	10.1	13.3	23.3	30.4	15	-35.8	10.2	23.3	23.3	8.7	3	19.2	37.4	15.2
Alc.-$CaCO_3$	mg/L	375	<10	<10	<10	13	<10	11	18	19	<10	<10	<10	19	19	23	20	20	24	29	27	21	36
COND	uS/cm	1600	1502	1218	1309	1329	1757	1390	1384	1380	1093	1013	1238	1331	841	1221	2127	1931	1541	1539	1570	1585	1664
Dureza	mg/L		928	728	882	833	1149	923	1014	955	669	598	766	769	463	1268.2	1416.6	910.91	959.63	1108.9	1065.8	1126.3	1218.2
pH	-	6.5-8.4	3.9	3.94	5.9	6.9	7.04	6.19	5.9	5.9	6	6.49	6.56	7.7	6.86	7.62	7.52	7.49	7.67	7.02	6.39	6.72	
TDS	mg/L	1000	1220	988	1130	1170	1830	1290	1590	910	710	830	1070	1200	650	1800	1880	1290	1425	1628	1520	1520	1695
Cl^-	mg/L	100	5.9	3.7	2.4	0.5	<0.10	0.4	<0.10	0.1	0.1	<0.10	<0.10	0.1	0.4	0.1	0.8	0.5	<0.10	<0.10	<0.10	<0.10	1.8
F^-	mg/L	1	0.8	<0.20	<0.20	<0.20	<0.20	<0.20	0.4	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N	mg/L	10	5.5	2.7	2.3	0.7	18.7	0.9	0.7	0.3	1.5	2.4	4.3	1.2	<0.20	<0.20	2.5	1.2	<0.20	<0.20	<0.20	<0.20	<0.20
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
SO_4	mg/L	300	1093	738	740	724	1173	819	969	840	565	493	906	684	436	993	1282	796	840	987	926	947	1053

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		ECA MYSRL Estándar más bajo	MT 4 Semana																					
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Ag	mg/L	0.05	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	
Al	mg/L	0.2	1.5839	0.0100	0.0010	0.0042	1.0230	0.0073	0.0585	0.0010	0.0010	0.0010	0.5158	0.0093	0.0485	<0.001	<0.001	0.3428	<0.002	<0.002	<0.002	<0.002	<0.001	
As	mg/L	0.01	0.010	0.010	0.003	0.002	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.002	0.0015	0.0011	<0.002	<0.002	0.0026	<0.002	0.0015	
B	mg/L	0.5	0.020	0.020	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.002	0.0049	0.0045	<0.004	<0.004	<0.004	<0.004	0.0061	
Ba	mg/L	0.7	0.009	0.006	0.018	0.017	0.016	0.015	0.015	0.015	0.018	0.016	0.013	0.008	0.008	0.0128	0.0144	0.0142	0.0171	<0.0012	0.0148	<0.0012	0.0141	
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018	<0.0018	<0.0018	<0.0018	<0.0009	
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Ca	mg/L	200	363	389	379	406	491	410	294	437	293	269	316	572	150	526	452	394	398	452	447	361	484	
Cd	mg/L	0.003	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	
Co	mg/L	0.05	0.0100	0.0100	0.0010	0.0010	0.0013	0.0011	0.0010	0.0010	0.0010	0.0010	0.0010	0.0012	0.0010	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.001	
Cr (Total)	mg/L	0.05	0.0040	0.0040	0.0004	0.0004	0.0010	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004	
Cu	mg/L	0.02	0.022	0.015	0.002	0.002	0.012	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.0015	<0.0015	<0.0015	<0.003	<0.003	0.0054	<0.003	<0.0015	
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	0.06	<0.05	0.08	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Hg	mg/L	0.001	0.0001	0.0188	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
K	mg/L		4.23	8.29	7.75	7.37	6.15	3.82	3.44	3.7	2.07	1.97	1.92	1.81	0.68	1.72	1.32	0.98	1.01	1.39	1.06	0.63	1.06	
Li	mg/L	2.5	0.10	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01	
Mg	mg/L	150	0.35	0.58	0.91	0.95	1.27	1.02	1	1.29	1.02	1.1	1.08	1.29	0.57	2.09	1.65	1.48	1.66	2.39	2.01	1.42	2.05	
Mn	mg/L	0.2	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005	
Mo	mg/L		0.0032	0.0034	0.0002	0.0035	0.0035	0.0033	0.0034	0.0003	0.0002	0.0002	0.0010	0.0012	0.0006	0.0016	0.0007	0.0009	0.0022	0.0018	0.0022	0.0018	0.0005	
Na	mg/L	200	3.75	4.51	4.33	3.79	2.87	2.18	1.67	1.69	1.56	1.06	1.27	1.11	0.96	1.45	1.24	1.24	0.8	1.31	1.11	1.09	1.06	
Ni	mg/L	0.025	0.05	0.05	0.02	0.03	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.01	0.0222	0.0271	0.0245	0.0231	<0.0002	0.0294	<0.0002	0.0261	
Pb	mg/L	0.05	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0007	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0014	<0.0007	
S	mg/L		266	329	316	351	400	324	252	320	254	241	272	504	125	438.21	365.11	308.78	313.91	366.32	355.36	280.12	385.78	
Sb	mg/L	0.006	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	0.0007	
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Se	mg/L	0.05	0.007	0.007	0.002	0.002	0.004	0.003	0.007	0.005	0.004	0.004	0.003	0.003	0.001	0.0195	0.0112	0.0081	0.0111	0.0065	0.0104	<0.0014	0.0101	
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.09	0.24	<0.10	<0.05	0.14	0.25	<0.05	<0.10	<0.10	<0.10	<0.10	0.17	0.18	<0.10	<0.10	
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Sr	mg/L		0.2737	0.4172	0.4086	0.4403	0.5257	0.4029	0.3152	0.3869	0.3088	0.3041	0.3583	0.4360	0.1595	0.3896	0.3928	0.3528	0.3549	0.4611	0.424	0.3211	0.4165	
Ti	mg/L		0.2209	0.2702	0.2536	0.2799	0.3061	0.2544	0.1616	0.1159	0.1310	0.1148	0.1865	0.2304	0.2041	0.177	0.2662	0.2327	0.1859	0.3248	0.2826	0.3247	0.258	
Tl	mg/L	0.0015[1]	0.008	0.008	0.015	0.014	0.015	0.011		0.010	0.012	0.010	0.008	0.007	0.01	0.001	0.013	0.0133	0.011	0.0117	0.0345	0.0141	0.0265	0.0135
U	mg/L	0.02	0.0020	0.0014	0.0001	0.0002	0.0023	0.0010	0.0006	0.0011	0.0014	0.0015	0.0005	0.0019	0.0001	3E-06	0.0017	0.0015	0.0009	0.002	0.0029	<0.0001	0.0023	
V	mg/L	0.1	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0003	
Zn	mg/L	2	0.025	0.025	0.003	0.003	0.008	0.005	0.003	0.003	0.007	0.006	0.009	0.003	0.012	<0.0025	0.0357	0.0387	<0.005	<0.005	<0.005	<0.005	<0.0025	
Ácido-$CaCO_3$	mg/L		46.4	83.1	76.8	80.2	41.6	18.7	13.7	13.8	16.2	33.2	23.2	14.6	11.8	16.8	49.3	21.7	11	5.6	16.2	28.2	19.9	
Alc.-$CaCO_3$	mg/L	375	<10	<10	<10	17	11	<10	<10	15	<10	<10	11	16	22	23	<10	17	23	28	29	23	32	
COND	uS/cm	1600	1346	1588	1448	1564	1858	1558	1252	1550	1178	1117	1230	2105	724	1124	1742	1891	1719	1553	1607	1315	1693	
Dureza	mg/L		909	974	950	1020	1233	1029	739	1097	737	677	794	1436	377	1322.4	1137.1	991.65	1000.9	1140.1	1126.8	909.38	1217.2	
pH	-	6.5-8.4	4.26	3.52	6.18	6.97	7.04		6.15	5.96	5.96	6.11	6.48	6.77	8	7.67	7.6	7.45	7.49	7.57	7.08	6.52	6.89	
TDS	mg/L	1000	1140	1260	1280	1460	1720	1470	1110	1240	900	980	1060	2160	520	2030	1410	1500	1435	1656	1644	1348	1740	
Cl^-	mg/L	100	4.5	7.4	2.6	0.8	<0.10	0.3	<0.10	0.4	0.2	<0.10	0.2	0.1	0.2	0.2	0.3	0.5	0.1	<0.10	<0.10	1.2	1.8	
