GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA, S.A. DE C.V.

PROYECTO: CUENCA DEL RIO SONORA; DERRAME DE LA MINA BUENAVISTA DEL COBRE, CANANEA, SONORA

TOMO I

LACTEOS Y CARNICOS/SUELO/AGUA

INDICE GENERAL

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA, S.A. DE C.V.

CONTENIDO

LÁCTEOS

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA S.A. DE C.V.
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LABORATORIO DE RESIDUOS TÓXICOS

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005
Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: LÁCTEOS
Fecha de Recepción: 2015-10-15

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

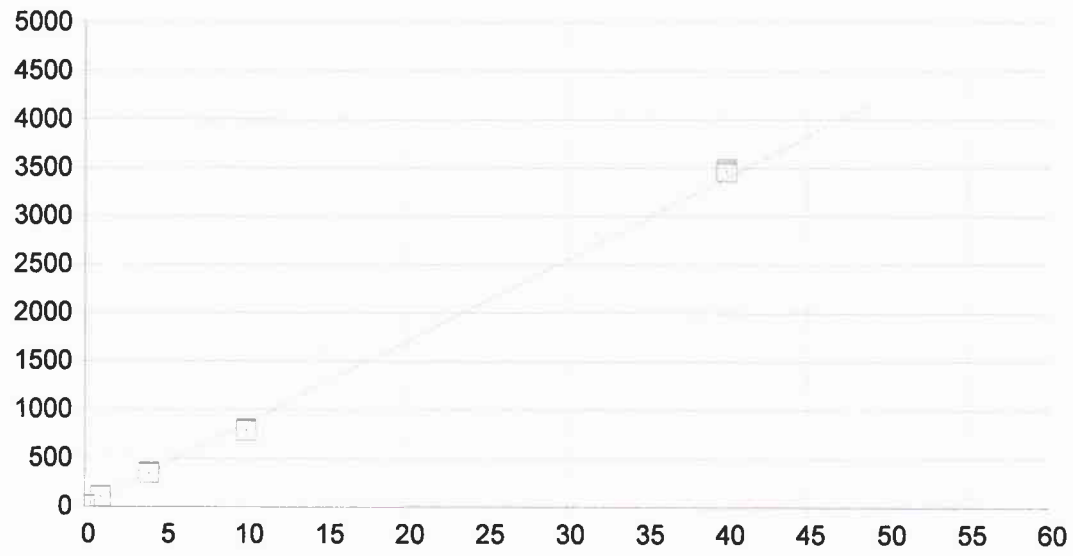
DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/10/15 (1)
Fecha de Analisis de Metales y Mercurio: 2015-10-22 2015-10-22
Fecha de Realización del Informe: 2015-10-23

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I002/15/0014	GISC15-20277
L-I002/15/0018	GISC15-20278
L-I004/15/0032	GISC15-20282
L-I004/15/0036	GISC15-20283
L-I005/15/0043	GISC15-20284
L-I006/15/0059	GISC15-20286
L-I007/15/0066	GISC15-20290
L-I009/15/0086	GISC15-20293
L-I013/15/0130	GISC15-20295
L-I014/15/0131	GISC15-20296
L-I025/15/0247	GISC15-20324
L-I025/15/0248	GISC15-20325
L-I041/15/0405	GISC15-20359
L-I067/15/0668	GISC15-20393
L-I067/15/0669	GISC15-20394
L-I068/15/0679	GISC15-20398
L-I068/15/0680	GISC15-20399
L-I072/15/0720	GISC15-20412
L-I074/15/0735	GISC15-20418
L-I074/15/0736	GISC15-20419

REVISÓ

Q.F.B.Leticia Velázquez Méndez
Gerente Técnico



Al 308.215 {109}

Fecha de la	22/10/2015 19:02:43	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	10.781259		Reajustar P	1.000000	
A1 (Ganancia)	84.715218		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999139		Estatus:	OK.	
Error Estándar de Est:	1.063942				
MDL:	0.066157				
MQL:	0.220522				

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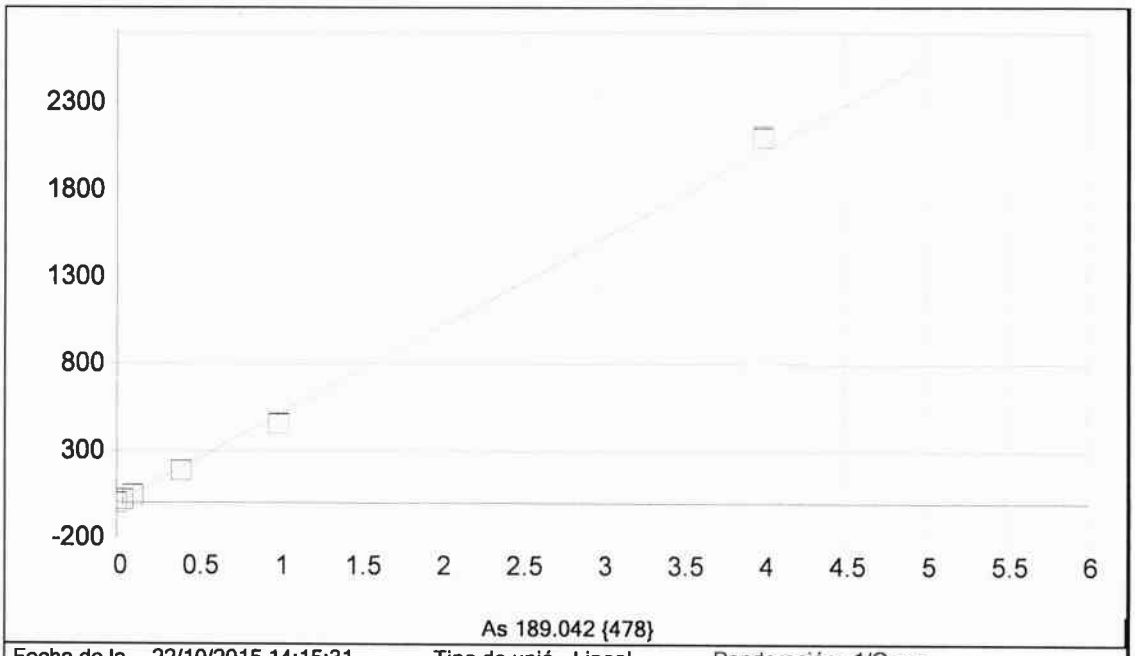
STD 6	1.0000	1.1071	.107	10.7	104.57	4.00	1
STD 7	4.0000	3.9655	-.034	-.862	346.72	5.91	1
STD 8	10.000	9.1712	-.829	-8.29	787.72	8.65	1
STD 9	40.000	40.756	.756	1.89	3463.5	19.2	1



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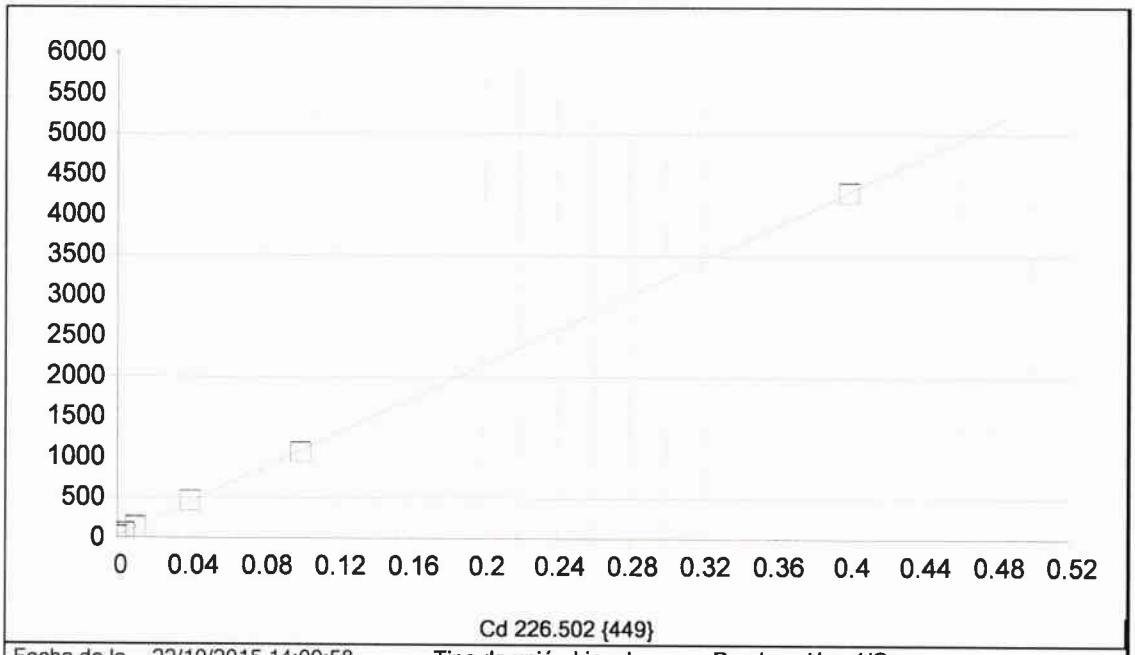
A1 (Ganancia)	506.325013		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.998147		Estatus:	OK.	
Error Estándar de Est:	0.562331				
MDL:	0.001570				
MQL:	0.005232				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	-.24860	1.18	1
STD 4	.10000	.08663	-.013	-13.4	43.607	.733	1
STD 5	.40000	.36692	-.033	-8.27	185.53	1.14	1
STD 6	1.0000	.89973	-.100	-10.0	455.30	1.40	1
STD 7	4.0000	4.1505	.150	3.76	2101.2	6.30	1
STD 3	.04000	.03626	-.004	-9.34	18.105	.777	1

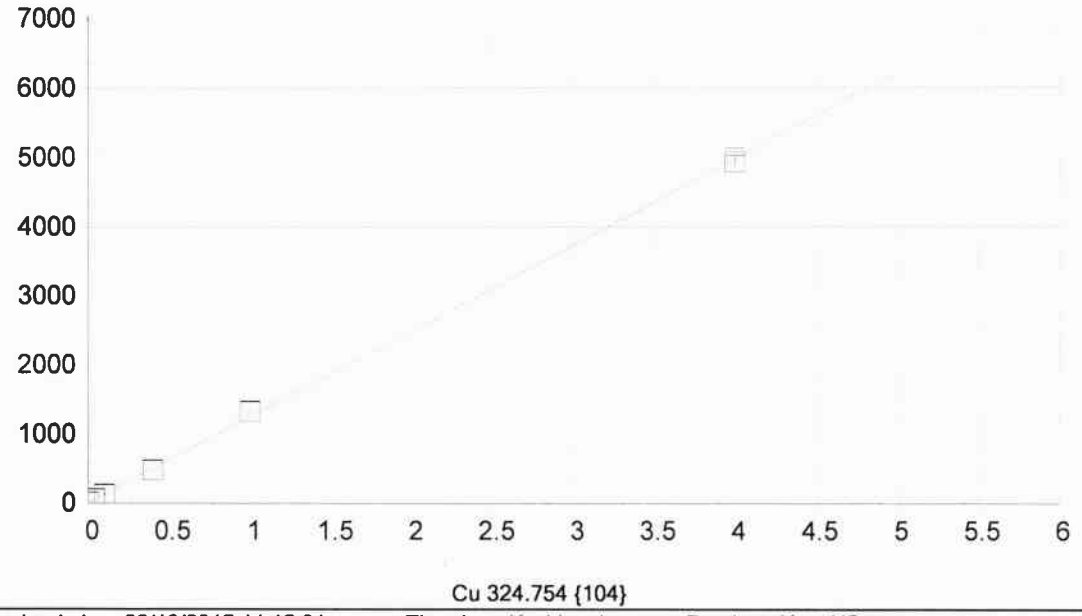


Cd 226.502 {449}

Fecha de la	22/10/2015 14:09:58	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	19.352085	Reajustar P	1.000000
A1 (Ganancia)	10666.40868	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999782	Estatus:	OK.
Error Estándar de Est:	0.405646		
MDL:	0.000109		
MQL:	0.000365		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	19.348	3.98	1
STD 1	.00400	.00390	-.000	-2.55	60.931	10.4	1
STD 2	.01000	.01116	.001	11.6	138.42	8.67	1
STD 3	.04000	.04149	.001	3.73	461.93	2.63	1
STD 4	.10000	.09782	-.002	-2.18	1062.7	3.20	1
STD 5	.40000	.39963	-.000	-.093	4281.9	.768	1



Fecha de la	22/10/2015 14:15:31	Tipo de unió	Lineal	Ponderación:	1/Conc

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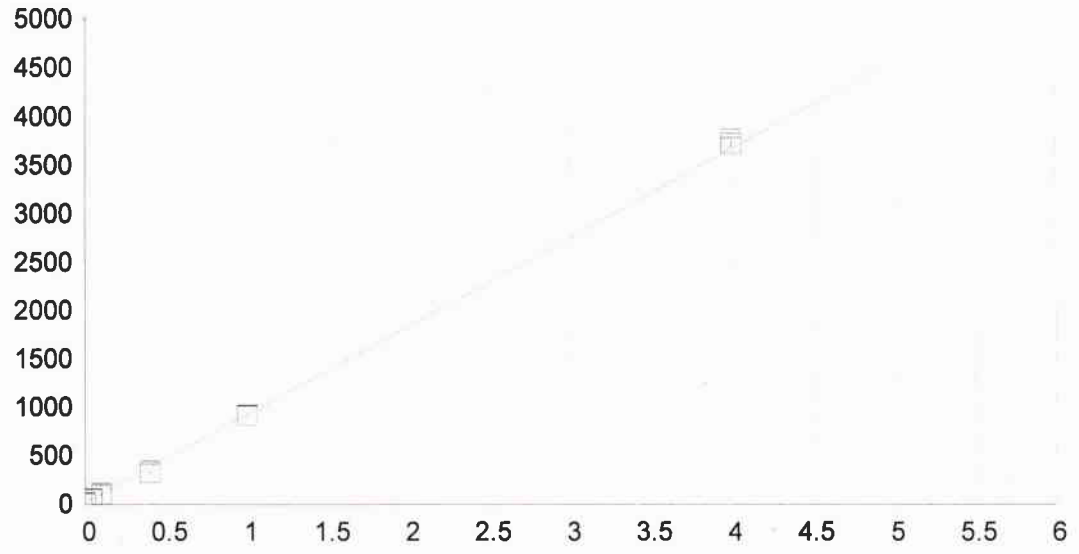
A1 (Ganancia)	1240.546351	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999518	Estatus:	OK.
Error Estándar de Est:	0.702123		
MDL:	0.003343		
MQL:	0.011142		

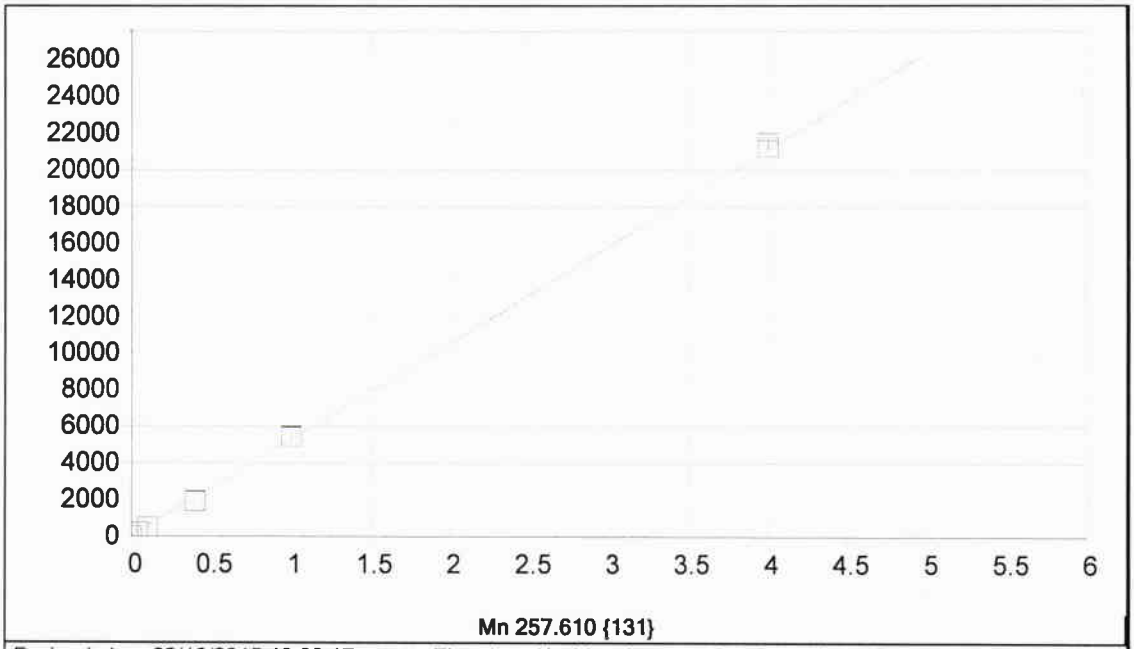
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	10.927	2.13	1
STD 5	.40000	.37911	-.021	-5.22	481.23	4.61	1
STD 6	1.0000	1.0601	.060	6.01	1326.0	6.66	1
STD 7	4.0000	3.9650	-.035	-.875	4929.7	53.3	1
STD 3	.04000	.04127	.001	3.17	62.123	4.00	1
STD 4	.10000	.09454	-.005	-5.46	128.20	5.82	1



Fe 259.940 {130}

Fecha de la	22/10/2015 19:03:10	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	14.601788		Reajustar P	1.000000	
A1 (Ganancia)	911.506255		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999237		Estatus:	OK.	
Error Estándar de Est:	0.649159				
MDL:	0.002900				
MQL:	0.009668				

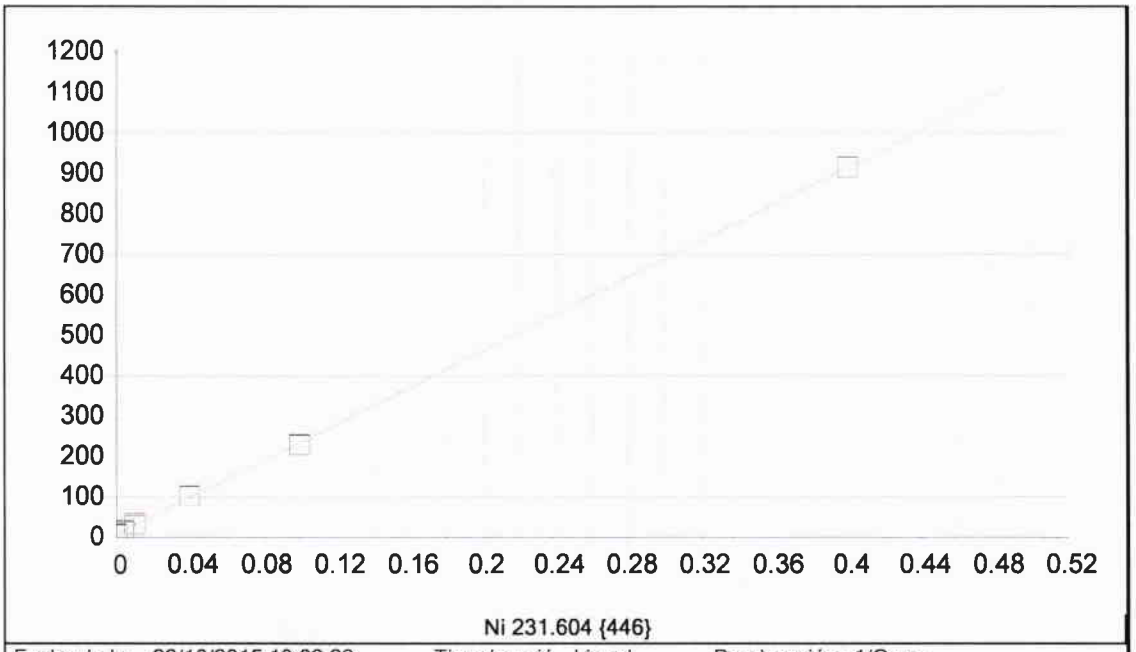
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	14.603	5.23	1
STD 5	.40000	.34693	-.053	-13.3	330.83	15.9	1
STD 6	1.0000	.98863	-.011	-1.14	915.74	3.61	1
STD 3	.04000	.04373	.004	9.33	54.463	5.16	1
STD 4	.10000	.09930	-.001	-.697	105.12	13.1	1
STD 7	4.0000	4.0614	.061	1.54	3716.6	43.5	1



Mn 257.610 {131}

Fecha de la	22/10/2015 19:03:17	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	12.644685		Reajustar P	1.000000	
A1 (Ganancia)	5271.797171		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999384		Estatus:	OK.	
Error Estándar de Est:	3.371077				
MDL:	0.000480				
MQL:	0.001601				

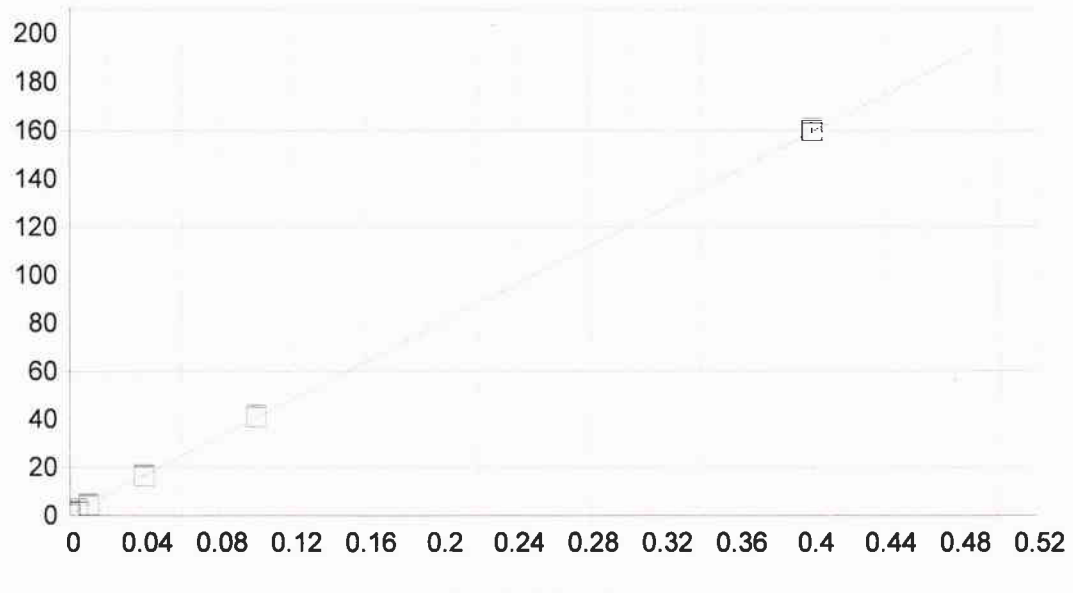
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	12.700	1.79	1
STD 5	.40000	.35974	-.040	-10.1	1909.1	10.3	1
STD 6	1.0000	1.0279	.028	2.79	5431.8	25.2	1
STD 3	.04000	.03720	-.003	-7.00	208.75	2.18	1
STD 4	.10000	.08735	-.013	-12.7	473.12	2.34	1
STD 7	4.0000	4.0278	.028	.694	21246.	194.	1



Ni 231.604 {446}

Fecha de la	22/10/2015 19:03:23	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	7.339661		Reajustar P	1.000000	
A1 (Ganancia)	2268.717252		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999803		Estatus:	OK.	
Error Estándar de Est:	0.081952				
MDL:	0.000432				
MQL:	0.001438				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	7.3396	1.08	1
STD 1	.00400	.00365	-.000	-8.73	15.623	2.12	1
STD 2	.01000	.01072	.001	7.20	31.661	3.17	1
STD 3	.04000	.04174	.002	4.36	102.04	.387	1
STD 4	.10000	.09757	-.002	-2.43	228.69	.849	1
STD 5	.40000	.40032	.000	.080	915.55	.532	1

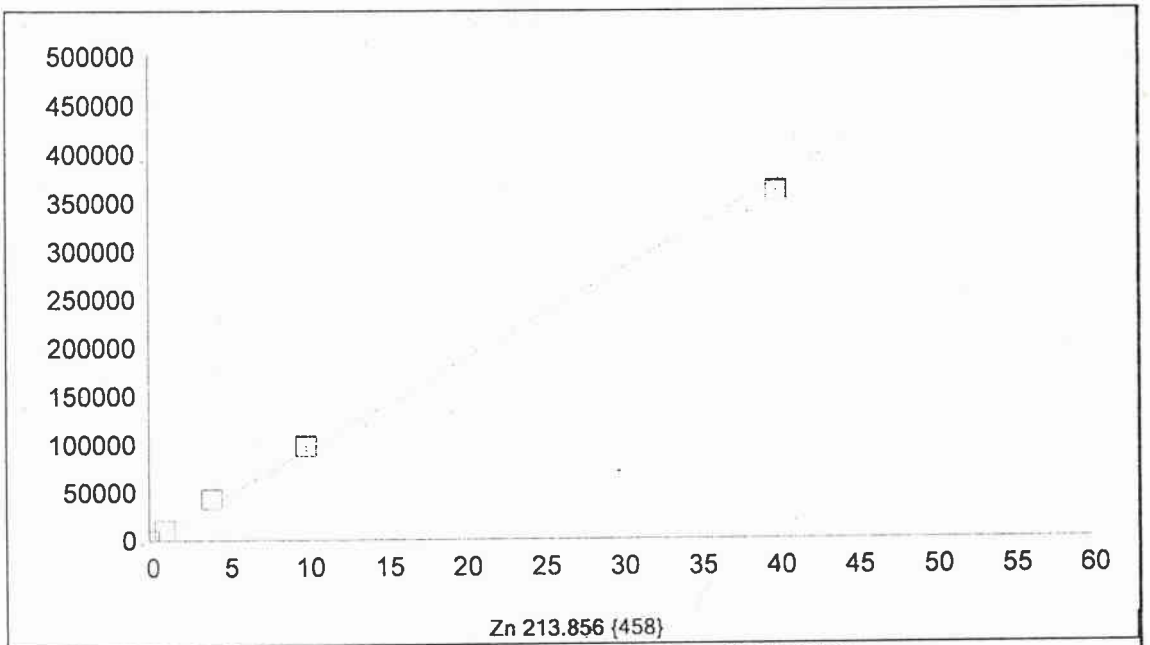


Pb 220.353 {453}

Fecha de la	22/10/2015 19:03:29	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	0.899583	Reajustar P	1.000000
A1 (Ganancia)	396.095079	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999522	Estatus:	OK.
Error Estándar de Est:	0.022325		
MDL:	0.005034		
MQL:	0.016780		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.90023	.697	1
STD 1	.00400	.00280	-.001	-30.0	2.0084	.853	1
STD 2	.01000	.00887	-.001	-11.3	4.4134	.408	1
STD 3	.04000	.03945	-.001	-1.38	16.525	.422	1
STD 4	.10000	.10176	.002	1.76	41.206	.551	1
STD 5	.40000	.40112	.001	.280	159.78	1.12	1

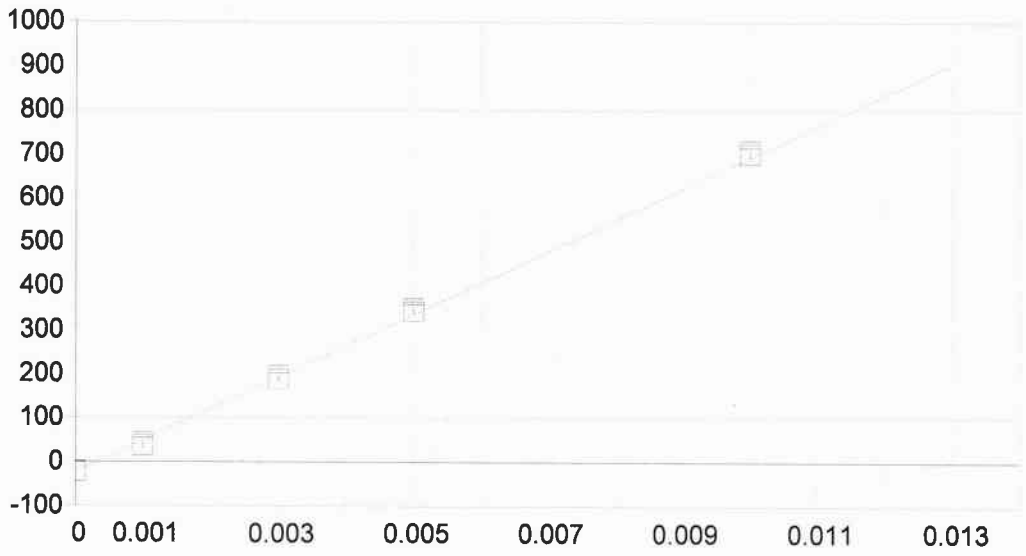


Zn 213.856 {458}

Fecha de la 22/10/2015 19:03:41 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	130.349194	Reajustar P	1.000000
A1 (Ganancia)	9330.506612	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998420	Estatus:	OK.
Error Estándar de Est:	158.859086		
MDL:	0.000104		
MQL:	0.000346		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00029	-.000	.000	127.65	3.19	1
STD 6	1.0000	1.1147	.115	11.5	10531.	24.3	1
STD 7	4.0000	4.6127	.613	15.3	43170.	114.	1
STD 8	10.000	10.527	.527	5.27	98349.	202.	1
STD 9	40.000	38.746	-1.25	-3.14	361650.	817.	1



Hg **194.227** {474}

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A1 (Ganancia)	71520.10986		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999183		Estatus:	OK.	
Error Estándar de Est:	0.514182				
MDL:	0.000027				
MQL:	0.000091				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	-22.318	1.05	1
STD 1	.00100	.00084	-.000	-16.4	37.465	6.14	1
STD 2	.00300	.00295	-.000	-1.73	188.52	8.06	1
STD 3	.00500	.00509	.000	1.89	342.04	6.62	1
STD 4	.01000	.01012	.000	1.21	701.54	7.83	1

Análisis: ***METALES PESADOS POR ICP-OES***

Lote analítico: DMP-LECHE-151022

Fecha de Análisis: 22/10/2015

Fecha de Reporte: 22/10/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÖN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.0100
NIVEL 5		0.400	0.400	0.400	0.400	0.400	0.400	0.400		
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000								10.000	
NIVEL 9	40.000								40.000	
Correlación	0.9991	0.9981	0.9998	0.9995	0.9992	0.9994	0.9998	0.9995	0.9984	0.9992

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
2	QC:QC-3	Cadmio	0.0400	0.0398	100	8	Recuperación	Mercurio	0.5	0.5081	102
		Plomo	0.0400	0.0398	100	19	Estándar de Chequeo	Mercurio	0.5	0.4236	85
3	QC:QC5	Arsénico	0.4000	0.4000	100						
		Cobre	0.4000	0.3997	100	31	Estándar de Chequeo	Mercurio	0.5	0.5383	108
		Fierro	0.4000	0.3954	99						
		Manganeso	0.4000	0.3926	98						
		Níquel	0.4000	0.3982	100						
4	QC: QC7	Aluminio	4.0000	4.0000	100						
		Zinc	4.0000	4.0000	100						
17	QC: ST DE CHEQUEO 3	Cadmio	0.0400	0.0400	100						
		Plomo	0.0400	0.0400	100						
18	QC: ST DE CHEQUEO 5	Arsénico	0.4000	0.4006	100						
		Cobre	0.4000	0.3973	99						
		Fierro	0.4000	0.3954	99						
		Manganeso	0.4000	0.3983	100						
		Níquel	0.4000	0.3939	98						
19	QC: ST DE CHEQUEO 7	Aluminio	4.0000	3.9050	98						
		Zinc	4.0000	3.9250	98						

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I. Gaudencio Vargas Espejel

ELABORÓ

Q.F.B. Leticia Velázquez Méndez

REVISÓ

GISCENA®

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Peso de muestra (g) Metales	Hg
GISC15-20277	Lacteos		15/10/2015	0.5020	0.5033
GISC15-20278	Lacteos		15/10/2015	0.5010	0.5027
GISC15-20282	Lacteos		15/10/2015	0.5012	0.5012
GISC15-20283	Lacteos		15/10/2015	0.5007	0.5030
GISC15-20284	Lacteos		15/10/2015	0.5002	0.5029
GISC15-20286	Lacteos		15/10/2015	0.5010	0.5060
GISC15-20290	Lacteos		15/10/2015	0.5013	0.5023
GISC15-20293	Lacteos		15/10/2015	0.5009	0.5020
GISC15-20295	Lacteos		15/10/2015	0.5007	0.5032
GISC15-20296	Lacteos		15/10/2015	0.5020	0.5040
GISC15-20324	Lacteos		15/10/2015	0.5013	0.5039
GISC15-20325	Lacteos		15/10/2015	0.5011	0.5036
GISC15-20359	Lacteos		15/10/2015	0.5013	0.5037
GISC15-20393	Lacteos		15/10/2015	0.5001	0.5038
GISC15-20394	Lacteos		15/10/2015	0.5017	0.5036
GISC15-20398	Lacteos		15/10/2015	0.5001	0.5060
GISC15-20399	Lacteos		15/10/2015	0.5000	0.5008
GISC15-20412	Lacteos		15/10/2015	0.5003	0.5002
GISC15-20418	Lacteos		15/10/2015	0.5004	0.5011
GISC15-20419	Lacteos		15/10/2015	0.5006	0.5012

I.B.I.Gaudencio Vargas Espejel

Q.F.B. Leticia Velazquez Méndez

1	Blanco: REACTIVO 22/10/2015 13:18:13 CONC DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-.1127**	**-.0017**	**.0007**	**.0063**	**.0121**	**.0023**	**.0030**	**.0031**	**.0045**
Desv. Est.	.0650	.0015	.0009	.0023	.0053	.0006	.0015	.0038	.0050
% RSD	57.63	88.22	118.4	36.74	43.90	24.92	51.44	121.6	111.5
Rep #1	-.1137	.0000	.0017	.0040	.0168	.0030	.0046	.0057	.0102
Rep #2	-.0473	-.0028	.0005	.0087	.0132	.0022	.0027	-.0012	.0025
Rep #3	-.1772	-.0025	.0000	.0062	.0063	.0018	.0016	.0048	.0008

2	QC: QC-3 22/10/2015 13:23:14 CONC DMP-151022: LECHE:	
	Cd2265	Pb2203
Linea	226.502 {44	220.353 {45
Unidades	mg/Kg	mg/Kg
Media	**.0398**	**.0398**
Desv. Est.	.0000	.0018
% RSD	.0339	4.527
Rep #1	.0398	.0385
Rep #2	.0398	.0390
Rep #3	.0398	.0419
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

3	QC: QC-5 22/10/2015 13:27:46 CONC DMP-151022: LECHE:				
	As1890	Cu3247	Fe2599	Mn2576	Ni2316
Linea	189.042 {47	324.754 {10	259.940 {13	257.610 {13	231.604 {44
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4000**	**.3997**	**.3954**	**.3926**	**.3982**
Desv. Est.	.0008	.0098	.0092	.0091	.0021
% RSD	.2057	2.440	2.317	2.316	.5327
Rep #1	.3999	.4061	.3974	.3948	.3959
Rep #2	.3992	.3885	.3854	.3826	.3986
Rep #3	.4008	.4045	.4034	.4004	.4001
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor					
Intervalo					

	QC: QC-7 22/10/2015 13:30:13 CONC DMP-151022: LECHE:	
	Al3082	Zn2138
Linea	308.215 {10	213.856 {45
Unidades	mg/Kg	mg/Kg
Media	**4.000**	**4.000**
Desv. Est.	.042	.006
% RSD	1.052	.1490
Rep #1	4.037	4.004
Rep #2	4.009	4.003
Rep #3	3.954	3.993
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

5	Unk: BCO REACTIVO 22/10/2015 13:35:24 CONC DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	.2598	-.0012	-.0031	-.0027	-.0041	-.0012	-.0054	-.0086	.9623
Desv. Est.	.9918	.0023	.0002	.0039	.0062	.0036	.0003	.0018	.0099
% RSD	381.7	189.5	5.628	143.3	152.8	308.0	4.820	20.53	1.027
Rep #1	-.8734	.0002	-.0030	-.0025	-.0016	-.0026	-.0051	-.0079	.9512
Rep #2	.9696	-.0039	-.0033	.0011	.0005	.0029	-.0055	-.0107	.9652
Rep #3	.6833	.0000	-.0030	-.0068	-.0112	-.0037	-.0056	-.0074	.9703
6	Unk: BCO MUESTRA 22/10/2015 13:39:56 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	.0107	-.2664	.0473	.1195	-.0031	.0359	.0514	.0445	-.0202
Desv. Est.	1.828	.0756	.0130	.0540	.0699	.0299	.0158	.4018	.0130
% RSD	17140.	28.37	27.44	45.20	2262.	83.20	30.81	902.6	64.35
Rep #1	-2.091	-.2716	.0377	.1485	-.0807	.0015	.0620	.2455	-.0297
Rep #2	.8853	-.1883	.0621	.0572	.0548	.0512	.0590	-.4181	-.0256
Rep #3	1.237	-.3392	.0422	.1529	.0166	.0551	.0332	.3061	-.0054
7	Unk: GISC15- 20277 22/10/2015 13:40:41 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	-1.717	.0243	.0376	.0884	-.0745	.0067	-.0078	-.6151	-.0153
Desv. Est.	4.681	.1958	.0135	.0663	.1642	.0363	.0360	.1207	.0045
% RSD	272.6	807.0	35.80	75.01	220.3	541.1	463.1	19.62	29.54
Rep #1	-.8747	-.0264	.0224	.1649	-.0552	-.0058	-.0490	-.4799	-.0178
Rep #2	-6.763	-.1412	.0479	.0495	.0791	-.0217	.0078	-.7119	-.0181
Rep #3	2.485	.2404	.0426	.0507	-.2475	.0476	.0179	-.6535	-.0101
8	Unk: GISC15-20278 22/10/2015 13:42:34 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	1.216	-.4453	.0167	-.0632	.1938	.0099	-.0007	-.1483	.0501
Desv. Est.	4.041	.1120	.0038	.0544	.0652	.0193	.0232	.2856	.0187
% RSD	332.4	25.14	22.62	86.18	33.66	195.0	3244.	192.5	37.40
Rep #1	2.613	-.3618	.0124	-.0440	.1683	.0008	-.0156	.0116	.0403
Rep #2	4.373	-.4016	.0194	-.0209	.2679	.0321	.0260	-.4781	.0717
Rep #3	-3.339	-.5725	.0183	-.1246	.1452	-.0031	-.0126	.0215	.0384
9	Unk: GISC15-20282 22/10/2015 13:45:13 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	-.8320	-.3716	-.0147	-.1058	.9933	.0493	.1128	-.0437	1.726
Desv. Est.	6.856	.0778	.0098	.2561	.5037	.0348	.0701	.2795	.208
% RSD	824.0	20.93	66.63	242.0	50.71	70.59	62.10	639.7	12.08
Rep #1	.0213	-.4348	-.0123	.1834	1.544	.0205	.0595	.1701	1.490
Rep #2	-8.075	-.3952	-.0063	-.1971	.8795	.0880	.0868	-.3600	1.803
Rep #3	5.557	-.2847	-.0254	-.3039	.5563	.0394	.1922	.0588	1.885
10	Unk: GISC15-20283 22/10/2015 13:47:05 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	-.1600	-.3840	-.0256	-.1448	-.2660	-.0497	-.0712	.2889	1.049

Desv. Est.	4.632	.1822	.0052	.0382	.2074	.0342	.0461	.3449	.020
% RSD	2895.	47.44	20.33	26.34	77.95	68.75	64.80	119.4	1.923
Rep #1	-2.475	-.5405	-.0235	-.1030	-.4756	-.0397	-.1169	.4386	1.073
Rep #2	5.173	-.1840	-.0315	-.1539	-.0610	-.0877	-.0721	.5336	1.036
Rep #3	-3.179	-.4274	-.0217	-.1776	-.2614	-.0217	-.0246	-.1055	1.040
11	Unk: GISC15-20284 22/10/2015 13:49:24 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	1.643	-.5549	-.0258	-.0411	.5934	.0063	-.0523	.0135	2.225
Desv. Est.	4.592	.0546	.0027	.2315	.2416	.0755	.0173	.3717	.156
% RSD	279.6	9.834	10.45	562.7	40.71	1200.	33.11	2758.	6.996
Rep #1	4.405	-.5144	-.0281	-.3063	.6142	-.0722	-.0442	.1965	2.118
Rep #2	4.181	-.5332	-.0228	.0621	.8239	.0127	-.0405	-.4142	2.154
Rep #3	-3.659	-.6169	-.0266	.1208	.3421	.0784	-.0722	.2581	2.404
12	Unk: GISC15-20286 22/10/2015 13:50:12 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	-2.581	-.0229	-.0053	.0775	-.3077	-.0104	.0359	.1952	.0396
Desv. Est.	2.058	.1226	.0039	.1683	.0565	.0415	.0137	.4257	.0415
% RSD	79.71	534.5	72.65	217.2	18.35	397.5	38.09	218.1	104.9
Rep #1	-4.203	.0078	-.0051	.0711	-.3343	-.0325	.0202	.6533	.0750
Rep #2	-.2667	-.1580	-.0093	.2488	-.2428	.0375	.0420	.1206	.0497
Rep #3	-3.275	.0814	-.0016	-.0875	-.3459	-.0363	.0455	-.1883	-.0061
13	Unk: GISC15-20290 22/10/2015 13:52:40 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	2.496	-.1425	-.0469	-.1389	-.4517	-.0581	-.0473	-.0220	-.4856
Desv. Est.	3.732	.0611	.0083	.0441	.0263	.0128	.0194	.3667	.0343
% RSD	149.5	42.85	17.66	31.75	5.832	22.10	40.99	1667.	7.056
Rep #1	6.805	-.1656	-.0559	-.1887	-.4733	-.0468	-.0642	-.4160	-.4535
Rep #2	.2773	-.0733	-.0396	-.1227	-.4224	-.0721	-.0516	.0408	-.5217
Rep #3	.4053	-.1887	-.0453	-.1051	-.4594	-.0555	-.0261	.3092	-.4816
1	Unk: GISC15-20293 22/10/2015 13:56:52 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	2.677	-.5387	-.0243	.1250	.3000	-.0437	-.0690	-.6890	-.2283
Desv. Est.	4.717	.1524	.0098	.1524	.2929	.0202	.0243	.5572	.0230
% RSD	176.2	28.29	40.27	121.9	97.63	46.13	35.21	80.87	10.06
Rep #1	7.669	-.6759	-.0182	.0884	-.0089	-.0660	-.0447	-.2301	-.2321
Rep #2	-1.707	-.3746	-.0191	-.0058	.5737	-.0267	-.0933	-1.309	-.2037
Rep #3	2.069	-.5656	-.0356	.2923	.3351	-.0386	-.0689	-.5278	-.2492
15	Unk: GISC15-20295 22/10/2015 14:03:44 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	-1.568	-.2713	-.0284	.0503	-1.027	-.0802	-.0830	-.1677	-.1703
Desv. Est.	4.951	.1070	.0112	.2911	.174	.0405	.0355	.6665	.0169
% RSD	315.7	39.44	39.54	578.8	16.92	50.56	42.79	397.6	9.919

Rep #1	-3.659	-.1522	-.0229	-.2847	-1.092	-.0820	-.1230	-.7531	-.1884
Rep #2	-5.131	-.3594	-.0414	.2420	-1.159	-.0388	-.0554	-.3077	-.1677
Rep #3	4.085	-.3024	-.0210	.1936	-.8300	-.1198	-.0705	.5577	-.1549
16	Unk: GISC15-20296 22/10/2015 14:06:18 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.0853**	**-.1830**	**-.0308**	**-.1439**	**-.6065**	**-.0287**	**-.0352**	**.2226**	**.4978**
Desv. Est.	7.930	.0047	.0077	.2695	.2325	.0169	.0195	.3656	.0328
% RSD	9293.	2.567	24.97	187.3	38.34	58.97	55.29	164.2	6.583
Rep #1	4.917	-.1876	-.0250	.0936	-.8266	-.0103	-.0567	.1517	.5148
Rep #2	-9.067	-.1831	-.0396	-.4369	-.3633	-.0436	-.0303	.6185	.5187
Rep #3	4.405	-.1782	-.0279	-.0885	-.6297	-.0324	-.0187	-.1024	.4601
17	QC: ST DE CHEQUEO 3 22/10/2015 14:07:48 CONC DMP-151022: LECHE:								
	Cd2265	Pb2203							
Línea	226.502 {44	220.353 {45							
Unidades	mg/Kg	mg/Kg							
Media	**.0400**	**.0400**							
Desv. Est.	.0002	.0046							
% RSD	.4465	11.55							
Rep #1	.0401	.0347							
Rep #2	.0401	.0429							
Rep #3	.0398	.0425							
Comprobació	Pasa Comp	Pasa Comp							
Valor									
Intervalo									
18	QC: ST DE CHEQUEO 5 22/10/2015 14:15:37 CONC DMP-151022: LECHE:								
	As1890	Cu3247	Fe2599	Mn2576	Ni2316				
Línea	189.042 {47	324.754 {10	259.940 {13	257.610 {13	231.604 {44				
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg				
Media	**.4006**	**.3973**	**.3954**	**.3983**	**.3939**				
Desv. Est.	.0017	.0037	.0065	.0027	.0016				
% RSD	.4264	.9387	1.638	.6888	.4100				
Rep #1	.3987	.3933	.3897	.3957	.3923				
Rep #2	.4012	.4007	.4025	.4011	.3955				
Rep #3	.4020	.3979	.3940	.3980	.3939				
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp				
Valor									
Intervalo									
19	QC: STD DE CHEQUEO 7 22/10/2015 14:20:13 CONC DMP-151022: LECHE:								
	Al3082	Zn2138							
Línea	308.215 {10	213.856 {45							
Unidades	mg/Kg	mg/Kg							
Media	**3.905**	**3.925**							
Desv. Est.	.000	.000							
% RSD	.0000	.0000							
Rep #1	3.905	3.925							
Comprobació	Pasa Comp	Pasa Comp							
Valor									
Intervalo									
20	Blanco: MUESTRA 22/10/2015 14:25:09 CONC x100 DMP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138