F^-	mg/L	1	1.2	0.4	<0.20	0.5	<0.20	<0.20	0.4	0.5	0.4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.6	0.7	
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	
NO_3-N	mg/L	10	3.2	6.2	<0.20	<0.20	2.7	2.4	1.7	1.4	1.9	4.5	2.7	2.4	<0.20	<0.20	5.9	1.5	<0.20	<0.20	<0.20	<0.20	<0.20	
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
SO_4	mg/L	300	1002	996	802	863	1265	944	696	976	627	551	954	1319	363	1093	1002	902	845	1007	1002	812	1073	

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		ECA MYSRL	MT 5																				
		Estándar más bajo	Semana																				
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ag	mg/L	0.05	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Al	mg/L	0.2	3.695	0.010	0.001	0.111	0.018	0.001	0.023	0.020	0.001	0.001	0.006	0.010	0.009	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.001
As	mg/L	0.01	0.010	0.010	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.002	0.0013	<0.002	<0.002	<0.002	<0.002	<0.002	0.0011
B	mg/L	0.5	0.020	0.020	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	<0.002	0.0049	0.0045	<0.004	<0.004	<0.004	<0.004	0.0063
Ba	mg/L	0.7	0.019	0.007	0.021	0.017	0.015	0.015	0.015	0.015	0.016	0.013	0.012	0.012	0.020	0.0138	0.0127	0.0144	0.0147	<0.0012	0.018	<0.0012	0.0145
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018	<0.0018	<0.0018	<0.0018	<0.0009
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ca	mg/L	200	369	311	312	439	451	371	329	394	293	415	440	278	98	474	572	610	546	541	508	367	565
Cd	mg/L	0.003	0.0010	0.0010	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Co	mg/L	0.05	0.010	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.0014	0.0014	<0.002	<0.002	<0.002	<0.002	0.0011
Cr (Total)	mg/L	0.05	0.004	0.004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004
Cu	mg/L	0.02	0.015	0.015	0.002	0.007	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.0015	0.002	<0.0015	<0.003	<0.003	<0.003	<0.003	<0.0015
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	0.07	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0002	0.0171	0.0003	0.0003	0.0001	0.0001	0.0001	0.0001	0.0003	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
K	mg/L		2.78	3.05	3.98	2.75	3.31	2.49	2.15	2.04	0.85	0.79	0.86	0.84	0.94	0.83	0.61	0.45	0.39	0.95	0.36	0.18	0.63
Li	mg/L	2.5	0.100	0.100	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01
Mg	mg/L	150	0.48	0.69	0.97	1.04	1.68	1.84	1.87	2.30	1.69	1.71	1.92	1.95	1.28	3.61	2.66	2.46	2.07	4.72	2.99	1.77	3.08
Mn	mg/L	0.2	0.005	0.005	0.003	0.003	0.003	0.003	0.001	0.001	0.003	0.001	0.001	0.001	0.001	0.001	0.0017	0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005
Mo	mg/L		0.016	0.002	0.000	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.001	0.001	0.000	0.0014	0.0006	0.0006	0.0019	0.0018	0.002	0.0018	0.0002
Na	mg/L	200	3.24	2.82	3.71	2.88	2.96	2.61	1.88	1.94	1.33	0.97	0.98	1.02	1.41	1.48	1.26	1.22	0.89	1.85	1.09	1.03	1.27
Ni	mg/L	0.025	0.06	0.04	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.02	0.005	0.0201	0.0348	0.0358	0.0351	<0.0002	0.0313	<0.0002	0.0283
Pb	mg/L	0.05	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0007	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0014	<0.0007
S	mg/L		278	279	284	391	396	306	290	308	254	380	381	248	83	423.58	469.39	479.44	438.43	444.04	404.26	279.76	459.53
Sb	mg/L	0.006	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0005	0.0007	0.0005	<0.001	<0.001	<0.001	<0.001	0.0009
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Se	mg/L	0.05	0.007	0.007	0.003	0.004	0.004	0.003	0.008	0.004	0.004	0.004	0.005	0.004	0.002	0.0081	0.0049	0.0028	0.0038	0.0073	0.0038	<0.0014	0.0044
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.16	0.24	<0.10	<0.05	0.16	0.15	<0.05	<0.10	<0.10	<0.10	<0.10	0.31	0.16	<0.10	<0.10
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sr	mg/L		0.385	0.286	0.309	0.394	0.435	0.369	0.314	0.325	0.265	0.356	0.404	0.285	0.100	0.3608	0.4414	0.4435	0.4003	0.4412	0.4161	0.3411	0.4227
Ti	mg/L		0.353	0.193	0.215	0.294	0.298	0.230	0.164	0.105	0.127	0.181	0.308	0.128	0.119	0.1766	0.3429	0.3308	0.345	0.331	0.308	0.3465	0.2426
Tl	mg/L	0.0015[1]	0.008	0.008	0.016	0.022	0.027	0.024	0.025	0.024	0.019	0.024	0.026	0.019	0.009	0.03	0.0353	0.0332	0.0337	0.0367	0.0374	0.0264	0.0373
U	mg/L	0.02	0.0044	0.0003	0.0001	0.0006	0.0010	0.0002	0.0002	0.0001	0.0011	0.0010	0.0001	0.0001	0.0001	3E-06	0.0006	0.001	<0.0001	0.0025	0.0018	<0.0001	0.0008
V	mg/L	0.1	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0003
Zn	mg/L	2	0.224	0.025	0.003	0.003	0.003	0.003	0.003	0.003	0.007	0.006	0.010	0.003	0.004	<0.0025	0.0393	0.0378	<0.005	<0.005	<0.005	<0.005	<0.0025
Ácido-$CaCO_3$	mg/L		59	133.2	135.1	128.1	139.7	18.7	22.6	31.1	24.4	35.9	35.2	21.5	16.4	87.5	36.5	27.4	15.8	9.9	19.4	21.4	21.5
Alc.-$CaCO_3$	mg/L	375	<10	<10	<10	<10	<10	11	<10	<10	<10	10	12	11	16	15	11	18	19	22	25	19	28
COND	uS/cm	1600	1341	1388	1298	1734	1747	1379	1390	1450	1114	1568	1690	1272	495	1684	2083	1931	1799	1870	1807	1400	1896
Dureza	mg/L		925	780	784	1101	1135	936	831	994	739	1044	1107	704	250	1201	1442.1	1534.9	1374.7	1371.2	1282.3	925.84	1425.8
pH	-	6.5-8.4	4.72	3.47	3.86	3.77	6.98		6.11	6.04	5.91	6.06	6.49	6.81	7.5	6.99	7.47	7.34	7.38	7.27	6.97	6.52	6.66
TDS	mg/L	1000	1144	1076	1070	1550	1680	1330	1300	1000	940	1450	1520	1130	300	1850	1900	1940	1295	2028	1860	1360	2030
Cl^-	mg/L	100	3.9	6.6	1.9	0.1	<0.10	0.5	<0.10	1.5	0.1	<0.10	0.1	0.1	0.6	0.4	0.3	0.3	<0.10	<0.10	<0.10	1.4	1.4
F^-	mg/L	1	0.6	0.5	<0.20	<0.20	<0.20	<0.20	0.4	0.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.6	0.6
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N	mg/L	10	2.4	5.1	2.2	4.4	4.4	0.7	1.5	3	0.9	1.7	2.4	1.5	<0.20	<0.20	2.4	1.2	<0.20	<0.20	<0.20	<0.20	<0.20
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20			
SO_4	mg/L	300	1000	760	706	932	1101	824	797	906	582	851	1319	633	223	956	1267	1347	1239	1254	1133	799	1247

La información contenida en este informe es confidencial y de propiedad exclusiva.

		ECA MYSRL Estándar más bajo	MT 6 Semana 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ag	mg/L	0.05	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0028	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Al	mg/L	0.2	0.010	0.010	0.001	0.005	0.008	0.004	0.052	0.001	0.001	0.067	0.901	0.008	0.004	0.0013	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.001
As	mg/L	0.01	0.010	0.010	0.005	0.003	0.004	0.005	0.005	0.004	0.005	0.007	0.006	0.004	0.002	0.0027	0.0035	0.0029	<0.002	<0.002	0.0022	<0.002	0.0029
B	mg/L	0.5	0.020	0.020	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.002	0.006	0.0059	<0.004	<0.004	<0.004	<0.004	0.007
Ba	mg/L	0.7	0.016	0.015	0.028	0.024	0.022	0.020	0.022	0.019	0.019	0.019	0.021	0.015	0.016	0.015	0.017	0.0156	0.0172	<0.0012	0.0179	<0.0012	0.0173
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018	<0.0018	<0.0018	<0.0018	<0.0009
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ca	mg/L	200	494	375	422	335	380	303	405	435	349	377	268	277	131	485	417	498	399	495	385	426	447
Cd	mg/L	0.003	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Co	mg/L	0.05	0.010	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.0011	<0.002	<0.002	<0.002	<0.002	<0.001
Cr (Total)	mg/L	0.05	0.004	0.004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004
Cu	mg/L	0.02	0.015	0.015	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	<0.0015	<0.0015	<0.0015	<0.003	<0.003	<0.003	<0.003	<0.0015
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	<0.05	<0.10	0.08	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0001	0.0170	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
K	mg/L		12.19	12.47	11.92	11.65	12.06	7.95	6.9	5.28	2.8	2.84	4.93	2.55	3.65	2.23	1.8	1.06	1.12	2.28	0.66	0.35	0.72
Li	mg/L	2.5	0.100	0.100	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01
Mg	mg/L	150	0.50	0.26	0.35	0.42	0.50	0.46	0.48	0.51	0.42	0.61	0.75	0.59	0.39	1.29	1.2	1.11	1.13	1.27	1.07	0.68	1.21
Mn	mg/L	0.2	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005
Mo	mg/L		0.050	0.014	0.003	0.005	0.004	0.004	0.004	0.001	0.000	0.000	0.001	0.001	0.001	0.0017	0.0009	0.0012	0.0026	0.0018	0.0025	0.0018	0.0008
Na	mg/L	200	5.49	4.36	4.55	4.60	4.87	3.89	2.78	2.41	1.75	1.56	2.10	1.24	1.72	1.63	1.3	1.24	0.82	1.14	0.99	1.03	1.01
Ni	mg/L	0.025	0.06	0.05	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.0211	0.0255	0.0303	0.0234	<0.0002	0.0258	<0.0002	0.024
Pb	mg/L	0.05	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0007	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0014	<0.0007
S	mg/L		368	312	334	285	300	258	359	342	318	359	238	235	108	410.83	341.09	386.22	315.2	401.45	311.36	321.55	359.04
Sb	mg/L	0.006	0.005	0.005	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.0007	0.0008	0.0009	<0.001	<0.001	0.0012	<0.001	0.0009
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Se	mg/L	0.05	0.007	0.007	0.003	0.003	0.005	0.004	0.007	0.003	0.004	0.005	0.005	0.005	0.003	0.0118	0.007	0.0035	0.0042	0.0054	0.0031	<0.0014	0.0048
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.12	0.12	<0.10	0.06	0.11	0.08	<0.05	<0.10	<0.10	<0.10	<0.10	0.14	<0.10	<0.10	<0.10
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sr	mg/L		0.388	0.284	0.320	0.290	0.305	0.292	0.343	0.291	0.293	0.332	0.261	0.254	0.125	0.3414	0.3565	0.3913	0.3057	0.4611	0.3119	0.3211	0.3782
Ti	mg/L		0.284	0.192	0.282	0.195	0.220	0.190	0.230	0.128	0.159	0.192	0.170	0.109	0.161	0.1894	0.2706	0.2459	0.2375	0.3568	0.2579	0.3047	0.1963
Tl	mg/L	0.0015[1]	0.008	0.008	0.018	0.014	0.016	0.013	0.017	0.016	0.014	0.017	0.013	0.009	0.003	0.0194	0.0188	0.0195	0.0205	0.0351	0.0215	0.0225	0.0224
U	mg/L	0.02	0.0036	0.0015	0.0003	0.0006	0.0011	0.0003	0.0010	0.0009	0.0014	0.0013	0.0001	0.0001	0.0001	3E-06	0.0006	0.0018	0.001	0.0027	0.0012	<0.0001	0.0009
V	mg/L	0.1	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0003
Zn	mg/L	2	0.025	0.025	0.003	0.003	0.003	0.012	0.003	0.003	0.006	0.007	0.020	0.003	0.003	<0.0025	0.0456	0.0428	<0.005	<0.005	<0.005	<0.005	<0.0025
Ácido-$CaCO_3$	mg/L		64	56	40.5	23.4	32.9	25.4	17.4	20.7	33.8	43.2	32.8	23.4	12.8	43.8	40.8	18.3	8.4	5.8	16.4	20.6	17.3
Alc.-$CaCO_3$	mg/L	375	<10	16	12	12	<10	<10	11	14	12	<10	12	10	22	22	<10	22	26	28	26	23	31
COND	uS/cm	1600	1859	1460	1558	1299	1473	1283	1652	1543	1340	1517	1144	1191	628	1315	1637	1021	1655	1726	1465	1585	1588
Dureza	mg/L		1237	939	1056	838	953	761	1014	1089	874	946	672	695	328	1216.6	1046.5	1250.5	1002.2	1242.1	967.28	1067.6	1122.7
pH	-	6.5-8.4	3.73	6.12	6.24		7.56	7.1		6.15	6.13	5.89	6.09		6.96	6.84	8	7.15	7.53	7.33	7.54	7.37	7.06	6.63	7.18
TDS	mg/L	1000	1550	1340	1410	1120	1390	1150	1590			930		1170	1430	910	1130	400	1800	1360	1610	1420	1868	1428	1520	1645
Cl^-	mg/L	100	5.1	4.8	1.7	0.6	0.3	1	<0.10	0.5	0.1	0.1	1.2	0.3	0.6	0.1	0.6	0.1	<0.10	<0.10	<0.10	1.4	1.7
F^-	mg/L	1	<0.20	0.5	<0.20	<0.20	<0.20	<0.20	0.4	<0.20	0.4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.6	
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N	mg/L	10	8	1	1	1.1	4.5	2.9	2.3	1.5	1.1	2.6	1.7	2.2	<0.20	<0.20	4.6	0.7	<0.20	<0.20	<0.20	<0.20	<0.20
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	1.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
SO_4	mg/L	300	1418	1004	911	709	939	713	1006	1006	740	822	796	607	296	998	913	1101	871	1125	877	930	1000

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		ECA MYSRL Estándar más bajo	MT 7 Semana 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ag	mg/L	0.05	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0017	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Al	mg/L	0.2	0.010	0.010	0.001	0.645	0.010	0.005	0.067	0.001	1.249	0.029	0.413	0.008	0.004	0.0089	<0.001	<0.001	<0.002	<0.002	<0.002	0.0092	<0.001
As	mg/L	0.01	0.010	0.010	0.005	0.003	0.003	0.003	0.003	0.002	0.004	0.003	0.004	0.003	0.001	0.0031	0.0024	0.0022	0.0031	<0.002	0.0025	0.0031	0.0024
B	mg/L	0.5	0.020	0.020	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	<0.002	0.0044	0.0047	<0.004	<0.004	<0.004	<0.004	0.0077
Ba	mg/L	0.7	0.016	0.014	0.027	0.028	0.021	0.021	0.017	0.019	0.019	0.021	0.014	0.013	0.019	0.0135	0.0156	0.0168	0.021	<0.0012	0.0152	0.0137	0.0148
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018	<0.0018	<0.0018	<0.0018	<0.0009
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ca	mg/L	200	535	483	364	277	503	322	373	357	343	222	391	317	112	577	376	326	298	522	470	481	486
Cd	mg/L	0.003	0.0010	0.0010	0.0001	0.0001	0.0002	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Co	mg/L	0.05	0.010	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0011	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.001
Cr (Total)	mg/L	0.05	0.004	0.004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004
Cu	mg/L	0.02	0.015	0.015	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.0015	0.002	<0.0015	0.0031	<0.003	<0.003	<0.003	<0.0015