20	Blanco: MUESTRA 22/10/2015 14:25:09 CONC x100 DMP 151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-3.532**	**-.2280**	**-.1651**	**.0893**	**.6585**	**-.1256**	**-.2091**	**-.9879**	**.9705**
Desv. Est.	5.775	.1443	.0094	.2823	.1893	.0325	.0224	.3310	.0062
% RSD	163.5	63.29	5.689	316.0	28.74	25.89	10.73	33.51	.6388
Rep #1	-.7906	-.1104	-.1543	.0117	.7712	-.1549	-.2321	-.7987	.9776
Rep #2	.3614	-.3890	-.1716	.4023	.7642	-.0906	-.2081	-1.370	.9670
Rep #3	-10.17	-.1845	-.1692	-.1460	.4400	-.1312	-.1872	-.7948	.9668
21	Unk: GISC15-20324 22/10/2015 14:30:58 CONC x100 DMP 151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.587**	**-.2728**	**-.0262**	**-.0951**	**-.8466**	**-.0480**	**-.0592**	**.0019**	**1.067**
Desv. Est.	9.863	.0625	.0062	.1569	.1380	.0142	.0092	.3130	.011
% RSD	215.0	22.92	23.65	164.9	16.30	29.57	15.62	16260.	1.004
Rep #1	8.341	-.2012	-.0190	-.0172	-.7131	-.0550	-.0599	-.0109	1.054
Rep #2	-6.603	-.3170	-.0303	.0075	-.8381	-.0573	-.0681	.3211	1.073
Rep #3	12.02	-.3002	-.0292	-.2758	-.9887	-.0316	-.0496	-.3045	1.073
22	Unk: GISC15-20325 22/10/2015 14:35:57 CONC x100 DMP 151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1.141**	**-.3330**	**-.0319**	**-.1884**	**1.668**	**-.0116**	**-.0765**	**-.1150**	**2.825**
Desv. Est.	1.697	.0833	.0125	.1194	.304	.0217	.0253	.2144	.021
% RSD	148.7	25.02	39.13	63.36	18.25	187.6	33.03	186.4	.7420
Rep #1	-.5867	-.4117	-.0251	-.2940	1.958	-.0137	-.0606	.1321	2.841
Rep #2	1.205	-.2458	-.0242	-.2125	1.351	.0111	-.0632	-.2261	2.801
Rep #3	2.805	-.3414	-.0462	-.0588	1.695	-.0322	-.1056	-.2511	2.834
23	Unk: GISC15-20359 22/10/2015 14:43:17 CONC x100 DMP 151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.552**	**-.4042**	**-.0260**	**-.2539**	**1.851**	**-.0501**	**-.1159**	**-.0397**	**4.228**
Desv. Est.	1.146	.0365	.0088	.3022	.081	.0246	.0368	.2322	.041
% RSD	32.26	9.029	33.87	119.1	4.350	49.14	31.78	585.2	.9691
Rep #1	4.245	-.4082	-.0344	-.3147	1.907	-.0247	-.1563	.0579	4.196
Rep #2	2.229	-.4386	-.0168	-.5211	1.759	-.0518	-.0842	.1278	4.275
Rep #3	4.181	-.3659	-.0268	.0742	1.887	-.0738	-.1072	-.3047	4.214
24	Unk: GISC15-20393 22/10/2015 14:45:52 CONC x100 DMP 151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.2027**	**-.4015**	**-.0256**	**-.1339**	**1.494**	**-.0327**	**-.0622**	**-.0725**	**2.443**
Desv. Est.	4.739	.0800	.0091	.2795	.056	.0395	.0378	.1445	.016
% RSD	2338.	19.93	35.42	208.7	3.762	120.9	60.84	199.4	.6495
Rep #1	2.325	-.3104	-.0310	-.1465	1.549	-.0017	-.0607	-.0121	2.458
Rep #2	-5.227	-.4340	-.0151	.1516	1.496	-.0772	-.1008	.0320	2.426
Rep #3	3.509	-.4602	-.0307	-.4069	1.437	-.0192	-.0252	-.2373	2.444
25	Unk: GISC15-20394 22/10/2015 14:50:29 CONC x100 DMP 151022: LECHE:								

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**149.6**	**-.1050**	**.6766**	**.8744**	**251.8**	**6.008**	**.9026**	**.5152**	**.5474**
Desv. Est.	.9	.0763	.0044	.0670	1.3	.068	.0695	.2193	.0119
% RSD	.5838	72.67	.6541	7.663	.5039	1.125	7.701	42.57	2.166
Rep #1	148.9	-.0726	.6771	.8051	252.3	6.019	.9731	.3215	.5385
Rep #2	150.5	-.1921	.6808	.9389	250.4	6.070	.8342	.7533	.5609
Rep #3	149.3	-.0502	.6720	.8790	252.7	5.936	.9003	.4708	.5429

26 Unk: GISC15-20394-R 22/10/2015 14:52:48 CONC x100
D MP-151022: LECHE:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**153.7**	**.0505**	**.7090**	**.9463**	**268.6**	**6.383**	**.9293**	**.6435**	**.6449**
Desv. Est.	2.6	.1104	.0089	.2048	2.1	.080	.0530	.1982	.0060
% RSD	1.660	218.5	1.256	21.64	.7805	1.255	5.706	30.79	.9300
Rep #1	155.3	-.0632	.7189	1.084	267.5	6.365	.8699	.4201	.6516
Rep #2	155.0	.1572	.7068	.7111	271.0	6.470	.9719	.7128	.6401
Rep #3	150.7	.0576	.7015	1.044	267.2	6.313	.9461	.7978	.6430

27 Unk: GISC15-20398 22/10/2015 14:57:53 CONC x100
D MP-151022: LECHE:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-1.198**	**-.4219**	**-.0397**	**-.1085**	**-.0103**	**-.0387**	**-.0658**	**.2451**	**2.262**
Desv. Est.	2.668	.1174	.0081	.2430	.0936	.0163	.0289	.3893	.017
% RSD	222.7	27.83	20.50	224.0	909.2	42.19	43.89	158.8	.7523
Rep #1	.2136	-.3770	-.0410	-.1266	-.1006	-.0501	-.0859	.6887	2.269
Rep #2	-4.275	-.5552	-.0310	-.3420	-.0166	-.0200	-.0789	.0863	2.274
Rep #3	.4672	-.3336	-.0472	.1431	.0862	-.0459	-.0327	-.0396	2.242

28 Unk: GISC15-20399 22/10/2015 15:00:12 CONC x100
D MP-151022: LECHE:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1.989**	**-.2815**	**-.0554**	**-.2105**	**-.5523**	**-.0264**	**-.0712**	**.2728**	**.7339**
Desv. Est.	1.370	.0741	.0071	.0885	.2780	.0223	.0588	.1610	.0143
% RSD	68.89	26.32	12.88	42.07	50.34	84.28	82.53	59.03	1.951
Rep #1	2.927	-.2755	-.0631	-.1385	-.3990	-.0436	-.1298	.4557	.7365
Rep #2	.4165	-.2106	-.0490	-.1836	-.8732	-.0012	-.0122	.2102	.7467
Rep #3	2.623	-.3584	-.0542	-.3093	-.3846	-.0345	-.0717	.1524	.7184

29 Unk: GISC15-20412 22/10/2015 15:07:27 CONC x100
D MP-151022: LECHE:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**7.576**	**-.4268**	**-.0339**	**-.1034**	**.1411**	**-.0125**	**-.0793**	**.2405**	**1.646**
Desv. Est.	5.750	.0852	.0086	.2505	.1295	.0034	.0106	.2003	.033
% RSD	75.89	19.97	25.29	242.3	91.74	27.18	13.40	83.30	1.980
Rep #1	5.970	-.4001	-.0398	.1009	.2034	-.0126	-.0671	.2506	1.672
Rep #2	2.800	-.5222	-.0379	-.3829	.2277	-.0090	-.0863	.4355	1.656
Rep #3	13.96	-.3581	-.0241	-.0281	-.0077	-.0157	-.0845	.0353	1.609

30 Unk: GISC15-20418 22/10/2015 15:09:53 CONC x100
D MP-151022: LECHE:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**28.91**	**-.3235**	**-.0289**	**-.2638**	**2.444**	**-.0082**	**-.0036**	**.2859**	**5.683**
Desv. Est.	.48	.1033	.0033	.2593	.257	.0336	.0352	.1910	.066
% RSD	1.646	31.92	11.47	98.31	10.53	409.5	969.7	66.78	1.159
Rep #1	29.17	-.3265	-.0259	-.4866	2.375	.0281	.0368	.0688	5.729
Rep #2	28.36	-.2187	-.0284	-.3257	2.729	-.0146	-.0200	.3612	5.712
Rep #3	29.20	-.4252	-.0325	.0209	2.228	-.0381	-.0277	.4279	5.607
31	Unk: GISC15-20419 22/10/2015 15:14:50 CONC x100 D MP-151022: LECHE:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.516**	**-.2636**	**-.0360**	**-.0764**	**.3902**	**-.0604**	**-.0911**	**.1232**	**-.9288**
Desv. Est.	1.488	.1718	.0022	.3064	.3156	.0362	.0114	.2370	.0635
% RSD	32.95	65.18	6.135	401.1	80.88	59.97	12.56	192.4	6.834
Rep #1	4.981	-.3740	-.0373	.1306	.3018	-.0204	-.1043	-.1399	-.9592
Rep #2	2.851	-.0656	-.0335	-.4284	.1282	-.0698	-.0839	.1894	-.9712
Rep #3	5.716	-.3512	-.0373	.0686	.7406	-.0909	-.0851	.3201	-.8558

1	Cal: Blanco 22/10/2015 17:56:09 IR D Hg-151022:
	Hg1942
Unidades	Cts/s
Media	**-22.32**
Desv. Est.	1.05
% RSD	4.692
Rep #1	-21.14
Rep #2	-23.15
Rep #3	-22.66

2	Cal: STD 1 22/10/2015 17:57:32 IR D Hg-151022:
	Hg1942
Unidades	Cts/s
Media	**37.46**
Desv. Est.	6.14
% RSD	16.39
Rep #1	30.73
Rep #2	38.93
Rep #3	42.74

3	Cal: STD 2 22/10/2015 17:59:07 IR D Hg-151022:
	Hg1942
Unidades	Cts/s
Media	**188.5**
Desv. Est.	8.1
% RSD	4.275
Rep #1	180.5
Rep #2	188.5
Rep #3	196.6

4	Cal: STD 3 22/10/2015 18:00:29 IR D Hg-151022:
	Hg1942
Unidades	Cts/s
Media	**342.0**
Desv. Est.	6.6
% RSD	1.935
Rep #1	335.4
Rep #2	348.7
Rep #3	342.0

5	Cal: STD 4 22/10/2015 18:01:51 IR D Hg-151022:
	Hg1942
Unidades	Cts/s
Media	**701.5**
Desv. Est.	7.8
% RSD	1.116
Rep #1	692.6
Rep #2	704.9
Rep #3	707.1

6	Blanco: REACTIVO 22/10/2015 18:05:15 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0093**
Desv. Est.	.0017

% RSD	18.70
Rep #1	.0110
Rep #2	.0093
Rep #3	.0076
7	Blanco: MUESTRA 22/10/2015 18:07:00 CONC x100 D Hg-151022:
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.0191**
Desv. Est.	.0043
% RSD	22.41
Rep #1	-.0154
Rep #2	-.0181
Rep #3	-.0238
8	Unk: RECUPERACION 22/10/2015 18:20:17 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.5081**
Desv. Est.	.0162
% RSD	3.183
Rep #1	.5031
Rep #2	.4950
Rep #3	.5262
9	Unk: GISC15-20277 22/10/2015 18:23:18 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0243**
Desv. Est.	.0220
% RSD	90.89
Rep #1	.0139
Rep #2	.0496
Rep #3	.0093
10	Unk: GISC15-20278 22/10/2015 18:26:12 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0145**
Desv. Est.	.0022
% RSD	15.37
Rep #1	.0168
Rep #2	.0123
Rep #3	.0143
11	Unk: GISC15-20282 22/10/2015 18:27:37 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.0053**
Desv. Est.	.0016
% RSD	30.77
Rep #1	-.0035

Rep #2	-.0056
Rep #3	-.0067
12	Unk: GISC15-20283 22/10/2015 18:29:14 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.0004**
Desv. Est.	.0009
% RSD	234.0
Rep #1	.0006
Rep #2	-.0007
Rep #3	-.0010
13	Unk: GISC15-20284 22/10/2015 18:30:37 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.0013**
Desv. Est.	.0015
% RSD	113.8
Rep #1	-.0007
Rep #2	-.0029
Rep #3	-.0002
14	Unk: GISC15-20286 22/10/2015 18:32:08 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0031**
Desv. Est.	.0011
% RSD	36.54
Rep #1	.0025
Rep #2	.0044
Rep #3	.0024
15	Unk: GISC15-20290 22/10/2015 18:33:31 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0008**
Desv. Est.	.0029
% RSD	384.8
Rep #1	.0008
Rep #2	-.0022
Rep #3	.0036
16	Unk: GISC15-20293 22/10/2015 18:34:55 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0117**
Desv. Est.	.0026
% RSD	22.19
Rep #1	.0147
Rep #2	.0102
Rep #3	.0101

17	Unk: GISC15-20295 22/10/2015 18:36:16 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.0004**
Desv. Est.	.0016
% RSD	350.4
Rep #1	.0009
Rep #2	-.0022
Rep #3	-.0001
18	Unk: GISC15-20296 22/10/2015 18:37:36 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.0012**
Desv. Est.	.0009
% RSD	73.22
Rep #1	-.0005
Rep #2	-.0010
Rep #3	-.0022
19	Unk: ESTANDAR DE CHEQUEO 22/10/2015 18:40:20 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.4236**
Desv. Est.	.0059
% RSD	1.398
Rep #1	.4168
Rep #2	.4268
Rep #3	.4273
20	Unk: GISC15-20324 22/10/2015 18:44:05 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0223**
Desv. Est.	.0028
% RSD	12.62
Rep #1	.0255
Rep #2	.0213
Rep #3	.0201
21	Unk: GISC15-20325 22/10/2015 18:45:48 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0022**
Desv. Est.	.0023
% RSD	102.9
Rep #1	.0045
Rep #2	-.0001
Rep #3	.0022
22	Unk: GISC15-20359 22/10/2015 18:47:20 CONC x100

	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0002**
Desv. Est.	.0029
% RSD	1533.
Rep #1	.0031
Rep #2	-.0027
Rep #3	.0002
23	Unk: GISC15-20393 22/10/2015 18:50:49 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0017**
Desv. Est.	.0025
% RSD	146.1
Rep #1	-.0011
Rep #2	.0037
Rep #3	.0025
24	Unk: GISC15-20394 22/10/2015 18:52:29 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0045**
Desv. Est.	.0026
% RSD	57.20
Rep #1	.0029
Rep #2	.0031
Rep #3	.0075
25	Unk: GISC15-20398 22/10/2015 18:53:54 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0056**
Desv. Est.	.0025
% RSD	45.05
Rep #1	.0081
Rep #2	.0054
Rep #3	.0031
26	Unk: GISC15-20399 22/10/2015 18:55:21 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0036**
Desv. Est.	.0014
% RSD	38.92
Rep #1	.0035
Rep #2	.0050
Rep #3	.0022
27	Unk: GISC15-20412 22/10/2015 18:57:04 CONC x100
	Hg1942
Línea	194.227 {47

Unidades	mg/Kg
Media	**-.0426**
Desv. Est.	.0018
% RSD	4.211
Rep #1	-.0442
Rep #2	-.0406
Rep #3	-.0429
28	Unk: GISC15-20418 22/10/2015 18:57:33 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0028**
Desv. Est.	.0015
% RSD	52.41
Rep #1	.0027
Rep #2	.0014
Rep #3	.0043
29	Unk: GISC15-20419 22/10/2015 18:58:54 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0066**
Desv. Est.	.0024
% RSD	36.25
Rep #1	.0045
Rep #2	.0062
Rep #3	.0092
30	Unk: ESTANDAR DE CHEQUEO 22/10/2015 19:00:21 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.5383**
Desv. Est.	.0223
% RSD	4.138
Rep #1	.5152
Rep #2	.5400
Rep #3	.5596

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA, S.A. DE C.V.

CONTENIDO

LÁCTEOS (segundo lote)

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA S.A. DE C.V.
EMILIANO ZAPATA No. 10, SAN LUIS HUEXOTLA, TEXCOCO EDO. DE MEXICO.
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LABORATORIO DE RESIDUOS TÓXICOS

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005 Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: LÁCTEOS
Fecha de Recepción: 2015-11-05

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/11/05 (2)
Fecha de analisis Metales y Mercurio: 2015-12-04 2015-12-07
Fecha de Realización del Informe: 2015-12-08

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I002/15/0015	GISC15-21674
L-I002/15/0016	GISC15-21675
L-I002/15/0017	GISC15-21676
L-I004/15/0033	GISC15-21686
L-I004/15/0034	GISC15-21687
L-I004/15/0037	GISC15-21689
L-I004/15/0038	GISC15-21690
L-I005/15/0044	GISC15-21695
L-I005/15/0045	GISC15-21696
L-I005/15/0047	GISC15-21698
L-I005/15/0048	GISC15-21699
L-I005/15/0049	GISC15-21700
L-I006/15/0057	GISC15-21707
L-I006/15/0058	GISC15-21708
L-I007/15/0064	GISC15-21710
L-I007/15/0065	GISC15-21711
L-I009/15/0084	GISC15-21727
L-I009/15/0085	GISC15-21728
L-I010/15/0096	GISC15-21737
L-I010/15/0097	GISC15-21738

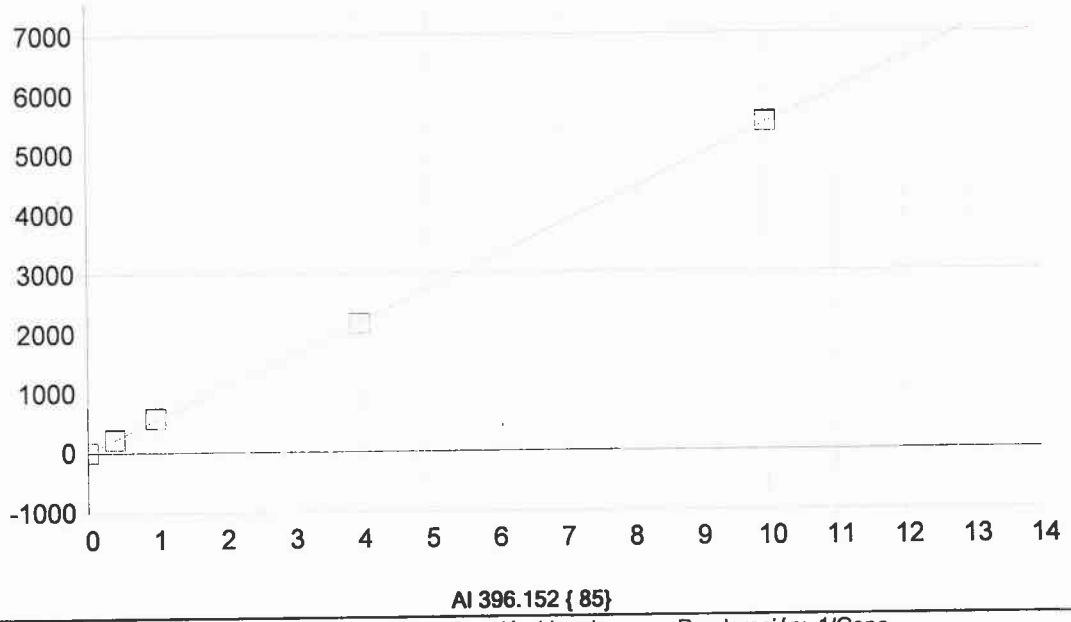
GISENA®
GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA S.A. DE C.V.
EMILIANO ZAPATA No. 10, SAN LUIS HUEXOTLA, TEXCOCO EDO. DE MEXICO.
C.P. 56250 TEL: 01(595) 928 41 78, 01(595) 931 39 60 y 01(595) 931 39 61
TEL/FAX: 01(595) 928 40 77 E-mail: gisena@prodigy.net.mx

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005 Requisitos generales para la competencia de laboratorios de ensayo y calibración".

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I010/15/0098	GISC15-21739
L-I017/15/0170	GISC15-21794
L-I025/15/0245	GISC15-21857
L-I025/15/0246	GISC15-21858
L-I025/15/0249	GISC15-21859
L-I025/15/0250	GISC15-21860
L-I041/15/0403	GISC15-21985
L-I041/15/0404	GISC15-21986
L-I067/15/0670	GISC15-22216

REVISÓ

Q.F.B.Leticia Velázquez Méndez
Gerente Técnico

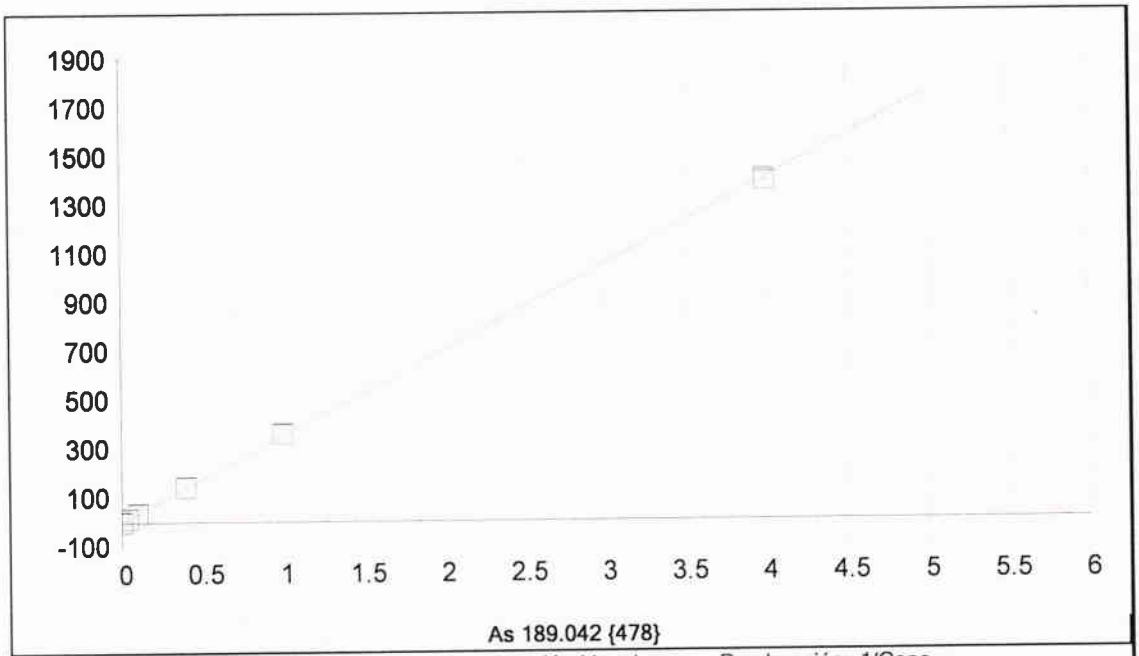


Al 396.152 { 85}

Fecha de la	04/12/2015 13:15:17	Tipo de unió	Lineal
Ponderación:	1/Conc		

A0 (Compensación):	0.635799	Reajustar P	1.000000
A1 (Ganancia)	547.417598	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999917	Estatus:	OK.
Error Estándar de Est:	0.714191		
MDL:	0.015241		
MQL:	0.050804		

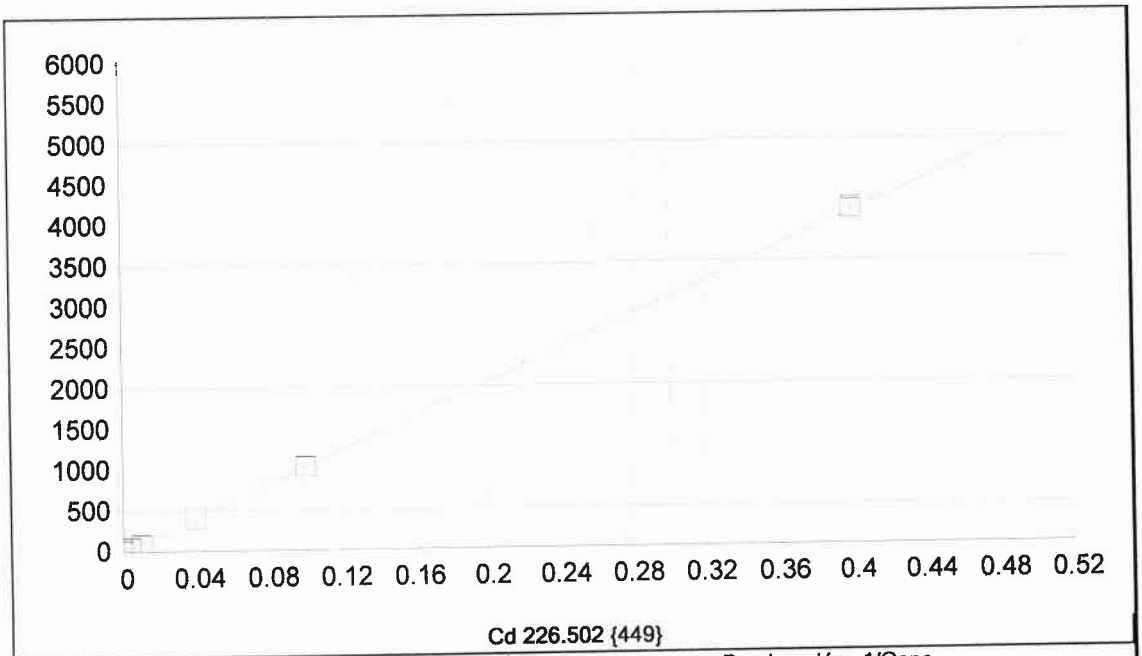
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00001	-.000	.000	.62879	.985	1
STD 5	.40000	.40186	.002	.466	220.62	4.92	1
STD 6	1.0000	1.0405	.040	4.05	570.22	2.63	1
STD 7	4.0000	3.9407	-.059	-1.48	2157.8	3.42	1
STD 8	10.000	10.017	.017	.170	5484.1	7.01	1



Fecha de la 04/12/2015 13:15:17 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	0.192373	Reajustar P	1.000000
A1 (Ganancia)	351.352717	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999892	Estatus:	OK.
Error Estándar de Est:	0.094168		
MDL:	0.002546		
MQL:	0.008487		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	.19220	.526	1
STD 4	.10000	.09997	-.000	-.027	35.318	.723	1
STD 5	.40000	.40791	.008	1.98	143.51	1.01	1
STD 6	1.0000	1.0270	.027	2.70	361.03	1.73	1
STD 7	4.0000	3.9661	-.034	-.846	1393.7	6.50	1
STD 3	.04000	.03896	-.001	-2.60	13.882	1.04	1

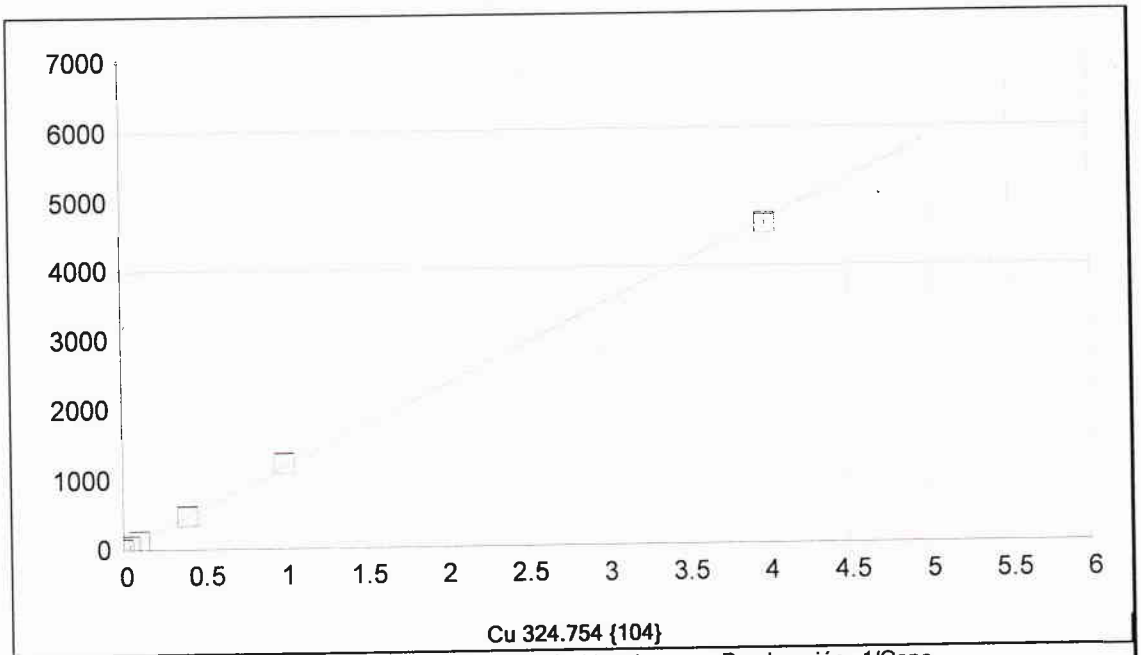


Cd 226.502 {449}

Fecha de la 04/12/2015 13:15:17 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	2.070501	Reajustar P	1.000000
A1 (Ganancia)	10237.23101	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999493	Estatus:	OK.
Error Estándar de Est:	0.594192		
MDL:	0.000141		
MQL:	0.000469		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	2.0812	1.02	1
STD 1	.00400	.00392	-.000	-1.89	42.244	.482	1
STD 2	.01000	.00776	-.002	-22.4	81.528	.588	1
STD 3	.04000	.03889	-.001	-2.77	400.22	1.26	1
STD 4	.10000	.10002	.000	.020	1026.0	2.30	1
STD 5	.40000	.40340	.003	.850	4131.8	21.8	1

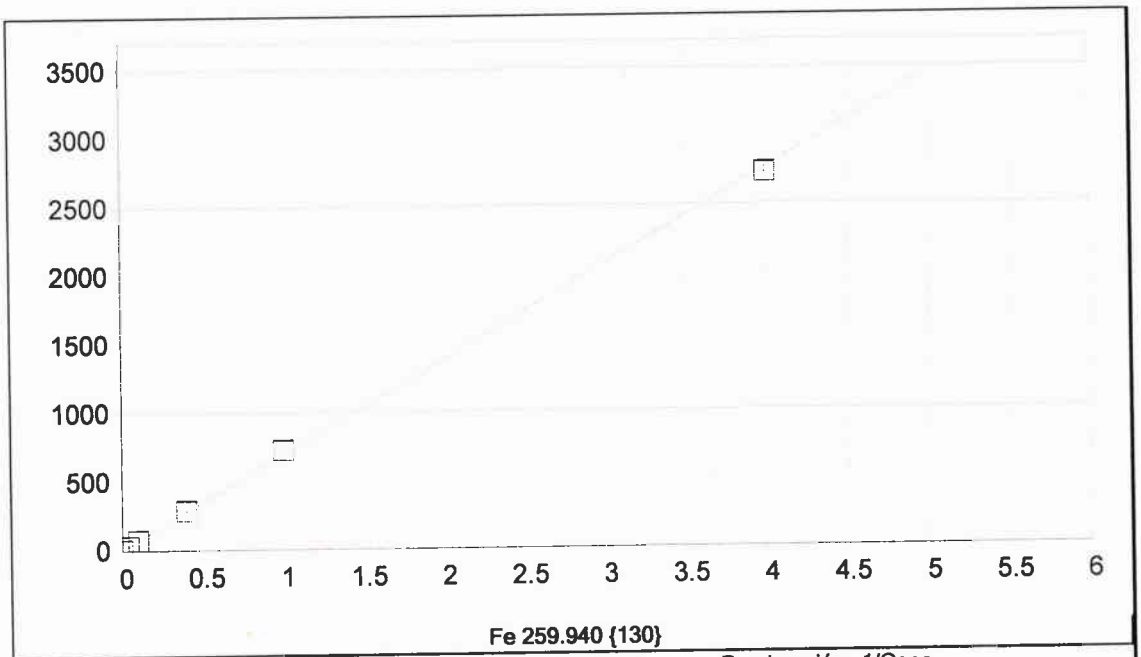


Cu 324.754 {104}

Fecha de la 04/12/2015 13:15:17 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	7.270556	Reajustar P	1.000000
A1 (Ganancia)	1163.648476	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999714	Estatus:	OK.
Error Estándar de Est:	0.506934		
MDL:	0.004003		
MQL:	0.013343		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	7.2697	3.22	1
STD 5	.40000	.40117	.001	.291	474.09	6.97	1
STD 6	1.0000	1.0502	.050	5.02	1229.4	8.13	1
STD 7	4.0000	3.9500	-.050	-1.25	4603.6	24.8	1
STD 3	.04000	.03943	-.001	-1.42	53.158	1.76	1
STD 4	.10000	.09920	-.001	-.803	122.70	1.28	1

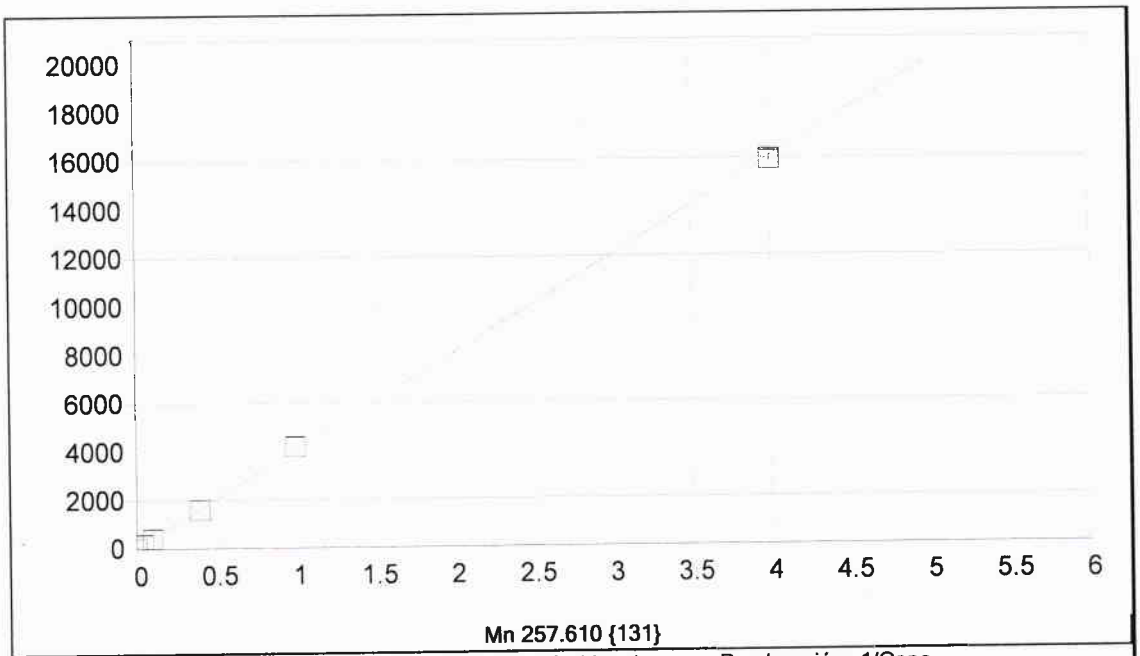


Fe 259.940 {130}

Fecha de la 04/12/2015 13:15:17 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	3.267453	Reajustar P	1.000000
A1 (Ganancia)	690.506549	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999740	Estatus:	OK.
Error Estándar de Est:	0.287142		
MDL:	0.003374		
MQL:	0.011246		

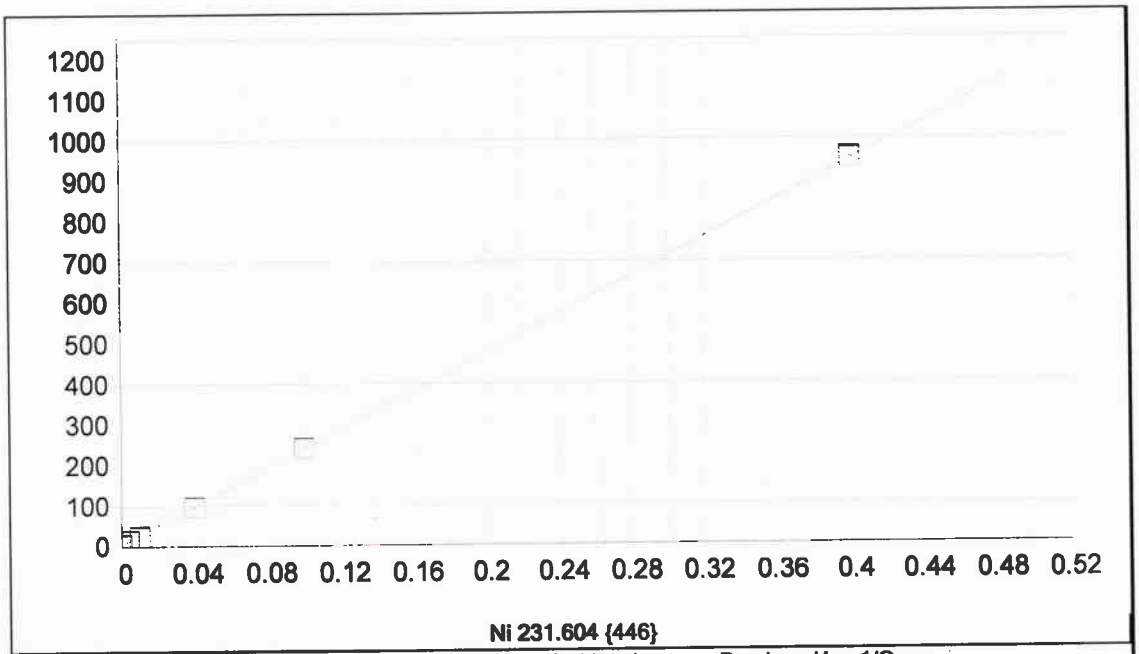
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	3.2667	1.51	1
STD 5	.40000	.41028	.010	2.57	286.57	5.11	1
STD 6	1.0000	1.0437	.044	4.37	723.98	2.93	1
STD 3	.04000	.03923	-.001	-1.92	30.358	1.22	1
STD 4	.10000	.09913	-.001	-.871	71.717	.832	1
STD 7	4.0000	3.9476	-.052	-1.31	2729.1	5.49	1



Fecha de la 04/12/2015 13:15:17 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	0.526500	Reajustar P	1.000000
A1 (Ganancia)	4019.364454	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999781	Estatus:	OK.
Error Estándar de Est:	1.532159		
MDL:	0.000614		
MQL:	0.002047		

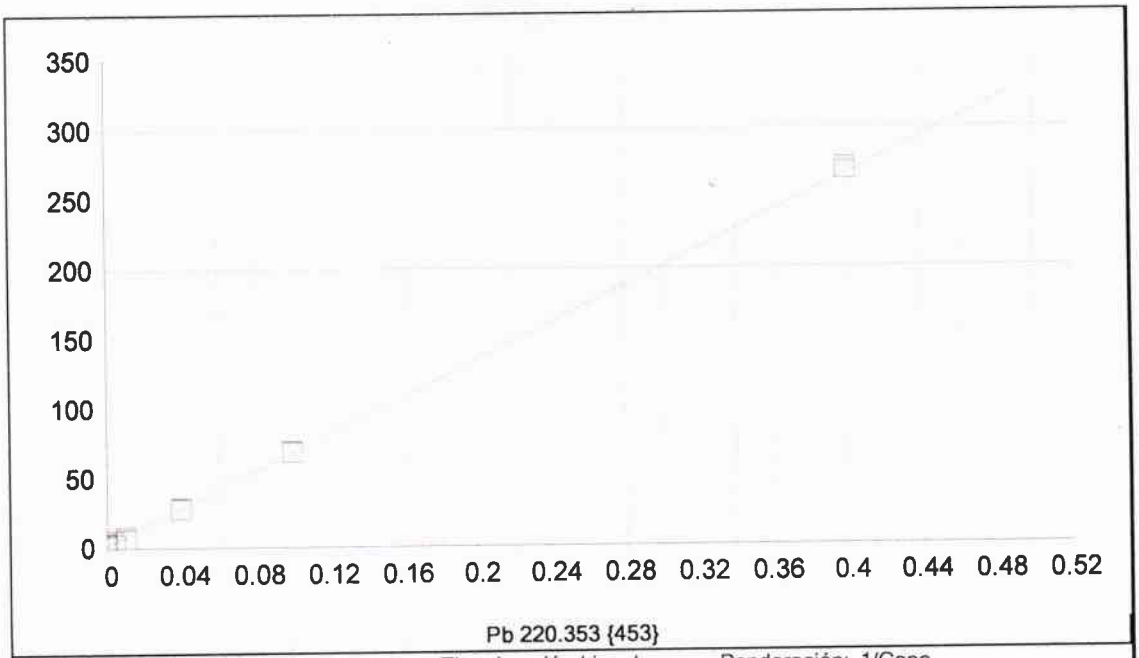
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.53333	.118	1
STD 5	.40000	.39549	-.005	-1.13	1590.1	8.18	1
STD 6	1.0000	1.0440	.044	4.40	4196.6	14.3	1
STD 3	.04000	.03821	-.002	-4.46	154.13	2.40	1
STD 4	.10000	.09783	-.002	-2.17	393.75	3.70	1
STD 7	4.0000	3.9645	-.035	-.887	15935.	64.9	1



Fecha de la 04/12/2015 13:15:17 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	4.240677	Reajustar P	1.000000
A1 (Ganancia)	2358.928594	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999742	Estatus:	OK.
Error Estándar de Est:	0.097595		
MDL:	0.000549		
MQL:	0.001830		

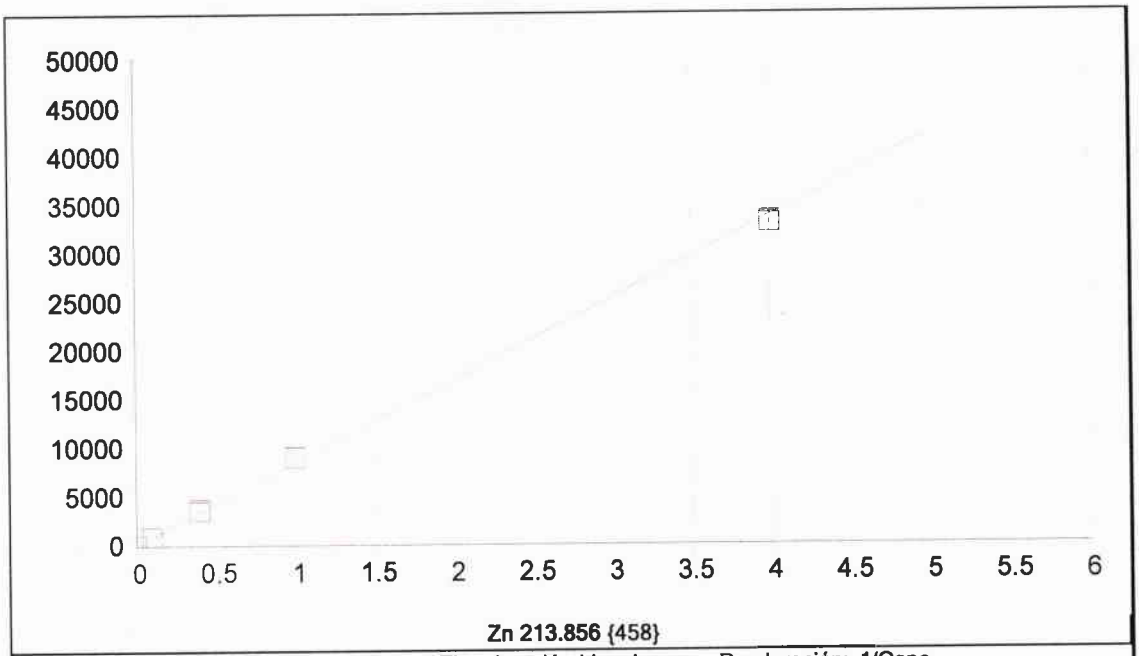
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	4.2422	1.57	1
STD 1	.00400	.00404	.000	.944	13.765	.703	1
STD 2	.01000	.00838	-.002	-16.2	24.020	.657	1
STD 3	.04000	.03927	-.001	-1.83	96.867	.532	1
STD 4	.10000	.10033	.000	.329	240.91	1.04	1
STD 5	.40000	.40198	.002	.495	952.49	1.54	1



Fecha de la 04/12/2015 13:15:17 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	2.092475	Reajustar P	1.000000
A1 (Ganancia)	662.283336	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998905	Estatus:	OK.
Error Estándar de Est:	0.056493		
MDL:	0.001840		
MQL:	0.006134		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	2.0941	1.14	1
STD 1	.00400	.00263	-.001	-34.3	3.8342	1.30	1
STD 2	.01000	.00737	-.003	-26.3	6.9758	1.23	1
STD 3	.04000	.03936	-.001	-1.60	28.161	.452	1
STD 4	.10000	.10067	.001	.671	68.765	.610	1
STD 5	.40000	.40396	.004	.991	269.63	1.78	1

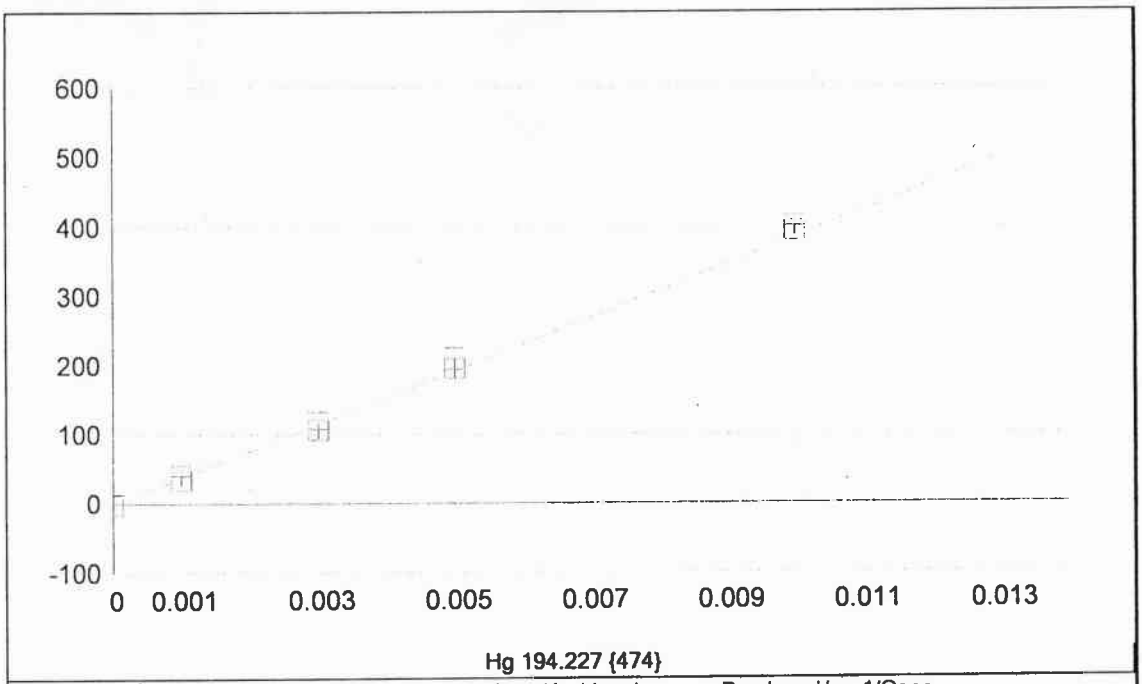


Zn 213.856 {458}

Fecha de la 04/12/2015 13:15:17 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	31.956053	Reajustar P	1.000000
A1 (Ganancia)	8459.780087	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999278	Estatus:	OK.
Error Estándar de Est:	9.729001		
MDL:	0.000139		
MQL:	0.000463		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00001	-.000	.000	31.880	.728	1
STD 4	.10000	.09827	-.002	-1.73	863.33	1.61	1
STD 5	.40000	.42552	.026	6.38	3631.7	136.	1
STD 6	1.0000	1.0655	.066	6.55	9046.1	23.7	1
STD 7	4.0000	3.9107	-.089	-2.23	33115.	152.	1



Hg 194.227 {474}

Fecha de la	07/12/2015 11:11:05	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	-1.404962		Reajustar P	1.000000	
A1 (Ganancia)	38671.57361		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999203		Estatus:	OK.	
Error Estándar de Est:	0.274598				
MDL:	0.000036				
MQL:	0.000120				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	-1.4002	.323	1
STD 1	.00100	.00091	-.000	-8.90	33.826	7.19	1
STD 2	.00300	.00278	-.000	-7.30	106.14	12.3	1
STD 3	.00500	.00509	.000	1.76	195.36	15.5	1
STD 4	.01000	.01022	.000	2.20	393.82	7.76	1

Análisis: ***METALES PESADOS POR ICP-OES***

Lote analítico: DMP-LECHE-151204

Fecha de Análisis: 04/12/2015

Fecha de Reporte: 04/12/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÓN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.0100
NIVEL 5	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000									
NIVEL 9										
Correlación	0.9999	0.9999	0.9995	0.9997	0.9997	0.9998	0.9997	0.9989	0.9993	0.9992

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
10	QC:QC	Aluminio	0.4000	0.4207	105	46	QC:QC	Aluminio	0.4000	0.409	102
		Arsénico	0.4000	0.4201	105			Arsénico	0.4000	0.4237	106
		Cadmio	0.4000	0.4195	105			Cadmio	0.4000	0.4278	107
		Cobre	0.4000	0.4108	103			Cobre	0.4000	0.415	104
		Fierro	0.4000	0.4153	104			Fierro	0.4000	0.4063	102
		Manganeso	0.4000	0.4096	102			Manganeso	0.4000	0.4164	104
		Níquel	0.4000	0.4159	104			Níquel	0.4000	0.4208	105
		Plomo	0.4000	0.4168	104			Plomo	0.4000	0.4188	105
		Zinc	0.4000	0.4372	109			Zinc	0.4000	0.4202	105
25	QC:QC	Aluminio	0.4000	0.4341	109	6	QC:QC	Mercurio	0.005	0.0059	118
		Arsénico	0.4000	0.4258	106	20	QC:QC	Mercurio	0.005	0.006	120
		Cadmio	0.4000	0.4284	107	33	QC:QC	Mercurio	0.005	0.0059	118
		Cobre	0.4000	0.4191	105	43	QC:QC	Mercurio	0.005	0.0058	116
		Fierro	0.4000	0.4143	104						
		Manganeso	0.4000	0.4182	105						
		Níquel	0.4000	0.4216	105						
		Plomo	0.4000	0.4203	105						
		Zinc	0.4000	0.4216	105						
37	QC:QC	Aluminio	0.4000	0.4178	104						
		Arsénico	0.4000	0.4267	107						
		Cadmio	0.4000	0.4286	107						
		Cobre	0.4000	0.4170	104						
		Fierro	0.4000	0.4120	103						
		Manganeso	0.4000	0.4163	104						
		Níquel	0.4000	0.4229	106						
		Plomo	0.4000	0.4227	106						
		Zinc	0.4000	0.4227	106						

Análisis: ***METALES PESADOS POR ICP-OES***
Lote analítico: DMP-LECHE-151204
Fecha de Análisis: 04/12/2015
Fecha de Reporte: 04/12/2015

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/kg		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
12	Recuperación	Aluminio	40.0000	42.2800	106						
		Arsénico	40.0000	42.9800	107						
		Cadmio	40.0000	43.6600	109						
		Cobre	40.0000	41.8800	105						
		Fierro	40.0000	41.4400	104						
		Manganeso	40.0000	42.4900	106						
		Níquel	40.0000	42.9500	107						
		Plomo	40.0000	42.4000	106						
		Zinc	40.0000	42.6400	107						
8	Recuperación	Mercurio	0.5	0.5283	106						

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I. Gaudencio Vargas Espejel
ELABORÓ

Q.F.B. Leticia Velázquez Méndez
REVISÓ

PACE/GIS/I02-F01

GISCENA®

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Peso de muestra (g) Metales	Hg
GISC15-21674	Lácteos		05/11/2015	0.5026	0.4967
GISC15-21675	Lácteos		05/11/2015	0.5071	0.5068
GISC15-21676	Lácteos		05/11/2015	0.5004	0.5089
GISC15-21686	Lácteos		05/11/2015	0.5050	0.5068
GISC15-21687	Lácteos		05/11/2015	0.5044	0.5010
GISC15-21689	Lácteos		05/11/2015	0.5072	0.5034
GISC15-21690	Lácteos		05/11/2015	0.5012	0.5045
GISC15-21695	Lácteos		05/11/2015	0.5022	0.5068
GISC15-21696	Lácteos		05/11/2015	0.5033	0.5046
GISC15-21698	Lácteos		05/11/2015	0.5028	0.5062
GISC15-21699	Lácteos		05/11/2015	0.5013	0.5030
GISC15-21700	Lácteos		05/11/2015	0.5043	0.5050
GISC15-21707	Lácteos		05/11/2015	0.5097	0.5014
GISC15-21708	Lácteos		05/11/2015	0.5083	0.5025
GISC15-21710	Lácteos		05/11/2015	0.5032	0.5077
GISC15-21711	Lácteos		05/11/2015	0.5090	0.5014
GISC15-21727	Lácteos		05/11/2015	0.5060	0.5047
GISC15-21728	Lácteos		05/11/2015	0.5009	0.5048
GISC15-21737	Lácteos		05/11/2015	0.5098	0.5038
GISC15-21738	Lácteos		05/11/2015	0.5073	0.5020
GISC15-21739	Lácteos		05/11/2015	0.5023	0.5093
GISC15-21794	Lácteos		05/11/2015	0.5041	0.5092
GISC15-21857	Lácteos		05/11/2015	0.5036	0.5088
GISC15-21858	Lácteos		05/11/2015	0.5073	0.5056
GISC15-21859	Lácteos		05/11/2015	0.5022	0.5010
GISC15-21860	Lácteos		05/11/2015	0.5075	0.5078
GISC15-21985	Lácteos		05/11/2015	0.5056	0.5019
GISC15-21986	Lácteos		05/11/2015	0.5080	0.5055
GISC15-22216	Lácteos		05/11/2015	0.5046	0.5040

I.B.I. Gaudencio Vargas Espejel

Q.F.B. Leticia Velazquez Mendez

1	Cal: Blanco 04/12/2015 09:59:34 IR D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**.6288**	**.1922**	**2.081**	**7.270**	**3.267**	**.5333**	**4.242**	**2.094**	**31.88**
Desv. Est.	.9846	.5257	1.023	3.218	1.508	.1181	1.571	1.142	.73
% RSD	156.6	273.5	49.14	44.26	46.15	22.15	37.03	54.53	2.283
Rep #1	.8045	.3589	3.171	3.555	3.875	.6250	2.452	1.335	31.09
Rep #2	1.514	-.3966	1.931	9.164	4.375	.5750	5.393	1.540	32.52
Rep #3	-.4318	.6144	1.142	9.091	1.550	.4000	4.881	3.407	32.04

2	Cal: STD 1 04/12/2015 10:02:31 IR D MP-151204: LECHES(UNAM):		
	Cd2265	Ni2316	Pb2203
Línea	226.502 {44	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s
Media	**42.24**	**13.77**	**3.834**
Desv. Est.	.48	.70	1.302
% RSD	1.140	5.106	33.95
Rep #1	42.71	13.75	2.529
Rep #2	42.28	13.07	3.841
Rep #3	41.75	14.48	5.133

3	Cal: STD 2 04/12/2015 10:04:49 IR D MP-151204: LECHES(UNAM):		
	Cd2265	Ni2316	Pb2203
Línea	226.502 {44	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s
Media	**81.53**	**24.02**	**6.976**
Desv. Est.	.59	.66	1.226
% RSD	.7213	2.733	17.58
Rep #1	82.19	23.31	7.778
Rep #2	81.32	24.61	7.585
Rep #3	81.07	24.14	5.564

4	Cal: STD 3 04/12/2015 10:07:28 IR D MP-151204: LECHES(UNAM):						
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**13.88**	**400.2**	**53.16**	**30.36**	**154.1**	**96.87**	**28.16**
Desv. Est.	1.04	1.3	1.76	1.22	2.4	.53	.45
% RSD	7.471	.3142	3.318	4.009	1.560	.5492	1.607
Rep #1	15.07	401.7	53.75	31.70	156.9	97.47	27.64
Rep #2	13.17	399.5	54.55	30.05	152.7	96.48	28.37
Rep #3	13.40	399.5	51.17	29.33	152.8	96.64	28.47

5	Cal: STD 4 04/12/2015 10:09:53 IR D MP-151204: LECHES(UNAM):							
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**35.32**	**1026.**	**122.7**	**71.72**	**393.8**	**240.9**	**68.76**	**863.3**
Desv. Est.	.72	2.	1.3	.83	3.7	1.0	.61	1.6
% RSD	2.046	.2239	1.040	1.159	.9394	.4297	.8870	.1866
Rep #1	36.14	1029.	123.9	70.78	397.9	239.9	69.26	864.2
Rep #2	35.02	1024.	121.4	72.03	390.8	240.8	68.95	861.5
Rep #3	34.80	1025.	122.8	72.35	392.6	242.0	68.08	864.4

6	Cal: STD 5 04/12/2015 10:12:35 IR D MP-151204: LECHES(UNAM):

	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**220.6**	**143.5**	**4132.**	**474.1**	**286.6**	**1590.**	**952.5**	**269.6**	**3632.**
Desv. Est.	4.9	1.0	22.	7.0	5.1	8.	1.5	1.8	136.
% RSD	2.232	.7028	.5272	1.470	1.783	.5142	.1621	.6595	3.750
Rep #1	226.3	142.6	4139.	482.1	285.4	1590.	953.5	270.2	3477.
Rep #2	218.4	143.4	4107.	469.9	282.1	1598.	950.7	267.6	3731.
Rep #3	217.2	144.6	4149.	470.2	292.2	1582.	953.2	271.0	3687.

7 Cal: STD 6 04/12/2015 10:15:10 IR
D MP-151204: LECHES(UNAM):

	Al3961	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	396.152 { 85	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**570.2**	**361.0**	**1229.**	**724.0**	**4197.**	**9046.**
Desv. Est.	2.6	1.7	8.	2.9	14.	24.
% RSD	.4609	.4790	.6614	.4040	.3396	.2625
Rep #1	572.8	359.5	1225.	724.0	4187.	9026.
Rep #2	567.5	360.6	1224.	721.1	4190.	9040.
Rep #3	570.4	362.9	1239.	726.9	4213.	9072.

8 Cal: STD 7 04/12/2015 10:17:32 IR
D MP-151204: LECHES(UNAM):

	Al3961	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	396.152 { 85	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**2158.**	**1394.**	**4604.**	**2729.**	**15940.**	**33120.**
Desv. Est.	3.	7.	25.	5.	65.	152.
% RSD	.1583	.4665	.5388	.2013	.4074	.4580
Rep #1	2155.	1386.	4607.	2732.	15930.	32950.
Rep #2	2157.	1398.	4577.	2723.	15880.	33160.
Rep #3	2161.	1396.	4626.	2733.	16000.	33240.

9 Cal: STD 8 04/12/2015 10:19:42 IR
D MP-151204: LECHES(UNAM):

	Al3961
Línea	396.152 { 85
Unidades	Cts/s
Media	**5484.**
Desv. Est.	7.
% RSD	.1278
Rep #1	5480.
Rep #2	5492.
Rep #3	5481.

10 QC: QC 04/12/2015 13:00:45 CONC
D MP-151204: LECHES(UNAM):

	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**.4207**	**.4201**	**.4195**	**.4108**	**.4153**	**.4096**	**.4159**	**.4168**	**.4372**
Desv. Est.	.0125	.0056	.0010	.0038	.0021	.0034	.0013	.0013	.0050
% RSD	2.972	1.325	.2273	.9251	.4972	.8390	.3151	.3238	1.138
Rep #1	.4063	.4185	.4193	.4066	.4150	.4056	.4145	.4156	.4322
Rep #2	.4273	.4263	.4205	.4120	.4134	.4121	.4170	.4182	.4373
Rep #3	.4286	.4155	.4186	.4139	.4175	.4110	.4162	.4164	.4422
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

11	Unk: REACTIVO 04/12/2015 13:03:34 CONC D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**<.0000**	**<.0000**	**.0002**	**<.0000**	**.0025**	**.0006**	**.0004**	**<.0000**	**.0022**
Desv. Est.	.0161	.0014	.0002	.0042	.0028	.0007	.0002	.0008	.0004
% RSD	2531.	811.0	116.1	809.6	110.5	110.2	56.68	78.31	16.14
Rep #1	-.0015	-.0017	.0004	.0021	.0002	.0013	.0003	-.0013	.0018
Rep #2	.0158	.0012	.0003	-.0053	.0017	.0006	.0002	-.0016	.0025
Rep #3	-.0163	-.0000	-.0001	.0017	.0056	-.0000	.0006	-.0001	.0023
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

12	Unk: RECUPERACION 04/12/2015 13:05:58 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**42.28**	**42.98**	**43.66**	**41.88**	**41.44**	**42.49**	**42.95**	**42.40**	**42.64**
Desv. Est.	1.09	.14	.03	.28	.35	.28	.12	.13	.09
% RSD	2.582	.3343	.0641	.6771	.8479	.6544	.2755	.2961	.2175
Rep #1	42.67	42.94	43.67	41.58	41.16	42.32	43.00	42.54	42.58
Rep #2	41.04	43.13	43.69	42.13	41.83	42.34	43.03	42.32	42.75
Rep #3	43.12	42.85	43.63	41.94	41.32	42.81	42.81	42.34	42.59
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

13	Blanco: REACTIVO 04/12/2015 13:08:32 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**1.722**	**-.0050**	**.0227**	**.1252**	**.3306**	**.0369**	**.0766**	**-.1446**	**.4776**
Desv. Est.	1.535	.2363	.0054	.3353	.2335	.0280	.0053	.0924	.0150
% RSD	89.14	4723.	23.64	267.8	70.63	75.94	6.885	63.93	3.146
Rep #1	.8283	.1979	.0237	.4873	.0771	.0360	.0724	-.2462	.4695
Rep #2	3.494	-.2644	.0169	-.1744	.5369	.0093	.0825	-.0656	.4949
Rep #3	.8429	.0515	.0275	.0627	.3776	.0653	.0748	-.1218	.4683

14	Unk: GISC15-21674 04/12/2015 13:11:08 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**5.657**	**<.0000**	**<.0000**	**.1408**	**1.856**	**.0593**	**.1299**	**<.0000**	**2.867**
Desv. Est.	1.684	.2249	.0108	.1486	.306	.0408	.0589	.0621	.035
% RSD	29.76	526.9	26.29	105.6	16.47	68.75	45.32	439.2	1.214
Rep #1	5.835	-.2565	-.0329	.0715	2.111	.0819	.1755	-.0851	2.903
Rep #2	7.245	.1918	-.0533	.3113	1.941	.0122	.0634	.0302	2.866
Rep #3	3.892	-.0633	-.0371	.0395	1.517	.0838	.1509	.0125	2.833
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

15	Unk: GISC15-21674-R 04/12/2015 13:12:14 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**6.178**	**<.0000**	**<.0000**	**.2217**	**1.751**	**.0323**	**.1075**	**.1613**	**2.853**
Desv. Est.	.487	.1512	.0017	.1796	.235	.0423	.0519	.1209	.009
% RSD	7.880	4629.	2.857	81.01	13.45	130.8	48.31	74.97	.3056
Rep #1	5.891	-.0456	-.0584	.4055	2.013	.0713	.1133	.1639	2.850
Rep #2	5.904	.1646	-.0599	.0465	1.684	-.0126	.1564	.2810	2.846
Rep #3	6.741	-.1288	-.0566	.2133	1.557	.0384	.0530	.0391	2.863
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

16	Unk: GISC15-21675 04/12/2015 13:14:36 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**5.728**	**.1656**	**<.0000**	**.1187**	**1.161**	**.0280**	**.0072**	**.1875**	**2.040**
Desv. Est.	.471	.1278	.0086	.1855	.199	.0387	.0183	.0785	.035
% RSD	8.228	77.20	15.65	156.2	17.11	138.4	255.7	41.86	1.711
Rep #1	6.149	.2766	-.0642	-.0301	.9341	.0160	.0139	.2473	2.047
Rep #2	5.816	.0258	-.0471	.3266	1.303	-.0033	.0211	.2165	2.070
Rep #3	5.219	.1944	-.0537	.0598	1.245	.0713	-.0136	.0986	2.002
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

17	Unk: GISC15-21676 04/12/2015 13:17:04 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.530**	**.1621**	**<.0000**	**.0839**	**1.764**	**.0114**	**.1331**	**.0651**	**2.786**
Desv. Est.	1.789	.3406	.0134	.0733	.080	.0038	.0090	.1014	.012
% RSD	70.72	210.1	19.15	87.43	4.507	33.33	6.750	155.7	.4425
Rep #1	.7339	-.1538	-.0546	-.0008	1.673	.0147	.1232	.1277	2.778
Rep #2	2.545	.5229	-.0749	.1277	1.814	.0122	.1355	.1196	2.800
Rep #3	4.313	.1172	-.0797	.1246	1.807	.0073	.1407	-.0519	2.780
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

18	Unk: GISC15-21686 04/12/2015 13:19:55 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**3.224**	**.0621**	**<.0000**	**.2879**	**2.350**	**.0419**	**.0766**	**<.0000**	**3.176**
Desv. Est.	.463	.0880	.0095	.2282	.202	.0318	.0159	.0440	.007
% RSD	14.37	141.7	13.87	79.28	8.608	75.82	20.74	73.54	.2167
Rep #1	2.967	.0018	-.0578	.0309	2.440	.0110	.0841	-.0203	3.171
Rep #2	2.946	.0214	-.0747	.4668	2.491	.0744	.0873	-.0519	3.174
Rep #3	3.759	.1631	-.0739	.3660	2.118	.0402	.0583	-.1071	3.184
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

19	Unk: GISC15-21687 04/12/2015 13:21:35 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

Media	**3.465**	**.2753**	**<.0000**	**.1368**	**2.291**	**.0440**	**.1992**	**.0736**	**4.084**
Desv. Est.	.685	.0529	.0081	.1642	.284	.0810	.0172	.1771	.034
% RSD	19.77	19.22	12.33	120.0	12.40	184.4	8.642	240.6	.8337
Rep #1	2.878	.3250	-.0720	.0324	2.538	.0632	.1892	.2440	4.059
Rep #2	4.218	.2197	-.0686	.0520	1.980	.1136	.2191	-.1096	4.123
Rep #3	3.300	.2813	-.0565	.3262	2.353	-.0450	.1893	.0864	4.070
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

20	Unk: GISC15-21689 04/12/2015 13:23:20 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**3.778**	**.1404**	**<.0000**	**.3299**	**2.847**	**.0740**	**.1544**	**.1326**	**3.101**
Desv. Est.	.593	.1158	.0233	.3349	.235	.0284	.0411	.2187	.018
% RSD	15.69	82.45	32.96	101.5	8.258	38.37	26.61	164.9	.5937
Rep #1	4.462	.2023	-.0946	.5855	3.110	.1068	.1926	-.1123	3.080
Rep #2	3.456	.0069	-.0698	-.0492	2.657	.0564	.1597	.3086	3.110
Rep #3	3.416	.2121	-.0480	.4535	2.773	.0589	.1109	.2016	3.114
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

21	Unk: GISC15-21690 04/12/2015 13:25:40 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**3.782**	**.0785**	**<.0000**	**<.0000**	**3.284**	**.1035**	**.1324**	**.1347**	**3.254**
Desv. Est.	.108	.1022	.0045	.4589	.135	.0414	.0306	.0559	.063
% RSD	2.847	130.2	6.132	2061.	4.106	40.04	23.08	41.53	1.945
Rep #1	3.659	.1890	-.0764	.4937	3.389	.0607	.1083	.0771	3.320
Rep #2	3.825	-.0128	-.0688	-.1758	3.331	.1062	.1221	.1888	3.247
Rep #3	3.861	.0593	-.0770	-.3848	3.132	.1435	.1668	.1383	3.194
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

22	Unk: GISC15-21695 04/12/2015 13:28:03 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.869**	**.0212**	**<.0000**	**.1126**	**2.186**	**.0701**	**.0761**	**.1199**	**3.390**
Desv. Est.	.131	.1405	.0040	.1627	.056	.0131	.0483	.0392	.020
% RSD	4.554	663.1	5.315	144.4	2.568	18.64	63.48	32.71	.5874
Rep #1	3.012	-.1045	-.0700	.2793	2.227	.0701	.0310	.1343	3.367
Rep #2	2.838	-.0048	-.0777	-.0457	2.122	.0831	.0702	.1498	3.402
Rep #3	2.757	.1729	-.0753	.1043	2.209	.0570	.1271	.0755	3.401
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

23	Unk: GISC15-21696 04/12/2015 13:30:26 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**3.291**	**.0148**	**<.0000**	**<.0000**	**3.061**	**.0846**	**.1113**	**.1405**	**3.496**

Desv. Est.	.486	.1022	.0083	.0478	.182	.0041	.0364	.1164	.021
% RSD	14.76	692.8	11.17	91.51	5.951	4.896	32.70	82.80	.5972
Rep #1	3.157	.0597	-.0745	-.0328	3.258	.0819	.0767	.2620	3.472
Rep #2	3.829	.0869	-.0658	-.1066	2.900	.0825	.1493	.0301	3.507
Rep #3	2.886	-.1022	-.0824	-.0172	3.023	.0894	.1081	.1296	3.509
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

24	Unk: GISC15-21698 04/12/2015 13:32:45 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.622**	**.0133**	**<.0000**	**<.0000**	**3.164**	**.1630**	**.1217**	**.1472**	**3.514**
Desv. Est.	.491	.2900	.0016	.3710	.107	.0278	.0314	.0308	.026
% RSD	18.73	2183.	1.725	233.6	3.388	17.07	25.84	20.91	.7283
Rep #1	2.430	.1324	-.0958	-.5387	3.175	.1932	.1376	.1241	3.499
Rep #2	3.180	-.3173	-.0932	-.1406	3.266	.1572	.0855	.1354	3.543
Rep #3	2.256	.2247	-.0962	.2027	3.052	.1385	.1419	.1822	3.499
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

25	QC: QC 04/12/2015 13:37:28 CONC D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**.4341**	**.4258**	**.4284**	**.4191**	**.4143**	**.4182**	**.4216**	**.4203**	**.4216**
Desv. Est.	.0082	.0041	.0020	.0060	.0054	.0043	.0022	.0046	.0023
% RSD	1.891	.9602	.4756	1.433	1.294	1.026	.5113	1.101	.5434
Rep #1	.4320	.4297	.4305	.4202	.4177	.4198	.4237	.4253	.4240
Rep #2	.4432	.4260	.4283	.4245	.4171	.4215	.4217	.4162	.4213
Rep #3	.4272	.4216	.4264	.4126	.4082	.4134	.4194	.4193	.4194
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

26	Unk: GISC15-21699 04/12/2015 13:40:18 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**4.339**	**.2190**	**<.0000**	**.1822**	**3.208**	**.0798**	**.0532**	**.2698**	**2.175**
Desv. Est.	1.322	.0779	.0040	.1682	.194	.0297	.0374	.0933	.010
% RSD	30.46	35.58	4.581	92.36	6.058	37.19	70.32	34.56	.4401
Rep #1	5.815	.2927	-.0838	.3746	3.392	.0558	.0764	.1664	2.177
Rep #2	3.937	.2269	-.0916	.0629	3.005	.0707	.0100	.3474	2.165
Rep #3	3.264	.1374	-.0897	.1090	3.226	.1130	.0733	.2958	2.184
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

27	Unk: GISC15-21700 04/12/2015 13:42:41 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**3.153**	**<.0000**	**<.0000**	**.0035**	**2.437**	**.1252**	**.0624**	**.1502**	**2.023**
Desv. Est.	.801	.0310	.0154	.3259	.214	.0177	.0274	.1393	.120

% RSD	25.41	105.4	20.84	9271.	8.762	14.12	43.99	92.71	5.917
Rep #1	2.803	-.0599	-.0562	-.2117	2.277	.1397	.0351	.2745	1.887
Rep #2	2.586	.0021	-.0838	-.1562	2.679	.1304	.0620	.1764	2.113
Rep #3	4.069	-.0305	-.0817	.3785	2.353	.1055	.0899	-.0003	2.070
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

28	Unk: GISC15-21707 04/12/2015 13:45:44 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**11.89**	**.2392**	**<.0000**	**<.0000**	**11.68**	**.2032**	**.0601**	**.1233**	**3.801**
Desv. Est.	.82	.3202	.0077	.0679	.39	.0601	.0259	.1438	.047
% RSD	6.884	133.9	8.773	55.37	3.318	29.57	43.13	116.6	1.248
Rep #1	11.16	.5729	-.0848	-.0621	11.29	.2001	.0844	.0227	3.842
Rep #2	12.78	-.0656	-.0968	-.1961	11.69	.1447	.0328	.0592	3.812
Rep #3	11.73	.2102	-.0824	-.1098	12.06	.2648	.0629	.2880	3.749
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

29	Unk: GISC15-21708 04/12/2015 13:48:02 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**4.592**	**.5114**	**<.0000**	**<.0000**	**1.822**	**.0243**	**.0370**	**.0054**	**3.997**
Desv. Est.	1.348	.0614	.0058	.2132	.346	.0271	.0757	.1943	.010
% RSD	29.35	12.01	9.311	245.5	18.97	111.7	204.7	3619.	.2576
Rep #1	4.234	.4881	-.0573	.1516	1.879	.0228	.1217	.1306	4.001
Rep #2	3.460	.5811	-.0683	-.1527	1.452	-.0021	-.0242	-.2184	3.985
Rep #3	6.083	.4650	-.0598	-.2594	2.136	.0520	.0134	.1040	4.005
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

30	Unk: GISC15-21710 04/12/2015 13:50:38 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**4.074**	**.1728**	**<.0000**	**<.0000**	**3.020**	**.0607**	**.1603**	**.2109**	**3.143**
Desv. Est.	1.443	.1307	.0082	.0549	.199	.0300	.0161	.1145	.015
% RSD	35.41	75.64	9.470	40.25	6.575	49.37	10.07	54.29	.4680
Rep #1	3.123	.0223	-.0855	-.1258	3.045	.0265	.1560	.0814	3.134
Rep #2	5.733	.2582	-.0945	-.1957	2.810	.0732	.1467	.2986	3.160
Rep #3	3.364	.2377	-.0783	-.0875	3.204	.0825	.1781	.2528	3.134
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

31	Unk: GISC15-21711 04/12/2015 13:53:05 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**4.848**	**.3638**	**<.0000**	**.0121**	**1.827**	**.0404**	**.0792**	**.1081**	**2.820**
Desv. Est.	.368	.0588	.0075	.2303	.070	.0461	.0218	.2274	.025
% RSD	7.602	16.16	10.17	1902.	3.808	114.0	27.58	210.3	.8978

Rep #1	5.272	.4094	-.0678	.1141	1.839	-.0120	.0753	.2746	2.842
Rep #2	4.662	.2974	-.0718	-.2516	1.890	.0744	.0595	.2007	2.825
Rep #3	4.609	.3847	-.0823	.1738	1.752	.0589	.1027	-.1510	2.793
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
32	Unk: GISC15-21727 04/12/2015 13:55:54 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.388**	**.1366**	**<.0000**	**.0964**	**1.356**	**.0562**	**.0306**	**.0159**	1.319
Desv. Est.	.230	.1461	.0020	.3126	.378	.0654	.0468	.0242	.002
% RSD	9.616	106.9	2.596	324.5	27.84	116.4	152.9	152.7	.1489
Rep #1	2.440	.0799	-.0737	.4535	1.789	.0744	.0511	.0161	1.317
Rep #2	2.586	.0274	-.0755	-.0367	1.090	-.0164	-.0229	-.0085	1.319
Rep #3	2.136	.3025	-.0776	-.1277	1.191	.1105	.0637	.0400	1.321
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
33	Unk: GISC15-21728 04/12/2015 13:58:31 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.143**	**.1829**	**<.0000**	**<.0000**	**1.565**	**.0226**	**.0653**	**<.0000**	**1.250**
Desv. Est.	1.112	.3981	.0061	.2184	.038	.0284	.0275	.0629	.026
% RSD	51.89	217.7	8.109	151.2	2.430	125.5	42.16	90.37	2.071
Rep #1	2.488	-.2420	-.0739	-.3215	1.528	-.0046	.0915	-.0976	1.272
Rep #2	.8991	.2434	-.0697	-.2113	1.604	.0520	.0366	.0024	1.221
Rep #3	3.041	.5472	-.0817	.0996	1.564	.0203	.0679	-.1136	1.257
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
34	Unk: GISC15-21737 04/12/2015 14:00:57 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.499**	**.0392**	**<.0000**	**.0309**	**1.319**	**.0218**	**.0852**	**.0301**	**4.509**
Desv. Est.	.477	.0267	.0110	.3756	.159	.0479	.0335	.0397	.036
% RSD	19.08	68.20	14.05	1217.	12.04	219.9	39.33	131.8	.7980
Rep #1	2.561	.0277	-.0702	.0684	1.140	.0278	.1153	.0068	4.550
Rep #2	1.994	.0201	-.0907	.3863	1.372	.0663	.0491	.0759	4.490
Rep #3	2.942	.0698	-.0737	-.3621	1.445	-.0288	.0913	.0076	4.485
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
35	Unk: GISC15-21738 04/12/2015 14:02:50 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.820**	**.1537**	**<.0000**	**.1484**	**1.389**	**.0317**	**.1489**	**.2062**	**3.390**
Desv. Est.	1.893	.1767	.0079	.2778	.089	.0155	.0701	.1551	.030
% RSD	67.14	115.0	10.40	187.1	6.434	48.84	47.08	75.21	.8934
Rep #1	4.446	.3019	-.0710	.3754	1.314	.0241	.1679	.3375	3.399

Rep #2	.7417	-.0418	-.0850	-.1613	1.365	.0216	.0713	.2460	3.416
Rep #3	3.272	.2010	-.0718	.2312	1.488	.0496	.2076	.0351	3.357
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

36	Unk: GISC15-21738-R1 04/12/2015 14:07:31 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.949**	**.3771**	**<.0000**	**<.0000**	**3.085**	**.0267**	**.0593**	**.1516**	**4.123**
Desv. Est.	.598	.1985	.0038	.1481	.123	.0381	.0335	.0299	.004
% RSD	20.27	52.62	4.618	451.3	3.985	142.6	56.55	19.70	.0953
Rep #1	3.604	.1491	-.0850	.0609	3.001	.0222	.0979	.1861	4.124
Rep #2	2.810	.5112	-.0775	-.2035	3.226	-.0089	.0379	.1323	4.127
Rep #3	2.433	.4710	-.0818	.0441	3.027	.0670	.0421	.1366	4.119
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

37	QC: QC 04/12/2015 14:09:48 CONC D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**.4178**	**.4267**	**.4286**	**.4170**	**.4120**	**.4163**	**.4229**	**.4227**	**.4227**
Desv. Est.	.0124	.0039	.0012	.0009	.0004	.0022	.0014	.0024	.0017
% RSD	2.970	.9179	.2895	.2245	.1048	.5279	.3277	.5790	.3999
Rep #1	.4290	.4261	.4280	.4177	.4117	.4158	.4219	.4218	.4219
Rep #2	.4199	.4308	.4300	.4159	.4119	.4187	.4245	.4254	.4246
Rep #3	.4045	.4231	.4278	.4174	.4125	.4143	.4222	.4208	.4215
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

38	Unk: GISC15-21739 04/12/2015 14:11:25 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**1.668**	**.2451**	**<.0000**	**<.0000**	**1.115**	**<.0000**	**.0813**	**.0463**	**3.330**
Desv. Est.	1.510	.4572	.0064	.2182	.238	.0750	.0280	.1483	.027
% RSD	90.52	186.6	9.019	412.8	21.37	709.2	34.44	320.4	.8012
Rep #1	-.0583	-.1664	-.0682	.0320	1.072	.0551	.0602	-.1137	3.360
Rep #2	2.320	.7373	-.0787	-.3008	1.372	.0054	.1131	.0735	3.323
Rep #3	2.742	.1643	-.0669	.1102	.9015	-.0923	.0706	.1792	3.308
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

39	Unk: GISC15-21794 04/12/2015 14:14:00 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.049**	**.1741**	**<.0000**	**.0878**	**.9981**	**.0238**	**.0780**	**.0867**	**3.935**
Desv. Est.	.709	.0525	.0082	.2179	.1160	.0781	.0152	.0421	.021
% RSD	34.61	30.13	10.20	248.3	11.62	327.6	19.51	48.53	.5344
Rep #1	2.833	.2295	-.0897	.3320	1.032	.0925	.0623	.0656	3.943
Rep #2	1.452	.1678	-.0761	-.0867	.8689	-.0612	.0927	.1352	3.911

Rep #3	1.862	.1251	-.0751	.0180	1.093	.0402	.0789	.0594	3.950
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
40	Unk: GISC15-21857 04/12/2015 14:16:24 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**2.103**	**<.0000**	**<.0000**	**.2755**	**1.284**	**.0437**	**.1076**	**.1839**	**3.252**
Desv. Est.	.336	.0937	.0140	.3455	.062	.1058	.0269	.0668	.027
% RSD	15.99	163.7	19.15	125.4	4.854	241.9	25.05	36.35	.8318
Rep #1	2.191	-.0997	-.0886	-.1164	1.264	-.0767	.0985	.2519	3.282
Rep #2	2.387	-.1222	-.0615	.4070	1.354	.0862	.0863	.1183	3.230
Rep #3	1.732	.0502	-.0690	.5359	1.235	.1217	.1379	.1813	3.243
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
41	Unk: GISC15-21858 04/12/2015 14:18:39 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**.7914**	**.1760**	**<.0000**	**.2941**	**5.235**	**.0717**	**.0809**	**.1183**	**3.217**
Desv. Est.	.4598	.1180	.0023	.1740	.233	.0690	.0484	.1113	.004
% RSD	58.10	67.03	2.869	59.16	4.457	96.12	59.76	94.05	.1084
Rep #1	1.290	.2791	-.0807	.4016	5.322	.1211	.1045	.0853	3.220
Rep #2	.6998	.0473	-.0765	.3875	4.971	.1012	.1130	.0273	3.213
Rep #3	.3843	.2016	-.0802	.0934	5.413	-.0070	.0253	.2424	3.217
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
42	Unk: GISC15-21859 04/12/2015 14:20:58 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**1.481**	**.0357**	**<.0000**	**.2160**	**1.319**	**.0699**	**.0781**	**.0501**	**4.713**
Desv. Est.	1.726	.3246	.0037	.0495	.352	.0143	.0333	.0700	.306
% RSD	116.5	908.3	5.055	22.94	26.72	20.50	42.67	139.6	6.500
Rep #1	.7521	-.3372	-.0703	.2730	1.057	.0551	.0652	.1297	4.368
Rep #2	3.452	.2544	-.0709	.1836	1.180	.0707	.0531	.0226	4.818
Rep #3	.2398	.1899	-.0769	.1914	1.720	.0838	.1159	-.0019	4.953
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
43	Unk: GISC15-21860 04/12/2015 14:23:18 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**1.475**	**.1535**	**<.0000**	**<.0000**	**1.230**	**.0477**	**.0504**	**.0144**	**4.162**
Desv. Est.	.592	.1117	.0086	.3644	.133	.0311	.0619	.0771	.044
% RSD	40.11	72.76	11.82	453.6	10.79	65.17	122.9	534.7	1.064
Rep #1	1.447	.2807	-.0637	-.3477	1.329	.0576	.0939	-.0623	4.211
Rep #2	2.081	.1080	-.0808	-.2281	1.079	.0726	-.0205	.0135	4.149
Rep #3	.8983	.0717	-.0737	.3348	1.282	.0129	.0778	.0920	4.125

Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
44	Unk: GISC15-21985 04/12/2015 14:27:23 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**1.357**	**<.0000**	**<.0000**	**.0435**	**.6963**	**<.0000**	**.0274**	**.1590**	**3.110**
Desv. Est.	.563	.1836	.0048	.1540	.1048	.0476	.0471	.1598	.018
% RSD	41.46	435.4	6.244	354.1	15.05	402.6	172.1	100.5	.5703
Rep #1	.7239	.1681	-.0804	.1043	.5757	-.0226	-.0084	.3290	3.101
Rep #2	1.547	-.1241	-.0793	.1578	.7639	-.0531	.0808	.1362	3.130
Rep #3	1.800	-.1705	-.0716	-.1316	.7494	.0402	.0097	.0118	3.097
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
45	Unk: GISC15-21986 04/12/2015 14:29:39 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**.3978**	**.2311**	**<.0000**	**<.0000**	**.5817**	**<.0000**	**.0095**	**<.0000**	**2.743**
Desv. Est.	.3847	.2420	.0028	.3497	.2175	.0260	.0429	.1303	.003
% RSD	96.69	104.7	3.357	306.6	37.39	90.05	450.4	146.2	.1120
Rep #1	.3453	.3461	-.0825	.1742	.5938	-.0046	-.0102	-.1291	2.747
Rep #2	.8061	-.0469	-.0845	-.5031	.7929	-.0257	-.0200	-.1947	2.742
Rep #3	.0422	.3942	-.0791	-.0133	.3584	-.0562	.0587	.0565	2.741
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
46	QC: QC 04/12/2015 14:32:06 CONC D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**.4090**	**.4237**	**.4278**	**.4150**	**.4063**	**.4164**	**.4208**	**.4188**	**.4202**
Desv. Est.	.0094	.0025	.0015	.0055	.0030	.0007	.0011	.0040	.0017
% RSD	2.286	.6009	.3482	1.318	.7405	.1782	.2681	.9480	.4075
Rep #1	.4198	.4258	.4295	.4163	.4061	.4170	.4217	.4231	.4222
Rep #2	.4044	.4244	.4268	.4197	.4094	.4167	.4195	.4181	.4195
Rep #3	.4028	.4209	.4271	.4090	.4034	.4156	.4211	.4153	.4190
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
47	Unk: GISC15-22216 04/12/2015 14:34:29 CONC x100 D MP-151204: LECHES(UNAM):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Media	**1.579**	**.1097**	**<.0000**	**<.0000**	**.8424**	**.0371**	**<.0000**	**.1695**	**4.384**
Desv. Est.	.618	.2222	.0034	.1930	.0748	.0156	.0377	.1668	.016
% RSD	39.12	202.5	3.997	310.8	8.874	42.17	167.7	98.37	.3619
Rep #1	1.866	.3575	-.0865	-.0391	.8943	.0191	.0174	.3143	4.395
Rep #2	.8700	-.0719	-.0805	-.2656	.7567	.0471	-.0575	.2071	4.391
Rep #3	2.001	.0435	-.0860	.1184	.8762	.0452	-.0274	-.0128	4.366
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno

1	Cal: Blanco 07/12/2015 11:06:16 IR D Hg-151207: LACTEOS(UNAM):
	Hg1942
Unidades	Cts/s
Media	**-1.400**
Desv. Est.	.323
% RSD	23.09
Rep #1	-1.243
Rep #2	-1.185
Rep #3	-1.772

2	Cal: STD 1 07/12/2015 11:09:41 IR D Hg-151207: LACTEOS(UNAM):
	Hg1942
Unidades	Cts/s
Media	**54.88**
Desv. Est.	4.92
% RSD	8.969
Rep #1	60.27
Rep #2	53.73
Rep #3	50.63

3	Cal: STD 2 07/12/2015 11:11:00 IR D Hg-151207: LACTEOS(UNAM):
	Hg1942
Unidades	Cts/s
Media	**106.1**
Desv. Est.	12.3
% RSD	11.61
Rep #1	91.92
Rep #2	113.4
Rep #3	113.1

4	Cal: STD 3 07/12/2015 11:11:51 IR D Hg-151207: LACTEOS(UNAM):
	Hg1942
Unidades	Cts/s
Media	**195.4**
Desv. Est.	15.5
% RSD	7.934
Rep #1	178.1
Rep #2	199.8
Rep #3	208.1

5	Cal: STD 4 07/12/2015 11:14:31 IR D Hg-151207: LACTEOS(UNAM):
	Hg1942
Unidades	Cts/s
Media	**393.8**
Desv. Est.	7.8
% RSD	1.971
Rep #1	398.7
Rep #2	384.9
Rep #3	397.9