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.07	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0001	0.0111	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
K	mg/L		10.87	17.82	10.89	11.92	9.63	5.25	5.68	4.28	1.81	1.98	1.87	1.25	0.74	1.5	0.89	0.78	0.51	1.05	1.04	0.51	0.59
Li	mg/L	2.5	0.100	0.100	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01
Mg	mg/L	150	0.70	0.24	0.26	0.30	0.44	0.43	0.50	0.47	0.35	0.41	0.57	0.45	0.22	1.09	0.88	0.9	0.75	1.63	1.6	1.13	1.51
Mn	mg/L	0.2	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005
Mo	mg/L		0.045	0.113	0.045	0.036	0.024	0.015	0.014	0.009	0.009	0.006	0.007	0.006	0.006	0.0058	0.0052	0.0051	0.0065	0.0018	0.006	0.0056	0.0041
Na	mg/L	200	4.06	4.44	3.31	3.52	2.94	2.20	1.73	1.69	1.26	1.08	0.99	0.88	1.52	1.4	1.12	1.18	0.69	1.34	2.07	1.29	1.05
Ni	mg/L	0.025	0.05	0.06	0.02	0.02	0.04	0.02	0.03	0.01	0.02	0.01	0.02	0.02	0.01	0.0246	0.0229	0.0222	0.0174	<0.0002	0.0315	0.0322	0.0275
Pb	mg/L	0.05	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0007	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0014	<0.0007
S	mg/L		395	402	286	235	398	263	322	263	301	189	338	267	90	472.45	301.61	257.03	246.6	419.29	370.38	366.18	385.02
Sb	mg/L	0.006	0.005	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0006	0.0007	<0.0005	<0.001	<0.001	<0.001	<0.001	0.001
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Se	mg/L	0.05	0.007	0.007	0.003	0.002	0.003	0.003	0.004	0.003	0.002	0.002	0.003	0.003	0.002	0.0074	0.0047	0.0033	0.0039	0.0063	0.0047	0.0023	0.0031
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.06	<0.05	<0.10	<0.05	0.11	0.09	<0.05	<0.10	<0.10	<0.10	<0.10	0.29	0.24	<0.10	<0.10
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sr	mg/L		0.369	0.406	0.291	0.279	0.421	0.287	0.317	0.260	0.268	0.210	0.357	0.294	0.096	0.3796	0.307	0.2755	0.2479	0.4411	0.3646	0.3567	0.396
Ti	mg/L		0.184	0.341	0.249	0.167	0.301	0.185	0.198	0.092	0.161	0.097	0.233	0.128	0.140	0.2565	0.2365	0.2155	0.1799	0.3397	0.3272	0.3094	0.2399
Tl	mg/L	0.0015[1]	0.008	0.008	0.021	0.017	0.027	0.018	0.020	0.018	0.017	0.015	0.017	0.011	0.001	0.0247	0.019	0.0182	0.0173	0.0247	0.0318	0.0254	0.0256
U	mg/L	0.02	0.0012	0.0014	0.0000	0.0004	0.0027	0.0017	0.0029	0.0019	0.0027	0.0024	0.0025	0.0015	0.0006	0.0018	0.0041	0.0047	0.0033	0.0025	0.0093	0.0061	0.01
V	mg/L	0.1	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0003
Zn	mg/L	2	0.025	0.025	0.003	0.003	0.003	0.003	0.003	0.005	0.009	0.008	0.031	0.003	0.003	<0.0025	0.0367	0.051	<0.005	<0.005	<0.005	0.0695	0.0246
Ácido-$CaCO_3$	mg/L		37.9	67.6	42.3	27.6	22.6	10.2	11	15.1	22.7	33.7	27.8	12.4	9.2	14.8	20.3	16.7	9.8	1.9	13.4	15	15.7
Alc.-$CaCO_3$	mg/L	375	11	<10	<10	<10	11	14	16	17	<10	<10	<10	23	23	25	17	23	22	29	32	26	63
COND	uS/cm	1600	1761	1897	1372	1087	1855	1272	1531	1325	1241	978	1542	1304	570	1211	1507	1635	1688	1731	1693	1805	1690
Dureza	mg/L		1340	1208	912	693	1259	808	936	893	860	557	980	795	281	1447.8	943.79	819.68	747.31	1310.8	1180.9	1207	1221
pH	-	6.5-8.4	6.7	3.52	6.17	6.98	7.14			6.22	6.17	5.99	6.17			7.07	6.82	8.3	7.55	7.47	7.42	7.61	7.38	7.15	6.68	7.21
TDS	mg/L	1000	1500	1650	1230			940	1850	1120	1420	710			1050	780	1370			350	2090	1090	1210	1925	1912	1736	1775	1765			
Cl^-	mg/L	100	3.7	7.5	1.5	0.3	<0.10	0.3	<0.10	0.3	0.1	<0.10	<0.10	0.2	0.8	0.2	0.4	0.2	<0.10	<0.10	<0.10	1.5	1.7
F^-	mg/L	1	0.8	<0.20	1.5	0.5	<0.20	<0.20	0.4	0.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N	mg/L	10	2.8	7.4	1.8	1.6	2.1	0.9	1	0.8	0.4	5.3	3.6	<0.20	<0.20	<0.20	1.6	0.8	<0.20	<0.20	<0.20	<0.20	<0.20
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		
SO_4	mg/L	300	1401	1254	872	569	1276	718	891	787	702	454	1167	685	246	1224	842	729	640	1160	1044	1073	1078

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		ECA MYSRL Estándar más bajo	MT 8 Semana 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ag	mg/L	0.05	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0014	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	
Al	mg/L	0.2	0.517	0.010	0.001	0.044	0.016	0.137	0.054	0.123	0.191	0.001	0.004	0.007	0.001	<0.001	<0.001	<0.001	0.1824	<0.002	<0.002	0.0156	0.258
As	mg/L	0.01	0.010	0.010	0.004	0.003	0.003	0.003	0.002	0.003	0.004	0.003	0.002	0.002	0.001	0.0047	0.0036	0.003	0.0038	<0.002	0.0024	0.0039	0.0023
B	mg/L	0.5	0.020	0.020	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.002	0.0065	0.0066	0.0052	<0.004	<0.004	<0.004	0.0073
Ba	mg/L	0.7	0.006	0.018	0.029	0.030	0.027	0.021	0.021	0.019	0.020	0.020	0.015	0.014	0.009	0.0145	0.0194	0.0143	0.0162	<0.0012	0.0184	0.0162	0.0185
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018	<0.0018	<0.0018	<0.0018	<0.0009
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ca	mg/L	200	434	455	451	536	512	395	447	565	409	343	418	406	59	526	478	610	641	597	538	519	512
Cd	mg/L	0.003	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	
Co	mg/L	0.05	0.0100	0.0100	0.0012	0.0015	0.0015	0.0010	0.0013	0.0012	0.0010	0.0010	0.0010	0.0010	0.0010	0.001	0.0011	0.0014	<0.002	<0.002	<0.002	<0.002	0.0011	
Cr (Total)	mg/L	0.05	0.0040	0.0040	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004	
Cu	mg/L	0.02	0.0150	0.0150	0.0015	0.0017	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	<0.0015	0.0029	<0.0015	<0.003	<0.003	<0.003	<0.003	0.0089	
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.05	<0.05	<0.10	0.07	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0001	0.0110	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
K	mg/L		21.93	33.04	19.38	22.4	12.2	5.7	5.28	8.13	3.72	3.65	3.63	2.62	2.39	1.99	1.57	1.39	1.25	1.58	0.97	0.32	0.59
Li	mg/L	2.5	0.1000	0.1000	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01
Mg	mg/L	150	0.36	0.46	0.44	0.76	0.76	0.53	0.6	0.79	0.62	0.56	0.61	0.58	0.17	0.96	1.05	0.99	1.11	1.23	0.93	0.66	1.25
Mn	mg/L	0.2	0.0050	0.0050	0.0005	0.0005	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005	0.0007	0.0005	0.0005	<0.0005	<0.0005	0.0007	<0.001	<0.001	<0.001	<0.001	0.001	
Mo	mg/L		0.0069	0.0221	0.0094	0.0075	0.0062	0.0050	0.0048	0.0019	0.0012	0.0011	0.0022	0.0021	0.0008	0.0022	0.0018	0.0016	0.003	0.0018	0.0025	0.0025	0.0009	
Na	mg/L	200	6.68	9.05	6.28	6.75	3.83	2.84	2.11	3.08	2.05	1.38	1.41	1.13	0.91	1.26	1.12	1.21	0.91	1.16	1	1.05	0.99	
Ni	mg/L	0.025	0.052	0.051	0.029	0.040	0.040	0.030	0.036	0.024	0.041	0.024	0.028	0.022	0.003	0.024	0.0297	0.0399	0.0385	<0.0002	0.0343	0.0349	0.0272	
Pb	mg/L	0.05	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0007	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0014	0.0009	
S	mg/L		328	373	371	461	413	306	389	442	360	307	369	356	49	432.22	383.72	479.16	511.55	480.16	421.96	391.28	401.42	
Sb	mg/L	0.006	0.0050	0.0050	0.0011	0.0012	0.0012	0.0009	0.0012	0.0015	0.0018	0.0015	0.0012	0.0010	0.0005	0.0006	0.0014	0.0014	0.0011	<0.001	0.0014	0.0012	0.0015	
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Se	mg/L	0.05	0.0070	0.0217	0.0027	0.0048	0.0038	0.0033	0.0050	0.0041	0.0047	0.0046	0.0046	0.0035	0.0015	0.0092	0.0088	0.0072	0.0071	0.006	0.0038	0.0043	0.0131	
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.09	0.22	<0.10	0.05	0.2	0.28	<0.05	<0.10	<0.10	<0.10	<0.10	0.31	0.16	<0.10	<0.10	
Sn	mg/L		<0.10	<0.10	<0.10	0.16	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Sr	mg/L		0.361	0.489	0.408	0.518	0.510	0.345	0.395	0.425	0.368	0.340	0.386	0.469	0.070	0.3754	0.4359	0.5107	0.5584	0.4611	0.4878	0.4072	0.4462	
Ti	mg/L		0.275	0.277	0.299	0.342	0.323	0.240	0.228	0.113	0.150	0.133	0.274	0.159	0.076	0.2036	0.3138	0.3675	0.3983	0.3247	0.3619	0.3548	0.2307	
Tl	mg/L	0.0015[1]	0.008	0.008	0.020	0.024	0.022	0.015	0.021	0.024	0.019	0.018	0.018	0.014	0.001	0.0218	0.0255	0.0323	0.037	0.0227	0.0303	0.0244	0.0255	
U	mg/L	0.02	0.002	0.001	0.001	0.004	0.004	0.002	0.002	0.002	0.003	0.002	0.002	0.001	0.000	3E-06	0.0032	0.004	0.0046	0.0021	0.0037	0.0021	0.0032	
V	mg/L	0.1	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0003	
Zn	mg/L	2	0.0250	0.0250	0.0025	0.0025	0.0025	0.0055	0.0025	0.0151	0.0061	0.0060	0.0218	0.0025	0.0025	<0.0025	0.0383	0.0604	<0.005	<0.005	<0.005	0.1467	0.1657	
Ácido-$CaCO_3$	mg/L		25.8	69.4	57.5	-4.6	17.8	24.2	16.8	19.5	11.2	18.3	29.2	6.3	11.2	17.1	7.1	14.6	3.1	-2.6	12.8	11	19.8	
Alc.-$CaCO_3$	mg/L	375	18	23	14	17	16	<10	<10	13	15	12	<10	22	18	24	28	25	28	34	30	26	36	
COND	uS/cm	1600	1517	1696	1624	1952	1936	1479	1777	1505	1505	1367	1647	1628	325	1325	1768	1888	1695	1994	1841	1862	1771	
Dureza	mg/L		1087	1140	1129	1342	1283	989	1121	1417	1024	861	1048	1017	149	1318.5	1199.1	1530	1608	1497.8	1348.9	1301.1	1285.5	
pH	-	6.5-8.4	7.04	6.18	6.4	6.95	7.14		6.22	6.13	6.01	6.2	7.03	7.33	8.1	7.12	7.59	7.8	7.66	7.61	7.17	6.84	7.21	
TDS	mg/L	1000	1270	1590	1520	1920	1960	1350	1710	1500	1520	1210	1440	1510						200	1950	1510	2120	1405	2244	1912	1895	1865			
Cl^-	mg/L	100	4.7	6.5	2.1	1	<0.10	0.3	<0.10	0.4	0.2	0.2	<0.10	0.1	0.1	0.4	0.3	0.4	<0.10	<0.10	<0.10	1.9	1.5	
F^-	mg/L	1	0.8	<0.20	<0.20	<0.20	<0.20	<0.20	0.4	0.5	<0.20	0.9	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	
NO_3-N	mg/L	10	0.5	5.4	0.9	1.6	2.6	3.8	2.7	2.5	1.3	2.1	4.1	0.7	<0.20	<0.20	<0.20	1.3	<0.20	<0.20	<0.20	<0.20	<0.20	
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
SO_4	mg/L	300	1160	1154	975	1118	1324	877	1088	1277	863	730	1266	912			134	1125	1051	1372	1416	1351	1154	1155	1156			

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		ECA MYSRL Estándar más bajo	MT 9 Semana 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ag	mg/L	0.05	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Al	mg/L	0.2	0.010	0.010	0.001	0.011	0.003	0.187	0.021	0.104	0.001	0.045	0.149	0.007	0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	0.0125	0.0467
As	mg/L	0.01	0.010	0.010	0.003	0.003	0.002	0.003	0.002	0.003	0.003	0.002	0.003	0.002	0.001	0.0031	0.0017	0.0026	<0.002	0.0034	0.0023	0.0021	0.0027
B	mg/L	0.5	0.020	0.020	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	<0.002	0.0037	0.0039	<0.004	<0.004	<0.004	<0.004	0.0077
Ba	mg/L	0.7	0.010	0.011	0.023	0.023	0.023	0.020	0.020	0.020	0.020	0.020	0.015	0.015	0.009	0.0171	0.0182	0.0178	0.0199	0.0156	0.0175	0.0174	0.0172
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018	<0.0018	<0.0018	<0.0018	<0.0009
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ca	mg/L	200	285	350	387	368	479	332	334	414	248	257	347	310	215	558	354	351	482	591	501	360	500
Cd	mg/L	0.003	0.0010	0.0010	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Co	mg/L	0.05	0.0100	0.0100	0.0010	0.0010	0.0012	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0022	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	0.0011
Cr (Total)	mg/L	0.05	0.0040	0.0040	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.0004
Cu	mg/L	0.02	0.0150	0.0150	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0022	<0.0015	<0.0015	<0.003	<0.003	<0.003	<0.003	0.002
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.08	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0001	0.0097	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
K	mg/L		12.14	21.35	13.73	13.72	12.14	6.22	6.01	7.54	2.62	2.93	3.46	3.16	3.14	3.58	2.01	1.72	1.6	2.37	1.57	0.73	1.4
Li	mg/L	2.5	0.1000	0.1000	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01
Mg	mg/L	150	0.21	0.44	0.58	0.53	0.76	0.55	0.57	0.75	0.41	0.51	0.69	0.69	0.32	0.81	0.6	0.66	0.68	1.31	1.12	0.61	1.18
Mn	mg/L	0.2	0.0050	0.0050	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0061	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005
Mo	mg/L		0.0383	0.0200	0.0044	0.0083	0.0059	0.0051	0.0053	0.0017	0.0012	0.0010	0.0022	0.0022	0.0015	0.0216	0.0013	0.0012	0.0028	0.0027	0.0025	0.0026	0.0009
Na	mg/L	200	4.1	5.65	3.88	3.67	3.18	2.19	1.78	2.41	1.37	1.23	1.47	1.42	1.66	1.74	1.19	1.27	0.91	1.47	1.18	1.11	1.11
Ni	mg/L	0.025	0.038	0.040		0.023	0.028	0.035	0.026	0.027	0.016	0.012	0.015	0.023	0.016	0.011	0.0281	0.0216	0.0223	0.0265	0.0354	0.0306	0.0238				0.0264
Pb	mg/L	0.05	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0007	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0014	<0.0007
S	mg/L		223	275	317	341	409	278	289	310	205	228	311	276	175	457.21	300.5	288.8	382.99	472.4	393.31	272.75	396.82
Sb	mg/L	0.006	0.0050	0.0051	0.0009	0.0005	0.0005	0.0005	0.0007	0.0008	0.0007	0.0009	0.0008	0.0008	0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	0.0011
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Se	mg/L	0.05	0.0141	0.0085	0.0018	0.0029	0.0038	0.0025	0.0037	0.0035	0.0025	0.0018	0.0042	0.0035	0.0024	0.0056	0.0033	0.0036	0.0047	0.0072	0.0052	0.0033	0.0038
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	0.1	<0.10	<0.05	0.07	0.11	<0.05	<0.10	<0.10	<0.10	<0.10	0.2	<0.10	<0.10	<0.10
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sr	mg/L		0.235	0.314	0.322	0.333	0.406	0.295	0.296	0.303	0.216	0.248	0.353	0.312	0.182	0.3759	0.3014	0.3246	0.3666	0.5306	0.4385	0.2708	0.4155
Ti	mg/L		0.162	0.191	0.231	0.228	0.294	0.187	0.172	0.092	0.083	0.121	0.234	0.159	0.261	0.2164	0.2084	0.2064	0.2462	0.3562	0.319	0.2153	0.2377
Tl	mg/L	0.0015[1]	0.008	0.008	0.015	0.015	0.017	0.012	0.011	0.014	0.008	0.008	0.007	0.005	0.004	0.0193	0.0123	0.0115	0.0167	0.0223	0.0183	0.0116	0.0174				
U	mg/L	0.02	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.002	0.001	0.000	3E-06	0.0009	0.0013	0.0015	0.005	0.0033	0.0009	0.0032
V	mg/L	0.1	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0072	<0.0003	<0.0003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0003
Zn	mg/L	2	0.0250	0.0250	0.0025	0.0025	0.0025	0.0025	0.0025	0.0472	0.0060	0.0072	0.0221	0.0025	0.0025	<0.0025	0.0381	0.0446	<0.005	<0.005	<0.005	0.1204	0.0083
Ácido-$CaCO_3$	mg/L		40.2	79.6	57.4	51.8	113.5	30.5	16.1	12.6	8.9	24.2	26.8	15.1	13.4	7.5	20.1	20.3	10.5	22.4	17.6	12.8	20.6
Alc.-$CaCO_3$	mg/L	375	<10	<10	14	10	<10	<10	13	18	16	<10	15	18	19	24	14	18	20	31	29	23	30