Intervalo	
6	QC: QC 07/12/2015 11:16:31 CONC D Hg-151207: LACTEOS(UNAM):
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0059**
Desv. Est.	.0001
% RSD	1.153
Rep #1	.0059
Rep #2	.0060
Rep #3	.0059
Comprobació	Ninguno
Valor	
Intervalo	
7	Unk: REACTIVO 07/12/2015 11:17:31 CONC D Hg-151207: LACTEOS(UNAM):
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0007**
Desv. Est.	.0001
% RSD	10.42
Rep #1	.0008
Rep #2	.0007
Rep #3	.0006
8	Unk: RECUPERACION 07/12/2015 11:19:06 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.5283**
Desv. Est.	.0311
% RSD	5.885
Rep #1	.4938
Rep #2	.5370
Rep #3	.5542
9	Blanco: REACTIVO 07/12/2015 11:20:32 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0997**
Desv. Est.	.0111
% RSD	11.11
Rep #1	.1112
Rep #2	.0988
Rep #3	.0891
10	Unk: GISC15-21674 07/12/2015 11:22:45 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.0707**
Desv. Est.	.0137
% RSD	19.37
Rep #1	-.0827

Rep #2	-.0735
Rep #3	-.0558
11	Unk: GISC15-21674-R 07/12/2015 11:24:22 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.0227**
Desv. Est.	.0244
% RSD	107.3
Rep #1	-.0482
Rep #2	.0004
Rep #3	-.0204
12	Unk: GISC15-21675 07/12/2015 11:27:11 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1350**
Desv. Est.	.0059
% RSD	4.388
Rep #1	-.1312
Rep #2	-.1320
Rep #3	-.1418
13	Unk: GISC15-21676 07/12/2015 11:28:31 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1378**
Desv. Est.	.0012
% RSD	.8947
Rep #1	-.1364
Rep #2	-.1384
Rep #3	-.1386
14	Unk: GISC15-21686 07/12/2015 11:29:59 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1339**
Desv. Est.	.0007
% RSD	.5601
Rep #1	-.1331
Rep #2	-.1346
Rep #3	-.1339
15	Unk: GISC15-21687 07/12/2015 11:31:12 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1336**
Desv. Est.	.0007
% RSD	.4996
Rep #1	-.1330
Rep #2	-.1343
Rep #3	-.1334

16	Unk: GISC15-21689 07/12/2015 11:32:32 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1149**
Desv. Est.	.0025
% RSD	2.205
Rep #1	-.1169
Rep #2	-.1121
Rep #3	-.1157
17	Unk: GISC15-21690 07/12/2015 11:33:47 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1191**
Desv. Est.	.0188
% RSD	15.81
Rep #1	-.1335
Rep #2	-.0978
Rep #3	-.1260
18	Unk: GISC15-21695 07/12/2015 11:35:06 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0056**
Desv. Est.	.2004
% RSD	3593.
Rep #1	.2359
Rep #2	-.0898
Rep #3	-.1293
19	Unk: GISC15-21696 07/12/2015 11:36:20 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1287**
Desv. Est.	.0028
% RSD	2.205
Rep #1	-.1315
Rep #2	-.1288
Rep #3	-.1258
20	QC: QC 07/12/2015 11:37:53 CONC D Hg-151207: LACTEOS(UNAM):
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0060**
Desv. Est.	.0001
% RSD	1.254
Rep #1	.0061
Rep #2	.0059
Rep #3	.0060
Comprobació	Ninguno
Valor	

Intervalo	
21	Unk: GISC15-21698 07/12/2015 11:38:17 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1284**
Desv. Est.	.0021
% RSD	1.670
Rep #1	-.1308
Rep #2	-.1268
Rep #3	-.1275
22	Unk: GISC15-21699 07/12/2015 11:39:38 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1087**
Desv. Est.	.0194
% RSD	17.82
Rep #1	-.1230
Rep #2	-.1165
Rep #3	-.0867
23	Unk: GISC15-21700 07/12/2015 11:40:52 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1336**
Desv. Est.	.0511
% RSD	38.24
Rep #1	-.0746
Rep #2	-.1624
Rep #3	-.1638
24	Unk: GISC15-21707 07/12/2015 11:42:07 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1661**
Desv. Est.	.0007
% RSD	.4080
Rep #1	-.1665
Rep #2	-.1665
Rep #3	-.1653
25	Unk: GISC15-21708 07/12/2015 11:43:25 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1698**
Desv. Est.	.0013
% RSD	.7397
Rep #1	-.1712
Rep #2	-.1688
Rep #3	-.1694

26	Unk: GISC15-21710 07/12/2015 11:44:56 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1261**
Desv. Est.	.0023
% RSD	1.835
Rep #1	-.1277
Rep #2	-.1271
Rep #3	-.1234
27	Unk: GISC15-21711 07/12/2015 11:46:30 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1331**
Desv. Est.	.0027
% RSD	1.997
Rep #1	-.1309
Rep #2	-.1361
Rep #3	-.1324
28	Unk: GISC15-21727 07/12/2015 11:48:23 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1329**
Desv. Est.	.0008
% RSD	.5744
Rep #1	-.1337
Rep #2	-.1326
Rep #3	-.1323
29	Unk: GISC15-21728 07/12/2015 11:49:40 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1286**
Desv. Est.	.0024
% RSD	1.829
Rep #1	-.1260
Rep #2	-.1306
Rep #3	-.1293
30	Unk: GISC15-21737 07/12/2015 11:51:01 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1368**
Desv. Est.	.0026
% RSD	1.881
Rep #1	-.1386
Rep #2	-.1339
Rep #3	-.1379
31	Unk: GISC15-21738 07/12/2015 11:52:19 CONC x100

	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1281**
Desv. Est.	.0021
% RSD	1.622
Rep #1	-.1280
Rep #2	-.1302
Rep #3	-.1261
32	Unk: GISC15-21738-R 07/12/2015 11:53:42 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1397**
Desv. Est.	.0031
% RSD	2.230
Rep #1	-.1363
Rep #2	-.1425
Rep #3	-.1402
33	QC: QC 07/12/2015 12:09:14 CONC D Hg-151207: LACTEOS(UNAM):
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0059**
Desv. Est.	.0002
% RSD	3.185
Rep #1	.0057
Rep #2	.0059
Rep #3	.0060
Comprobació	Ninguno
Valor	
Intervalo	
34	Unk: GISC15-21739 07/12/2015 12:10:25 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1283**
Desv. Est.	.0019
% RSD	1.463
Rep #1	-.1263
Rep #2	-.1287
Rep #3	-.1300
35	Unk: GISC15-21794 07/12/2015 12:11:48 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1263**
Desv. Est.	.0015
% RSD	1.174
Rep #1	-.1279
Rep #2	-.1259
Rep #3	-.1251

36	Unk: GISC15-21857 07/12/2015 12:13:09 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	-.1244
Desv. Est.	.0027
% RSD	2.161
Rep #1	-.1275
Rep #2	-.1229
Rep #3	-.1229
37	Unk: GISC15-21858 07/12/2015 12:14:52 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	-.1320
Desv. Est.	.0010
% RSD	.7519
Rep #1	-.1318
Rep #2	-.1312
Rep #3	-.1331
38	Unk: GISC15-21859 07/12/2015 12:16:11 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	-.1310
Desv. Est.	.0014
% RSD	1.107
Rep #1	-.1302
Rep #2	-.1327
Rep #3	-.1301
39	Unk: GISC15-21860 07/12/2015 12:17:34 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	-.1251
Desv. Est.	.0017
% RSD	1.335
Rep #1	-.1262
Rep #2	-.1232
Rep #3	-.1259
40	Unk: GISC15-21885 07/12/2015 12:18:57 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	-.1225
Desv. Est.	.0041
% RSD	3.312
Rep #1	-.1195
Rep #2	-.1271
Rep #3	-.1210
41	Unk: GISC15-21886 07/12/2015 12:20:15 CONC x100

	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1352**
Desv. Est.	.0013
% RSD	.9913
Rep #1	-.1362
Rep #2	-.1337
Rep #3	-.1357
42	Unk: GISC15-22216 07/12/2015 12:21:45 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**-.1245**
Desv. Est.	.0015
% RSD	1.244
Rep #1	-.1240
Rep #2	-.1263
Rep #3	-.1233
43	QC: QC 07/12/2015 12:25:41 CONC D Hg-151207: LACTEOS(UNAM):
	Hg1942
Línea	194.227 {47
Unidades	mg/Kg
Media	**.0058**
Desv. Est.	.0003
% RSD	5.263
Rep #1	.0056
Rep #2	.0056
Rep #3	.0061
Comprobació	Ninguno
Valor	
Intervalo	

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA, S.A. DE C.V.

CONTENIDO

QUESO

GISENA ®
GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA S.A. DE C.V.
EMILIANO ZAPATA No. 10, SAN LUIS HUEXOTLA, TEXCOCO EDO. DE MEXICO
C.P. 56250 TEL: 01(595) 928 41 78, 01(595) 931 39 60 y 01(595) 931 39 61
TEL/FAX: 01(595) 928 40 77 E-mail: gisena@prodigy.net.mx

LABORATORIO DE RESIDUOS TÓXICOS

ema entidad mexicana de acreditación, a.c.

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005 Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: QUESO
Fecha de Recepción: 2015-11-05

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/11/05 (2)
Fecha de Analisis de Metales y Mercurio: 2015-12-09 2015-12-11
Fecha de Realización del Informe: 2015-12-11

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I001/15/0008	GISC15-21670
L-I001/15/0009	GISC15-21671
L-I001/15/0010	GISC15-21672
L-I002/15/0011	GISC15-21673
L-I002/15/0019	GISC15-21677
L-I003/15/0021	GISC15-21678
L-I004/15/0040	GISC15-21692
L-I005/15/0041	GISC15-21693
L-I005/15/0042	GISC15-21694
L-I005/15/0050	GISC15-21701
L-I006/15/0051	GISC15-21702
L-I006/15/0052	GISC15-21703
L-I006/15/0055	GISC15-21705
L-I006/15/0056	GISC15-21706
L-I007/15/0068	GISC15-21712
L-I007/15/0069	GISC15-21713
L-I008/15/0079	GISC15-21722
L-I008/15/0080	GISC15-21723
L-I009/15/0088	GISC15-21729
L-I020/15/0198	GISC15-21820

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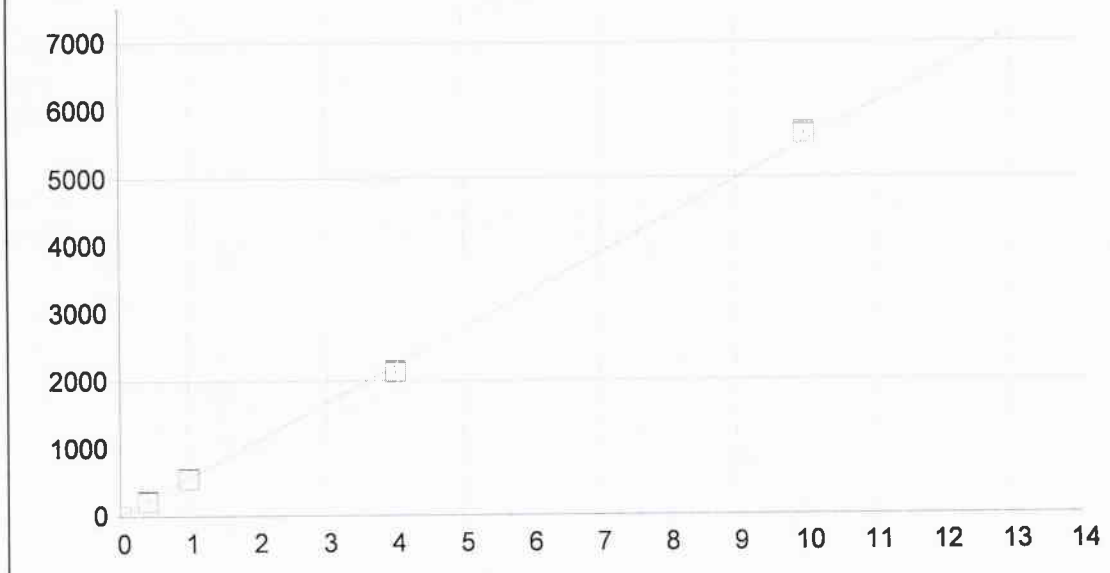
IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I025/15/0243	GISC15-21856
L-I030/15/0296	GISC15-21898
L-I030/15/0297	GISC15-21899
L-I030/15/0298	GISC15-21900
L-I031/05/0301	GISC15-21901
L-I038/15/0377	GISC15-21960
L-I038/15/0378	GISC15-21961
L-I038/15/0379	GISC15-21962
L-I038/15/0380	GISC15-21963
L-I041/15/0407	GISC15-21987
L-I053/15/0530	GISC15-22093
L-I065/15/0648	GISC15-22198
L-I065/15/0649	GISC15-22199
L-I066/15/0651	GISC15-22200
L-I066/15/0658	GISC15-22206

REVISÓ

Q.F.B.Leticia Velázquez Méndez
Gerente Técnico

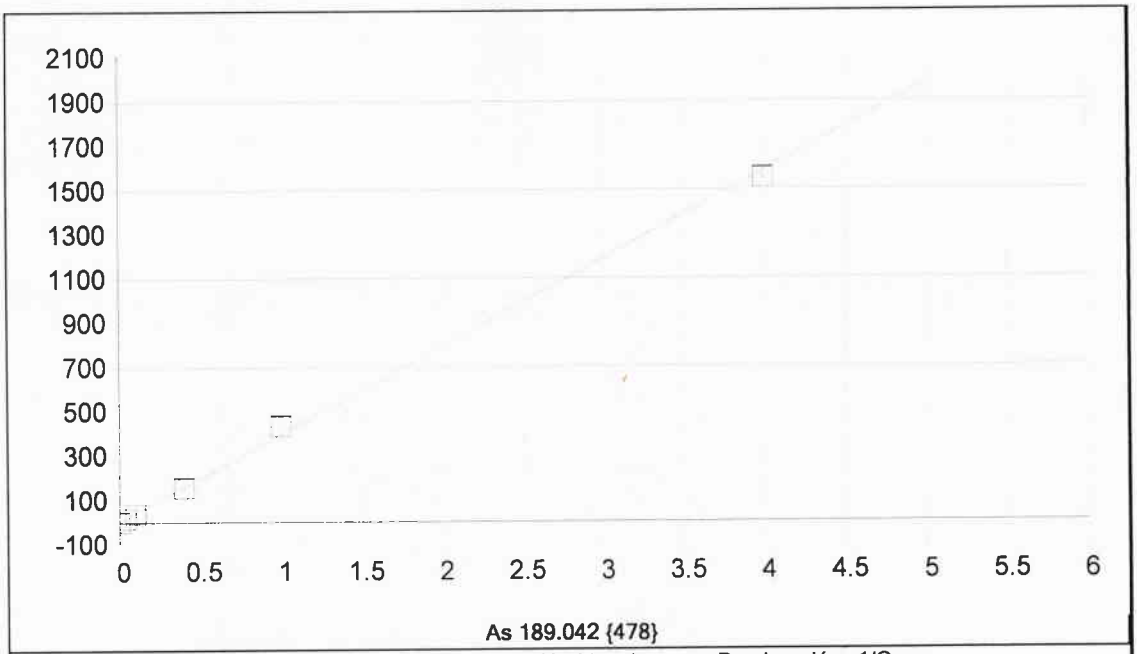


Al 396.152 { 85}

Fecha de la 09/12/2015 12:00:21 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	9.735451	Reajustar P	1.000000
A1 (Ganancia)	552.104749	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999576	Estatus:	OK.
Error Estándar de Est:	1.628892		
MDL:	0.015210		
MQL:	0.050701		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00004	.000	.000	9.7583	1.55	1
STD 5	.40000	.37462	-.025	-6.35	216.56	8.08	1
STD 6	1.0000	.97981	-.020	-2.02	550.69	3.68	1
STD 7	4.0000	3.8365	-.164	-4.09	2127.9	13.0	1
STD 8	10.000	10.209	.209	2.09	5646.2	22.6	1

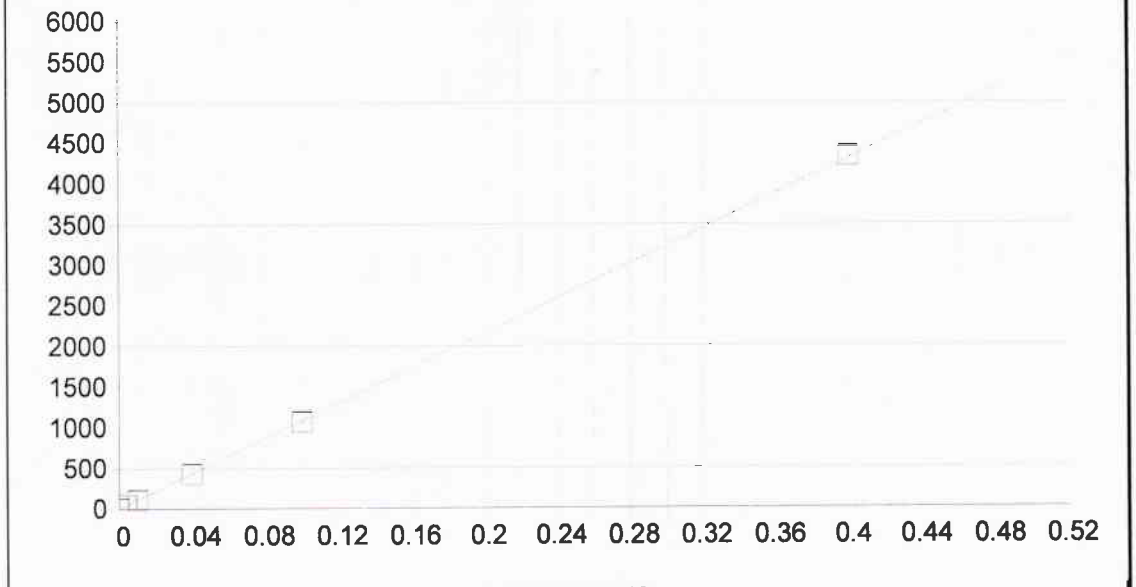


As 189.042 {478}

Fecha de la 09/12/2015 11:57:39 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	0.644309	Reajustar P	1.000000
A1 (Ganancia)	395.667967	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999031	Estatus:	OK.
Error Estándar de Est:	0.317448		
MDL:	0.002267		
MQL:	0.007557		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.64512	.712	1
STD 4	.10000	.09450	-.005	-5.50	38.036	.067	1
STD 5	.40000	.38968	-.010	-2.58	154.83	1.21	1
STD 6	1.0000	1.0931	.093	9.31	433.16	1.79	1
STD 7	4.0000	3.9245	-.076	-1.89	1553.4	2.55	1
STD 3	.04000	.03821	-.002	-4.48	15.762	.623	1

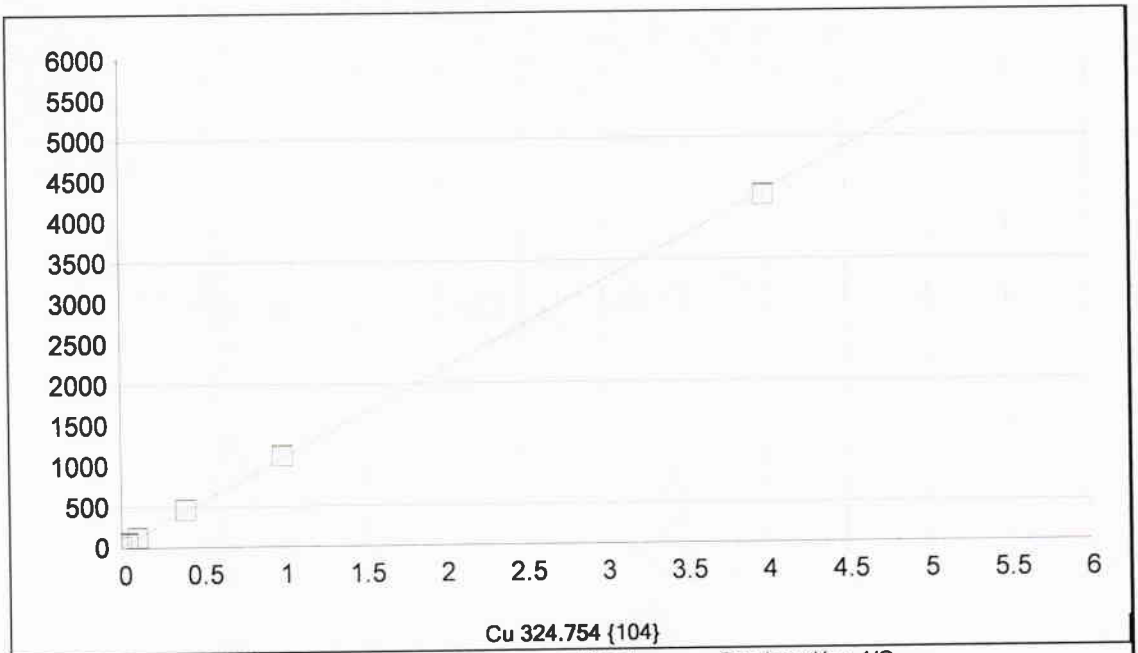


Cd 226.502 {449}

Fecha de la	09/12/2015 11:53:09	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	5.138870	Reajustar P	1.000000
A1 (Ganancia)	10758.02178	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999962	Estatus:	OK.
Error Estándar de Est:	0.171739		
MDL:	0.000134		
MQL:	0.000446		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	5.1412	1.20	1
STD 1	.00400	.00396	-.000	-1.01	47.736	1.42	1
STD 2	.01000	.00978	-.000	-2.20	110.35	1.31	1
STD 3	.04000	.03938	-.001	-1.55	428.80	1.40	1
STD 4	.10000	.09873	-.001	-1.27	1067.3	3.95	1
STD 5	.40000	.40215	.002	.538	4331.5	14.3	1

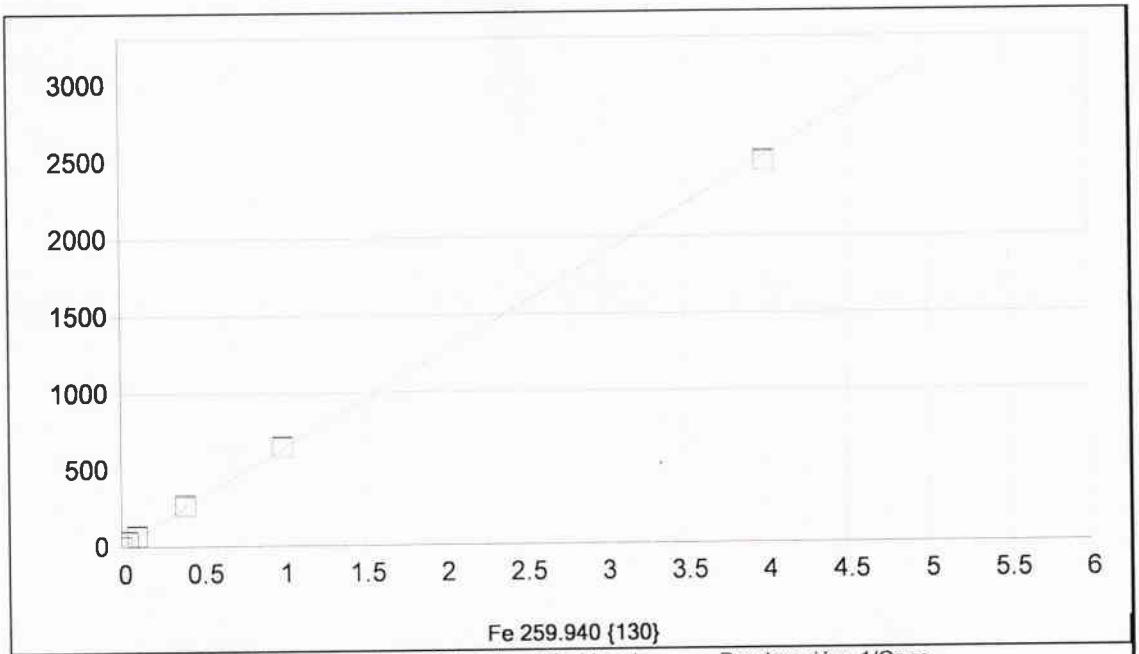


Cu 324.754 {104}

Fecha de la 09/12/2015 11:57:39 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	12.291640	Reajustar P	1.000000
A1 (Ganancia)	1080.041487	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999839	Estatus:	OK.
Error Estándar de Est:	0.352638		
MDL:	0.004268		
MQL:	0.014228		

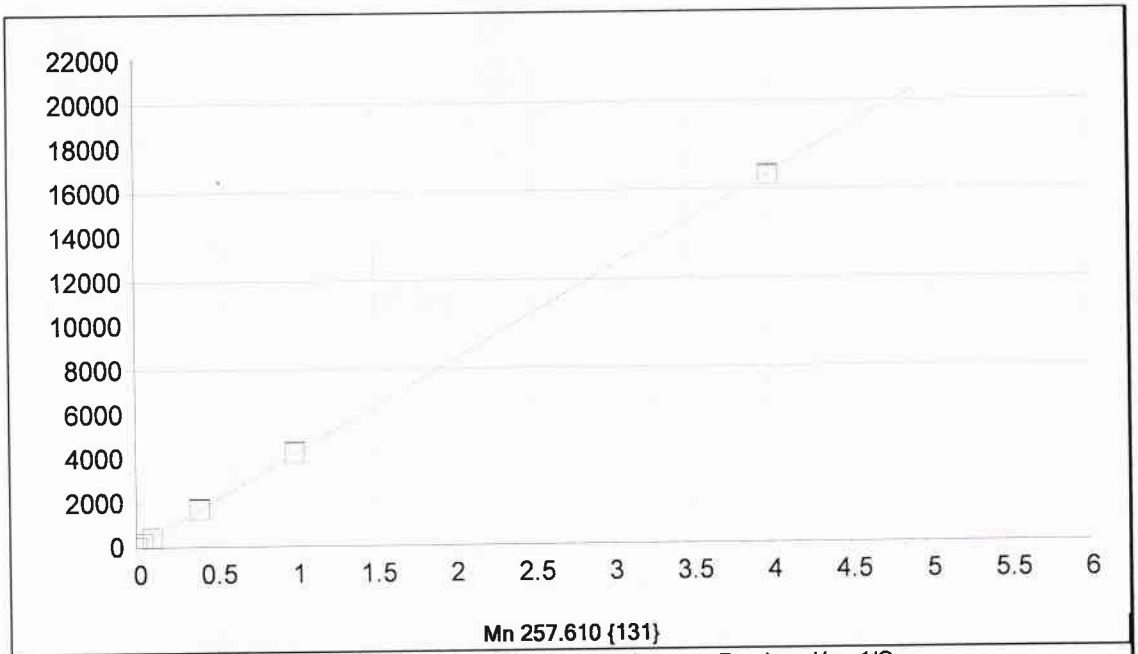
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	12.288	1.67	1
STD 5	.40000	.41509	.015	3.77	460.60	2.38	1
STD 6	1.0000	1.0254	.025	2.54	1119.8	6.33	1
STD 7	4.0000	3.9563	-.044	-1.09	4285.3	11.0	1
STD 3	.04000	.04023	.000	.563	55.736	4.43	1
STD 4	.10000	.10292	.003	2.92	123.45	2.26	1



Fecha de la 09/12/2015 11:57:39 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	1.928981	Reajustar P	1.000000
A1 (Ganancia)	630.101912	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999573	Estatus:	OK.
Error Estándar de Est:	0.335558		
MDL:	0.003574		
MQL:	0.011915		

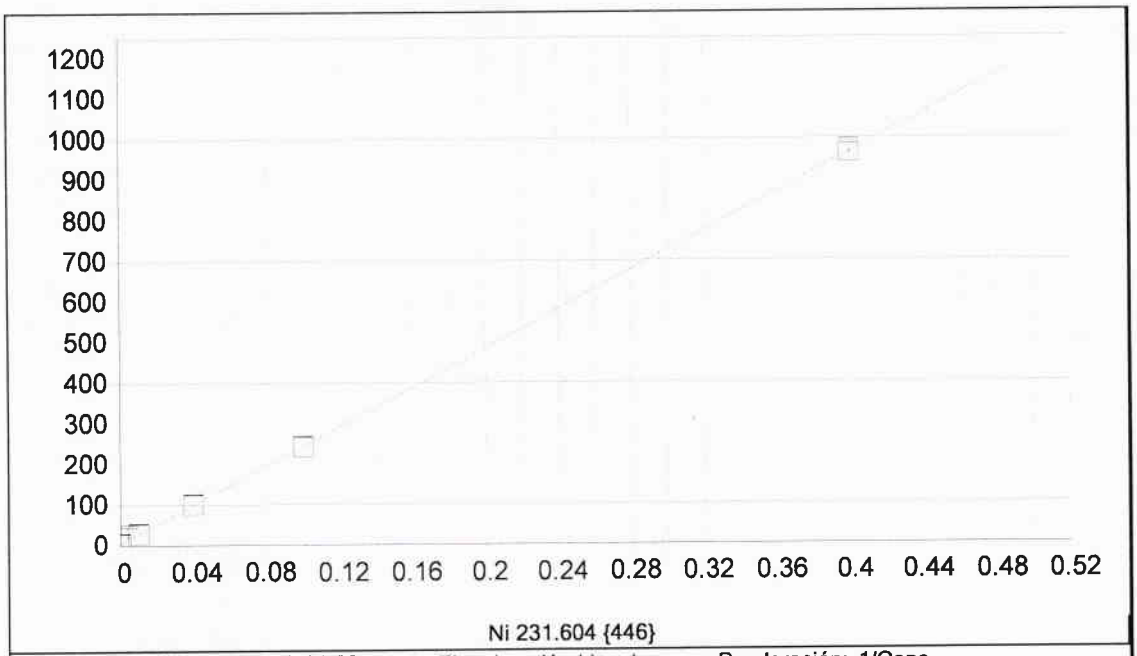
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00001	-.000	.000	1.9200	1.06	1
STD 5	.40000	.41939	.019	4.85	266.19	5.42	1
STD 6	1.0000	1.0192	.019	1.92	644.15	2.00	1
STD 3	.04000	.04949	.009	23.7	33.110	2.02	1
STD 4	.10000	.10651	.007	6.51	69.043	2.40	1
STD 7	4.0000	3.9454	-.055	-1.37	2487.9	5.35	1



Fecha de la 09/12/2015 11:57:39 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	3.692602	Reajustar P	1.000000
A1 (Ganancia)	4177.353131	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999951	Estatus:	OK.
Error Estándar de Est:	0.755397		
MDL:	0.000596		
MQL:	0.001985		

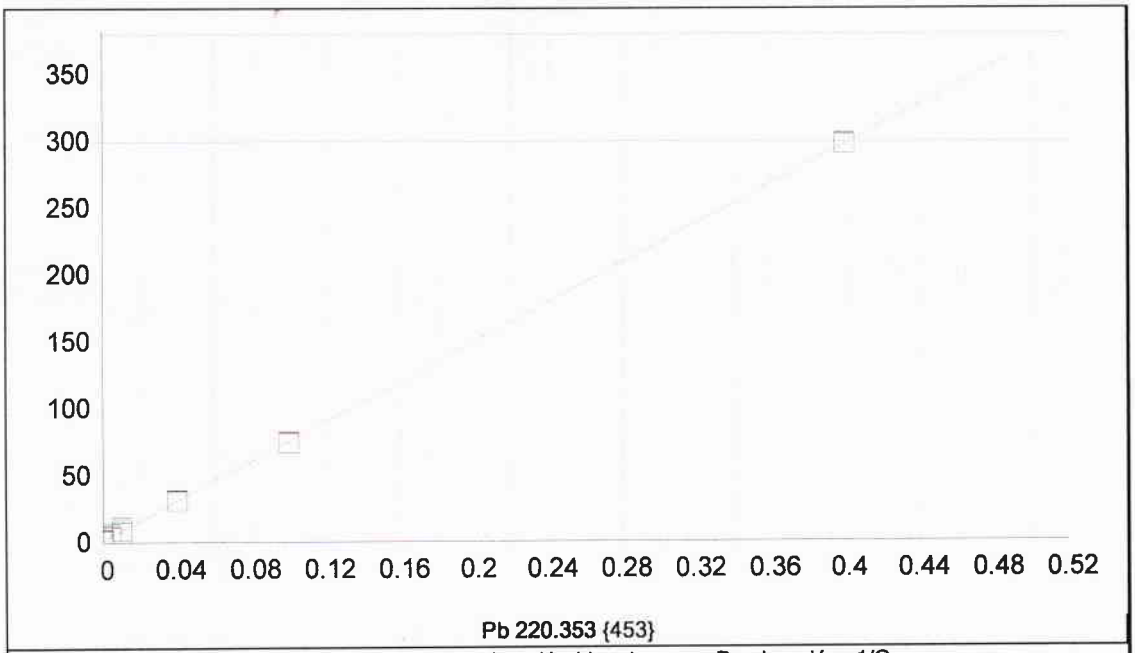
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	3.6833	3.33	1
STD 5	.40000	.40611	.006	1.53	1700.1	15.3	1
STD 6	1.0000	1.0165	.016	1.65	4249.9	9.47	1
STD 3	.04000	.04064	.001	1.59	173.44	4.64	1
STD 4	.10000	.10140	.001	1.40	427.27	2.19	1
STD 7	4.0000	3.9754	-.025	-.615	16610.	31.7	1



Fecha de la 09/12/2015 12:01:09 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	3.687586	Reajustar P	1.000000
A1 (Ganancia)	2405.437810	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999993	Estatus:	OK.
Error Estándar de Est:	0.017198		
MDL:	0.000537		
MQL:	0.001791		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	3.6874	1.34	1
STD 1	.00400	.00755	.004	88.6	21.837	3.24	0
STD 2	.01000	.01025	.000	2.54	28.352	.790	1
STD 3	.04000	.04009	.000	.233	100.13	1.21	1
STD 4	.10000	.09968	-.000	-.319	243.46	1.16	1
STD 5	.40000	.39997	-.000	-.007	965.80	6.53	1

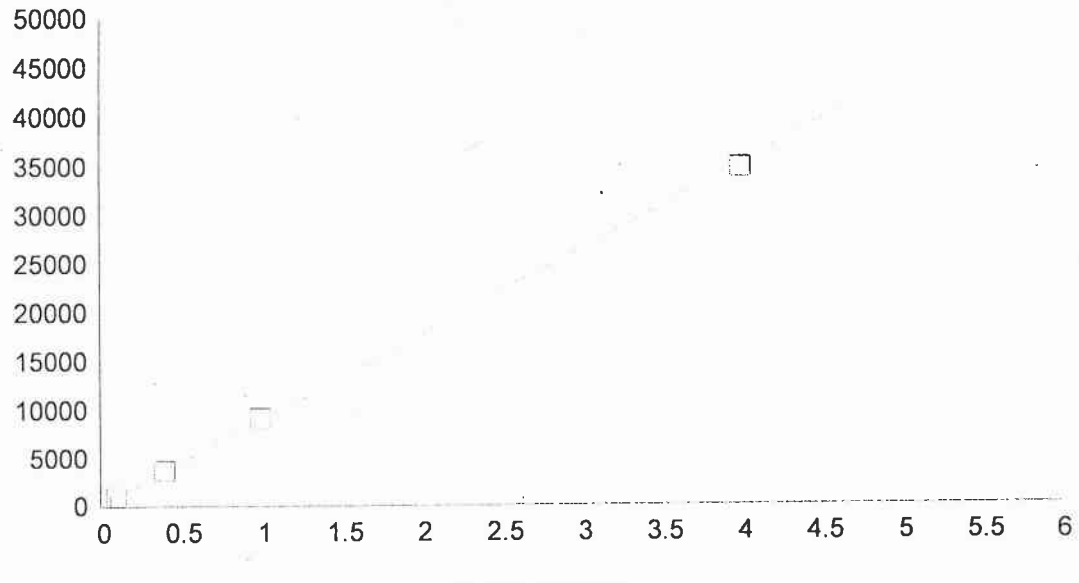


Pb 220.353 {453}

Fecha de la	09/12/2015 11:53:09	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	1.412778	Reajustar P	1.000000
A1 (Ganancia)	741.201753	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999881	Estatus:	OK.
Error Estándar de Est:	0.020859		
MDL:	0.001641		
MQL:	0.005470		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	1.4122	.438	1
STD 1	.00400	.00465	.001	16.2	4.8579	1.31	1
STD 2	.01000	.01031	.000	3.13	9.0569	1.87	1
STD 3	.04000	.04001	.000	.033	31.071	.358	1
STD 4	.10000	.09870	-.001	-1.30	74.567	.451	1
STD 5	.40000	.40033	.000	.082	298.14	.626	1



Zn 213.856 {458}

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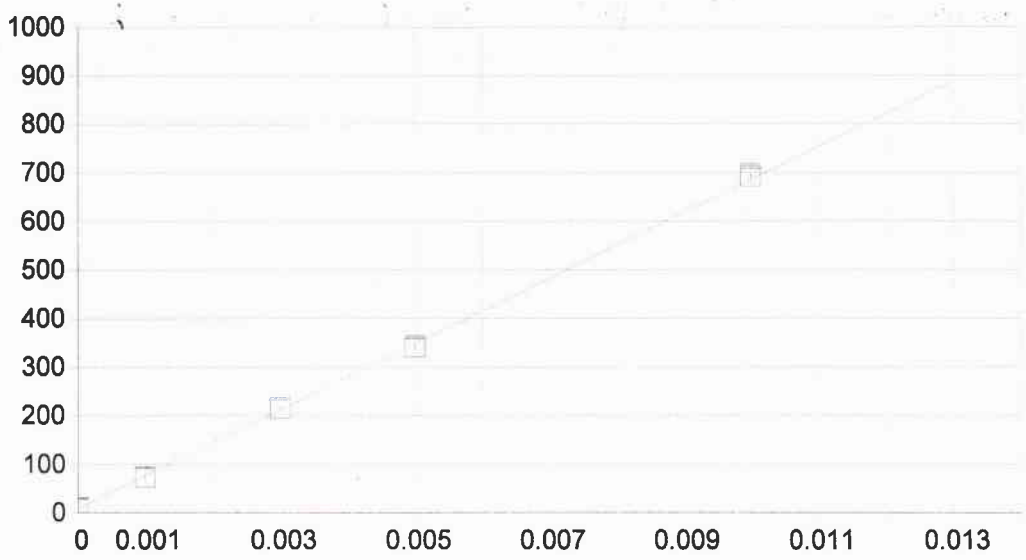
A0 (Compensación):	34.221353	Reajustar P	1.000000
A1 (Ganancia)	8840.869149	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999725	Estatus:	OK.
Error Estándar de Est:	6.276154		
MDL:	0.000132		
MQL:	0.000441		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00001	-.000	.000	34.136	3.11	1
STD 4	.10000	.10280	.003	2.80	943.05	1.45	1
STD 5	.40000	.41886	.019	4.72	3737.3	16.0	1
STD 6	1.0000	1.0353	.035	3.53	9187.3	12.0	1
STD 7	4.0000	3.9430	-.057	-1.42	34894.	34.8	1



Hg **194.227** {474}

Fecha de la	11/12/2015 10:28:16	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	8.895948		Reajustar P	1.000000	
A1 (Ganancia)	67611.63430		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999815		Estatus:	OK.	
Error Estándar de Est:	0.231127				
MDL:	0.000029				
MQL:	0.000097				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	8.8995	1.44	1
STD 1	.00100	.00094	-.000	-5.96	72.477	2.05	1
STD 2	.00300	.00304	.000	1.46	214.69	2.51	1
STD 3	.00500	.00491	-.000	-1.83	340.77	3.40	1
STD 4	.01000	.01011	.000	1.07	692.27	4.11	1

Análisis: ***METALES PESADOS POR ICP-OES***
Lote analítico: DMP-QUESO-151209
Fecha de Análisis: 09/12/2015
Fecha de Reporte: 09/12/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÓN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.0100
NIVEL 5	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000									
NIVEL 9										
Correlación	0.9996	0.9990	0.9999	0.9998	0.9995	0.9999	0.9999	0.9999	0.9997	0.9998

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
1	QC:QC	Aluminio	0.4000	0.3969	99	28	QC:QC	Aluminio	0.4000	0.375	94
		Arsénico	0.4000	0.4064	102			Arsénico	0.4000	0.409	102
		Cadmio	0.4000	0.4261	107			Cadmio	0.4000	0.4266	107
		Cobre	0.4000	0.4295	107			Cobre	0.4000	0.4225	106
		Fierro	0.4000	0.4274	107			Fierro	0.4000	0.4325	108
		Manganeso	0.4000	0.4305	108			Manganes	0.4000	0.4302	108
		Níquel	0.4000	0.4166	104			Níquel	0.4000	0.4167	104
		Plomo	0.4000	0.4246	106			Plomo	0.4000	0.4258	106
		Zinc	0.4000	0.4397	110			Zinc	0.4000	0.4447	111
16	QC:QC	Aluminio	0.4000	0.3824	96	39	QC:QC	Aluminio	0.4000	0.3893	97
		Arsénico	0.4000	0.4028	101			Arsénico	0.4000	0.4023	101
		Cadmio	0.4000	0.4215	105			Cadmio	0.4000	0.4251	106
		Cobre	0.4000	0.4203	105			Cobre	0.4000	0.4227	106
		Fierro	0.4000	0.4168	104			Fierro	0.4000	0.4264	107
		Manganeso	0.4000	0.4212	105			Manganes	0.4000	0.4276	107
		Níquel	0.4000	0.4126	103			Níquel	0.4000	0.4137	103
		Plomo	0.4000	0.4199	105			Plomo	0.4000	0.4223	106
		Zinc	0.4000	0.4340	109			Zinc	0.4000	0.43	108

Análisis: ***METALES PESADOS POR ICP-OES***
Lote analítico: DMP-QUESO-151209
Fecha de Análisis: 09/12/2015
Fecha de Reporte: 09/12/2015

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/kg		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
6	QC:QC	Mercurio	0.005	0.005	100	8	Recuperación	Mercurio	0.5	0.5122	102
20	QC:QC	Mercurio	0.005	0.0051	102						
31	QC:QC	Mercurio	0.005	0.0052	104						
42	QC:QC	Mercurio	0.005	0.0052	104						

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I. Gaudencio Vargas Espejel
ELABORÓ

Q.F.B. Leticia Velázquez Méndez
REVISÓ

PACE/GIS/I02-F01

GISENA®

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Peso de muestra (g) Metales	Hg
GISC15-21670	Queso		05/11/2015	0.5025	0.5009
GISC15-21671	Queso		05/11/2015	0.5056	0.5041
GISC15-21672	Queso		05/11/2015	0.5015	0.5017
GISC15-21673	Queso		05/11/2015	0.5053	0.5001
GISC15-21677	Jamoncillo		05/11/2015	0.5007	0.5025
GISC15-21678	Jamoncillo		05/11/2015	0.5047	0.5063
GISC15-21692	Queso		05/11/2015	0.5032	0.5018
GISC15-21693	Queso		05/11/2015	0.5086	0.5008
GISC15-21694	Queso		05/11/2015	0.5050	0.5505
GISC15-21701	Jamoncillo		05/11/2015	0.5075	0.5043
GISC15-21702	Jamoncillo		05/11/2015	0.5067	0.5053
GISC15-21703	Jamoncillo		05/11/2015	0.5025	0.5029
GISC15-21705	Queso		05/11/2015	0.5073	0.5047
GISC15-21706	Queso		05/11/2015	0.5020	0.5049
GISC15-21712	Queso		05/11/2015	0.5050	0.5034
GISC15-21713	Queso		05/11/2015	0.5080	0.5058
GISC15-21722	Queso		05/11/2015	0.5088	0.5056
GISC15-21723	Queso		05/11/2015	0.5027	0.5043
GISC15-21729	Queso		05/11/2015	0.5076	0.5026
GISC15-21820	Queso		05/11/2015	0.5079	0.5084
GISC15-21856	Queso		05/11/2015	0.5096	0.5054
GISC15-21898	Queso		05/11/2015	0.5000	0.5099
GISC15-21899	Queso		05/11/2015	0.5027	0.5038
GISC15-21900	Queso		05/11/2015	0.5021	0.5011
GISC15-21901	Queso		05/11/2015	0.5064	0.5033
GISC15-21960	Queso		05/11/2015	0.5019	0.5064
GISC15-21961	Queso		05/11/2015	0.5024	0.5069
GISC15-21962	Queso		05/11/2015	0.5059	0.5061
GISC15-21963	Queso		05/11/2015	0.5083	0.5030
GISC15-21987	Queso		05/11/2015	0.5080	0.5070
GISC15-22093	Queso		05/11/2015	0.5017	0.5018
GISC15-22198	Queso		05/11/2015	0.5058	0.5054
GISC15-22199	Queso		05/11/2015	0.5086	0.5051
GISC15-22200	Queso		05/11/2015	0.5059	0.5091
GISC15-22206	Queso		05/11/2015	0.5013	0.5019

R.A.

I.B.T. Reyna Ivette Delgado

Q.F.B. Leticia Velazquez Mendez

1	Cal: Blanco 09/12/2015 11:36:05 IR D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**9.758**	**.6451**	**5.141**	**12.29**	**1.920**	**3.683**	**3.687**	**1.412**	**34.14**
Desv. Est.	1.552	.7120	1.205	1.67	1.055	3.329	1.344	.438	3.11
% RSD	15.91	110.4	23.43	13.62	54.95	90.39	36.45	31.02	9.104
Rep #1	11.45	1.432	5.416	14.06	1.800	3.075	5.233	1.693	31.28
Rep #2	8.400	.0456	3.823	10.74	.9300	.7000	3.035	1.636	33.69
Rep #3	9.425	.4577	6.185	12.06	3.030	7.275	2.794	.9075	37.44

2	Cal: STD 1 09/12/2015 11:38:31 IR D MP-151209: UNAM(QUESO):		
	Cd2265	Ni2316	Pb2203
Línea	226.502 {44	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s
Media	**47.74**	**21.84**	**4.858**
Desv. Est.	1.42	3.24	1.312
% RSD	2.965	14.84	27.00
Rep #1	47.17	18.10	3.580
Rep #2	49.35	23.75	6.200
Rep #3	46.69	23.67	4.794

3	Cal: STD 2 09/12/2015 11:40:55 IR D MP-151209: UNAM(QUESO):		
	Cd2265	Ni2316	Pb2203
Línea	226.502 {44	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s
Media	**110.4**	**28.35**	**9.057**
Desv. Est.	1.3	.79	1.871
% RSD	1.189	2.786	20.66
Rep #1	110.2	27.89	11.21
Rep #2	111.7	29.26	8.094
Rep #3	109.1	27.90	7.863

4	Cal: STD 3 09/12/2015 11:43:20 IR D MP-151209: UNAM(QUESO):						
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**15.76**	**428.8**	**55.74**	**33.11**	**173.4**	**100.1**	**31.07**
Desv. Est.	.62	1.4	4.43	2.02	4.6	1.2	.36
% RSD	3.952	.3259	7.946	6.096	2.677	1.206	1.153
Rep #1	16.32	428.9	52.34	35.44	172.5	100.0	31.24
Rep #2	15.89	430.1	54.12	31.99	169.3	101.4	31.31
Rep #3	15.09	427.4	60.75	31.90	178.5	98.98	30.66

5	Cal: STD 4 09/12/2015 11:48:42 IR D MP-151209: UNAM(QUESO):							
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**38.04**	**1067.**	**123.4**	**69.04**	**427.3**	**243.5**	**74.57**	**943.1**
Desv. Est.	.07	4.	2.3	2.40	2.2	1.2	.45	1.5
% RSD	.1753	.3701	1.834	3.469	.5120	.4766	.6046	.1541
Rep #1	38.10	1064.	120.9	71.58	429.8	243.5	74.05	943.8
Rep #2	37.97	1066.	125.3	68.73	426.1	244.6	74.78	944.0
Rep #3	38.04	1072.	124.1	66.82	426.0	242.3	74.87	941.4

6	Cal: STD 5 09/12/2015 11:51:00 IR D MP-151209: UNAM(QUESO):							
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138

Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**216.6**	**154.8**	**4331.**	**460.6**	**266.2**	**1700.**	**965.8**	**298.1**	**3737.**
Desv. Est.	8.1	1.2	14.	2.4	5.4	15.	6.5	.6	16.
% RSD	3.733	.7834	.3291	.5159	2.034	.8987	.6762	.2100	.4289
Rep #1	214.8	154.3	4315.	457.9	264.4	1683.	966.3	298.2	3736.
Rep #2	209.5	156.2	4342.	461.5	272.3	1709.	972.1	298.7	3754.
Rep #3	225.4	153.9	4338.	462.4	261.9	1709.	959.0	297.5	3722.

7	Cal: STD 6 09/12/2015 11:53:20 IR D MP-151209: UNAM(QUESO):					
	Al3961	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	396.152 { 85	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**550.7**	**433.2**	**1120.**	**644.1**	**4250.**	**9187.**
Desv. Est.	3.7	1.8	6.	2.0	9.	12.
% RSD	.6676	.4139	.5653	.3101	.2229	.1303
Rep #1	550.3	431.2	1122.	645.6	4255.	9174.
Rep #2	554.6	433.5	1113.	641.9	4239.	9197.
Rep #3	547.3	434.8	1125.	645.0	4256.	9191.

8	Cal: STD 7 09/12/2015 11:55:36 IR D MP-151209: UNAM(QUESO):					
	Al3961	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	396.152 { 85	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**2128.**	**1553.**	**4285.**	**2488.**	**16610.**	**34890.**
Desv. Est.	13.	3.	11.	5.	32.	35.
% RSD	.6115	.1642	.2569	.2150	.1910	.0996
Rep #1	2114.	1551.	4296.	2483.	16580.	34930.
Rep #2	2129.	1556.	4285.	2494.	16610.	34900.
Rep #3	2140.	1554.	4274.	2486.	16640.	34860.

9	Cal: STD 8 09/12/2015 11:58:15 IR D MP-151209: UNAM(QUESO):
	Al3961
Línea	396.152 { 85
Unidades	Cts/s
Media	**5646.**
Desv. Est.	23.
% RSD	.4001
Rep #1	5660.
Rep #2	5659.
Rep #3	5620.

1	QC: QC 09/12/2015 12:02:13 CONC D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.3969**	**.4064**	**.4261**	**.4295**	**.4274**	**.4305**	**.4166**	**.4246**	**.4397**
Desv. Est.	.0125	.0035	.0024	.0021	.0048	.0032	.0027	.0014	.0018
% RSD	3.153	.8723	.5568	.4933	1.113	.7483	.6499	.3391	.4194
Rep #1	.3904	.4096	.4281	.4276	.4220	.4312	.4192	.4254	.4399
Rep #2	.3890	.4069	.4266	.4292	.4291	.4269	.4168	.4255	.4414
Rep #3	.4114	.4026	.4235	.4318	.4310	.4332	.4138	.4230	.4377
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

2	Unk: BLANCO 09/12/2015 12:04:56 CONC D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**<.0000**	**.0002**	**.0000**	**<.0000**	**.0040**	**.0004**	**.0004**	**.0004**	**.0000**
Desv. Est.	.0085	.0011	.0002	.0023	.0004	.0007	.0003	.0007	.0004
% RSD	75.89	568.2	767.7	58.30	9.039	185.1	78.56	188.1	17430.
Rep #1	-.0071	.0005	-.0001	-.0020	.0044	.0003	.0002	.0011	-.0003
Rep #2	-.0209	.0011	-.0000	-.0065	.0041	-.0003	.0002	.0004	-.0001
Rep #3	-.0055	-.0010	.0002	-.0035	.0037	.0011	.0007	-.0003	.0005
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

3	Unk: RECUPERACION 09/12/2015 12:07:31 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**40.33**	**41.59**	**44.12**	**43.11**	**43.84**	**44.43**	**42.33**	**43.59**	**44.54**
Desv. Est.	.47	.21	.09	.71	.37	.23	.16	.14	.08
% RSD	1.168	.5095	.2050	1.642	.8404	.5274	.3663	.3243	.1816
Rep #1	40.14	41.73	44.13	43.28	44.26	44.28	42.49	43.60	44.62
Rep #2	40.87	41.69	44.03	43.72	43.64	44.31	42.31	43.44	44.55
Rep #3	39.99	41.34	44.21	42.33	43.60	44.70	42.18	43.73	44.46
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

4	Blanco: REACTIVO 09/12/2015 12:10:12 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-.8849**	**-.0160**	**-.0096**	**-.1815**	**1.669**	**.0534**	**.2942**	**-.0520**	**.4840**
Desv. Est.	1.697	.2770	.0041	.0792	.671	.0279	.0937	.2112	.1344
% RSD	191.8	1733.	42.97	43.67	40.22	52.19	31.84	406.3	27.78
Rep #1	.7090	-.0688	-.0053	-.2631	1.506	.0307	.1864	.1162	.3315
Rep #2	-.6947	.2836	-.0100	-.1764	1.094	.0846	.3560	.0169	.5352
Rep #3	-2.669	-.2628	-.0135	-.1049	2.406	.0451	.3401	-.2890	.5853

5	Unk: GISC15-21670 09/12/2015 12:12:51 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**7.850**	**1.151**	**<.0000**	**.3803**	**1.920**	**.0972**	**<.0000**	**.1164**	**18.60**
Desv. Est.	.365	.201	.0099	.0934	.366	.0688	.0396	.0797	.17
% RSD	4.647	17.45	28.24	24.57	19.06	70.79	13.63	68.48	.9070
Rep #1	8.028	1.234	-.0314	.4099	1.499	.0461	-.2855	.2074	18.54
Rep #2	7.431	1.297	-.0461	.2757	2.166	.0700	-.2540	.0587	18.47
Rep #3	8.092	.9218	-.0273	.4554	2.094	.1754	-.3327	.0831	18.79
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

6	Unk: GISC15-21670-R 09/12/2015 12:15:15 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**8.377**	**1.256**	**<.0000**	**<.0000**	**2.436**	**.0908**	**<.0000**	**.1578**	**20.27**
Desv. Est.	.776	.168	.0048	.4801	.402	.0311	.0608	.1947	.42
% RSD	9.261	13.35	13.06	1592.	16.51	34.29	23.15	123.4	2.084
Rep #1	8.599	1.428	-.0315	-.4688	2.626	.0598	-.3265	.3754	20.39
Rep #2	9.018	1.093	-.0404	.4827	2.707	.1221	-.2054	-.0000	20.61
Rep #3	7.514	1.248	-.0393	-.1044	1.974	.0904	-.2562	.0980	19.80
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

7	Unk: GISC15-21671 09/12/2015 12:17:41 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.978**	**.5562**	**<.0000**	**.1763**	**.5306**	**.0347**	**<.0000**	**.1009**	**4.086**
Desv. Est.	5.476	.5394	.0120	.2856	2.584	.1018	.0171	.0288	7.949
% RSD	110.0	96.97	35.08	161.9	486.9	293.3	5.149	28.59	194.6
Rep #1	7.089	1.165	-.0232	.0215	1.898	.0808	-.3124	.1059	13.26
Rep #2	9.084	.1387	-.0471	.0017	2.144	.1053	-.3404	.0699	-.2341
Rep #3	-1.240	.3647	-.0326	.5059	-2.449	-.0820	-.3434	.1269	-.7683
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

8	Unk: GISC15-21672 09/12/2015 12:19:22 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**5.314**	**.8851**	**<.0000**	**<.0000**	**2.648**	**.1185**	**<.0000**	**.0528**	**10.55**
Desv. Est.	.674	.3506	.0033	.4214	.193	.0416	.0409	.0599	.07
% RSD	12.68	39.61	8.712	190.3	7.285	35.13	12.36	113.4	.7049
Rep #1	6.014	.5958	-.0359	-.0038	2.534	.0874	-.2863	.0235	10.56
Rep #2	4.671	.7845	-.0359	.0467	2.539	.1658	-.3667	.1218	10.61
Rep #3	5.256	1.275	-.0416	-.7070	2.870	.1023	-.3393	.0132	10.47
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

9	Unk: GISC15-21673 09/12/2015 12:21:38 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg

Media	**4.017**	**.7441**	**<.0000**	**.0706**	**3.822**	**.1438**	**<.0000**	**.0973**	**12.33**
Desv. Est.	.503	.1275	.0088	.1016	.237	.0365	.0155	.0501	.05
% RSD	12.53	17.13	21.08	144.0	6.205	25.40	6.229	51.46	.4332
Rep #1	3.616	.6910	-.0334	.1439	3.561	.1065	-.2325	.0887	12.38
Rep #2	3.852	.6517	-.0406	.1132	3.880	.1454	-.2524	.1512	12.27
Rep #3	4.582	.8895	-.0508	-.0455	4.024	.1795	-.2631	.0522	12.35
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

10	Unk: GISC15-21677 09/12/2015 12:24:03 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.014**	**.1640**	**<.0000**	**.0715**	**7.036**	**.1285**	**<.0000**	**.0342**	**5.180**
Desv. Est.	1.432	.0276	.0089	.0351	.381	.0186	.0169	.1592	.028
% RSD	47.52	16.85	26.39	49.12	5.413	14.48	19.80	465.2	.5308
Rep #1	2.391	.1452	-.0441	.0711	6.748	.1107	-.0715	-.0472	5.150
Rep #2	4.652	.1511	-.0301	.0366	7.468	.1269	-.1043	-.0678	5.187
Rep #3	1.999	.1957	-.0274	.1069	6.894	.1478	-.0805	.2176	5.204
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

11	Unk: GISC15-21678 09/12/2015 12:26:24 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.932**	**.0381**	**<.0000**	**<.0000**	**8.371**	**.2143**	**<.0000**	**.1745**	**6.593**
Desv. Est.	1.078	.1525	.0096	.5081	.129	.0198	.0291	.1317	.093
% RSD	36.77	400.3	27.13	1012.	1.538	9.231	385.4	75.44	1.417
Rep #1	3.702	-.0609	-.0322	-.5126	8.265	.2131	-.0320	.0833	6.496
Rep #2	3.394	-.0385	-.0461	.4937	8.514	.1951	.0247	.3254	6.600
Rep #3	1.700	.2137	-.0277	-.1317	8.333	.2346	-.0154	.1149	6.682
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

12	Unk: GISC15-21692 09/12/2015 12:28:45 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.789**	**.6766**	**<.0000**	**<.0000**	**2.301**	**.0395**	**<.0000**	**1.058**	**14.63**
Desv. Est.	.543	.1974	.0063	.3100	.336	.0327	.0238	.147	.12
% RSD	14.33	29.18	20.41	162.1	14.59	82.67	8.137	13.89	.8418
Rep #1	4.308	.7160	-.0330	.1557	2.528	.0377	-.2799	1.152	14.69
Rep #2	3.832	.4625	-.0239	-.2883	2.459	.0730	-.2777	.8889	14.71
Rep #3	3.225	.8514	-.0361	-.4411	1.915	.0078	-.3200	1.134	14.49
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

13	Unk: GISC15-21693 09/12/2015 12:31:03 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**6.078**	**.9072**	**<.0000**	**.1633**	**2.584**	**.1484**	**<.0000**	**2.132**	**12.50**

Desv. Est.	.650	.3322	.0096	.2004	.168	.0467	.0210	.080	.12
% RSD	10.69	36.61	30.22	122.7	6.512	31.49	10.75	3.734	.9683
Rep #1	6.826	1.196	-.0248	.3506	2.648	.1323	-.2071	2.206	12.62
Rep #2	5.747	.9808	-.0426	-.0480	2.710	.1119	-.1712	2.144	12.50
Rep #3	5.659	.5445	-.0276	.1873	2.393	.2011	-.2080	2.048	12.38
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

14	Unk: GISC15-21694 09/12/2015 12:33:19 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**5.587**	**1.102**	**<.0000**	**.1993**	**2.730**	**.1251**	**<.0000**	**.9249**	**16.73**
Desv. Est.	.804	.066	.0059	.2175	.112	.0117	.0260	.0841	.02
% RSD	14.39	5.960	14.49	109.1	4.115	9.339	14.61	9.093	.1237
Rep #1	5.449	1.174	-.0345	.3767	2.820	.1137	-.1514	.9083	16.76
Rep #2	4.862	1.087	-.0462	-.0433	2.604	.1245	-.2033	1.016	16.73
Rep #3	6.451	1.046	-.0409	.2647	2.766	.1370	-.1781	.8503	16.71
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

15	Unk: GISC15-21701 09/12/2015 12:35:41 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.269**	**.6694**	**<.0000**	**.0268**	**14.79**	**.1386**	**<.0000**	**.2101**	**4.203**
Desv. Est.	.202	.1881	.0157	.2062	.34	.0107	.0563	.1236	.052
% RSD	4.742	28.10	58.17	769.5	2.320	7.726	21.02	58.85	1.246
Rep #1	4.256	.8606	-.0441	.1427	15.04	.1263	-.2473	.2256	4.263
Rep #2	4.477	.6629	-.0135	.1490	14.95	.1448	-.3314	.0794	4.167
Rep #3	4.073	.4846	-.0231	-.2113	14.40	.1448	-.2246	.3252	4.178
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

16	QC: QC 09/12/2015 12:39:42 CONC D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.3824**	**.4028**	**.4215**	**.4203**	**.4168**	**.4212**	**.4126**	**.4199**	**.4340**
Desv. Est.	.0051	.0033	.0015	.0052	.0093	.0038	.0009	.0011	.0007
% RSD	1.339	.8181	.3474	1.231	2.237	.8908	.2160	.2598	.1699
Rep #1	.3774	.4060	.4232	.4261	.4256	.4254	.4135	.4208	.4347
Rep #2	.3876	.4029	.4208	.4187	.4178	.4202	.4117	.4187	.4332
Rep #3	.3822	.3994	.4206	.4161	.4070	.4181	.4127	.4201	.4340
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

17	Unk: GISC15-21702 09/12/2015 12:41:08 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.317**	**.4169**	**<.0000**	**.1690**	**37.89**	**.3473**	**<.0000**	**.3090**	**8.425**
Desv. Est.	1.071	.2562	.0047	.3576	.65	.0165	.0050	.1041	.072

% RSD	24.81	61.45	11.10	211.5	1.709	4.739	1.604	33.67	.8539
Rep #1	5.554	.4299	-.0470	.3186	37.66	.3310	-.3187	.1950	8.389
Rep #2	3.702	.6663	-.0425	.4276	37.38	.3471	-.3102	.3989	8.378
Rep #3	3.696	.1544	-.0376	-.2390	38.62	.3639	-.3099	.3331	8.508
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

18	Unk: GISC15-21703 09/12/2015 12:43:23 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.860**	**1.096**	**<.0000**	**.2367**	**3.517**	**.0523**	**<.0000**	**.1387**	**14.29**
Desv. Est.	2.778	.158	.0103	.4823	.155	.0274	.0179	.0400	.11
% RSD	71.96	14.43	25.57	203.8	4.392	52.43	25.35	28.84	.7774
Rep #1	6.679	.9297	-.0518	-.3085	3.380	.0209	-.0506	.0997	14.34
Rep #2	3.774	1.244	-.0318	.6077	3.488	.0718	-.0849	.1796	14.37
Rep #3	1.126	1.112	-.0375	.4108	3.685	.0640	-.0765	.1367	14.16
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

19	Unk: GISC15-21705 09/12/2015 12:45:47 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**5.695**	**1.410**	**<.0000**	**.5752**	**2.724**	**.2172**	**<.0000**	**.0633**	**18.05**
Desv. Est.	.673	.127	.0075	.0247	.441	.0423	.0097	.0904	.37
% RSD	11.81	9.023	18.68	4.287	16.20	19.47	3.441	142.8	2.053
Rep #1	6.224	1.294	-.0321	.5934	3.159	.2017	-.2899	.0529	18.41
Rep #2	5.923	1.389	-.0416	.5471	2.737	.1849	-.2707	-.0215	18.06
Rep #3	4.938	1.546	-.0469	.5850	2.277	.2651	-.2823	.1585	17.67
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

20	Unk: GISC15-21706 09/12/2015 12:48:08 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.208**	**.9369**	**<.0000**	**<.0000**	**2.159**	**.2045**	**<.0000**	**.5629**	**9.619**
Desv. Est.	1.137	.1586	.0019	.2214	.165	.0475	.0151	.1565	.049
% RSD	27.01	16.92	4.571	665.9	7.648	23.24	6.481	27.80	.5121
Rep #1	4.976	.7539	-.0430	.1296	2.328	.1694	-.2152	.3917	9.670
Rep #2	4.745	1.023	-.0441	.0560	2.153	.2585	-.2427	.5982	9.572
Rep #3	2.903	1.034	-.0404	-.2853	1.998	.1855	-.2395	.6987	9.614
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

21	Unk: GISC15-21712 09/12/2015 12:50:28 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.832**	**1.104**	**<.0000**	**.1504**	**4.001**	**.0814**	**<.0000**	**.6589**	**10.18**
Desv. Est.	2.481	.189	.0064	.2180	.531	.0368	.0081	.0471	.05
% RSD	64.74	17.14	13.02	145.0	13.28	45.26	3.702	7.143	.5206

Rep #1	6.693	1.317	-.0534	.2306	4.615	.1191	-.2090	.7084	10.24
Rep #2	2.292	1.039	-.0417	-.0964	3.680	.0455	-.2244	.6148	10.17
Rep #3	2.509	.9564	-.0520	.3169	3.710	.0796	-.2211	.6534	10.13
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
22	Unk: GISC15-21713 09/12/2015 12:52:50 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**5.079**	**1.093**	**<.0000**	**<.0000**	**3.885**	**.2095**	**<.0000**	**.0511**	**14.36**
Desv. Est.	1.551	.360	.0030	.3406	.127	.0783	.0213	.2136	.17
% RSD	30.54	32.98	19.75	861.0	3.277	37.40	8.371	418.0	1.161
Rep #1	6.865	1.479	-.0130	.3257	3.739	.1676	-.2764	-.1770	14.52
Rep #2	4.296	.7660	-.0185	-.0960	3.969	.1610	-.2338	.0840	14.36
Rep #3	4.075	1.034	-.0137	-.3485	3.948	.2998	-.2539	.2463	14.19
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
23	Unk: GISC15-21722 09/12/2015 12:55:08 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.037**	**1.041**	**<.0000**	**<.0000**	**4.202**	**.2129**	**<.0000**	**.0889**	**13.85**
Desv. Est.	.059	.399	.0021	.1476	.349	.0519	.0321	.1069	.13
% RSD	1.462	38.30	4.342	56.05	8.302	24.38	29.43	120.3	.9391
Rep #1	4.063	1.097	-.0502	-.2685	4.254	.2053	-.1207	.2106	13.99
Rep #2	4.079	.6172	-.0506	-.1132	4.523	.1652	-.0728	.0464	13.81
Rep #3	3.970	1.408	-.0467	-.4082	3.831	.2681	-.1338	.0098	13.73
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
24	Unk: GISC15-21723 09/12/2015 12:57:10 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.814**	**.9446**	**<.0000**	**.0563**	**2.842**	**.1003**	**<.0000**	**.1597**	**11.16**
Desv. Est.	.959	.1746	.0129	.0930	.126	.0520	.0402	.1624	.07
% RSD	25.14	18.48	29.92	165.3	4.437	51.87	15.72	101.6	.5939
Rep #1	3.046	.8441	-.0300	.0253	2.775	.0682	-.2482	.1390	11.23
Rep #2	4.889	.8435	-.0437	-.0173	2.988	.1604	-.2194	.3315	11.15
Rep #3	3.506	1.146	-.0559	.1608	2.764	.0724	-.2988	.0087	11.10
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
25	Unk: GISC15-21729 09/12/2015 12:59:34 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**6.982**	**1.007**	**<.0000**	**.1089**	**5.920**	**.0453**	**<.0000**	**.1489**	**7.669**
Desv. Est.	.570	.059	.0095	.3846	.317	.0517	.0559	.1289	.063
% RSD	8.156	5.853	31.64	353.3	5.354	114.2	27.30	86.58	.8262
Rep #1	6.910	1.007	-.0200	.4747	6.135	.0730	-.2642	.2950	7.742

Rep #2	6.453	1.067	-.0389	-.2921	6.068	-.0144	-.1535	.1007	7.633
Rep #3	7.585	.9488	-.0316	.1439	5.556	.0772	-.1961	.0510	7.633
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
26	Unk: GISC15-21820 09/12/2015 13:02:07 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**5.277**	**.8060**	**<.0000**	**.1031**	**3.499**	**<.0000**	**<.0000**	**<.0000**	**6.589**
Desv. Est.	1.573	.3193	.0094	.2180	.217	.0276	.0437	.1457	.043
% RSD	29.82	39.62	33.50	211.4	6.191	213.2	24.73	395.7	.6534
Rep #1	5.796	.8943	-.0188	.1040	3.251	.0024	-.1725	-.0411	6.543
Rep #2	6.525	1.072	-.0274	-.1153	3.651	-.0449	-.2222	-.1804	6.597
Rep #3	3.509	.4518	-.0375	.3207	3.596	.0036	-.1351	.1110	6.628
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
27	Unk: GISC15-21820-R 09/12/2015 13:04:30 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.815**	**.7111**	**<.0000**	**<.0000**	**3.256**	**<.0000**	**<.0000**	**.0054**	**6.398**
Desv. Est.	.630	.1528	.0178	.3311	.229	.0105	.0180	.0501	.092
% RSD	16.52	21.48	61.08	299.5	7.027	2621.	7.447	921.1	1.439
Rep #1	3.132	.5577	-.0164	-.4230	3.504	-.0120	-.2268	-.0104	6.501
Rep #2	3.941	.7126	-.0495	.2365	3.053	.0084	-.2376	-.0348	6.369
Rep #3	4.373	.8632	-.0216	-.1452	3.210	.0024	-.2620	.0615	6.324
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
28	QC: QC 09/12/2015 13:11:59 CONC D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.3750**	**.4090**	**.4266**	**.4225**	**.4325**	**.4302**	**.4167**	**.4258**	**.4447**
Desv. Est.	.0134	.0004	.0029	.0048	.0082	.0046	.0036	.0013	.0053
% RSD	3.586	.0897	.6890	1.147	1.898	1.079	.8600	.3153	1.184
Rep #1	.3901	.4086	.4244	.4172	.4283	.4291	.4139	.4248	.4395
Rep #2	.3643	.4093	.4254	.4236	.4273	.4262	.4155	.4252	.4445
Rep #3	.3707	.4089	.4299	.4267	.4420	.4353	.4208	.4273	.4500
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
29	Unk: GISC15-21856 09/12/2015 13:13:09 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.106**	**.4821**	**<.0000**	**.0867**	**1.420**	**.1442**	**<.0000**	**.0531**	**9.347**
Desv. Est.	.094	.0441	.0185	.1898	.380	.0243	.0457	.0881	.057
% RSD	4.457	9.141	50.64	218.9	26.74	16.84	19.47	166.1	.6050
Rep #1	2.200	.5004	-.0209	.3039	1.674	.1694	-.2862	-.0475	9.376
Rep #2	2.105	.5141	-.0569	.0038	.9834	.1424	-.2178	.1168	9.383

Rep #3	2.012	.4319	-.0318	-.0476	1.602	.1209	-.1996	.0899	9.282
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
30	Unk: GISC15-21898 09/12/2015 13:15:27 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.983**	**.8127**	**<.0000**	**.0006**	**2.874**	**.0991**	**<.0000**	**.0308**	**11.08**
Desv. Est.	.437	.1281	.0090	.1769	.246	.0056	.0191	.0893	.03
% RSD	14.65	15.76	20.24	31520.	8.569	5.609	7.097	289.9	.2741
Rep #1	2.717	.9474	-.0543	-.1439	3.026	.0946	-.2915	-.0163	11.11
Rep #2	3.487	.7983	-.0371	-.0522	3.005	.1053	-.2602	.1337	11.06
Rep #3	2.744	.6924	-.0414	.1978	2.590	.0975	-.2568	-.0251	11.05
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
31	Unk: GISC15-21899 09/12/2015 13:17:16 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.009**	**.8891**	**<.0000**	**<.0000**	**5.476**	**.1099**	**<.0000**	**.1883**	**10.97**
Desv. Est.	.919	.0576	.0117	.3947	.168	.0796	.0730	.1425	.37
% RSD	22.92	6.484	38.98	287.1	3.072	72.46	88.11	75.70	3.329
Rep #1	2.948	.9449	-.0322	-.5568	5.288	.1550	-.1667	.1558	11.14
Rep #2	4.551	.8926	-.0175	-.0825	5.611	.1568	-.0331	.0648	11.22
Rep #3	4.528	.8297	-.0407	.2268	5.529	.0180	-.0488	.3442	10.55
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
32	Unk: GISC15-21900 09/12/2015 13:19:34 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.479**	**.8350**	**<.0000**	**.0623**	**1.989**	**.0523**	**<.0000**	**.2561**	**11.64**
Desv. Est.	.496	.0723	.0161	.1426	.254	.0200	.0217	.0886	.07
% RSD	20.02	8.658	40.86	229.0	12.76	38.36	12.95	34.58	.5784
Rep #1	2.970	.8213	-.0277	.0505	2.199	.0724	-.1643	.1943	11.65
Rep #2	2.489	.7705	-.0579	.2104	2.061	.0521	-.1905	.3576	11.70
Rep #3	1.978	.9131	-.0329	-.0741	1.707	.0323	-.1475	.2165	11.57
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
33	Unk: GISC15-21901 09/12/2015 13:21:57 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.190**	**1.025**	**<.0000**	**<.0000**	**1.491**	**.1067**	**<.0000**	**.1561**	**19.84**
Desv. Est.	.572	.300	.0078	.1513	.122	.0273	.0633	.0055	.16
% RSD	26.12	29.30	16.02	122.8	8.146	25.59	39.59	3.530	.8242
Rep #1	2.332	1.024	-.0470	-.1902	1.496	.1137	-.1756	.1540	19.87
Rep #2	2.677	.7247	-.0573	-.2294	1.610	.1299	-.0901	.1624	19.98
Rep #3	1.560	1.325	-.0419	.0501	1.368	.0766	-.2136	.1520	19.66

Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
34	Unk: GISC15-21960 09/12/2015 13:23:36 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.758**	**.9689**	**<.0000**	**.2449**	**1.570**	**.1239**	**<.0000**	**.1971**	**22.03**
Desv. Est.	.475	.1523	.0111	.1736	.211	.0234	.0619	.1044	.20
% RSD	17.21	15.72	25.96	70.88	13.45	18.91	52.09	52.97	.9289
Rep #1	2.336	.7938	-.0393	.0665	1.567	.1317	-.1797	.2913	21.83
Rep #2	3.272	1.071	-.0340	.2550	1.782	.0975	-.0560	.0848	22.24
Rep #3	2.667	1.042	-.0554	.4133	1.360	.1424	-.1207	.2153	22.03
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
35	Unk: GISC15-21961 09/12/2015 13:26:11 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.675**	**1.273**	**<.0000**	**.3245**	**3.469**	**.2051**	**<.0000**	**.1560**	**26.85**
Desv. Est.	.998	.240	.0080	.1549	.071	.0399	.0401	.0913	.44
% RSD	27.14	18.84	19.84	47.75	2.043	19.47	202.2	58.53	1.646
Rep #1	3.501	1.386	-.0446	.4954	3.529	.1598	-.0457	.0523	26.43
Rep #2	2.777	1.437	-.0458	.1932	3.488	.2202	-.0402	.1914	26.82
Rep #3	4.749	.9979	-.0313	.2849	3.391	.2352	.0264	.2243	27.31
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
36	Unk: GISC15-21962 09/12/2015 13:28:31 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.088**	**1.082**	**<.0000**	**.0275**	**2.431**	**<.0000**	**<.0000**	**<.0000**	**17.67**
Desv. Est.	1.231	.264	.0074	.0695	.265	.0438	.0315	.0542	.76
% RSD	39.87	24.43	18.99	252.9	10.90	124.6	11.01	108.9	4.313
Rep #1	3.535	.7949	-.0334	.0484	2.324	.0072	-.2587	-.0411	18.13
Rep #2	4.034	1.316	-.0360	.0842	2.732	-.0802	-.3204	-.1077	18.08
Rep #3	1.696	1.135	-.0473	-.0501	2.236	-.0323	-.2786	-.0004	16.79
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
37	Unk: GISC15-21963 09/12/2015 13:30:52 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**5.339**	**1.223**	**<.0000**	**<.0000**	**1.037**	**.0309**	**<.0000**	**.1044**	**19.49**
Desv. Est.	.534	.037	.0061	.3744	.151	.0113	.0279	.2301	.32
% RSD	10.01	3.021	12.33	387.4	14.59	36.43	20.00	220.5	1.647
Rep #1	4.768	1.263	-.0475	-.0299	.9136	.0383	-.1256	-.0230	19.79
Rep #2	5.420	1.191	-.0563	-.5000	1.206	.0365	-.1717	-.0339	19.15
Rep #3	5.828	1.216	-.0445	.2399	.9914	.0180	-.1214	.3700	19.52
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno

Valor									
Intervalo									
38	Unk: GISC15-21987 09/12/2015 13:33:13 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.120**	**1.234**	**<.0000**	**.4982**	**2.473**	**.0844**	**<.0000**	**.1354**	**23.50**
Desv. Est.	1.920	.166	.0179	.0924	.329	.0492	.0684	.0480	.46
% RSD	46.59	13.46	32.88	18.55	13.32	58.35	85.55	35.46	1.967
Rep #1	2.318	1.235	-.0343	.4646	2.470	.0395	-.0815	.1734	23.70
Rep #2	6.139	1.067	-.0602	.4272	2.145	.0766	-.0108	.0815	23.82
Rep #3	3.903	1.399	-.0685	.6027	2.804	.1370	-.1476	.1513	22.97
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
39	QC: QC 09/12/2015 13:34:15 CONC D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.3893**	**.4023**	**.4251**	**.4227**	**.4264**	**.4276**	**.4137**	**.4223**	**.4300**
Desv. Est.	.0217	.0034	.0020	.0037	.0014	.0030	.0027	.0053	.0029
% RSD	5.570	.8417	.4611	.8806	.3231	.6934	.6561	1.248	.6733
Rep #1	.4068	.4048	.4274	.4256	.4257	.4263	.4168	.4283	.4334
Rep #2	.3960	.4036	.4238	.4239	.4280	.4310	.4118	.4183	.4286
Rep #3	.3650	.3984	.4243	.4185	.4255	.4255	.4126	.4205	.4281
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
40	Unk: GISC15-22093 09/12/2015 13:37:48 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.636**	**.5375**	**<.0000**	**.0671**	**1.607**	**.1075**	**<.0000**	**.1031**	**26.50**
Desv. Est.	.835	.0299	.0048	.1795	.126	.0147	.0498	.0846	.41
% RSD	22.97	5.569	10.28	267.6	7.822	13.66	36.27	82.11	1.561
Rep #1	3.231	.5116	-.0412	.2698	1.653	.1065	-.0836	.0551	26.04
Rep #2	4.596	.5307	-.0505	-.0715	1.702	.1227	-.1819	.2008	26.84
Rep #3	3.081	.5703	-.0479	.0029	1.464	.0934	-.1467	.0533	26.62
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
41	Unk: GISC15-22198 09/12/2015 13:40:09 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.557**	**.5467**	**<.0000**	**.1885**	**1.040**	**.1843**	**<.0000**	**.0362**	**20.88**
Desv. Est.	.504	.0528	.0095	.3059	.065	.0581	.0353	.1411	.32
% RSD	19.72	9.656	29.15	162.2	6.229	31.51	15.67	389.8	1.519
Rep #1	2.001	.5992	-.0287	.5416	1.114	.1490	-.2605	.1540	21.21
Rep #2	2.986	.5473	-.0255	.0198	.9914	.2514	-.2247	.0746	20.58
Rep #3	2.683	.4936	-.0433	.0042	1.015	.1526	-.1899	-.1201	20.83
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									

Intervalo									
42	Unk: GISC15-22199 09/12/2015 13:42:32 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.270**	**.6848**	**<.0000**	**.0192**	**.7041**	**.1089**	**<.0000**	**.0749**	**25.87**
Desv. Est.	.559	.2261	.0061	.2144	.0588	.0269	.0089	.0781	.28
% RSD	17.10	33.02	19.99	1115.	8.349	24.68	2.920	104.2	1.093
Rep #1	3.894	.8255	-.0319	.0476	.6819	.1376	-.3139	.0904	25.69
Rep #2	2.816	.4240	-.0353	-.2079	.6597	.0844	-.3024	-.0098	25.72
Rep #3	3.098	.8050	-.0236	.2180	.7708	.1047	-.2964	.1440	26.19
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
43	Unk: GISC15-22200 09/12/2015 13:44:48 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.999**	**.7276**	**<.0000**	**<.0000**	**1.464**	**.2037**	**<.0000**	**.0327**	**20.08**
Desv. Est.	.631	.1460	.0062	.2873	.498	.0100	.0139	.0795	.42
% RSD	15.78	20.07	12.73	111.3	34.03	4.920	25.36	243.3	2.078
Rep #1	4.070	.7966	-.0547	-.5888	2.037	.2095	-.0696	.0606	20.55
Rep #2	4.592	.5599	-.0423	-.0690	1.131	.2095	-.0420	.0944	19.95
Rep #3	3.336	.8264	-.0497	-.1166	1.225	.1921	-.0529	-.0570	19.74
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
44	Unk: GISC15-22206 09/12/2015 13:47:16 CONC x100 D MP-151209: UNAM(QUESO):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.776**	**.6858**	**<.0000**	**.7045**	**.8940**	**.1670**	**<.0000**	**.1234**	**34.33**
Desv. Est.	.571	.1525	.0062	.1748	.1280	.0795	.0389	.1751	.20
% RSD	15.11	22.24	21.12	24.82	14.32	47.61	14.93	141.8	.5784
Rep #1	3.641	.8615	-.0230	.5059	.8850	.1035	-.2896	.3087	34.51
Rep #2	3.284	.5874	-.0301	.8350	1.026	.2561	-.2163	-.0392	34.12
Rep #3	4.401	.6085	-.0355	.7727	.7708	.1412	-.2754	.1007	34.37
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

1	Cal: Blanco 11/12/2015 10:23:16 IR DHg-151211: QUESO:
	Hg1942
Unidades	Cts/s
Media	**8.900**
Desv. Est.	1.439
% RSD	16.17
Rep #1	8.639
Rep #2	7.609
Rep #3	10.45

2	Cal: STD 1 11/12/2015 10:26:01 IR DHg-151211: QUESO:
	Hg1942
Unidades	Cts/s
Media	**72.48**
Desv. Est.	2.05
% RSD	2.822
Rep #1	72.84
Rep #2	70.28
Rep #3	74.32

3	Cal: STD 2 11/12/2015 10:27:05 IR DHg-151211: QUESO:
	Hg1942
Unidades	Cts/s
Media	**214.7**
Desv. Est.	2.5
% RSD	1.171
Rep #1	211.8
Rep #2	216.2
Rep #3	216.1

4	Cal: STD 3 11/12/2015 10:28:50 IR DHg-151211: QUESO:
	Hg1942
Unidades	Cts/s
Media	**340.8**
Desv. Est.	3.4
% RSD	.9986
Rep #1	337.1
Rep #2	341.3
Rep #3	343.9

5	Cal: STD 4 11/12/2015 10:30:16 IR DHg-151211: QUESO:
	Hg1942
Unidades	Cts/s
Media	**692.3**
Desv. Est.	4.1
% RSD	.5941
Rep #1	687.5
Rep #2	694.6
Rep #3	694.7

6	QC: QC 11/12/2015 10:35:37 CONC DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0050**
Desv. Est.	.0000

% RSD	.7308
Rep #1	.0049
Rep #2	.0050
Rep #3	.0050
Comprobació	Pasa Comp
Valor	
Intervalo	

7	Unk: BLANCO 11/12/2015 10:36:09 CONC
	DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0002**
Desv. Est.	.0000
% RSD	23.16
Rep #1	-.0001
Rep #2	-.0002
Rep #3	-.0002

8	Unk: RECUPERACION 11/12/2015 10:37:41 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.5122**
Desv. Est.	.0014
% RSD	.2771
Rep #1	.5115
Rep #2	.5113
Rep #3	.5138

9	Blanco: REACTIVO 11/12/2015 10:39:32 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0140**
Desv. Est.	.0013
% RSD	9.295
Rep #1	-.0155
Rep #2	-.0135
Rep #3	-.0131

10	Unk: GISC15-21670 11/12/2015 10:41:05 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0205**
Desv. Est.	.0032
% RSD	15.59
Rep #1	-.0177
Rep #2	-.0197
Rep #3	-.0240

11	Unk: GISC15-21670-R 11/12/2015 10:42:37 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0268**

Desv. Est.	.0038
% RSD	14.05
Rep #1	-.0311
Rep #2	-.0242
Rep #3	-.0250
12	Unk: GISC15-21671 11/12/2015 10:44:18 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0254**
Desv. Est.	.0034
% RSD	13.24
Rep #1	-.0215
Rep #2	-.0270
Rep #3	-.0277
13	Unk: GISC15-21672 11/12/2015 10:45:39 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0227**
Desv. Est.	.0005
% RSD	2.089
Rep #1	-.0223
Rep #2	-.0232
Rep #3	-.0225
14	Unk: GISC15-21673 11/12/2015 10:47:05 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0250**
Desv. Est.	.0022
% RSD	8.641
Rep #1	-.0225
Rep #2	-.0259
Rep #3	-.0265
15	Unk: GISC15-21677 11/12/2015 10:48:27 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0263**
Desv. Est.	.0039
% RSD	14.80
Rep #1	-.0252
Rep #2	-.0231
Rep #3	-.0306
16	Unk: GISC15-21678 11/12/2015 10:49:54 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0325**
Desv. Est.	.0044
% RSD	13.68

Rep #1	-.0300
Rep #2	-.0298
Rep #3	-.0376
17	Unk: GISC15-21692 11/12/2015 10:51:19 CONC x100 DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0216**
Desv. Est.	.0011
% RSD	5.095
Rep #1	-.0229
Rep #2	-.0212
Rep #3	-.0208
18	Unk: GISC15-21693 11/12/2015 10:52:52 CONC x100 DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0162**
Desv. Est.	.0018
% RSD	11.00
Rep #1	-.0182
Rep #2	-.0151
Rep #3	-.0151
19	Unk: GISC15-21694 11/12/2015 10:54:19 CONC x100 DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0184**
Desv. Est.	.0026
% RSD	14.13
Rep #1	-.0213
Rep #2	-.0164
Rep #3	-.0175
20	QC: QC 11/12/2015 10:56:37 CONC DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0051**
Desv. Est.	.0004
% RSD	8.772
Rep #1	.0046
Rep #2	.0052
Rep #3	.0054
Comprobació	Pasa Comp
Valor	
Intervalo	
21	Unk: GISC15-21701 11/12/2015 10:58:05 CONC x100 DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0346**
Desv. Est.	.0012

% RSD	3.407
Rep #1	-.0336
Rep #2	-.0342
Rep #3	-.0359
22	Unk: GISC15-21702 11/12/2015 10:59:32 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0276**
Desv. Est.	.0005
% RSD	1.718
Rep #1	-.0271
Rep #2	-.0281
Rep #3	-.0275
23	Unk: GISC15-21703 11/12/2015 11:00:58 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0210**
Desv. Est.	.0032
% RSD	15.16
Rep #1	-.0194
Rep #2	-.0190
Rep #3	-.0247
24	Unk: GISC15-21705 11/12/2015 11:02:27 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0252**
Desv. Est.	.0026
% RSD	10.22
Rep #1	-.0275
Rep #2	-.0258
Rep #3	-.0224
25	Unk: GISC15-21706 11/12/2015 11:03:55 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0217**
Desv. Est.	.0007
% RSD	3.326
Rep #1	-.0220
Rep #2	-.0222
Rep #3	-.0208
26	Unk: GISC15-21712 11/12/2015 11:05:27 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0205**
Desv. Est.	.0018
% RSD	8.785
Rep #1	-.0213

Rep #2	-.0219
Rep #3	-.0185
27	Unk: GISC15-21713 11/12/2015 11:06:55 CONC x100 DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0291**
Desv. Est.	.0032
% RSD	10.97
Rep #1	-.0254
Rep #2	-.0314
Rep #3	-.0304
28	Unk: GISC15-21722 11/12/2015 11:08:28 CONC x100 DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0221**
Desv. Est.	.0025
% RSD	11.49
Rep #1	-.0236
Rep #2	-.0235
Rep #3	-.0192
29	Unk: GISC15-21723 11/12/2015 11:09:59 CONC x100 DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0212**
Desv. Est.	.0020
% RSD	9.553
Rep #1	-.0208
Rep #2	-.0234
Rep #3	-.0194
30	Unk: GISC15-21729 11/12/2015 11:11:32 CONC x100 DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0194**
Desv. Est.	.0022
% RSD	11.37
Rep #1	-.0217
Rep #2	-.0172
Rep #3	-.0194
31	QC: QC 11/12/2015 11:22:17 CONC DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0052**
Desv. Est.	.0000
% RSD	.4490
Rep #1	.0051
Rep #2	.0052
Rep #3	.0052

Comprobació	Pasa Comp
Valor	
Intervalo	
32	Unk: GISC15-21820 11/12/2015 11:23:24 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0187**
Desv. Est.	.0032
% RSD	17.28
Rep #1	-.0211
Rep #2	-.0200
Rep #3	-.0150
33	Unk: GISC15-21820-R 11/12/2015 11:23:30 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0151**
Desv. Est.	.0050
% RSD	33.14
Rep #1	-.0191
Rep #2	-.0167
Rep #3	-.0095
34	Unk: GISC15-21856 11/12/2015 11:26:51 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0253**
Desv. Est.	.0028
% RSD	11.05
Rep #1	-.0236
Rep #2	-.0238
Rep #3	-.0285
35	Unk: GISC15-21898 11/12/2015 11:28:45 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0348**
Desv. Est.	.0030
% RSD	8.587
Rep #1	-.0371
Rep #2	-.0359
Rep #3	-.0315
36	Unk: GISC15-21899 11/12/2015 11:30:08 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0156**
Desv. Est.	.0020
% RSD	12.74
Rep #1	-.0172
Rep #2	-.0163

Rep #3	-.0134
37	Unk: GISC15-21900 11/12/2015 11:31:29 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0218**
Desv. Est.	.0044
% RSD	20.39
Rep #1	-.0213
Rep #2	-.0176
Rep #3	-.0264
38	Unk: GISC15-21901 11/12/2015 11:32:56 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0161**
Desv. Est.	.0011
% RSD	6.809
Rep #1	-.0164
Rep #2	-.0149
Rep #3	-.0170
39	Unk: GISC15-21960 11/12/2015 11:34:37 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0262**
Desv. Est.	.0018
% RSD	7.015
Rep #1	-.0273
Rep #2	-.0241
Rep #3	-.0273
40	Unk: GISC15-21961 11/12/2015 11:36:13 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0264**
Desv. Est.	.0009
% RSD	3.319
Rep #1	-.0255
Rep #2	-.0264
Rep #3	-.0273
41	Unk: GISC15-21962 11/12/2015 11:37:40 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0323**
Desv. Est.	.0014
% RSD	4.462
Rep #1	-.0339
Rep #2	-.0313
Rep #3	-.0316

42	QC: QC 11/12/2015 11:39:32 CONC DHg-151211: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0052**
Desv. Est.	.0002
% RSD	3.028
Rep #1	.0050
Rep #2	.0053
Rep #3	.0054
Comprobació	Pasa Comp
Valor	
Intervalo	

43	Unk: GISC15-21963 11/12/2015 11:41:16 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0245**
Desv. Est.	.0078
% RSD	31.88
Rep #1	-.0158
Rep #2	-.0309
Rep #3	-.0268

44	Unk: GISC15-21987 11/12/2015 11:42:46 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0198**
Desv. Est.	.0017
% RSD	8.690
Rep #1	-.0183
Rep #2	-.0217
Rep #3	-.0194

45	Unk: GISC15-22093 11/12/2015 11:44:28 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0174**
Desv. Est.	.0034
% RSD	19.26
Rep #1	-.0206
Rep #2	-.0139
Rep #3	-.0178

46	Unk: GISC15-22198 11/12/2015 11:47:52 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0268**
Desv. Est.	.0011
% RSD	4.117
Rep #1	-.0279
Rep #2	-.0257

Rep #3	-.0269
47	Unk: GISC15-22199 11/12/2015 11:49:12 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	-.0248
Desv. Est.	.0010
% RSD	4.142
Rep #1	-.0239
Rep #2	-.0247
Rep #3	-.0259
48	Unk: GISC15-22200 11/12/2015 11:50:35 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	-.0302
Desv. Est.	.0058
% RSD	19.04
Rep #1	-.0236
Rep #2	-.0338
Rep #3	-.0333
49	Unk: GISC15-22206 11/12/2015 11:51:57 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	-.0303
Desv. Est.	.0026
% RSD	8.534
Rep #1	-.0306
Rep #2	-.0275
Rep #3	-.0327

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA, S.A. DE C.V.