COND	uS/cm	1600	1223	1543	1439	1437	1706	1310	1355	972	972	1113	1455	1418	976	1356	1713	1625	1625	1990	1810	1396				1743
Dureza	mg/L		714	876	969	921	1201	831	836	1038	622	644	869	777	539	1397.9	887.54	881.1	1206.8	1481.8	1257.5	902.09	1253.8
pH	-	6.5-8.4	4.01	3.25	6.44	7.08	7.13		6.39	6.24	6.11	6.27	7.02	7.53	8.1	7.51	7.7	7.57	7.64	7.58	7.32	6.76	7.17
TDS	mg/L	1000	960	1140	1240	1270	1760	1230	1250	1040	900	870	1210	1250	760	2060	1080	1190	1050	2208	1852	1268	1755
Cl^-	mg/L	100	3.9	6.4	2	0.4	<0.10	0.2	<0.10	1.5	0.1	0.2	0.2	0.3	0.5	0.7	0.5	0.4	<0.10	<0.10	<0.10	1.4	1.5
F^-	mg/L	1	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	0.4	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.4	<0.20	<0.20	<0.20	<0.20	<0.20
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N	mg/L	10	6	<0.20	0.9	1.1	3.4	4.3	1.7	1.3	0.2	3	2.1	1.1	<0.20	<0.20	1.1	0.9	<0.20	<0.20	<0.20	<0.20	<0.20
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
SO_4	mg/L	300	859	1137	811	772	1131	769	773	775	504	524	1051	707	518	1187	761	735	1044	1360	1129	770	1119

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		ECA MYSRL Estándar más bajo	MT 10 Semana 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ag	mg/L	0.05	0.0010	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Al	mg/L	0.2	2.003	0.787	0.001	0.004	0.001	0.003	0.277	0.915	0.053	0.001	0.117	0.006	0.008	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.001
As	mg/L	0.01	0.010	0.010	0.002	0.003	0.003	0.002	0.003	0.003	0.003	0.002	0.003	0.003	0.001	0.0026	0.0018	0.0016	<0.002	<0.002	<0.002	0.0024	0.0021
B	mg/L	0.5	0.020	0.020	0.002	0.002	0.002	0.002	0.002	0.004	0.003	0.002	0.002	0.002	0.002	<0.002	0.0058	0.0055	<0.004	<0.004	<0.004	<0.004	0.007
Ba	mg/L	0.7	0.012	0.014	0.024	0.023	0.022	0.020	0.019	0.016	0.017	0.019	0.013	0.010	0.008	0.0134	0.0174	0.0152	0.0181	0.0135	0.017	0.0173	0.0149
Be	mg/L	0.04	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018	<0.0018	<0.0018	<0.0018	<0.0009
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ca	mg/L	200	476	474	474	532	537	446	462	541	393	309	516	528	403	643	453	418	408	542	485	501	505
Cd	mg/L	0.003	0.0010	0.0010	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001
Co	mg/L	0.05	0.0100	0.0100	0.0012	0.0015	0.0016	0.0017	0.0013	0.0011	0.0010	0.0010	0.0011	0.0012	0.0010	0.0012	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	0.001
Cr (Total)	mg/L	0.05	0.0040	0.0040	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0004
Cu	mg/L	0.02	0.0150	0.0150	0.0033	0.0018	0.0015	0.0052	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	<0.0015	<0.0015	<0.0015	<0.003	<0.003	<0.003	<0.003	<0.0015
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	0.08	<0.10	0.08	<0.05	0.06	<0.05	<0.10	<0.10	<0.10	<0.10	0.14	0.1	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0004	0.0112	0.0002	0.0001	0.0001	0.0001	0.0004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
K	mg/L		9.54	11.8	13.03	15.26	15.6	8.86	6.78	5.93	2.93	1.96	2.68	1.25	0.66	1.56	0.7	0.58	0.54	0.52	0.48	0.25	0.36
Li	mg/L	2.5	0.1000	0.1000	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.01
Mg	mg/L	150	0.58	0.34	0.58	0.67	0.93	0.92	1	1.23	1.05	0.92	1.55	1.33	0.71	2.59	1.76	1.64	1.59	2.59	2.11	1.71	2.2
Mn	mg/L	0.2	0.0050	0.0050	0.0005	0.0005	0.0008	0.0031	0.0005	0.0005	0.0005	0.0005	0.0008	0.0005	0.0005	0.0041	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.0005
Mo	mg/L		0.0101	0.0141	0.0019	0.0044	0.0034	0.0032	0.0034	0.0004	0.0002	0.0002	0.0010	0.0013	0.0009	0.0017	0.001	0.001	0.0024	0.0022	0.0024	0.0023	0.0006
Na	mg/L	200	4.63	4.43	4.96	5.52	5.45	3.5	2.61	2.45	1.79	1.1	1.5	0.95	0.98	1.45	0.99	1.06	0.71	1.06	1.01	1.03	0.96
Ni	mg/L	0.025	0.058	0.060	0.030	0.040	0.042	0.034	0.034		0.022	0.022	0.018	0.031	0.028	0.022		0.0284	0.0268	0.0261	0.0255	0.034	0.0303	0.0331	0.0269
Pb	mg/L	0.05	0.007	0.007	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.0007	<0.0007	<0.0007	<0.0014	<0.0014	<0.0014	<0.0014	<0.0007
S	mg/L		367	378	411	495	526	406	420	425	352	261	474	464	329	540.81	366.59	327.24	326.21	431.26	380.77	376.4	407.08
Sb	mg/L	0.006	0.0050	0.0050	0.0017	0.0014	0.0006	0.0005	0.0008	0.0011	0.0014	0.0013	0.0012	0.0009	0.0011	0.0007	0.0011	0.0008	0.0013	<0.001	0.0011	0.0011	0.0013
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Se	mg/L	0.05	0.0070	0.0070	0.0026	0.0035	0.0053	0.0046	0.0066	0.0057	0.0057	0.0042	0.0077	0.0063	0.0039	0.0146	0.0082	0.0049	0.0061	0.0073	0.0057	0.0042	0.0047
Si	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.21	0.25	<0.10	<0.05	0.29	0.21	<0.05	<0.10	<0.10	<0.10	<0.10	0.21	0.14	<0.10	<0.10
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sr	mg/L		0.334	0.354	0.382	0.436	0.476	0.399	0.382	0.382	0.351	0.263	0.494	0.446	0.302	0.4112	0.3368	0.3041	0.3038	0.4641	0.3431	0.3513	0.3758
Ti	mg/L		0.191	0.282	0.316	0.342	0.395	0.285	0.235	0.150	0.163	0.139	0.266	0.258	0.205	0.2811	0.282	0.2558	0.2454	0.3515	0.2872	0.3071	0.1398
Tl	mg/L	0.0015[1]	0.008	0.008	0.026	0.030	0.030	0.026	0.028	0.028	0.025	0.021	0.030	0.027	0.017	0.0371	0.03	0.0268	0.0304	0.0387	0.0393	0.0325	0.0322
U	mg/L	0.02	0.002	0.002	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.001	3E-06	0.0022	0.002	0.0014	0.0029	0.0034	0.0024	0.0033
V	mg/L	0.1	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0003
Zn	mg/L	2	0.0250	0.0250	0.0025	0.0025	0.0025	0.0112	0.0053	0.0044	0.0060	0.0059	0.0427	0.0025	0.0025	<0.0025	0.0373	0.0466	<0.005	<0.005	<0.005	0.0136	<0.0025
Ácido-$CaCO_3$	mg/L		156.1	106.1	114.3	128.9	335.7	160.5	67.5	56.8	27.9	22.6	105.2	16.6	10.9	32.9	12.1	10.8	10.1	26.8	15.4	11.2	18.7
Alc.-$CaCO_3$	mg/L	375	<10	<10	13	11	<10	14	18	18	16	<10	<10	11	22	22	23	19	20	26	31	27	30
COND	uS/cm	1600	2188	1825	1763	1955	2021	1731	1787	1850			1466	1215	1915	1996	1605	1551	1411	1925	1888	1816	1558			1701	1750
Dureza	mg/L		1194	1187	1188	1333	1347	1118	1159	1357	987		777	1296	1326	1010	1619	1138.8	1052.5	1026	1365	1221.6	1259.8	1270.5			
pH	-	6.5-8.4	2.99	3.38	6.18		6.86	6.95		6.15	6.22	6.1	6.29	7.04	7.47	7.9	7.21	7.55	7.52	7.65	7.4	7.24	6.86	7.1
TDS	mg/L	1000	1610	1530	1650	1930	1990	1650	1720	1480	1330	1060	1790	2040	1460	2300	1530	1450	1710	1972	1756	1740	1790				
Cl^-	mg/L	100	5	8	2.6	1.3	0.2	0.7	<0.10	1	0.1	<0.10	<0.10	<0.10	0.3	0.2	0.2	0.2	0.1	<0.10	<0.10	2.1	1.5
F^-	mg/L	1	0.8	0.5	<0.20	0.6	<0.20	<0.20	0.3	0.6	0.4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
NO_2-N	mg/L	0.06	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N	mg/L	10	22.2	11.1	<0.20	<0.20	2.3	1	0.6	1.3	0.8	3.2	5.3	2.1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
PO_4-P	mg/L	0.15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
SO_4	mg/L	300	1393	859	1035	1088	1185	962	697	1177	839	621	1489	1181	999	1330	996	891	899	1183	1052	1046	1110

La información contenida en este informe es confidencial y de propiedad exclusiva.