CONTENIDO

QUESO (segundo lote)

GISENA®
GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA S.A. DE C.V.
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TEL/FAX: 01(595) 928 40 77 E-mail: gisena@prodigy.net.mx

LABORATORIO DE RESIDUOS TÓXICOS

ema entidad mexicana de acreditación, a.c.

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005 Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: QUESO
Fecha de Recepción: 2015-10-15

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

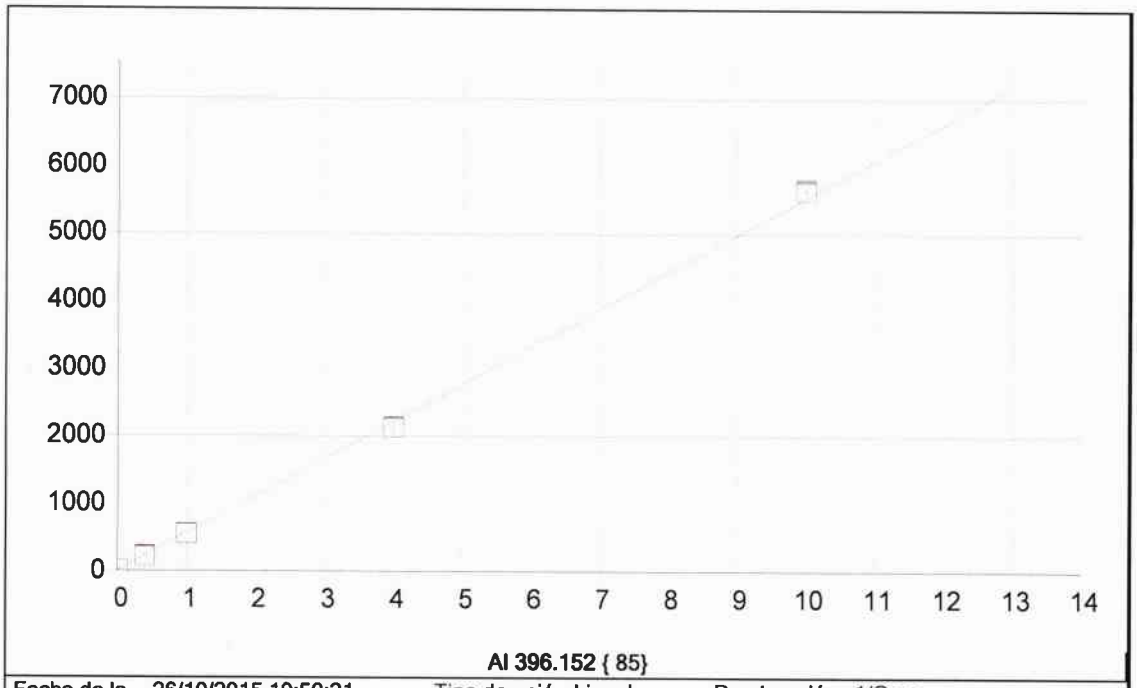
DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/10/15 (1)
Fecha de Analisis de Metales y Mercurio: 2015-10-26 2015-10-27
Fecha de Realización del Informe: 2015-10-28

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I001/15/0007	GISC15-20275
L-I002/15/0012	GISC15-20276
L-I002/15/0020	GISC15-20279
L-I006/15/0054	GISC15-20285
L-I007/15/0067	GISC15-20291
L-I008/15/0078	GISC15-20292
L-I009/15/0087	GISC15-20294
L-I021/15/0206	GISC15-20308
L-I021/15/0207	GISC15-20309
L-I021/15/0208	GISC15-20310
L-I025/15/0242	GISC15-20322
L-I025/15/0244	GISC15-20323
L-I030/15/0299	GISC15-20334
L-I030/15/0300	GISC15-20335
L-I031/15/0303	GISC15-20336
L-I038/15/0376	GISC15-20357
L-I041/15/0406	GISC15-20360
L-I053/15/0529	GISC15-20377
L-I061/15/0601	GISC15-20387
L-I065/15/0650	GISC15-20392

REVISÓ

Q.F.B.Leticia Velázquez Méndez
Gerente Técnico

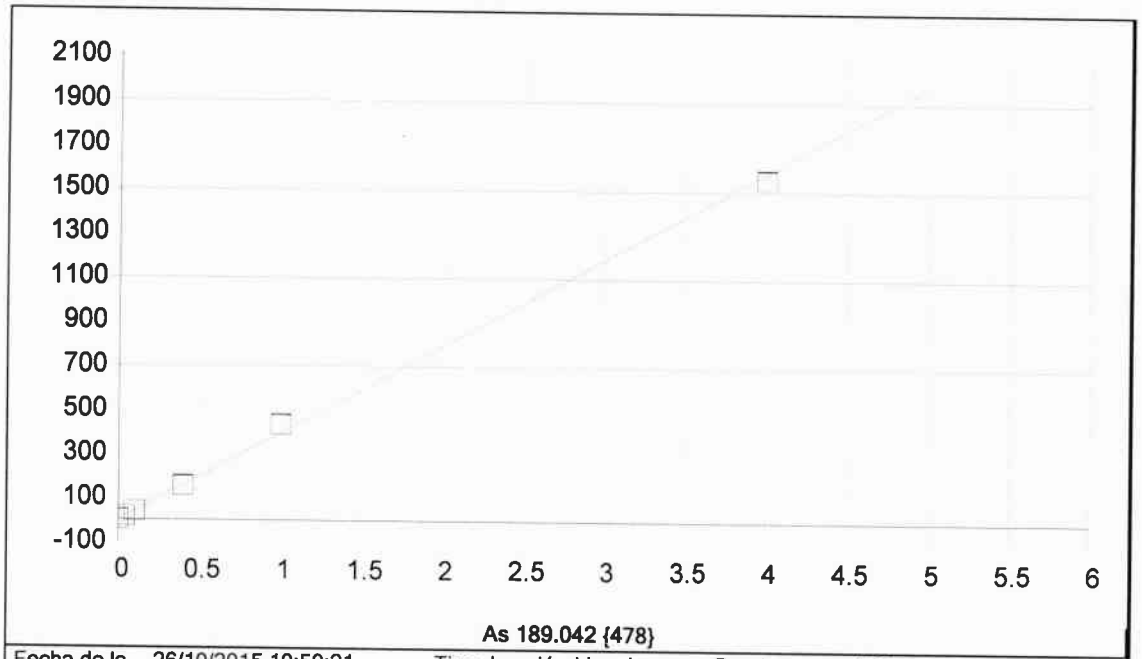


Al 396.152 { 85}

Fecha de la	26/10/2015 19:50:21	Tipo de unió	Lineal	Ponderación: 1/Conc

A0 (Compensación):	9.735451	Reajustar P	1.000000
A1 (Ganancia)	552.104749	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999576	Estatus:	OK.
Error Estándar de Est:	1.628892		
MDL:	0.015210		
MQL:	0.050701		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00004	.000	.000	9.7583	1.55	1
STD 5	.40000	.37462	-.025	-6.35	216.56	8.08	1
STD 6	1.0000	.97981	-.020	-2.02	550.69	3.68	1
STD 7	4.0000	3.8365	-.164	-4.09	2127.9	13.0	1
STD 8	10.000	10.209	.209	2.09	5646.2	22.6	1

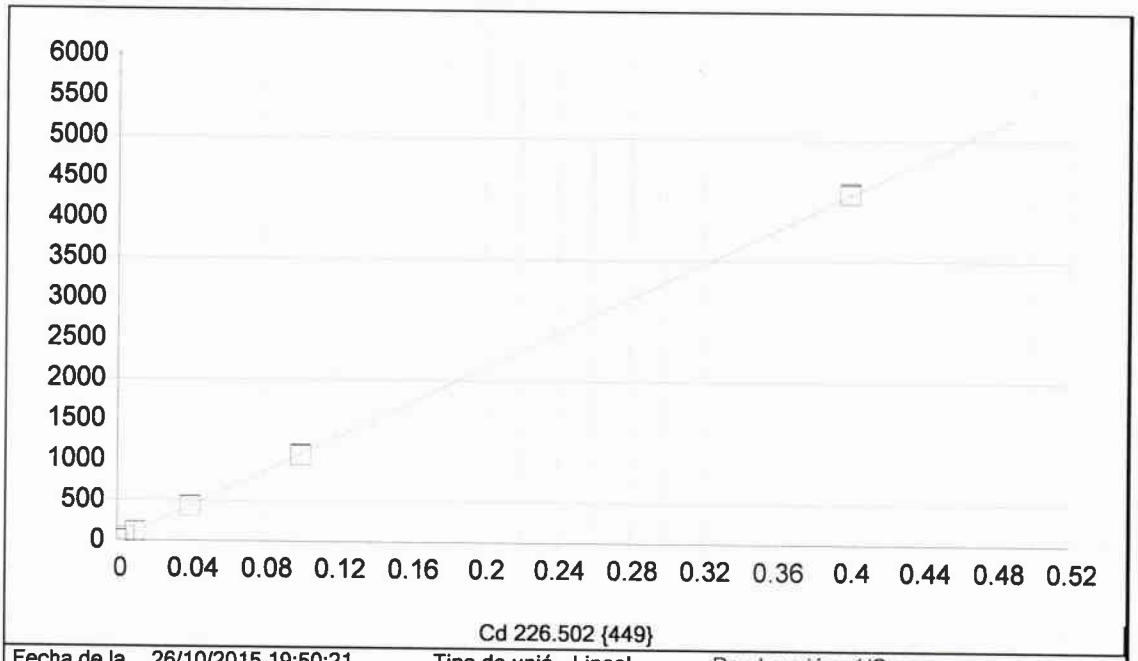


As 189.042 {478}

Fecha de la 26/10/2015 19:50:21 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	0.644309	Reajustar P	1.000000
A1 (Ganancia)	395.667967	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999031	Estatus:	OK.
Error Estándar de Est:	0.317448		
MDL:	0.002267		
MQL:	0.007557		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.64512	.712	1
STD 4	.10000	.09450	-.005	-5.50	38.036	.067	1
STD 5	.40000	.38968	-.010	-2.58	154.83	1.21	1
STD 6	1.0000	1.0931	.093	9.31	433.16	1.79	1
STD 7	4.0000	3.9245	-.076	-1.89	1553.4	2.55	1
STD 3	.04000	.03821	-.002	-4.48	15.762	.623	1

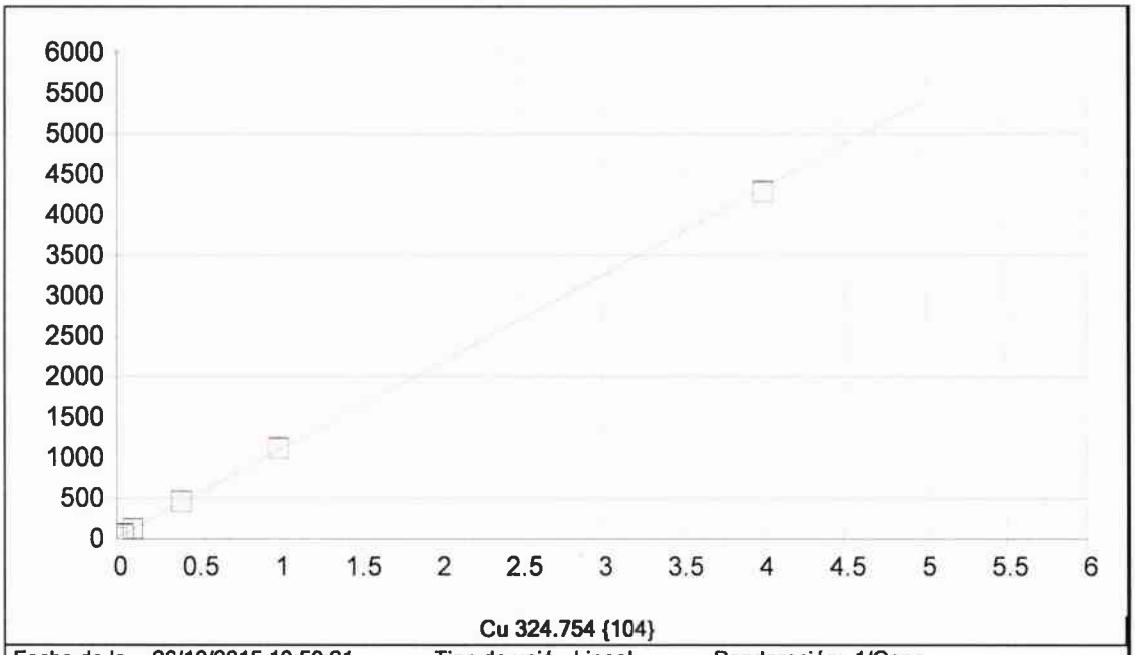


Cd 226.502 {449}

Fecha de la	26/10/2015 19:50:21	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	5.138870	Reajustar P	1.000000
A1 (Ganancia)	10758.02178	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999962	Estatus:	OK.
Error Estándar de Est:	0.171739		
MDL:	0.000134		
MQL:	0.000446		

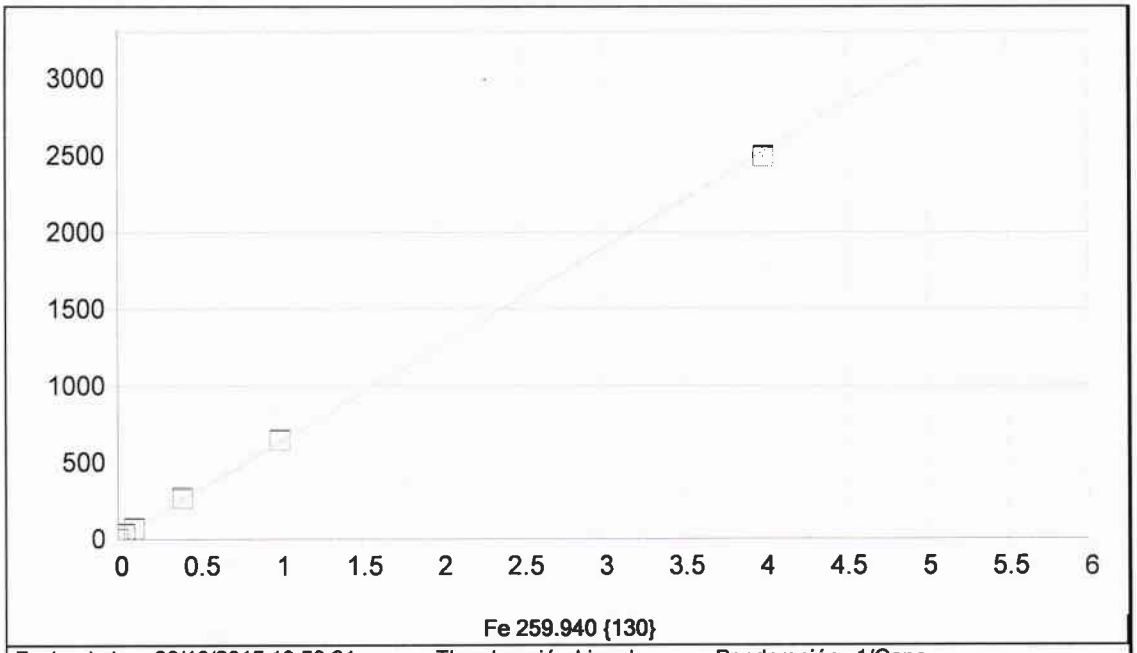
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	5.1412	1.20	1
STD 1	.00400	.00396	-.000	-1.01	47.736	1.42	1
STD 2	.01000	.00978	-.000	-2.20	110.35	1.31	1
STD 3	.04000	.03938	-.001	-1.55	428.80	1.40	1
STD 4	.10000	.09873	-.001	-1.27	1067.3	3.95	1
STD 5	.40000	.40215	.002	.538	4331.5	14.3	1



Cu 324.754 {104}

Fecha de la	26/10/2015 19:50:21	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	12.291640		Reajustar P	1.000000	
A1 (Ganancia)	1080.041487		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999839		Estatus:	OK.	
Error Estándar de Est:	0.352638				
MDL:	0.004268				
MQL:	0.014228				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	12.288	1.67	1
STD 5	.40000	.41509	.015	3.77	460.60	2.38	1
STD 6	1.0000	1.0254	.025	2.54	1119.8	6.33	1
STD 7	4.0000	3.9563	-.044	-1.09	4285.3	11.0	1
STD 3	.04000	.04023	.000	.563	55.736	4.43	1
STD 4	.10000	.10292	.003	2.92	123.45	2.26	1

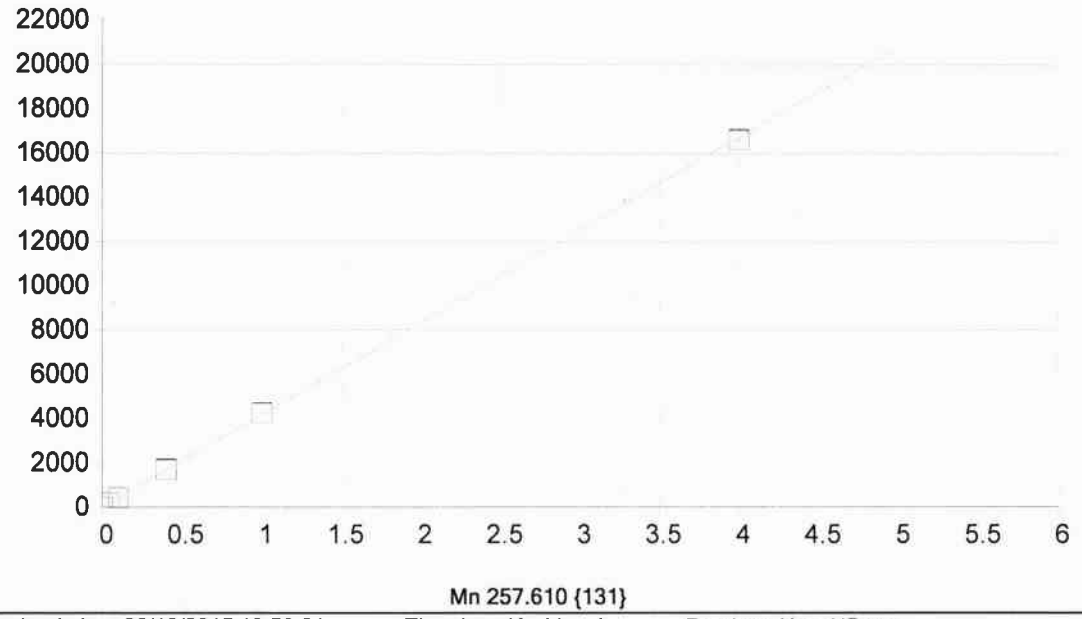


Fe 259.940 {130}

Fecha de la	26/10/2015 19:50:21	Tipo de unió	Lineal	Ponderación: 1/Conc

A0 (Compensación):	1.928981	Reajustar P	1.000000
A1 (Ganancia)	630.101912	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999573	Estatus:	OK.
Error Estándar de Est:	0.335558		
MDL:	0.003574		
MQL:	0.011915		

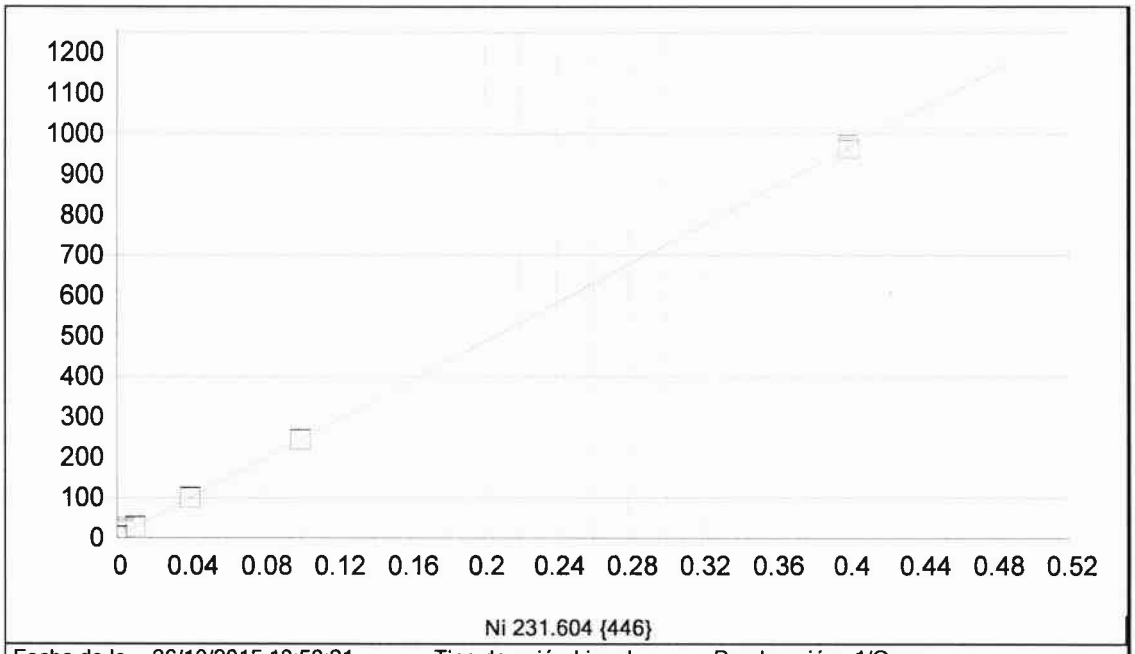
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00001	-.000	.000	1.9200	1.06	1
STD 5	.40000	.41939	.019	4.85	266.19	5.42	1
STD 6	1.0000	1.0192	.019	1.92	644.15	2.00	1
STD 3	.04000	.04949	.009	23.7	33.110	2.02	1
STD 4	.10000	.10651	.007	6.51	69.043	2.40	1
STD 7	4.0000	3.9454	-.055	-1.37	2487.9	5.35	1



Fecha de la	26/10/2015 19:50:21	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	3.692602	Reajustar P	1.000000
A1 (Ganancia)	4177.353131	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999951	Estatus:	OK.
Error Estándar de Est:	0.755397		
MDL:	0.000596		
MQL:	0.001985		

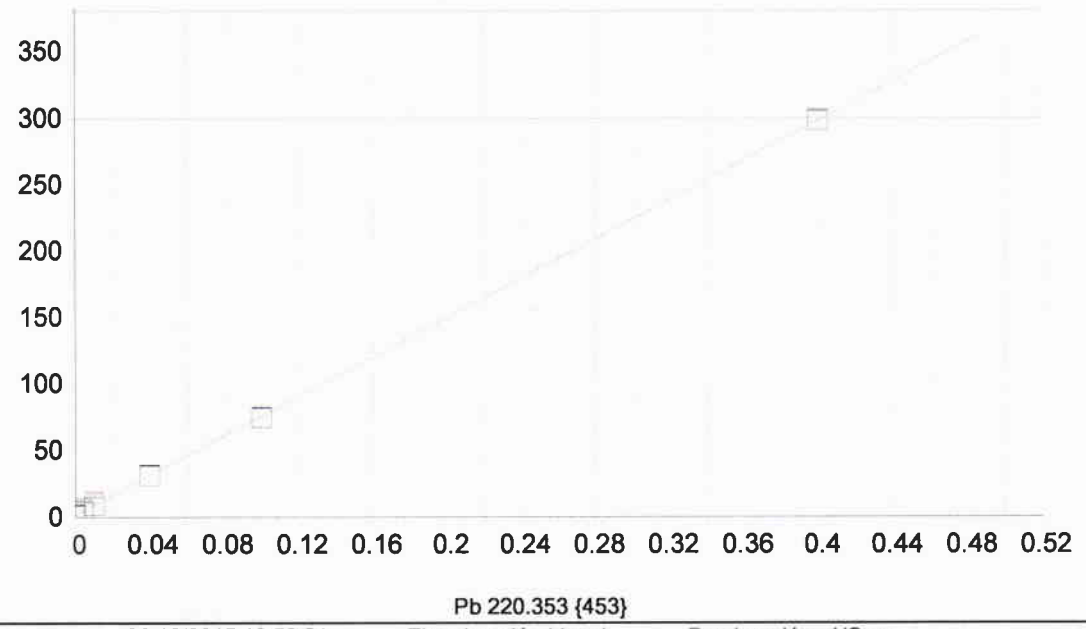
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	3.6833	3.33	1
STD 5	.40000	.40611	.006	1.53	1700.1	15.3	1
STD 6	1.0000	1.0165	.016	1.65	4249.9	9.47	1
STD 3	.04000	.04064	.001	1.59	173.44	4.64	1
STD 4	.10000	.10140	.001	1.40	427.27	2.19	1
STD 7	4.0000	3.9754	-.025	-.615	16610.	31.7	1



Ni 231.604 {446}

Fecha de la	26/10/2015 19:50:21	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	3.687586		Reajustar P	1.000000	
A1 (Ganancia)	2405.437810		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999993		Estatus:	OK.	
Error Estándar de Est:	0.017198				
MDL:	0.000537				
MQL:	0.001791				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	3.6874	1.34	1
STD 1	.00400	.00755	.004	88.6	21.837	3.24	0
STD 2	.01000	.01025	.000	2.54	28.352	.790	1
STD 3	.04000	.04009	.000	.233	100.13	1.21	1
STD 4	.10000	.09968	-.000	-.319	243.46	1.16	1
STD 5	.40000	.39997	-.000	-.007	965.80	6.53	1

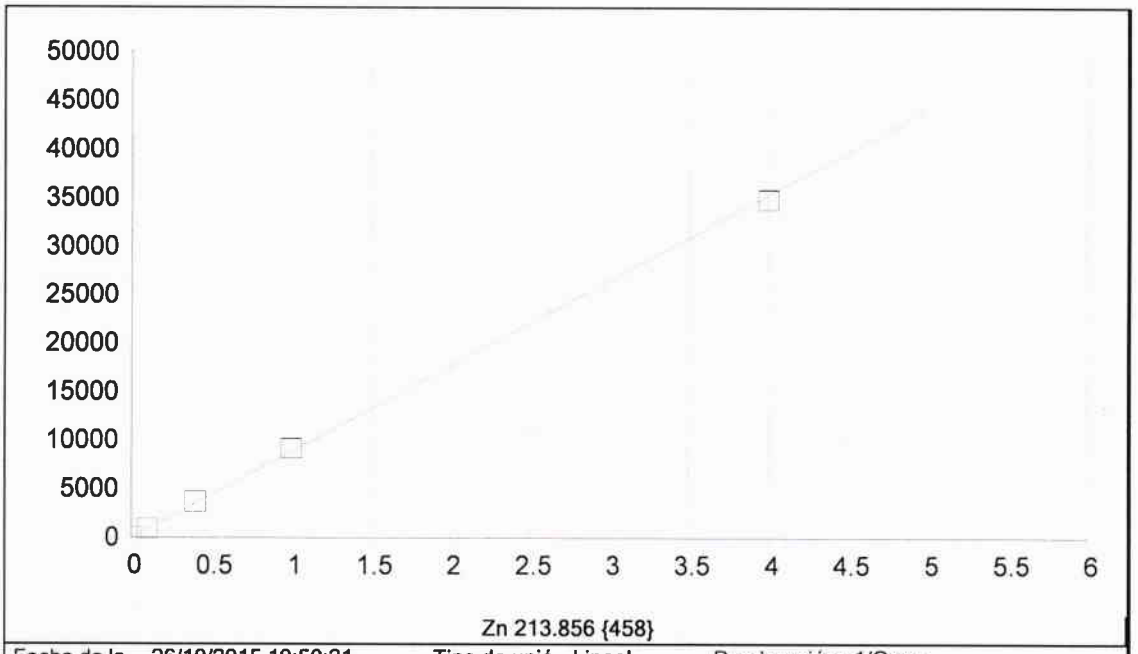


Pb 220.353 {453}

Fecha de la	26/10/2015 19:50:21	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	1.412778	Reajustar P	1.000000
A1 (Ganancia)	741.201753	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999881	Estatus:	OK.
Error Estándar de Est:	0.020859		
MDL:	0.001641		
MQL:	0.005470		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	1.4122	.438	1
STD 1	.00400	.00465	.001	16.2	4.8579	1.31	1
STD 2	.01000	.01031	.000	3.13	9.0569	1.87	1
STD 3	.04000	.04001	.000	.033	31.071	.358	1
STD 4	.10000	.09870	-.001	-1.30	74.567	.451	1
STD 5	.40000	.40033	.000	.082	298.14	.626	1

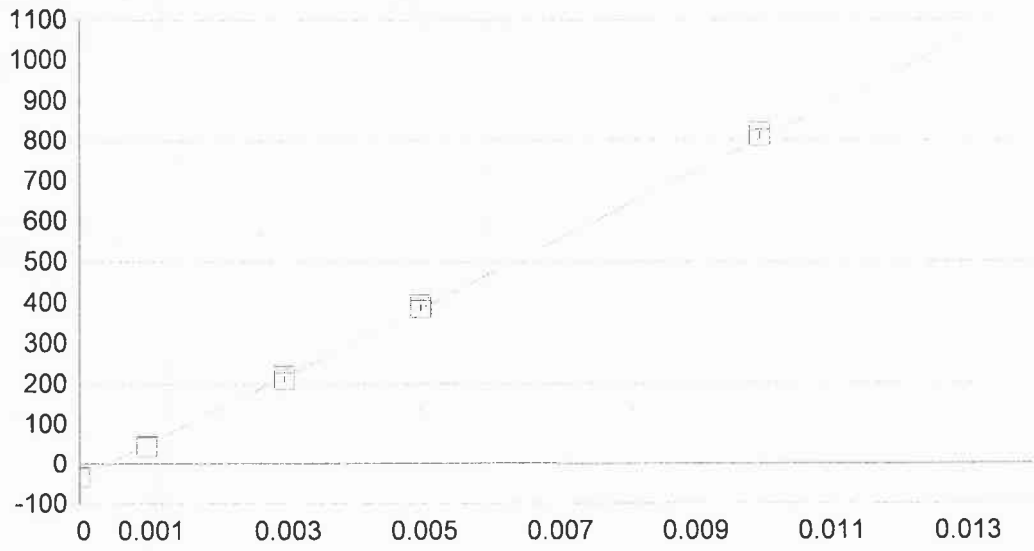


Zn 213.856 {458}

Fecha de la	26/10/2015 19:50:21	Tipo de unió	Lineal	Ponderación: 1/Conc

A0 (Compensación):	34.221353	Reajustar P	1.000000
A1 (Ganancia)	8840.869149	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999725	Estatus:	OK.
Error Estándar de Est:	6.276154		
MDL:	0.000132		
MQL:	0.000441		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00001	-.000	.000	34.136	3.11	1
STD 4	.10000	.10280	.003	2.80	943.05	1.45	1
STD 5	.40000	.41886	.019	4.72	3737.3	16.0	1
STD 6	1.0000	1.0353	.035	3.53	9187.3	12.0	1
STD 7	4.0000	3.9430	-.057	-1.42	34894.	34.8	1



Hg 194.227 {474}

Fecha de la	27/10/2015 09:06:08	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	-33.950345		Reajustar P	1.000000	
A1 (Ganancia)	83623.86355		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999791		Estatus:	OK.	
Error Estándar de Est:	0.304138				
MDL:	0.000023				
MQL:	0.000076				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	-33.944	1.41	1
STD 1	.00100	.00093	-.000	-7.04	43.790	.629	1
STD 2	.00300	.00293	-.000	-2.31	211.13	8.23	1
STD 3	.00500	.00503	.000	.576	386.58	7.54	1
STD 4	.01000	.01011	.000	1.11	811.56	10.2	1

Análisis: ***METALES PESADOS POR ICP-OES***

Lote analítico: DMP-QUESO-151026

Fecha de Análisis: 26/10/2015

Fecha de Reporte: 26/10/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÓN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.0100
NIVEL 5	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000									
NIVEL 9										
Correlación	0.9996	0.9990	0.9999	0.9998	0.9996	0.9999	0.9999	0.9999	0.9997	0.9998

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
2	QC:QC-3	Cadmio	0.0400	0.0396	99	8	Recuperación	Mercurio	0.5	0.4735	95
		Plomo	0.0400	0.0393	98	19	Estándar de Chequeo	Mercurio	0.5	0.4632	93
3	QC:QC5	Arsénico	0.4000	0.4013	100						
		Cobre	0.4000	0.3973	99						
		Fierro	0.4000	0.3993	100						
		Manganeso	0.4000	0.3954	99						
		Níquel	0.4000	0.3951	99						
4	QC: QC7	Aluminio	4.0000	3.8920	97						
		Zinc	4.0000	4.0230	101						
16	QC: ST DE CHEQUEO 3	Cadmio	0.0400	0.0424	106						
		Plomo	0.0400	0.0348	87						
17	QC: ST DE CHEQUEO 5	Arsénico	0.4000	0.4450	111						
		Cobre	0.4000	0.3858	96						
		Fierro	0.4000	0.4273	107						
		Manganeso	0.4000	0.3991	100						
		Níquel	0.4000	0.3971	99						
18	QC: ST DE CHEQUEO 7	Aluminio	4.0000	3.5640	89						
		Zinc	4.0000	4.1970	105						

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I. Gaudencio Vargas Espejel

ELABORÓ

Q.F.B. Leticia Velázquez Méndez

REVISÓ

PACE/GIS/I02-F01

GISCENA®

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Peso de muestra (g) Metales	Hg
GISC15-20275	Queso		15/10/2015	0.5023	0.5029
GISC15-20276	Queso		15/10/2015	0.5041	0.5015
GISC15-20279	Queso		15/10/2015	0.5014	0.5044
GISC15-20285	Queso		15/10/2015	0.5045	0.5087
GISC15-20291	Queso		15/10/2015	0.5067	0.5039
GISC15-20292	Queso		15/10/2015	0.5086	0.5092
GISC15-20294	Queso		15/10/2015	0.5045	0.5062
GISC15-20308	Queso		15/10/2015	0.5087	0.5090
GISC15-20309	Queso		15/10/2015	0.5015	0.5061
GISC15-20310	Queso		15/10/2015	0.5015	0.5032
GISC15-20322	Queso		15/10/2015	0.5036	0.5004
GISC15-20323	Queso		15/10/2015	0.5090	0.5010
GISC15-20334	Queso		15/10/2015	0.5034	0.5072
GISC15-20335	Queso		15/10/2015	0.5091	0.5062
GISC15-20336	Queso		15/10/2015	0.5024	0.5051
GISC15-20357	Queso		15/10/2015	0.5005	0.5010
GISC15-20360	Queso		15/10/2015	0.5078	0.5039
GISC15-20377	Queso		15/10/2015	0.5070	0.5040
GISC15-20387	Queso		15/10/2015	0.5075	0.5023
GISC15-20392	Queso		15/10/2015	0.5024	0.5039

P.A. [signature]

I.B.T. Reyna Ivette Delgado

[signature]

Q.F.B. Leticia Velazquez Méndez

1	Blanco: REACTIVO 26/10/2015 15:41:32 CONC D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-.1007**	**-.0011**	**-.0019**	**-.0045**	**.0215**	**-.0019**	**-.0007**	**-.0025**	**-.0095**
Desv. Est.	.0428	.0019	.0001	.0003	.0309	.0005	.0019	.0008	.0028
% RSD	42.55	169.1	7.322	7.566	144.0	24.02	256.2	29.56	28.96
Rep #1	-.0804	-.0033	-.0019	-.0047	.0363	-.0017	.0010	-.0025	-.0068
Rep #2	-.0717	-.0001	-.0020	-.0047	.0421	-.0016	-.0004	-.0018	-.0094
Rep #3	-.1499	.0000	-.0018	-.0041	-.0141	-.0024	-.0027	-.0033	-.0123

2	QC: QC 3 26/10/2015 15:46:49 CONC D MP-151026: QUESO:	
	Cd2265	Pb2203
Línea	226.502 {44	220.353 {45
Unidades	mg/Kg	mg/Kg
Media	**.0396**	**.0393**
Desv. Est.	.0002	.0007
% RSD	.4929	1.815
Rep #1	.0398	.0400
Rep #2	.0394	.0386
Rep #3	.0395	.0395
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

3	QC: QC 5 26/10/2015 15:51:51 CONC D MP-151026: QUESO:				
	As1890	Cu3247	Fe2599	Mn2576	Ni2316
Línea	189.042 {47	324.754 {10	259.940 {13	257.610 {13	231.604 {44
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4013**	**.3973**	**.3993**	**.3954**	**.3951**
Desv. Est.	.0051	.0045	.0039	.0028	.0037
% RSD	1.262	1.143	.9752	.7150	.9480
Rep #1	.3958	.3954	.3996	.3941	.3913
Rep #2	.4058	.3939	.3952	.3935	.3988
Rep #3	.4022	.4024	.4030	.3986	.3952
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor					
Intervalo					

4	QC: QC 7 26/10/2015 15:56:05 CONC D MP-151026: QUESO:	
	Al3082	Zn2138
Línea	308.215 {10	213.856 {45
Unidades	mg/Kg	mg/Kg
Media	**3.892**	**4.023**
Desv. Est.	.034	.016
% RSD	.8648	.3983
Rep #1	3.856	4.005
Rep #2	3.899	4.031
Rep #3	3.922	4.034
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

5	Unk: BCO REACTIVO1 26/10/2015 16:00:32 CONC D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.0482**	**-.0024**	**.0004**	**.0072**	**.0454**	**.0009**	**.0030**	**-.0033**	**.0058**
Desv. Est.	.0253	.0002	.0001	.0019	.0021	.0001	.0006	.0005	.0001
% RSD	52.43	8.078	19.32	26.04	4.548	5.813	20.77	16.20	1.308
Rep #1	.0774	-.0026	.0004	.0091	.0445	.0008	.0031	-.0039	.0057
Rep #2	.0343	-.0022	.0003	.0055	.0478	.0009	.0035	-.0032	.0058
Rep #3	.0330	-.0025	.0005	.0069	.0440	.0009	.0023	-.0028	.0058
6	Unk: GISC15-20275 26/10/2015 16:16:45 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.877**	**-1.485**	**-.0884**	**.2634**	**6.062**	**.1083**	**.1866**	**-.7729**	**18.92**
Desv. Est.	4.492	.045	.0083	.1665	.206	.0314	.0149	.4195	.11
% RSD	76.44	3.067	9.373	63.21	3.395	29.00	8.008	54.28	.6028
Rep #1	-10.66	-1.537	-.0894	.2469	6.128	.0721	.2021	-1.230	19.03
Rep #2	-1.750	-1.460	-.0797	.1057	6.227	.1249	.1853	-.4052	18.92
Rep #3	-5.219	-1.457	-.0962	.4375	5.831	.1279	.1723	-.6834	18.80
7	Unk: GISC15-20276 26/10/2015 16:18:57 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.342**	**-1.299**	**-.1522**	**.0386**	**7.005**	**.0552**	**.0835**	**-.5608**	**11.00**
Desv. Est.	2.669	.128	.0140	.2284	.089	.0069	.0334	.0388	.07
% RSD	49.96	9.823	9.178	592.4	1.276	12.58	40.01	6.926	.6580
Rep #1	-8.254	-1.160	-.1489	.1180	6.930	.0540	.0920	-.5162	11.08
Rep #2	-4.761	-1.412	-.1401	.2166	7.104	.0626	.1118	-.5870	10.99
Rep #3	-3.012	-1.325	-.1675	-.2189	6.981	.0489	.0466	-.5792	10.94
8	Unk: GISC15-20279 26/10/2015 16:21:06 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.869**	**-.9887**	**-.1418**	**.1101**	**7.707**	**.0695**	**.2582**	**-.5021**	**5.261**
Desv. Est.	5.249	.2069	.0113	.2631	.167	.0480	.0377	.1928	.016
% RSD	89.43	20.92	7.962	238.9	2.163	69.14	14.59	38.40	.2970
Rep #1	-11.52	-1.163	-.1294	.3299	7.895	.0150	.2381	-.4819	5.262
Rep #2	-4.948	-.7599	-.1514	.1818	7.577	.0880	.3016	-.3202	5.245
Rep #3	-1.142	-1.044	-.1448	-.1814	7.649	.1056	.2348	-.7041	5.276
9	Unk: GISC15-20285 26/10/2015 16:23:15 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-8.561**	**-1.664**	**-.1153**	**.3718**	**5.091**	**.0205**	**.2010**	**-.5278**	**14.54**
Desv. Est.	2.091	.123	.0105	.1135	.198	.0200	.0453	.0266	.11
% RSD	24.42	7.362	9.103	30.53	3.894	97.45	22.54	5.044	.7234
Rep #1	-6.500	-1.803	-.1120	.4454	4.893	.0042	.2188	-.5585	14.42
Rep #2	-10.68	-1.618	-.1069	.4289	5.290	.0429	.2347	-.5134	14.56
Rep #3	-8.502	-1.572	-.1270	.2411	5.091	.0145	.1495	-.5114	14.63
10	Unk: GISC15-20291 26/10/2015 16:25:25 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.814**	**-1.551**	**-.1308**	**-.2372**	**4.930**	**-.0017**	**.1609**	**-.6509**	**13.56**

Desv. Est.	2.297	.160	.0034	.1608	.215	.0178	.0225	.0733	.08
% RSD	39.51	10.29	2.625	67.78	4.356	1079.	13.99	11.26	.5876
Rep #1	-8.034	-1.410	-.1272	-.4141	4.696	-.0018	.1463	-.7298	13.64
Rep #2	-3.447	-1.725	-.1312	-.1001	5.118	.0162	.1868	-.6379	13.57
Rep #3	-5.963	-1.519	-.1340	-.1972	4.976	-.0194	.1495	-.5850	13.48
11	Unk: GISC15-20292 26/10/2015 16:27:34 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-6.120**	**-1.713**	**-.1701**	**.0301**	**4.686**	**.0482**	**.0882**	**-.7416**	**13.75**
Desv. Est.	1.677	.094	.0090	.1642	.229	.0117	.0357	.0386	.12
% RSD	27.40	5.474	5.317	545.5	4.886	24.36	40.50	5.207	.8471
Rep #1	-4.504	-1.639	-.1661	.1045	4.782	.0351	.0668	-.7723	13.83
Rep #2	-6.005	-1.819	-.1805	-.1582	4.425	.0515	.0685	-.7542	13.79
Rep #3	-7.852	-1.682	-.1638	.1439	4.851	.0579	.1295	-.6983	13.61
12	Unk: GISC15-20294 26/10/2015 16:29:45 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.314**	**-1.522**	**-.1592**	**.0787**	**5.152**	**-.0626**	**.0651**	**-.6784**	**10.41**
Desv. Est.	3.054	.160	.0159	.0778	.022	.0263	.0122	.2009	.09
% RSD	57.48	10.50	9.955	98.91	.4220	41.95	18.78	29.61	.8674
Rep #1	-8.179	-1.387	-.1566	.0382	5.139	-.0546	.0626	-.6097	10.43
Rep #2	-2.100	-1.698	-.1449	.1684	5.139	-.0413	.0544	-.5208	10.49
Rep #3	-5.663	-1.480	-.1763	.0294	5.177	-.0920	.0784	-.9046	10.31
13	Unk: GISC15-20308 26/10/2015 16:31:58 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.381**	**-.8075**	**-.1674**	**-.1249**	**4.811**	**-.0120**	**-.0079**	**-.5387**	**16.26**
Desv. Est.	1.523	.0205	.0126	.1062	.139	.0266	.0319	.2520	.09
% RSD	28.31	2.541	7.500	85.04	2.878	222.6	404.2	46.77	.5692
Rep #1	-4.607	-.7912	-.1818	-.0170	4.893	-.0409	.0229	-.3775	16.25
Rep #2	-4.401	-.8305	-.1613	-.2293	4.651	-.0065	-.0408	-.4096	16.36
Rep #3	-7.136	-.8008	-.1590	-.1282	4.888	.0115	-.0059	-.8291	16.17
14	Unk: GISC15-20309 26/10/2015 16:34:04 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-3.090**	**-1.281**	**-.0775**	**.0309**	**4.920**	**.0002**	**.1780**	**-.6699**	**18.67**
Desv. Est.	2.319	.130	.0156	.2047	.143	.0353	.0182	.2232	.04
% RSD	75.04	10.11	20.14	662.1	2.908	16810.	10.20	33.31	.2354
Rep #1	-.4215	-1.132	-.0598	.0260	4.987	-.0048	.1897	-.5672	18.63
Rep #2	-4.616	-1.349	-.0892	.2380	5.017	-.0323	.1873	-.9259	18.65
Rep #3	-4.232	-1.362	-.0835	-.1713	4.756	.0377	.1571	-.5166	18.71
15	Unk: GISC15-20310 26/10/2015 16:36:32 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-2.443**	**-1.021**	**-.1775**	**.1713**	**3.298**	**.0184**	**.0070**	**-.5445**	**15.15**
Desv. Est.	2.669	.063	.0091	.0834	.133	.0298	.0582	.3397	.37
% RSD	109.2	6.152	5.146	48.67	4.021	161.8	827.3	62.39	2.471

Rep #1	-1.347	-1.006	-.1851	.2243	3.308	.0016	.0648	-.7089	15.50
Rep #2	-5.486	-.9668	-.1674	.0752	3.161	.0527	.0080	-.7707	15.20
Rep #3	-.4964	-1.090	-.1801	.2145	3.426	.0008	-.0517	-.1538	14.76

16	QC: STD DE CHEQUEO -3 D MP-151026: QUESO:	26/10/2015 17:07:44 CONC
	Cd2265	Pb2203
Línea	226.502 {44	220.353 {45
Unidades	mg/Kg	mg/Kg
Media	**.0424**	**.0348**
Desv. Est.	.0003	.0019
% RSD	.8213	5.365
Rep #1	.0426	.0370
Rep #2	.0426	.0338
Rep #3	.0420	.0337
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

17	QC: STD DE CHEQUEO -5 D MP-151026: QUESO:		26/10/2015 17:09:57 CONC		
	As1890	Cu3247	Fe2599	Mn2576	Ni2316
Línea	189.042 {47	324.754 {10	259.940 {13	257.610 {13	231.604 {44
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4450**	**.3858**	**.4273**	**.3991**	**.3971**
Desv. Est.	.0018	.0031	.0029	.0009	.0013
% RSD	.3939	.8026	.6719	.2133	.3195
Rep #1	.4432	.3822	.4291	.3981	.3975
Rep #2	.4467	.3875	.4240	.3994	.3982
Rep #3	.4451	.3877	.4288	.3997	.3957
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor					
Intervalo					

18	QC: STD DE CHEQUEO -7 D MP-151026: QUESO:	26/10/2015 17:12:09 CONC
	Al3082	Zn2138
Línea	308.215 {10	213.856 {45
Unidades	mg/Kg	mg/Kg
Media	**3.564**	**4.197**
Desv. Est.	.065	.004
% RSD	1.817	.0932
Rep #1	3.639	4.198
Rep #2	3.532	4.193
Rep #3	3.521	4.200
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

19	Unk: GISC15-20275-R D MP-151026: QUESO:		26/10/2015 17:14:30 CONC x100						
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.320**	**-1.603**	**-.0616**	**.1622**	**5.988**	**.1484**	**.2401**	**-.4213**	**18.73**
Desv. Est.	4.025	.216	.0042	.2342	.179	.0901	.0389	.0997	.22
% RSD	75.66	13.48	6.772	144.4	2.999	60.72	16.22	23.65	1.167
Rep #1	-.6740	-1.362	-.0572	.4252	6.176	.2357	.2467	-.5132	18.48
Rep #2	-7.758	-1.779	-.0620	.0847	5.970	.1537	.1983	-.4354	18.80
Rep #3	-7.529	-1.668	-.0655	-.0235	5.818	.0557	.2754	-.3154	18.90

20	Unk: GISC15-20322 26/10/2015 17:18:57 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.680**	**-1.170**	**-.1611**	**-.2401**	**2.395**	**-.0320**	**.0725**	**-.6147**	**19.77**
Desv. Est.	4.336	.255	.0020	.3257	.105	.0109	.0803	.0608	.19
% RSD	76.33	21.75	1.235	135.6	4.396	34.07	110.7	9.890	.9445
Rep #1	-6.697	-.9438	-.1607	-.2186	2.358	-.0198	.1638	-.5445	19.87
Rep #2	-.9265	-1.446	-.1593	.0743	2.314	-.0353	.0129	-.6481	19.55
Rep #3	-9.418	-1.121	-.1632	-.5760	2.514	-.0409	.0410	-.6514	19.88
21	Unk: GISC15-20323 26/10/2015 17:21:17 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-3.447**	**-.9662**	**-.1762**	**-.1212**	**5.057**	**.0341**	**.0760**	**-.5243**	**29.39**
Desv. Est.	1.036	.3490	.0056	.1442	.212	.0081	.0409	.1874	.18
% RSD	30.06	36.12	3.156	119.0	4.192	23.68	53.82	35.74	.6282
Rep #1	-3.204	-.5750	-.1822	.0444	5.282	.0248	.1182	-.3164	29.29
Rep #2	-4.583	-1.246	-.1712	-.2199	4.861	.0381	.0365	-.6803	29.28
Rep #3	-2.554	-1.078	-.1753	-.1881	5.027	.0394	.0735	-.5762	29.60
22	Unk: GISC15-20334 26/10/2015 17:23:36 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.819**	**-1.137**	**-.1365**	**.0647**	**4.684**	**-.0278**	**.0951**	**-.5656**	**10.26**
Desv. Est.	3.570	.118	.0037	.2804	.233	.0261	.0098	.0866	.11
% RSD	61.35	10.40	2.747	433.2	4.980	93.61	10.30	15.31	1.081
Rep #1	-9.764	-1.075	-.1401	-.1383	4.466	-.0572	.0927	-.4785	10.39
Rep #2	-2.811	-1.274	-.1326	.3846	4.930	-.0190	.0867	-.6517	10.17
Rep #3	-4.882	-1.064	-.1368	-.0522	4.656	-.0074	.1059	-.5666	10.22
23	Unk: GISC15-20335 26/10/2015 17:26:03 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-2.325**	**-1.465**	**-.1791**	**.1626**	**7.474**	**.2878**	**.0184**	**-.4359**	**46.35**
Desv. Est.	3.053	.273	.0021	.0741	.139	.0122	.0359	.1518	.40
% RSD	131.3	18.60	1.160	45.56	1.861	4.253	195.3	34.83	.8594
Rep #1	-5.439	-1.253	-.1772	.2056	7.633	.3001	-.0006	-.6109	46.67
Rep #2	.6633	-1.773	-.1788	.0770	7.377	.2876	.0598	-.3399	46.47
Rep #3	-2.198	-1.370	-.1813	.2050	7.411	.2756	-.0041	-.3568	45.90
24	Unk: GISC15-20336 26/10/2015 17:28:08 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-7.376**	**-1.592**	**-.1623**	**-.1388**	**3.454**	**.0155**	**.0221**	**-.7640**	**19.22**
Desv. Est.	2.685	.230	.0062	.3163	.246	.0505	.0281	.1440	.01
% RSD	36.40	14.46	3.797	227.9	7.116	325.1	127.3	18.84	.0732
Rep #1	-10.11	-1.341	-.1674	-.0015	3.663	-.0250	-.0060	-.7433	19.21
Rep #2	-4.737	-1.641	-.1641	.0856	3.517	.0721	.0220	-.6315	19.21
Rep #3	-7.286	-1.794	-.1555	-.5006	3.183	-.0005	.0503	-.9172	19.23
25	Unk: GISC15-20357 26/10/2015 17:30:28 CONC x100 D MP-151026: QUESO:								

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-6.726**	**-1.515**	**-.1710**	**-.0980**	**3.125**	**-.0465**	**.0136**	**-.8856**	**19.97**
Desv. Est.	4.773	.098	.0027	.1136	.379	.0107	.0475	.3346	.16
% RSD	70.96	6.471	1.569	115.9	12.13	23.00	349.5	37.78	.7837
Rep #1	-2.096	-1.407	-.1683	-.1279	3.286	-.0559	-.0133	-.5656	20.04
Rep #2	-11.63	-1.599	-.1737	-.1936	2.691	-.0486	-.0144	-1.233	19.79
Rep #3	-6.454	-1.540	-.1710	.0276	3.396	-.0349	.0684	-.8581	20.08
26	Unk: GISC15-20360 26/10/2015 17:33:08 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-6.659**	**-1.390**	**-.1444**	**-.0301**	**3.582**	**-.0037**	**.0354**	**-.9223**	**20.84**
Desv. Est.	2.144	.300	.0067	.1822	.268	.0415	.0477	.2724	.20
% RSD	32.20	21.57	4.654	605.8	7.476	1136.	134.8	29.54	.9676
Rep #1	-6.061	-1.305	-.1435	-.1646	3.343	.0205	.0527	-1.186	20.62
Rep #2	-9.039	-1.142	-.1382	-.1029	3.871	.0201	-.0186	-.6420	20.91
Rep #3	-4.878	-1.724	-.1516	.1772	3.531	-.0516	.0721	-.9387	21.00
27	Unk: GISC15-20377 26/10/2015 17:35:21 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-3.891**	**-1.675**	**-.1737**	**-.0086**	**2.361**	**-.0553**	**.0451**	**-.8102**	**26.02**
Desv. Est.	1.093	.151	.0063	.2556	.148	.0421	.0443	.2004	.21
% RSD	28.08	8.988	3.623	2976.	6.282	76.13	98.25	24.73	.8003
Rep #1	-3.765	-1.567	-.1809	-.1783	2.375	-.0237	-.0042	-.5902	26.25
Rep #2	-2.867	-1.611	-.1694	.2853	2.206	-.0392	.0816	-.8583	25.86
Rep #3	-5.041	-1.847	-.1708	-.1328	2.502	-.1031	.0577	-.9821	25.94
28	Unk: GISC15-20387 26/10/2015 17:41:06 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-3.049**	**-1.658**	**-.1576**	**.0645**	**6.469**	**.0356**	**.1298**	**-.8849**	**24.30**
Desv. Est.	1.507	.078	.0212	.1804	.313	.0461	.0136	.3040	.31
% RSD	49.42	4.680	13.47	279.7	4.833	129.6	10.50	34.35	1.291
Rep #1	-4.789	-1.572	-.1752	-.0500	6.324	-.0125	.1344	-.6975	24.11
Rep #2	-2.142	-1.676	-.1636	.2725	6.255	.0399	.1145	-1.236	24.13
Rep #3	-2.217	-1.724	-.1340	-.0290	6.828	.0794	.1405	-.7215	24.66
29	Unk: GISC15-20392 26/10/2015 17:45:52 CONC x100 D MP-151026: QUESO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-5.645**	**-1.806**	**-.1582**	**-.0489**	**6.250**	**.0572**	**.1252**	**-.8061**	**24.57**
Desv. Est.	1.431	.171	.0036	.0314	.323	.0252	.0451	.1080	.23
% RSD	25.35	9.463	2.275	64.26	5.171	44.09	36.03	13.40	.9301
Rep #1	-7.262	-1.941	-.1621	-.0842	6.582	.0296	.1609	-.8897	24.62
Rep #2	-5.126	-1.614	-.1550	-.0384	5.936	.0789	.0745	-.8445	24.32
Rep #3	-4.546	-1.864	-.1576	-.0241	6.232	.0630	.1402	-.6841	24.77

1	Cal: Blanco 27/10/2015 08:56:17 IR D Hg-151027: QUESO:
	Hg1942
Unidades	Cts/s
Media	**-31.50**
Desv. Est.	1.49
% RSD	4.720
Rep #1	-33.18
Rep #2	-30.95
Rep #3	-30.37
2	Cal: STD 1 27/10/2015 09:00:34 IR D Hg-151027: QUESO:
	Hg1942
Unidades	Cts/s
Media	**43.79**
Desv. Est.	.63
% RSD	1.437
Rep #1	44.27
Rep #2	43.08
Rep #3	44.02
3	Cal: STD 2 27/10/2015 09:01:52 IR D Hg-151027: QUESO:
	Hg1942
Unidades	Cts/s
Media	**211.1**
Desv. Est.	8.2
% RSD	3.899
Rep #1	201.8
Rep #2	214.2
Rep #3	217.4
4	Cal: STD 3 27/10/2015 09:03:38 IR D Hg-151027: QUESO:
	Hg1942
Unidades	Cts/s
Media	**386.6**
Desv. Est.	7.5
% RSD	1.951
Rep #1	377.9
Rep #2	391.0
Rep #3	390.8
5	Cal: STD 4 27/10/2015 09:04:58 IR D Hg-151027: QUESO:
	Hg1942
Unidades	Cts/s
Media	**811.6**
Desv. Est.	10.2
% RSD	1.260
Rep #1	802.4
Rep #2	822.6
Rep #3	809.7
6	Blanco: REACTIVO 27/10/2015 09:06:57 CONC D Hg-151027: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0001**
Desv. Est.	.0000

% RSD	20.23
Rep #1	.0001
Rep #2	.0001
Rep #3	.0000
7	Blanco: MUESTRA 27/10/2015 09:08:37 CONC x100 D Hg-151027: QUESO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0648**
Desv. Est.	.0027
% RSD	4.094
Rep #1	-.0618
Rep #2	-.0670
Rep #3	-.0654
8	Unk: RECUPERACION1 27/10/2015 09:13:01 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.4735**
Desv. Est.	.0100
% RSD	2.110
Rep #1	.4626
Rep #2	.4755
Rep #3	.4823
9	Unk: GISC15-20275 27/10/2015 09:15:25 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0585**
Desv. Est.	.0035
% RSD	5.919
Rep #1	-.0546
Rep #2	-.0611
Rep #3	-.0599
10	Unk: GISC15-20276 27/10/2015 09:16:43 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0773**
Desv. Est.	.0019
% RSD	2.446
Rep #1	-.0792
Rep #2	-.0771
Rep #3	-.0755
11	Unk: GISC15-20279 27/10/2015 09:18:16 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0545**
Desv. Est.	.0007
% RSD	1.205
Rep #1	-.0548

Rep #2	-.0538
Rep #3	-.0551
12	Unk: GISC15-20285 27/10/2015 09:19:43 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0569**
Desv. Est.	.0004
% RSD	.6227
Rep #1	-.0568
Rep #2	-.0567
Rep #3	-.0573
13	Unk: GISC15-20291 27/10/2015 09:21:23 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0666**
Desv. Est.	.0035
% RSD	5.209
Rep #1	-.0633
Rep #2	-.0663
Rep #3	-.0702
14	Unk: GISC15-20292 27/10/2015 09:23:12 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0666**
Desv. Est.	.0004
% RSD	.5989
Rep #1	-.0663
Rep #2	-.0665
Rep #3	-.0671
15	Unk: GISC15-20294 27/10/2015 09:24:29 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0543**
Desv. Est.	.0018
% RSD	3.228
Rep #1	-.0562
Rep #2	-.0540
Rep #3	-.0527
16	Unk: GISC15-20308 27/10/2015 09:25:59 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0552**
Desv. Est.	.0033
% RSD	5.933
Rep #1	-.0580
Rep #2	-.0516
Rep #3	-.0561

17	Unk: GISC15-20309 27/10/2015 09:27:36 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0588**
Desv. Est.	.0024
% RSD	4.108
Rep #1	-.0561
Rep #2	-.0607
Rep #3	-.0595
18	Unk: GISC15-20310 27/10/2015 09:28:58 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0386**
Desv. Est.	.0006
% RSD	1.560
Rep #1	-.0384
Rep #2	-.0381
Rep #3	-.0393
19	Unk: ESTANDAR DE CHEQUEO 27/10/2015 09:36:22 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.4632**
Desv. Est.	.0247
% RSD	5.335
Rep #1	.4364
Rep #2	.4684
Rep #3	.4850
20	Unk: GISC15-20275-R 27/10/2015 09:37:57 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0551**
Desv. Est.	.0013
% RSD	2.445
Rep #1	-.0566
Rep #2	-.0539
Rep #3	-.0549
21	Unk: GISC15-20322 27/10/2015 09:40:35 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0583**
Desv. Est.	.0024
% RSD	4.178
Rep #1	-.0612
Rep #2	-.0570
Rep #3	-.0569
22	Unk: GISC15-20323 27/10/2015 09:42:06 CONC x100

	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0418**
Desv. Est.	.0013
% RSD	3.066
Rep #1	-.0404
Rep #2	-.0425
Rep #3	-.0427
23	Unk: GISC15-20334 27/10/2015 09:43:30 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0524**
Desv. Est.	.0027
% RSD	5.173
Rep #1	-.0502
Rep #2	-.0554
Rep #3	-.0515
24	Unk: GISC15-20335 27/10/2015 09:44:45 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0440**
Desv. Est.	.0032
% RSD	7.375
Rep #1	-.0477
Rep #2	-.0427
Rep #3	-.0415
25	Unk: GISC15-20336 27/10/2015 09:45:59 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0226**
Desv. Est.	.0011
% RSD	4.853
Rep #1	-.0215
Rep #2	-.0224
Rep #3	-.0237
26	Unk: GISC15-20357 27/10/2015 09:47:42 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0300**
Desv. Est.	.0025
% RSD	8.458
Rep #1	-.0277
Rep #2	-.0295
Rep #3	-.0327
27	Unk: GISC15-20360 27/10/2015 09:49:06 CONC x100
	Hg1942
Línea	194.227 {47

Unidades	mg/kg
Media	**-.0511**
Desv. Est.	.0006
% RSD	1.193
Rep #1	-.0504
Rep #2	-.0516
Rep #3	-.0512
28	Unk: GISC15-20377 27/10/2015 09:50:32 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0192**
Desv. Est.	.0015
% RSD	8.058
Rep #1	-.0199
Rep #2	-.0203
Rep #3	-.0174
29	Unk: GISC15-20387 27/10/2015 09:52:01 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0026**
Desv. Est.	.0030
% RSD	114.7
Rep #1	-.0002
Rep #2	.0023
Rep #3	.0058
30	Unk: GISC15-20392 27/10/2015 09:53:34 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0250**
Desv. Est.	.0013
% RSD	5.158
Rep #1	-.0236
Rep #2	-.0261
Rep #3	-.0254

SISENA

CONTENIDO

CARNE

1.1 Informes de resultados de prueba

1.2 Curva de calibración

1.3 Evaluación de muestras de control de calidad

1.4 Datos crudos de lote analítico

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LABORATORIO DE RESIDUOS TÓXICOS

ema entidad mexicana de acreditación, a.c.

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005 Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: CARNE
Fecha de Recepción: 2015-10-15

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

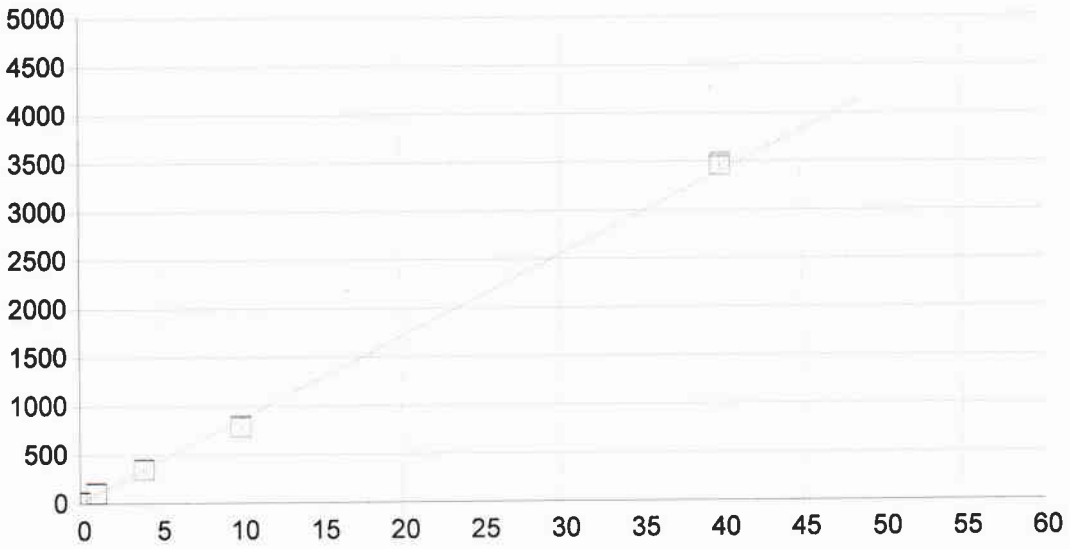
DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/10/15 (1)
Fecha de Analisis de Metales Mercurio: 2015-10-22 2015-10-23
Fecha de Realización del Informe: 2015-10-23

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I001/15/0006	GISC15-20274
L-I021/15/0210	GISC15-20311
L-I022/15/0211	GISC15-20312
L-I022/15/0212	GISC15-20313
L-I022/15/0213	GISC15-20314
L-I022/15/0214	GISC15-20315
L-I022/15/0215	GISC15-20316
L-I022/15/0216	GISC15-20317
L-I022/15/0217	GISC15-20318
L-I022/15/0218	GISC15-20319
L-I030/15/0294	GISC15-20332
L-I030/15/0295	GISC15-20333
L-I038/15/0373	GISC15-20354
L-I038/15/0374	GISC15-20355
L-I038/15/0375	GISC15-20356

REVISÓ

Q.F.B.Leticia Velázquez Méndez
Gerente Técnico

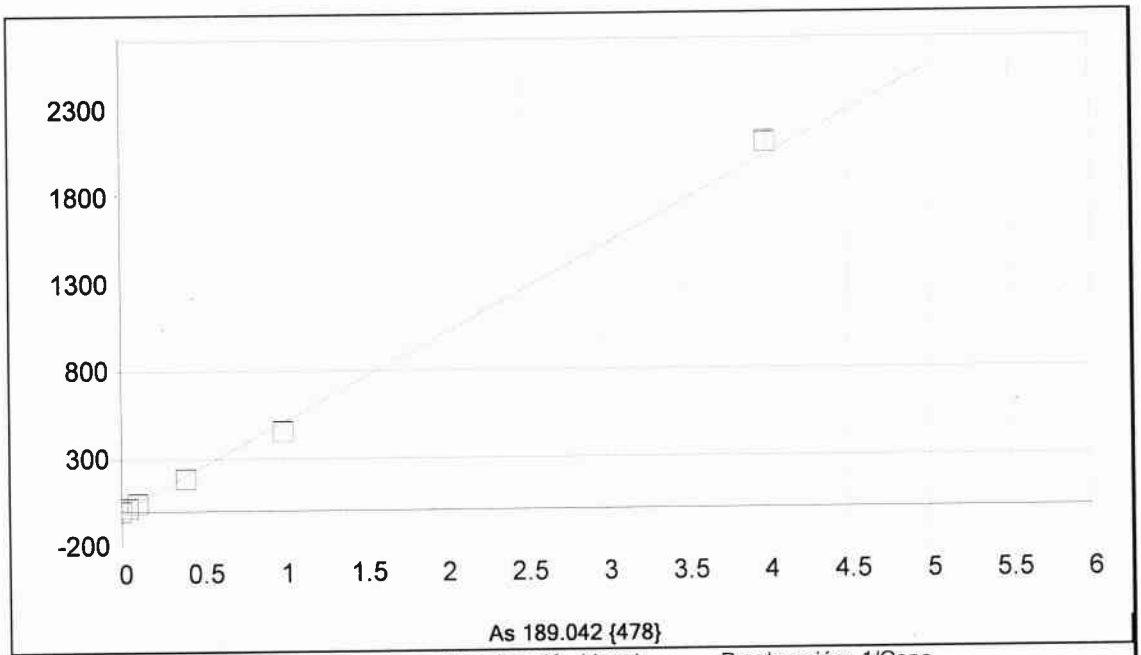


Al 308.215 {109}

Fecha de la 20/10/2015 18:06:37 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	10.781259	Reajustar P	1.000000
A1 (Ganancia)	84.715218	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999139	Estatus:	OK.
Error Estándar de Est:	1.063942		
MDL:	0.034292		
MQL:	0.114308		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00003	-.000	.000	10.778	5.31	1
STD 6	1.0000	1.1071	.107	10.7	104.57	4.00	1
STD 7	4.0000	3.9655	-.034	-.862	346.72	5.91	1
STD 8	10.000	9.1712	-.829	-8.29	787.72	8.65	1
STD 9	40.000	40.756	.756	1.89	3463.5	19.2	1

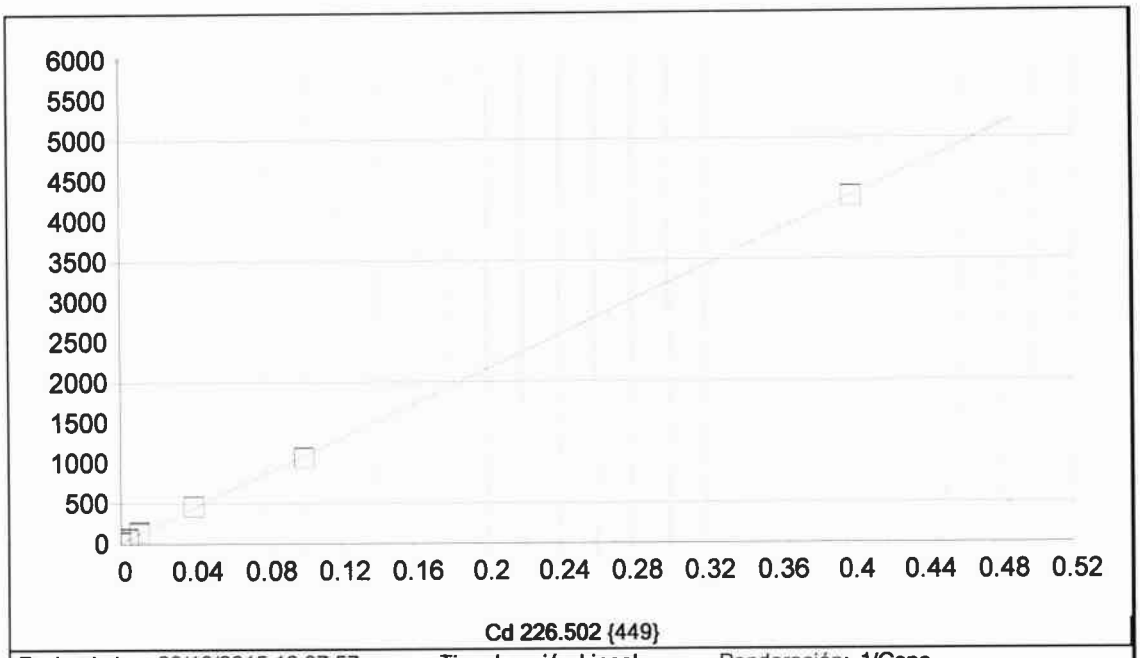


As 189.042 {478}

Fecha de la 20/10/2015 18:07:50 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	-0.256146	Reajustar P	1.000000
A1 (Ganancia)	506.325013	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998147	Estatus:	OK.
Error Estándar de Est:	0.562331		
MDL:	0.001563		
MQL:	0.005210		

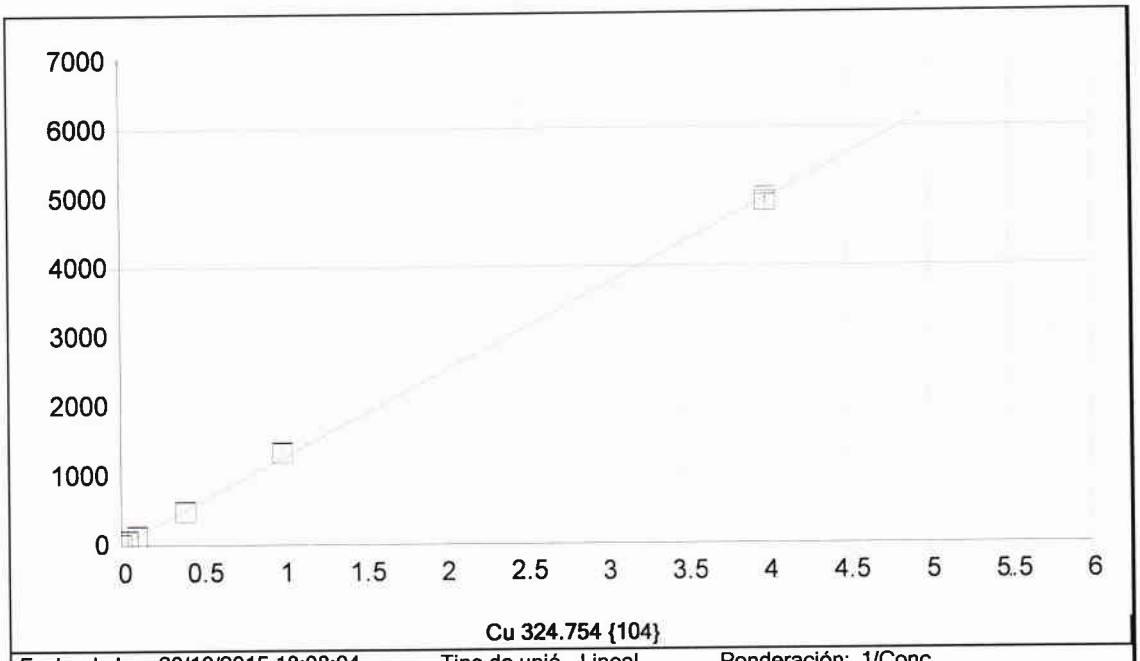
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	-.24860	1.18	1
STD 4	.10000	.08663	-.013	-13.4	43.607	.733	1
STD 5	.40000	.36692	-.033	-8.27	185.53	1.14	1
STD 6	1.0000	.89973	-.100	-10.0	455.30	1.40	1
STD 7	4.0000	4.1505	.150	3.76	2101.2	6.30	1
STD 3	.04000	.03626	-.004	-9.34	18.105	.777	1



Fecha de la 20/10/2015 18:07:57 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	19.352085	Reajustar P	1.000000
A1 (Ganancia)	10666.40868	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999782	Estatus:	OK.
Error Estándar de Est:	0.405646		
MDL:	0.000139		
MQL:	0.000464		

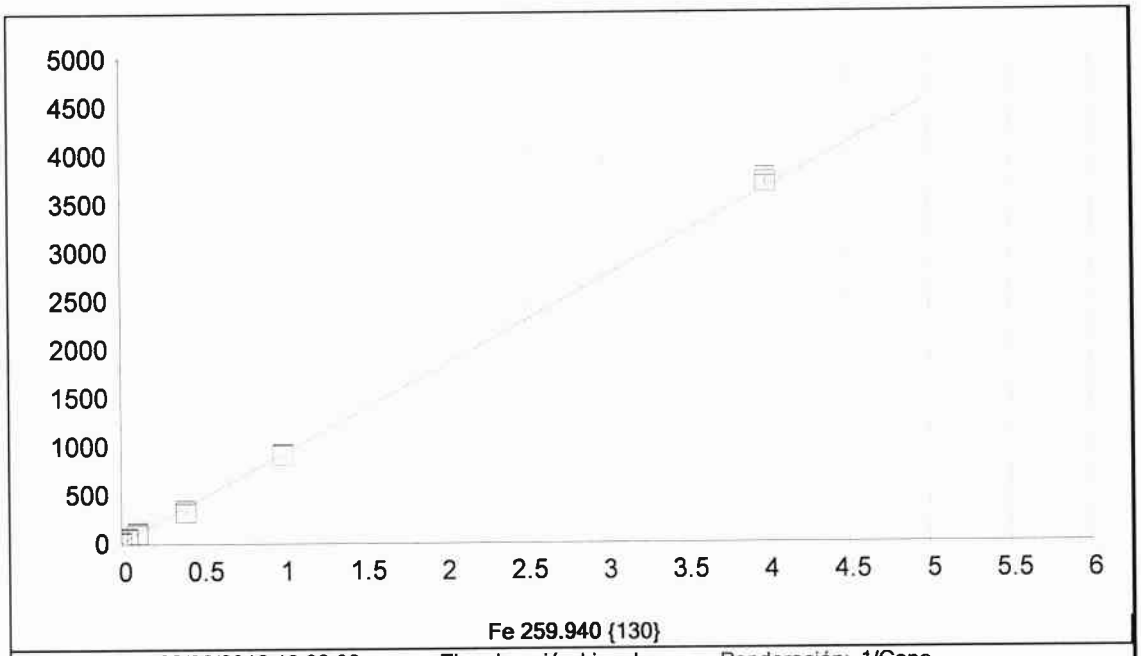
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	19.348	3.98	1
STD 1	.00400	.00390	-.000	-2.55	60.931	10.4	1
STD 2	.01000	.01116	.001	11.6	138.42	8.67	1
STD 3	.04000	.04149	.001	3.73	461.93	2.63	1
STD 4	.10000	.09782	-.002	-2.18	1062.7	3.20	1
STD 5	.40000	.39963	-.000	-.093	4281.9	.768	1



Fecha de la 20/10/2015 18:08:04 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	10.926092	Reajustar P	1.000000
A1 (Ganancia)	1240.546351	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999518	Estatus:	OK.
Error Estándar de Est:	0.702123		
MDL:	0.002266		
MQL:	0.007554		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	10.927	2.13	1
STD 5	.40000	.37911	-.021	-5.22	481.23	4.61	1
STD 6	1.0000	1.0601	.060	6.01	1326.0	6.66	1
STD 7	4.0000	3.9650	-.035	-.875	4929.7	53.3	1
STD 3	.04000	.04127	.001	3.17	62.123	4.00	1
STD 4	.10000	.09454	-.005	-5.46	128.20	5.82	1

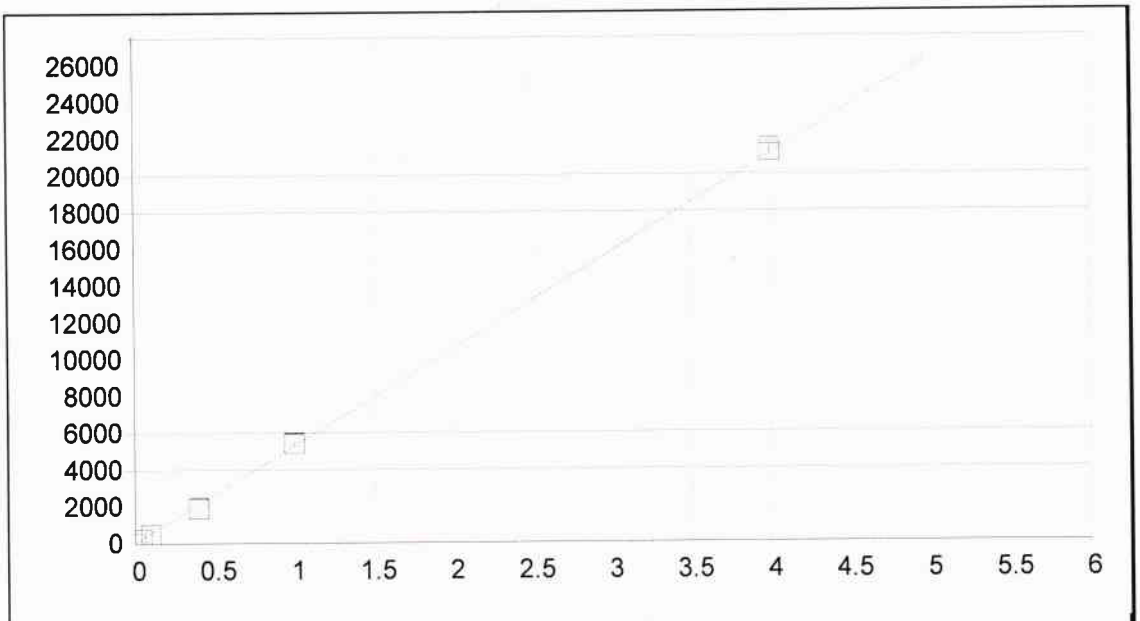


Fe 259.940 {130}

Fecha de la 22/02/2016 18:02:00 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	14.601788	Reajustar P	1.000000
A1 (Ganancia)	911.506255	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999237	Estatus:	OK.
Error Estándar de Est:	0.649159		
MDL:	0.002080		
MQL:	0.006934		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	14.603	5.23	1
STD 5	.40000	.34693	-.053	-13.3	330.83	15.9	1
STD 6	1.0000	.98863	-.011	-1.14	915.74	3.61	1
STD 3	.04000	.04373	.004	9.33	54.463	5.16	1
STD 4	.10000	.09930	-.001	-.697	105.12	13.1	1
STD 7	4.0000	4.0614	.061	1.54	3716.6	43.5	1

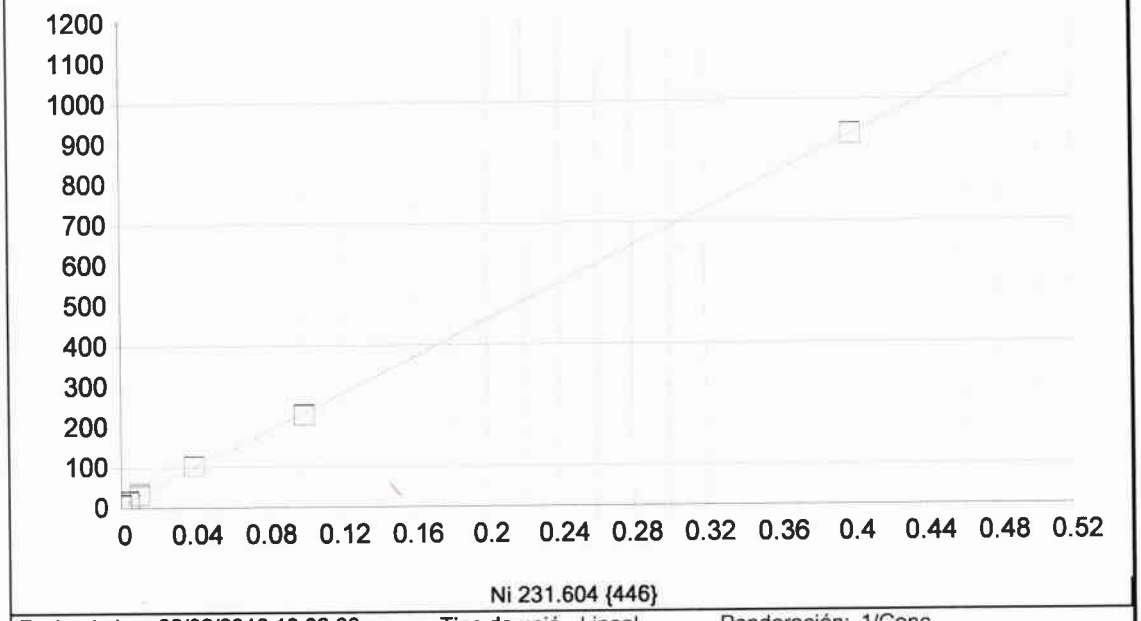


Mn 257.610 {131}

Fecha de la 22/02/2016 18:02:00 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	12.644685	Reajustar P	1.000000
A1 (Ganancia)	5271.797171	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999384	Estatus:	OK.
Error Estándar de Est:	3.371077		
MDL:	0.000403		
MQL:	0.001344		

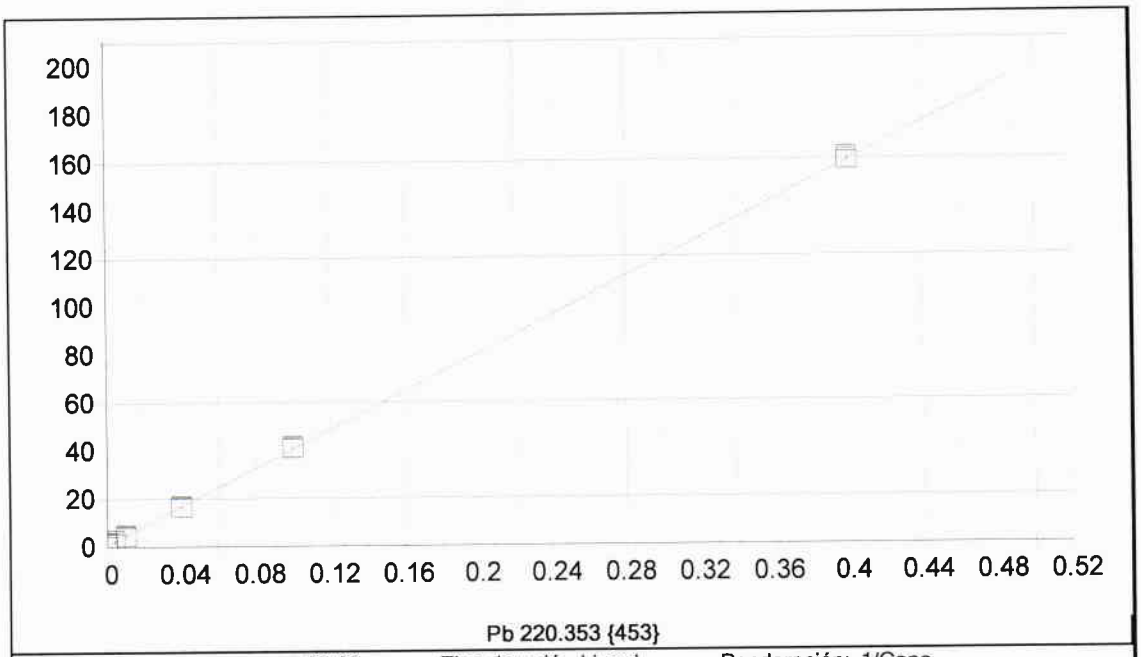
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	12.700	1.79	1
STD 5	.40000	.35974	-.040	-10.1	1909.1	10.3	1
STD 6	1.0000	1.0279	.028	2.79	5431.8	25.2	1
STD 3	.04000	.03720	-.003	-7.00	208.75	2.18	1
STD 4	.10000	.08735	-.013	-12.7	473.12	2.34	1
STD 7	4.0000	4.0278	.028	.694	21246.	194.	1



Fecha de la 22/02/2016 18:02:00 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	7.339661	Reajustar P	1.000000
A1 (Ganancia)	2268.717252	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999803	Estatus:	OK.
Error Estándar de Est:	0.081952		
MDL:	0.000494		
MQL:	0.001647		