		ECA MYSRL	MT 11																			
		Estándar más bajo	Semana																			
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Ag	mg/L	0.05	0.0001	0.0073	0.0001	0.0791	0.0256	0.0001	0.0001	0.0001	0.0001	0.0009	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Al	mg/L	0.2	0.263	0.332	0.018	0.268	0.010	0.001	1.166	0.004	0.010	0.110	0.100	0.001	0.001	0.415	0.011	0.006	<0.001	<0.001	<0.001	<0.002
As	mg/L	0.01	0.111	0.073	0.069	0.079	0.083	0.096	0.091	0.086	0.079	0.079	0.084	0.080	0.088	0.059	0.075	0.061	0.0716	0.0695	0.0811	0.0871
B	mg/L	0.5	0.023	0.025	0.031	0.020	0.020	0.025	0.035	0.045	0.024	0.034	0.025	0.017	0.018	0.017	0.015	0.004	0.0124	0.0246	0.0191	0.0165
Ba	mg/L	0.7	0.064	0.047	0.043	0.020	0.026	0.048	0.050	0.040	0.040	0.042	0.033	0.042	0.057	0.044	0.050	0.050	0.0401	0.0422	0.0449	0.0436
Be	mg/L	0.04	0.002	0.001	0.001	0.009	0.009	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	<0.0009	<0.0009	<0.0009	<0.0018
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Ca	mg/L	200	17.8	42.5	41.9	55.3	52.6	44.0	48.7	63.7	40.6	35.3	45.5	30.2	25.6	53.7	25.2	8.77	53.0	38.1	24.9	24.0
Cd	mg/L	0.003	0.0001	0.0001	0.0001	0.0010	0.0010	0.0002	0.0002	0.0002	0.0001	0.0002	0.0003	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Co	mg/L	0.05	0.001	0.001	0.001	0.010	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.002
Cr (Total)	mg/L	0.05	0.0004	0.0004	0.0004	0.0040	0.0040	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008
Cu	mg/L	0.02	0.005	0.010	0.044	0.064	0.015	0.011	0.011	0.013	0.011	0.014	0.016	0.020	0.014	0.008	0.019	0.004	0.0231	0.0297	0.0281	0.0583
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
K	mg/L		0.32	0.33	1.79	0.49	0.48	0.44	0.53	0.68	0.41	0.5	0.47	0.28	0.57	0.37	0.26	0.14	0.4	0.34	0.29	0.3
Li	mg/L	2.5	0.01	0.01	0.01	0.10	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.02
Mg	mg/L	150	0.56	1.25	1.41	1.81	1.9	1.67	2.03	2.81	1.5	1.61	1.78	1.21	1.12	1.59	1.00	0.35	1.6	1.27	0.97	0.94
Mn	mg/L	0.2	0.001	0.003	0.003	0.005	0.005	0.002	0.002	0.004	0.002	0.002	0.003	0.003	0.002	0.003	0.003	0.001	0.0074	0.008	0.0078	0.013
Mo	mg/L		0.007	0.006	0.007	0.010	0.011	0.005	0.011	0.012	0.010	0.011	0.008	0.006	0.006	0.009	0.007	0.003	0.0103	0.0092	0.0073	0.0091
Na	mg/L	200	2.44	2.04	2.28	2.4	2.44	2.39	2.68	2.99	1.89	1.62	1.47	1.32	0.93	0.87	0.77	0.79	1.13	1.01	1.15	0.68
Ni	mg/L	0.025	0.0001	0.0033	0.0036	0.0175	0.0182	0.0012	0.0050	0.0061	0.0045	0.0036	0.0019	0.0005	0.0001	0.0001	0.0017	0.0001	0.0036	0.0034	0.002	0.0027
Pb	mg/L	0.05	0.0007	0.0007	0.0007	0.0070	0.0070	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	<0.0007	<0.0007	<0.0007	<0.0014
S	mg/L		13.9	31.8	31.7	43.1	39.5	30.8	37.3	48.6	29.5	27.1	34.8	22.8	20.2	39.6	18.1	6.39	44.35	27.43	20.24	19.93
Sb	mg/L	0.006	0.007	0.006	0.007	0.010	0.009	0.009	0.010	0.014	0.011	0.012	0.014	0.012	0.012	0.007	0.013	0.004	0.0141	0.0172	0.0164	0.0173
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Se	mg/L	0.05	0.003	0.002	0.001	0.013	0.007	0.001	0.001	0.002	0.002	0.040	0.001	0.001	0.002	0.002	0.001	0.001	0.0019	<0.0007	<0.0007	<0.0014
Si	mg/L		0.49	0.81	0.82	1.1	1.05	0.77	1.12	1.53	0.83	1.16	1.24	0.5	0.88	1.11	0.86	<0.05	0.65	<0.10	0.31	0.37
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Sr	mg/L		0.0458	0.1006	0.1461	0.0695	0.0736	0.1160	0.1039	0.1256	0.0802	0.0751	0.0854	0.1082	0.0565	0.1038	0.1105	0.0149	0.0866	0.058	0.0465	0.0518
Ti	mg/L		0.0173	0.0339	0.0384	0.0367	0.0290	0.0425	0.0499	0.0568	0.0322	0.0471	0.0340	0.0303	0.0254	0.0736	0.0295	0.0051	0.0161	0.0149	0.0108	0.0107
Tl	mg/L	0.0015[1]	0.0008	0.0008	0.0008	0.0080	0.0080	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0014	<0.0008	<0.0008	<0.0016
U	mg/L	0.02	0.0007	0.0016	0.0008	0.0026	0.0036	0.0002	0.0012	0.0013	0.0004	0.0003	0.0005	0.0013	0.0011	0.0006	0.0001	0.0001	3E-06	0.0001	0.0001	<0.0001
V	mg/L	0.1	0.0003	0.0003	0.0003	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006
Zn	mg/L	2	0.003	0.014	0.006	0.025	0.025	0.005	0.008	0.004	0.005	0.006	0.006	0.015	0.011	0.003	0.011	0.003	0.0173	0.0618	0.066	0.0134
Acido-$CaCO_3$	mg/L		15.1	14	13.8	4.5	28.3	16.8	4.5	12.7	10.5	9.8	22.5	14.4	15.4	26.1	11.8	9.2	11.8	18.2	16.2	17.5
Alc.-$CaCO_3$	mg/L	375	25	22	21	19	<10	13	19	13	15	14	11	<10	13	<10	<10	17	<10	<10	<10	<10
COND	uS/cm	1600	118	243	252	295	360	248	270	441	221	214	300	265	160	284	236	61	210	180	151	185
Dureza	mg/L		47	111	111	146	139	117	130	171	108	94.8	121	80.4	68.6	141	67.1	23.4	139.06	100.31	66.33	63.81
pH	-	6.5-8.4	8.66		6.72	7.29	3.84	6.55	6.57	7.68		6.62	6.62	6.39	5.97	8.08	7.72	8.1	7.79	8.43	7.79	8.02
TDS	mg/L	1000	132	1110	159	195	212	164	182	270	154	158	200	102	108	204	<50	<50	208	94	116	3770
Cl^-	mg/L	100	2.3	8	1	0.4	<0.10	1.7	0.2	<0.10	0.3	<0.10	0.3	<0.10	0.2	<0.10	<0.10	<0.10	0.3	0.4	0.2	<0.10
F^-	mg/L	1	<0.20	<2.00	<2.00	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
NO_2-N	mg/L	0.06	<0.40	<4.00	<4.00	1	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N	mg/L	10	<0.20	<2.00	<2.00	<0.20	7.1	2.7	0.6	2.2	1.4	1.6	2	2	1.5	5.1	1.6	<0.20	<0.20	<0.20	<0.20	<0.20
PO_4-P	mg/L	0.15	4	16	93	6.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	1.8	<0.20	<0.20	0.5	<0.20	<0.20	<0.20	0.7
SO_4	mg/L	300	30.8	626	97	<5.0	178	67.9	76.1	186	80.3	51.9	124	60.7	45.4	148	53	19.9	114	64	47.3	54.8

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		ECA MYSRL	MT 12																			
		Estándar más bajo	Semana																			
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Ag	mg/L	0.05	0.0001	0.0024	0.0001	0.0131	0.0096	0.0001	0.0001	0.0001	0.0001	0.0008	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Al	mg/L	0.2	0.107	0.021	1.972	0.010	0.010	0.001	0.4018	0.0244	1.0807	0.5209	0.0347	0.0010	0.0641	0.0843	0.0160	0.0054	<0.001	<0.001	<0.001	<0.002
As	mg/L	0.01	0.107	0.080	0.001	0.100	0.099	0.103	0.0860	0.0861	0.0696	0.0800	0.0686	0.0574	0.0603	0.0950	0.0642	0.0510	0.0715	0.0723	0.0845	0.0896
B	mg/L	0.5	0.028	0.032	0.002	0.033	0.026	0.036	0.0464	0.0636	0.0370	0.0519	0.0333	0.0233	0.0264	0.0113	0.0204	0.0040	0.0187	0.0268	0.0234	0.0177
Ba	mg/L	0.7	0.056	0.046	0.001	0.023	0.028	0.048	0.0441	0.0376	0.0344	0.0424	0.0356	0.0435	0.0463	0.0425	0.0422	0.0541	0.0393	0.0369	0.0422	0.0382
Be	mg/L	0.04	0.002	0.001	0.001	0.009	0.009	0.001	0.0009	0.0010	0.0010	0.0010	0.0009	0.0009	0.0009	0.0016	0.0010	0.0009	<0.0009	<0.0009	<0.0009	<0.0018
Bi	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Ca	mg/L	200	20.9	44.0	48.7	48.1	54.1	47.6	50.9	79.4	49.9	47.1	51.1	36.7	34.2	34.9	34.5	10.6	74.4	29.2	33.7	35.0
Cd	mg/L	0.003	0.0001	0.0001	0.0001	0.0010	0.0010	0.0001	0.0001	0.0003	0.0002	0.0002	0.0002	0.0001	0.0002	0.0004	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Co	mg/L	0.05	0.001	0.001	0.001	0.010	0.010	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.002
Cr (Total)	mg/L	0.05	0.0004	0.0004	0.0004	0.0040	0.0040	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	<0.0004	<0.0004	<0.0004	<0.0008
Cu	mg/L	0.02	0.010	0.008	0.010	0.019	0.015	0.011	0.009	0.011	0.009	0.012	0.007	0.007	0.018	0.035	0.007	0.002	0.0076	0.0085	0.0076	0.0086
Fe	mg/L	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Ga	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Hg	mg/L	0.001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
K	mg/L		0.36	0.36	0.48	0.46	0.46	0.46	0.57	0.71	0.43	0.58	0.52	0.31	0.46	0.31	0.32	0.16	0.47	0.52	0.29	0.29
Li	mg/L	2.5	0.01	0.01	0.01	0.10	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.02
Mg	mg/L	150	0.65	1.31	1.64	1.87	1.98	1.85	2.18	3.13	1.9	2.01	2.06	1.33	1.29	1.27	1.17	0.34	2.1	1.24	1	0.98
Mn	mg/L	0.2	0.001	0.003	0.001	0.005	0.005	0.003	0.003	0.006	0.003	0.002	0.003	0.002	0.002	0.017	0.002	0.001	0.0022	0.0024	0.0024	0.0103
Mo	mg/L		0.008	0.007	0.001	0.011	0.010	0.006	0.011	0.013	0.009	0.012	0.008	0.006	0.006	0.008	0.007	0.003	0.0128	0.0084	0.0089	0.011
Na	mg/L	200	2.83	2.17	2.61	2.68	2.45	2.44	2.73	2.95	2.03	1.8	1.57	1.36	1.18	0.82	0.86	0.79	1.34	1.05	1.07	0.68
Ni	mg/L	0.025	0.0003	0.0035	0.0003	0.0178	0.0161	0.0015	0.0051	0.0075	0.0050	0.0046	0.0021	0.0005	0.0011	0.0001	0.0023	0.0002	0.0043	0.0035	0.0025	0.0017
Pb	mg/L	0.05	0.0007	0.0007	0.0007	0.0070	0.0070	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	<0.0007	<0.0007	<0.0007	<0.0014
S	mg/L		16.8	33.2	37.4	38.1	40.6	34.3	39.4	62.0	37.5	35.6	39.3	21.7	25.8	26.2	23.3	6.6	59.98	24.21	22.79	24.61
Sb	mg/L	0.006	0.006	0.006	0.001	0.012	0.009	0.009	0.010	0.012	0.008	0.009	0.009	0.008	0.008	0.011	0.009	0.002	0.01	0.0089	0.0121	0.0125
Sc	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Se	mg/L	0.05	0.003	0.001	0.001	0.020	0.007	0.001	0.001	0.002	0.002	0.031	0.002	0.001	0.002	0.002	0.002	0.001	0.003	0.002	0.0015	0.0029
Si	mg/L		0.42	0.9	0.81	0.97	1.2	0.9	1.18	1.57	0.86	1.47	1.42	0.57	0.84	0.97	0.89	<0.05	0.58	0.39	<0.10	<0.10
Sn	mg/L		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.05	<0.10	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Sr	mg/L		0.0522	0.1082	0.0003	0.0696	0.0668	0.1049	0.1099	0.1556	0.0944	0.0986	0.0896	0.0681	0.0667	0.0733	0.0705	0.0165	0.101	0.0594	0.0576	0.0589
Ti	mg/L		0.0188	0.0427	0.0010	0.0255	0.0391	0.0439	0.0483	0.0739	0.0399	0.0514	0.0380	0.0338	0.0347	0.0463	0.0415	0.0070	0.031	0.019	0.0188	0.0122
Tl	mg/L	0.0015[1]	0.0008	0.0008	0.0008	0.0080	0.0080	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0012	<0.0008	<0.0008	<0.0016
U	mg/L	0.02	0.0007	0.0012	0.0000	0.0030	0.0021	0.0005	0.0009	0.0028	0.0011	0.0008	0.0006	0.0011	0.0011	0.0018	0.0001	0.0001	3E-06	0.0002	3E-06	<0.0001
V	mg/L	0.1	0.0003	0.0003	0.0003	0.0030	0.0030	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0006
Zn	mg/L	2	0.003	0.008	0.221	0.025	0.025	0.003	0.003	0.005	0.006	0.005	0.006	0.009	0.011	0.036	0.005	0.003	<0.0025	0.0406	0.0617	<0.005
Acido-$CaCO_3$	mg/L		17.9	11.8	11.3	6.6	21	20.8	24.3	6.7	7.6	4.5	11	2.7	14.3	58.5	13.7	46.1	1.3	13	1.8	6.5
Alc.-$CaCO_3$	mg/L	375	26	23	22	17	<10	11	<10	17	17	19	21	14	12	<10	<10	21	19	12	18	18
COND	uS/cm	1600	139	255	293	287	313	263	292	428	272	205	355	200	291	246	206	350	80	205	191	135
Dureza	mg/L		55.0	115	128	128	143	126	136	211	133	126	136	97.1	90.8	92.5	91.2	28.0	194.53	78.1	88.25	91.61
pH	-	6.5-8.4	8.93		6.5	7.42	4.33	6.6	5.64	7.93		7.29	7.31	7.43	6.29	7.93	8.35	9.2	8.55	8.3	8.75	8.66
TDS	mg/L	1000	148	157	184	166	212	174	210	340	192	244	202	96	160	130	138	<50	278	106	116	1430
Cl^-	mg/L	100	2.7	7	<1.00	2.6	3	1.2	0.2	0.1	0.3	<0.10	0.4	0.1	0.1	0.1	0.2	0.1	0.2	0.4	0.3	<0.10
F^-	mg/L	1	<0.20	<2.00	<2.00	0.6	0.9	0.5	<0.20	<0.20	<0.20	0.4	<0.20	0.4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.6
NO_2-N	mg/L	0.06	<0.40	<4.00	<4.00	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
NO_3-N	mg/L	10	<0.20	<2.00	<2.00	1.5	5.5	2.7	4.4	2.2	2	2	0.9	1.5	3.1	11.1	1.8	<0.20	<0.20	1.6	<0.20	<0.20
PO_4-P	mg/L	0.15	1.7	56	53	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	3.6	<0.20	<0.20	<0.20	<0.20	<0.20	0.7	<0.20	0.3
SO_4	mg/L	300	40.5	125	148	161	160	79.8	79.2	199	97.4	97.4	107	61.7	57.4	98.5	64.3	16.9	140	70	60.5	66.1

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