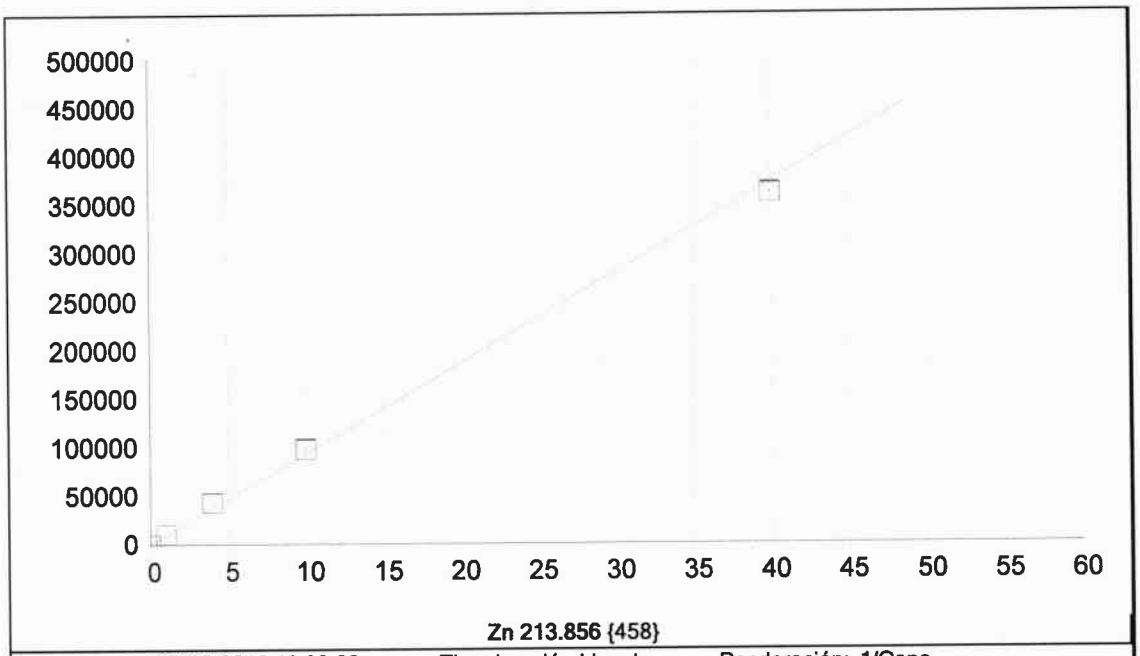
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	7.3396	1.08	1
STD 1	.00400	.00365	-.000	-8.73	15.623	2.12	1
STD 2	.01000	.01072	.001	7.20	31.661	3.17	1
STD 3	.04000	.04174	.002	4.36	102.04	.387	1
STD 4	.10000	.09757	-.002	-2.43	228.69	.849	1
STD 5	.40000	.40032	.000	.080	915.55	.532	1



Fecha de la 22/02/2016 18:02:00 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	0.899583	Reajustar P	1.000000
A1 (Ganancia)	396.095079	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999522	Estatus:	OK.
Error Estándar de Est:	0.022325		
MDL:	0.001427		
MQL:	0.004756		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.90023	.697	1
STD 1	.00400	.00280	-.001	-30.0	2.0084	.853	1
STD 2	.01000	.00887	-.001	-11.3	4.4134	.408	1
STD 3	.04000	.03945	-.001	-1.38	16.525	.422	1
STD 4	.10000	.10176	.002	1.76	41.206	.551	1
STD 5	.40000	.40112	.001	.280	159.78	1.12	1

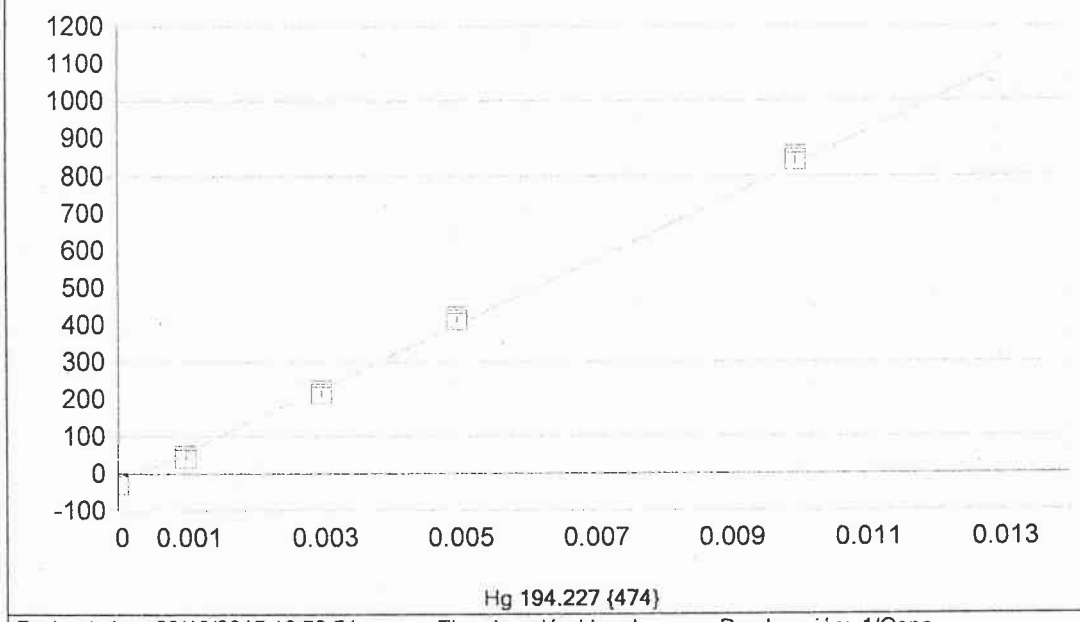


Zn 213.856 {458}

Fecha de la 22/02/2016 18:02:00 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	130.349194	Reajustar P	1.000000
A1 (Ganancia)	9330.506612	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998420	Estatus:	OK.
Error Estándar de Est:	158.859086		
MDL:	0.000107		
MQL:	0.000356		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00029	-.000	.000	127.65	3.19	1
STD 6	1.0000	1.1147	.115	11.5	10531.	24.3	1
STD 7	4.0000	4.6127	.613	15.3	43170.	114.	1
STD 8	10.000	10.527	.527	5.27	98349.	202.	1
STD 9	40.000	38.746	-1.25	-3.14	361650.	817.	1



Hg 194.227 {474}

Fecha de la	23/10/2015 16:58:54	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	-29.547090	Reajustar P	1.000000
A1 (Ganancia)	85814.23494	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998932	Estatus:	OK.
Error Estándar de Est:	0.705457		
MDL:	0.000022		
MQL:	0.000074		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	-29.533	3.83	1
STD 1	.00100	.00084	-.000	-16.0	42.510	5.40	1
STD 2	.00300	.00285	-.000	-5.02	214.97	9.12	1
STD 3	.00500	.00516	.000	3.16	413.07	8.87	1
STD 4	.01000	.01015	.000	1.53	841.73	10.2	1

Análisis: ***METALES PESADOS POR ICP-OES***

Lote analítico: DMP-CARNE-151020

Fecha de Análisis: 20/10/2015

Fecha de Reporte: 20/10/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÓN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.0100
NIVEL 5		0.400	0.400	0.400	0.400	0.400	0.400	0.400		
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000								10.000	
NIVEL 9	40.000								40.000	
Correlación	0.9991	0.9981	0.9998	0.9995	0.9992	0.9994	0.9998	0.9995	0.9984	0.9989

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/kg		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
2	QC:QC-3	Cadmio	0.0400	0.0400	100	8	Recuperación	Mercurio	0.5	0.5628	113
		Plomo	0.0400	0.0396	99	19	Recuperación	Mercurio	0.5	0.5711	114
3	QC:QC-5	Arsénico	0.4000	0.4006	100	30	Recuperación	Aluminio	0.4000	0.3544	89
		Cobre	0.4000	0.4029	101			Arsenico	0.4000	0.4422	111
		Fierro	0.4000	0.4027	101			Cadmio	0.4000	0.4287	107
		Manganeso	0.4000	0.4028	101			Cobre	0.4000	0.4177	104
		Níquel	0.4000	0.4005	100			Fierro	0.4000	0.4084	102
4	QC: QC-7	Aluminio	4.0000	3.9800	100			Manganesc	0.4000	0.4245	106
		Zinc	4.0000	4.0340	101			Niquel	0.4000	0.4271	107
20	QC:QC-3	Cadmio	0.0400	0.0478	120			Plomo	0.4000	0.4319	108
		Plomo	0.0400	0.0436	109			Zinc	0.4000	0.4246	106
21	QC:QC-5	Arsénico	0.4000	0.4512	113						
		Cobre	0.4000	0.4391	110						
		Fierro	0.4000	0.4250	106						
		Manganeso	0.4000	0.4725	118						
		Níquel	0.4000	0.4656	116						
22	QC: QC-7	Aluminio	4.0000	3.3400	84						
		Zinc	4.0000	4.3450	109						

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I. Gaudencio Vargas Espejel

ELABORÓ

Q.F.B. Leticia Velázquez Méndez

REVISÓ

PACE/GIS/I02-F01

GISCENA®

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Peso de muestra (g) Metales	Hg
GISC15-20274	Carne	Musculo	15/10/2015	0.5003	0.5018
GISC15-20311	Carne	Musculo	15/10/2015	0.5001	0.5001
GISC15-20312	Carne	Musculo	15/10/2015	0.4902	0.5002
GISC15-20313	Carne	Musculo	15/10/2015	0.5001	0.5035
GISC15-20314	Carne	Musculo	15/10/2015	0.5002	0.5002
GISC15-20315	Carne	Musculo	15/10/2015	0.5000	0.5010
GISC15-20316	Carne	Musculo	15/10/2015	0.4900	0.5033
GISC15-20317	Carne	Musculo	15/10/2015	0.5000	0.5049
GISC15-20318	Carne	Musculo	15/10/2015	0.4900	0.5050
GISC15-20319	Carne	Musculo	15/10/2015	0.5000	0.5017
GISC15-20332	Carne	Musculo	15/10/2015	0.4900	0.5013
GISC15-20333	Carne	Musculo	15/10/2015	0.5002	0.5102
GISC15-20354	Carne	Musculo	15/10/2015	0.5001	0.5100
GISC15-20355	Carne	Musculo	15/10/2015	0.5000	0.5015
GISC15-20356	Carne	Musculo	15/10/2015	0.5001	0.5017

P.A. [signature]

I.B.T. Reyna Ivette Delgado

[signature]

Q.F.B. Leticia Velazquez Méndez

1	Blanco: REACTIVO 23/10/2015 12:29:19 CONC D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-.1192**	**-.0016**	**-.0013**	**.0027**	**.0131**	**-.0008**	**-.0002**	**-.0014**	**-.0036**
Desv. Est.	.0622	.0018	.0001	.0023	.0033	.0003	.0003	.0009	.0015
% RSD	52.21	108.2	4.678	85.72	25.52	42.68	174.7	64.40	42.12
Rep #1	-.0563	-.0015	-.0014	.0037	.0121	-.0007	-.0005	-.0008	-.0051
Rep #2	-.1206	.0001	-.0013	.0001	.0168	-.0012	-.0002	-.0009	-.0038
Rep #3	-.1808	-.0035	-.0013	.0045	.0103	-.0005	.0001	-.0025	-.0020

2	QC: QC-3 23/10/2015 12:33:58 CONC D MP-151023: TEJIDO:	
	Cd2265	Pb2203
Línea	226.502 {44	220.353 {45
Unidades	mg/Kg	mg/Kg
Media	**.0400**	**.0396**
Desv. Est.	.0000	.0004
% RSD	.0917	1.011
Rep #1	.0400	.0398
Rep #2	.0400	.0398
Rep #3	.0400	.0391
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

3	QC: QC-5 23/10/2015 12:38:21 CONC D MP-151023: TEJIDO:				
	As1890	Cu3247	Fe2599	Mn2576	Ni2316
Línea	189.042 {47	324.754 {10	259.940 {13	257.610 {13	231.604 {44
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4006**	**.4029**	**.4027**	**.4028**	**.4005**
Desv. Est.	.0024	.0022	.0047	.0012	.0004
% RSD	.6011	.5392	1.168	.2999	.1009
Rep #1	.4031	.4004	.3988	.4016	.4008
Rep #2	.4005	.4039	.4079	.4040	.4000
Rep #3	.3983	.4044	.4012	.4026	.4006
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor					
Intervalo					

4	QC: QC-7 23/10/2015 12:43:04 CONC D MP-151023: TEJIDO:	
	Al3082	Zn2138
Línea	308.215 {10	213.856 {45
Unidades	mg/Kg	mg/Kg
Media	**3.980**	**4.034**
Desv. Est.	.008	.007
% RSD	.1988	.1745
Rep #1	3.983	4.026
Rep #2	3.987	4.039
Rep #3	3.971	4.037
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

5	Blanco: REACTIVO 23/10/2015 12:45:40 CONC D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-.1145**	**-.0049**	**-.0019**	**-.0039**	**.0155**	**-.0012**	**-.0026**	**-.0020**	**-.0079**
Desv. Est.	.0183	.0011	.0002	.0015	.0010	.0007	.0001	.0005	.0001
% RSD	16.02	23.04	10.15	39.15	6.531	60.84	4.556	25.64	1.697
Rep #1	-.1352	-.0039	-.0017	-.0045	.0167	-.0004	-.0026	-.0014	-.0080
Rep #2	-.1002	-.0062	-.0020	-.0050	.0149	-.0014	-.0025	-.0024	-.0079
Rep #3	-.1082	-.0047	-.0020	-.0022	.0150	-.0018	-.0027	-.0021	-.0077
6	Blanco: MUESTRA 23/10/2015 12:47:39 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-9.011**	**-1.084**	**-.2240**	**.2207**	**10.16**	**.2857**	**-.1888**	**-.3067**	**10.65**
Desv. Est.	1.656	.114	.0051	.1237	.33	.0390	.0109	.0166	.39
% RSD	18.38	10.53	2.293	56.05	3.275	13.66	5.777	5.407	3.671
Rep #1	-7.203	-1.215	-.2297	.3229	9.831	.2669	-.1812	-.3220	10.24
Rep #2	-10.45	-1.003	-.2224	.0832	10.50	.2596	-.1840	-.2891	10.71
Rep #3	-9.376	-1.035	-.2198	.2560	10.14	.3305	-.2013	-.3089	11.01
7	Unk: GISC15-20274 23/10/2015 12:55:24 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.9455**	**-.1018**	**.0215**	**.3606**	**18.16**	**-.1894**	**-.1423**	**.0152**	**19.21**
Desv. Est.	1.748	.0466	.0123	.0810	.60	.0145	.0176	.1472	.07
% RSD	184.9	45.75	57.43	22.47	3.324	7.658	12.34	967.5	.3759
Rep #1	-.4921	-.1179	.0357	.4018	18.21	-.1823	-.1527	-.0830	19.17
Rep #2	2.892	-.0493	.0133	.4129	17.53	-.1798	-.1221	-.0558	19.16
Rep #3	.4368	-.1381	.0155	.2673	18.74	-.2061	-.1523	.1844	19.29
8	Unk: GISC15-20274-R 23/10/2015 13:00:21 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**4.490**	**-.2151**	**.0623**	**.5912**	**18.77**	**-.0968**	**-.0686**	**-.0617**	**19.10**
Desv. Est.	1.876	.1534	.0061	.0750	.39	.0301	.0198	.1273	.61
% RSD	41.79	71.33	9.842	12.68	2.066	31.07	28.83	206.4	3.204
Rep #1	4.716	-.2751	.0686	.5160	18.36	-.0620	-.0635	-.1678	18.44
Rep #2	6.242	-.0407	.0563	.5917	19.13	-.1143	-.0904	-.0969	19.22
Rep #3	2.510	-.3295	.0619	.6660	18.82	-.1139	-.0518	.0795	19.65
9	Unk: GISC15-20311 23/10/2015 13:03:01 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.069**	**-.3737**	**.0702**	**19.47**	**80.34**	**4.198**	**-.0696**	**.0022**	**78.50**
Desv. Est.	1.107	.1394	.0070	.05	.22	.061	.0397	.0748	.53
% RSD	36.07	37.31	9.921	.2549	.2689	1.453	57.06	3396.	.6795
Rep #1	4.119	-.4034	.0728	19.53	80.10	4.150	-.0237	-.0153	77.90
Rep #2	3.174	-.4959	.0624	19.44	80.52	4.177	-.0927	.0842	78.67
Rep #3	1.913	-.2218	.0756	19.44	80.41	4.267	-.0924	-.0623	78.93
10	Unk: GISC15-20311-R 23/10/2015 13:05:12 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.499**	**-.3787**	**.0758**	**19.48**	**80.80**	**4.194**	**-.0614**	**.0311**	**79.34**

Desv. Est.	2.399	.0642	.0123	.26	.24	.031	.0535	.1221	.22
% RSD	96.01	16.96	16.28	1.314	.2944	.7376	87.13	392.2	.2787
Rep #1	5.247	-.4455	.0857	19.28	80.76	4.158	-.0088	-.0119	79.17
Rep #2	1.432	-.3730	.0796	19.38	80.58	4.208	-.0597	.1690	79.25
Rep #3	.8183	-.3174	.0620	19.77	81.05	4.215	-.1158	-.0636	79.59
11	Unk: GISC15-20312 23/10/2015 13:08:03 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.051**	**-.3480**	**.0811**	**21.64**	**67.63**	**1.837**	**.0093**	**.0012**	**68.63**
Desv. Est.	1.298	.1503	.0114	.14	.17	.019	.0135	.0531	.19
% RSD	63.26	43.19	14.03	.6565	.2534	1.049	144.8	4342.	.2788
Rep #1	3.439	-.4951	.0929	21.69	67.61	1.826	.0231	.0603	68.82
Rep #2	1.847	-.3543	.0702	21.48	67.47	1.860	.0088	-.0141	68.44
Rep #3	.8681	-.1947	.0802	21.76	67.81	1.826	-.0039	-.0425	68.61
12	Unk: GISC15-20312R 23/10/2015 13:10:21 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.422**	**-.3084**	**.0879**	**21.94**	**67.73**	**1.874**	**.0076**	**-.0222**	**68.98**
Desv. Est.	.950	.0370	.0043	.40	.13	.007	.0185	.0739	.08
% RSD	39.24	11.99	4.865	1.828	.1863	.3854	242.8	332.7	.1111
Rep #1	1.532	-.3499	.0840	22.23	67.71	1.875	-.0095	.0083	68.89
Rep #2	3.422	-.2959	.0924	21.48	67.61	1.881	.0051	.0315	69.04
Rep #3	2.311	-.2792	.0872	22.12	67.86	1.866	.0273	-.1065	69.00
13	Unk: GISC15-20313 23/10/2015 13:12:32 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.588**	**-.1425**	**.0845**	**18.97**	**71.90**	**1.407**	**-.1146**	**-.0258**	**77.58**
Desv. Est.	2.018	.0913	.0144	.10	.38	.039	.0718	.0801	.28
% RSD	77.97	64.09	16.99	.5107	.5333	2.736	62.67	310.0	.3546
Rep #1	4.235	-.1027	.0989	19.08	72.31	1.374	-.0373	-.0946	77.78
Rep #2	.3373	-.2470	.0846	18.90	71.85	1.398	-.1274	-.0451	77.27
Rep #3	3.190	-.0778	.0702	18.94	71.54	1.449	-.1792	.0621	77.70
14	Unk: GISC15-20314 23/10/2015 13:14:58 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**3.478**	**-.3126**	**.0264**	**3.786**	**43.03**	**-.0072**	**-.1728**	**.0142**	**5.922**
Desv. Est.	1.245	.0980	.0026	.101	.36	.0139	.0264	.0635	.015
% RSD	35.81	31.34	9.737	2.674	.8266	192.1	15.29	448.4	.2500
Rep #1	2.129	-.2797	.0291	3.708	42.83	-.0217	-.1682	-.0091	5.939
Rep #2	3.721	-.2353	.0263	3.900	43.44	.0059	-.1490	-.0344	5.912
Rep #3	4.584	-.4228	.0239	3.749	42.81	-.0059	-.2013	.0860	5.915
15	Unk: GISC15-20315 23/10/2015 13:19:49 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.1438**	**.3014**	**-.0006**	**-.3318**	**.0955**	**-.1182**	**-.1528**	**.0427**	**-10.03**
Desv. Est.	1.926	.0468	.0006	.0992	.1250	.0111	.0254	.0308	.03
% RSD	1340.	15.52	94.21	29.91	130.8	9.423	16.60	72.15	.2652

Rep #1	1.487	.2535	-.0003	-.2279	-.0388	-.1241	-.1806	.0079	-10.06
Rep #2	1.006	.3470	-.0003	-.4256	.2084	-.1250	-.1468	.0666	-10.00
Rep #3	-2.062	.3037	-.0013	-.3417	.1170	-.1053	-.1310	.0535	-10.03
16	Unk: GISC15-20316 23/10/2015 13:22:15 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-.9621**	**-.1999**	**-.0082**	**4.628**	**45.59**	**.4458**	**-.1953**	**-.0532**	**5.894**
Desv. Est.	3.471	.0797	.0120	.077	.59	.0266	.0334	.0077	.151
% RSD	360.8	39.89	145.9	1.668	1.287	5.958	17.12	14.52	2.562
Rep #1	-4.633	-.1271	-.0182	4.652	44.96	.4676	-.1779	-.0544	5.749
Rep #2	2.267	-.1874	.0051	4.690	45.67	.4162	-.2339	-.0449	5.884
Rep #3	-.5197	-.2852	-.0116	4.542	46.13	.4536	-.1742	-.0602	6.050
17	Unk: GISC15-20317 23/10/2015 13:24:32 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.5750**	**-.2440**	**-.0082**	**1.235**	**23.12**	**.4903**	**-.1180**	**.0703**	**23.97**
Desv. Est.	2.353	.0314	.0021	.063	.51	.0213	.0083	.0917	.05
% RSD	409.2	12.89	25.88	5.107	2.217	4.338	7.042	130.4	.2030
Rep #1	-1.399	-.2584	-.0069	1.211	23.71	.4809	-.1234	-.0216	23.96
Rep #2	-.0553	-.2657	-.0070	1.307	22.87	.5147	-.1223	.1617	23.93
Rep #3	3.179	-.2080	-.0106	1.188	22.78	.4754	-.1085	.0708	24.03
18	Unk: GISC15-20318 23/10/2015 13:26:18 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1.133**	**-.1848**	**-.0049**	**.7298**	**15.55**	**-.2484**	**-.2133**	**-.0200**	**19.71**
Desv. Est.	3.162	.1246	.0130	.1798	.53	.0156	.0227	.0494	.08
% RSD	278.9	67.42	265.7	24.64	3.375	6.298	10.65	247.2	.3914
Rep #1	1.006	-.2364	-.0179	.7201	16.06	-.2414	-.2250	-.0770	19.76
Rep #2	-1.963	-.2754	.0081	.5551	15.01	-.2664	-.2278	.0101	19.74
Rep #3	4.357	-.0427	-.0048	.9142	15.58	-.2375	-.1871	.0070	19.62
19	Unk: GISC15-20319 23/10/2015 13:28:29 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1.858**	**-.1069**	**-.0018**	**.9276**	**19.22**	**-.1252**	**-.1608**	**.0251**	**24.57**
Desv. Est.	1.976	.1034	.0102	.0569	.09	.0267	.0207	.0171	.07
% RSD	106.3	96.76	560.4	6.134	.4785	21.32	12.88	68.28	.2768
Rep #1	-.2543	-.1198	.0053	.9897	19.18	-.1540	-.1815	.0098	24.52
Rep #2	2.167	.0024	-.0135	.9151	19.16	-.1013	-.1609	.0219	24.54
Rep #3	3.660	-.2032	.0027	.8780	19.33	-.1204	-.1401	.0436	24.65
20	QC: QC-3 23/10/2015 13:32:26 CONC D MP-151023: TEJIDO:								
	Cd2265	Pb2203							
Linea	226.502 {44	220.353 {45							
Unidades	mg/Kg	mg/Kg							
Media	**.0478**	**.0436**							
Desv. Est.	.0002	.0006							
% RSD	.4179	1.446							
Rep #1	.0478	.0430							
Rep #2	.0480	.0443							

Rep #3	.0476	.0434							
Comprobació	Pasa Comp	Pasa Comp							
Valor									
Intervalo									
21	QC: QC-5 23/10/2015 13:36:32 CONC D MP-151023: TEJIDO:								
	As1890	Cu3247	Fe2599	Mn2576	Ni2316				
Linea	189.042 {47	324.754 {10	259.940 {13	257.610 {13	231.604 {44				
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg				
Media	**.4512**	**.4391**	**.4250**	**.4725**	**.4656**				
Desv. Est.	.0023	.0023	.0037	.0027	.0008				
% RSD	.5012	.5260	.8743	.5797	.1624				
Rep #1	.4526	.4364	.4266	.4710	.4648				
Rep #2	.4525	.4400	.4208	.4709	.4659				
Rep #3	.4486	.4407	.4277	.4757	.4662				
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp				
Valor									
Intervalo									
22	QC: QC-7 23/10/2015 13:38:45 CONC D MP-151023: TEJIDO:								
	Al3082	Zn2138							
Linea	308.215 {10	213.856 {45							
Unidades	mg/Kg	mg/Kg							
Media	**3.340**	**4.345**							
Desv. Est.	.025	.004							
% RSD	.7528	.1042							
Rep #1	3.350	4.349							
Rep #2	3.359	4.346							
Rep #3	3.311	4.340							
Comprobació	Pasa Comp	Pasa Comp							
Valor									
Intervalo									
23	Blanco: MUESTRA-R 23/10/2015 13:50:10 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-10.93**	**-.9871**	**-.2116**	**.3764**	**10.45**	**.2962**	**-.1568**	**-.3003**	11.43
Desv. Est.	1.45	.1114	.0047	.1685	.23	.0082	.0604	.0599	.02
% RSD	13.30	11.29	2.217	44.77	2.165	2.775	38.50	19.95	.1957
Rep #1	-9.260	-.9394	-.2104	.5499	10.18	.3054	-.2265	-.3614	11.45
Rep #2	-11.62	-.9076	-.2168	.2133	10.57	.2897	-.1208	-.2416	11.41
Rep #3	-11.91	-1.115	-.2076	.3660	10.58	.2933	-.1232	-.2979	11.42
24	Unk: GISC15-20332 23/10/2015 13:52:34 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**11.79**	**.3480**	**.0180**	**.8858**	**92.76**	**.3535**	**.0178**	**.1054**	**106.3**
Desv. Est.	.49	.0822	.0008	.1385	.72	.0312	.0371	.0483	.9
% RSD	4.121	23.63	4.668	15.64	.7813	8.818	208.0	45.83	.8815
Rep #1	11.24	.3063	.0174	.9575	93.15	.3895	.0318	.0565	107.4
Rep #2	12.15	.4428	.0177	.9738	93.21	.3370	.0459	.1065	105.9
Rep #3	11.99	.2951	.0190	.7262	91.92	.3340	-.0242	.1531	105.7
25	Unk: GISC15-20333 23/10/2015 13:55:02 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138

Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	4.960	-.0860	.0147	.8287	93.85	.4400	-.0494	-.0870	96.89
Desv. Est.	1.619	.1127	.0013	.1852	.43	.0174	.0316	.0190	.98
% RSD	32.64	131.1	8.965	22.35	.4592	3.947	63.84	21.82	1.015
Rep #1	3.992	-.0440	.0160	.9964	93.55	.4270	-.0823	-.1001	95.84
Rep #2	4.058	-.2136	.0147	.6299	94.35	.4332	-.0467	-.0958	97.03
Rep #3	6.828	-.0002	.0133	.8598	93.66	.4597	-.0193	-.0653	97.79

26	Unk: GISC15-20354 23/10/2015 13:58:13 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	3.500	-.2234	-.0012	.1524	18.28	1.006	.1880	.0377	12.02
Desv. Est.	1.370	.0085	.0061	.1607	.11	.008	.0214	.0656	.09
% RSD	39.14	3.815	510.6	105.4	.6129	.7922	11.39	174.2	.7740
Rep #1	2.549	-.2257	-.0041	.0959	18.40	1.012	.1889	.1108	11.96
Rep #2	2.881	-.2140	-.0053	.0277	18.23	1.010	.1662	.0182	12.13
Rep #3	5.070	-.2306	.0058	.3337	18.20	.9971	.2090	-.0160	11.97

27	Unk: GISC15-20354R 23/10/2015 13:58:18 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	1.570	-.1996	.0034	.2170	17.23	.9485	.1054	-.0746	11.13
Desv. Est.	.624	.0520	.0099	.1130	.32	.0229	.0105	.0574	.39
% RSD	39.76	26.05	289.3	52.08	1.870	2.412	9.935	76.91	3.512
Rep #1	1.703	-.2473	-.0064	.2544	16.93	.9424	.1096	-.1393	10.68
Rep #2	2.118	-.1442	.0134	.3065	17.18	.9292	.0935	-.0546	11.30
Rep #3	.8902	-.2072	.0033	.0900	17.57	.9738	.1131	-.0299	11.41

28	Unk: GISC15-20355 23/10/2015 14:00:59 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	1.957	-.0869	-.0027	.4531	15.77	-.3230	-.0085	-.0795	19.19
Desv. Est.	.997	.0205	.0061	.0632	.36	.0366	.0217	.0554	.44
% RSD	50.93	23.59	225.2	13.94	2.271	11.32	254.8	69.73	2.310
Rep #1	.8238	-.0708	-.0086	.3881	15.58	-.2939	.0110	-.1417	18.70
Rep #2	2.698	-.1100	.0035	.5143	15.55	-.3112	-.0318	-.0354	19.33
Rep #3	2.350	-.0799	-.0031	.4569	16.19	-.3641	-.0047	-.0614	19.55

29	Unk: GISC15-20356 23/10/2015 14:04:14 CONC x100 D MP-151023: TEJIDO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	4.208	-.0249	.0034	.4443	35.84	-.2541	.0061	-.0531	19.64
Desv. Est.	2.018	.0695	.0021	.0413	.25	.0105	.0121	.0523	.36
% RSD	47.96	279.0	62.16	9.304	.6863	4.148	198.8	98.45	1.846
Rep #1	5.535	.0502	.0025	.4007	35.59	-.2505	.0160	-.0002	19.24
Rep #2	5.203	-.0870	.0019	.4829	35.87	-.2659	.0096	-.0543	19.77
Rep #3	1.885	-.0380	.0059	.4494	36.08	-.2458	-.0074	-.1048	19.93

ǂ 30	Unk: RECUPERACION 23/10/2015 14:19:25 CONC D MP 151023: TEJIDO:								
2015/10/23	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.3544**	**.4422**	**.4287**	**.4177**	**.4084**	**.4245**	**.4271**	**.4319**	**.4246**
Desv. Est.	.0107	.0021	.0007	.0003	.0033	.0022	.0012	.0008	.0007
% RSD	3.011	.4717	.1550	.0770	.8028	.5286	.2766	.1844	.1721
Rep #1	.3442	.4401	.4291	.4174	.4047	.4219	.4276	.4328	.4241
Rep #2	.3655	.4424	.4279	.4177	.4110	.4255	.4280	.4318	.4243
Rep #3	.3537	.4443	.4291	.4180	.4096	.4260	.4258	.4312	.4254
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

1	Cal: Blanco 23/10/2015 16:25:53 IR D Hg-151023: TEJIDO:
	Hg1942
Unidades	Cts/s
Media	**-29.53**
Desv. Est.	3.83
% RSD	12.95
Rep #1	-33.72
Rep #2	-28.66
Rep #3	-26.22

2	Cal: STD 1 23/10/2015 16:27:20 IR D Hg-151023: TEJIDO:
	Hg1942
Unidades	Cts/s
Media	**42.51**
Desv. Est.	5.40
% RSD	12.69
Rep #1	37.01
Rep #2	42.72
Rep #3	47.80

3	Cal: STD 2 23/10/2015 16:28:37 IR D Hg-151023: TEJIDO:
	Hg1942
Unidades	Cts/s
Media	**215.0**
Desv. Est.	9.1
% RSD	4.242
Rep #1	205.1
Rep #2	216.9
Rep #3	223.0

4	Cal: STD 3 23/10/2015 16:29:57 IR D Hg-151023: TEJIDO:
	Hg1942
Unidades	Cts/s
Media	**413.1**
Desv. Est.	8.9
% RSD	2.146
Rep #1	403.1
Rep #2	415.9
Rep #3	420.1

5	Cal: STD 4 23/10/2015 16:31:18 IR D Hg-151023: TEJIDO:
	Hg1942
Unidades	Cts/s
Media	**841.7**
Desv. Est.	10.2
% RSD	1.211
Rep #1	832.3
Rep #2	840.4
Rep #3	852.5

6	Blanco: REACTIVO 23/10/2015 16:33:38 CONC D Hg-151023: TEJIDO:
	Hg1942
Linea	194.227 {47
Unidades	mg/kg
Media	**.0002**
Desv. Est.	.0000

% RSD	13.49
Rep #1	.0002
Rep #2	.0002
Rep #3	.0002
7	Blanco: MUESTRA 23/10/2015 16:35:57 CONC x100 D Hg-151023: TEJIDO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0356**
Desv. Est.	.0024
% RSD	6.841
Rep #1	-.0361
Rep #2	-.0377
Rep #3	-.0329
8	Unk: RECUPERACION3 23/10/2015 16:38:39 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.5628**
Desv. Est.	.0115
% RSD	2.045
Rep #1	.5509
Rep #2	.5637
Rep #3	.5739
9	Unk: GISC15-20274 23/10/2015 16:42:04 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0198**
Desv. Est.	.0019
% RSD	9.660
Rep #1	.0221
Rep #2	.0186
Rep #3	.0188
10	Unk: GISC15-20311 23/10/2015 16:42:37 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0047**
Desv. Est.	.0004
% RSD	9.444
Rep #1	-.0045
Rep #2	-.0052
Rep #3	-.0044
11	Unk: GISC15-20312 23/10/2015 16:43:56 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0055**
Desv. Est.	.0016
% RSD	29.88
Rep #1	.0064

Rep #2	.0036
Rep #3	.0064
12	Unk: GISC15-20313 23/10/2015 16:45:55 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0091
Desv. Est.	.0011
% RSD	12.45
Rep #1	.0101
Rep #2	.0078
Rep #3	.0093
13	Unk: GISC15-20314 23/10/2015 16:47:52 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0062
Desv. Est.	.0003
% RSD	4.669
Rep #1	.0061
Rep #2	.0059
Rep #3	.0065
14	Unk: GISC15-20315 23/10/2015 16:49:12 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0414
Desv. Est.	.0027
% RSD	6.403
Rep #1	.0441
Rep #2	.0414
Rep #3	.0388
15	Unk: GISC15-20316 23/10/2015 16:50:46 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0119
Desv. Est.	.0037
% RSD	31.19
Rep #1	.0162
Rep #2	.0103
Rep #3	.0093
16	Unk: GISC15-20317 23/10/2015 16:52:42 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0043
Desv. Est.	.0020
% RSD	45.74
Rep #1	.0065
Rep #2	.0035
Rep #3	.0029

17	Unk: GISC15-20318 23/10/2015 16:56:06 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0205
Desv. Est.	.0017
% RSD	8.259
Rep #1	.0219
Rep #2	.0209
Rep #3	.0186
18	Unk: GISC15-20319 23/10/2015 16:57:25 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0014
Desv. Est.	.0010
% RSD	73.28
Rep #1	.0004
Rep #2	.0024
Rep #3	.0014
19	Unk: RECUPERACION 23/10/2015 16:58:45 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.5711
Desv. Est.	.0105
% RSD	1.843
Rep #1	.5613
Rep #2	.5700
Rep #3	.5822
20	Unk: GISC15-20274-R 23/10/2015 17:00:35 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0244
Desv. Est.	.0017
% RSD	6.914
Rep #1	.0261
Rep #2	.0242
Rep #3	.0228
21	Unk: GISC15-20332 23/10/2015 17:03:46 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0074
Desv. Est.	.0024
% RSD	32.96
Rep #1	.0102
Rep #2	.0065
Rep #3	.0055
22	Unk: GISC15-20333 23/10/2015 17:05:07 CONC x100

	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0049
Desv. Est.	.0023
% RSD	47.30
Rep #1	.0069
Rep #2	.0055
Rep #3	.0024
23	Unk: GISC15-20354 23/10/2015 17:06:36 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0145
Desv. Est.	.0015
% RSD	10.50
Rep #1	.0152
Rep #2	.0127
Rep #3	.0155
24	Unk: GISC15-20355 23/10/2015 17:08:03 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0152
Desv. Est.	.0004
% RSD	2.586
Rep #1	.0154
Rep #2	.0148
Rep #3	.0155
25	Unk: GISC15-20356 23/10/2015 17:09:24 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0139
Desv. Est.	.0006
% RSD	4.297
Rep #1	.0137
Rep #2	.0146
Rep #3	.0135

CONTENIDO

HUEVO

GISENA®
GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA S.A. DE C.V.
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TEL/FAX: 01(595) 928 40 77 E-mail: gisena@prodigy.net.mx

LABORATORIO DE RESIDUOS TÓXICOS

ema entidad mexicana de acreditación, a.c.

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005 Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: HUEVO
Fecha de Recepción: 2015-10-15

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

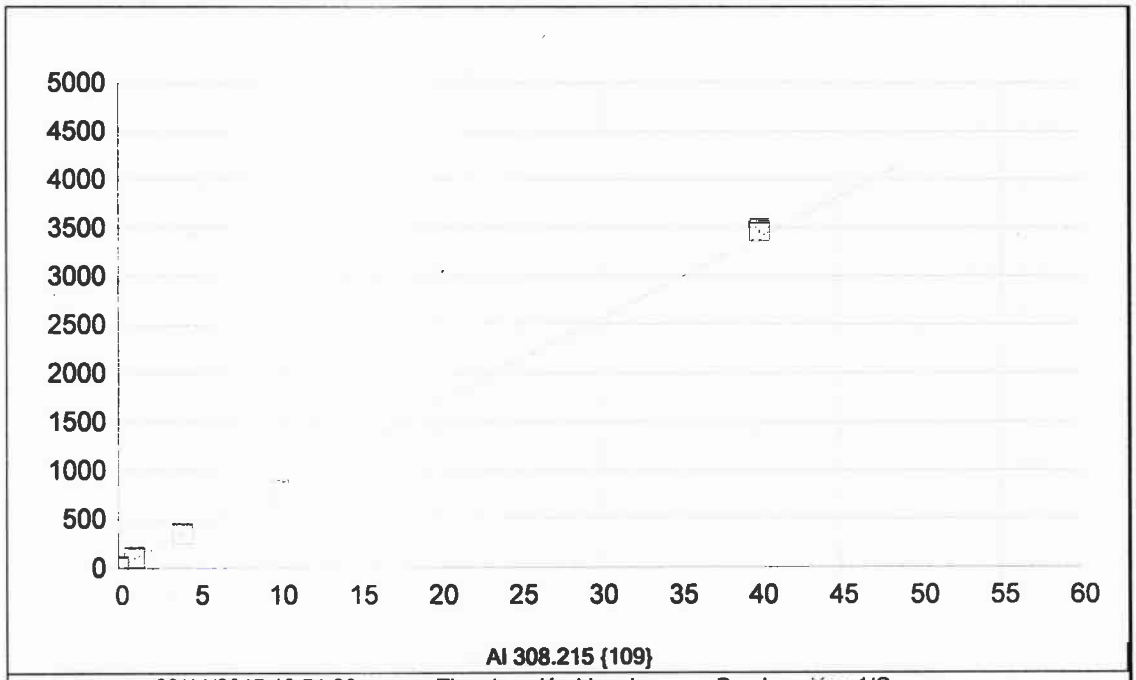
DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/10/15 (2)
Fecha de Analisis de Metales y Mercurio: 2015-11-09 2015-11-09
Fecha de Realización del Informe: 2015-11-10

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-1026/15/0258	GISC15-20326
L-1055/15/0550	GISC15-20381
L-1068/15/0674	GISC15-20396
L-1068/15/0675	GISC15-20397

REVISÓ

Q.F.B.Leticia Velázquez Méndez
Gerente Técnico

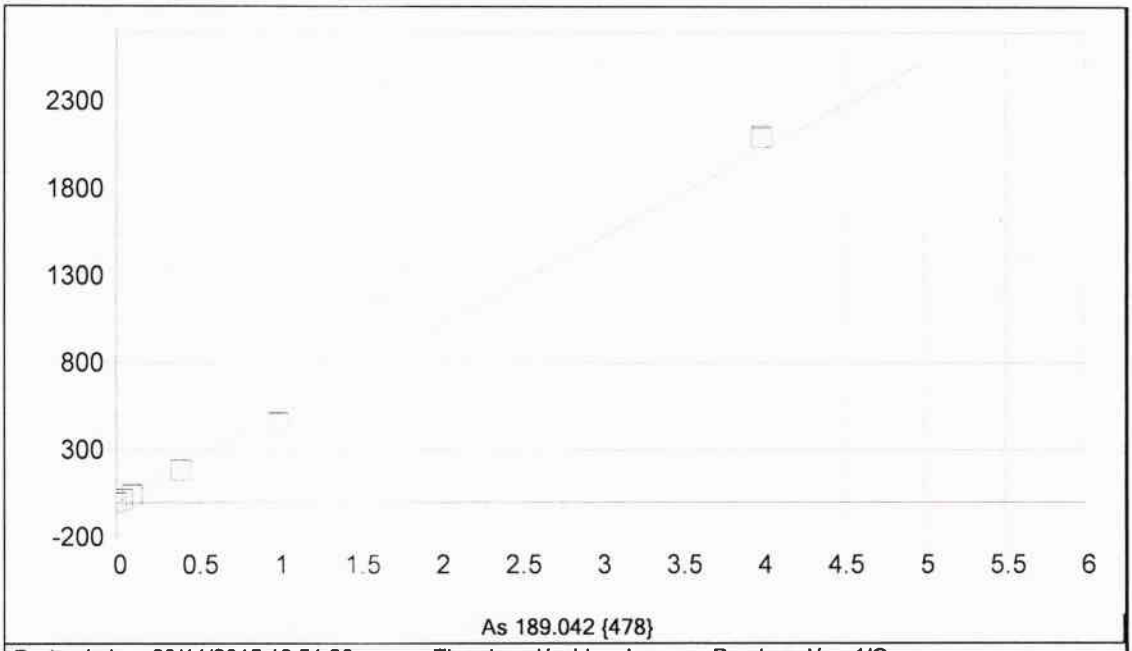


Al 308.215 {109}

Fecha de la 09/11/2015 13:51:26 Tipo de unió Lineal Ponderación: 1/Conc

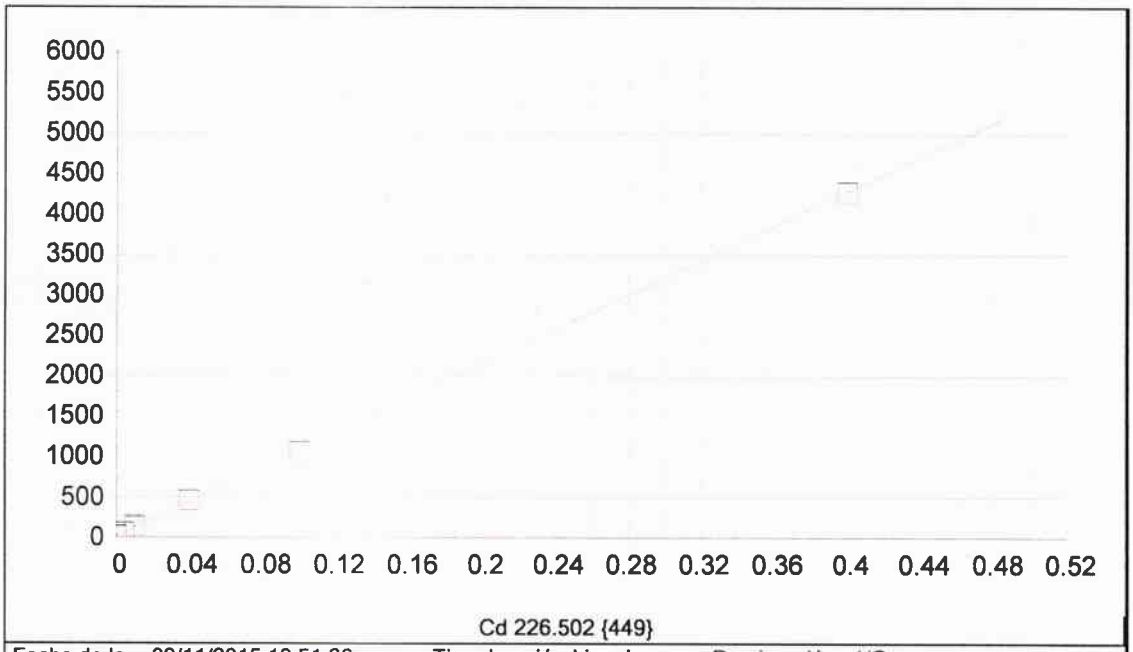
A0 (Compensación):	10.781259	Reajustar P	1.000000
A1 (Ganancia)	84.715218	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999139	Estatus:	OK.
Error Estándar de Est:	1.063942		
MDL:	0.051582		
MQL:	0.171942		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00003	-.000	.000	10.778	5.31	1
STD 6	1.0000	1.1071	.107	10.7	104.57	4.00	1
STD 7	4.0000	3.9655	-.034	-.862	346.72	5.91	1
STD 8	10.000	9.1712	-.829	-8.29	787.72	8.65	1
STD 9	40.000	40.756	.756	1.89	3463.5	19.2	1



Fecha de la	09/11/2015 13:51:26	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	-0.256146		Reajustar P	1.000000	
A1 (Ganancia)	506.325013		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.998147		Estatus:	OK.	
Error Estándar de Est:	0.562331				
MDL:	0.002036				
MQL:	0.006786				

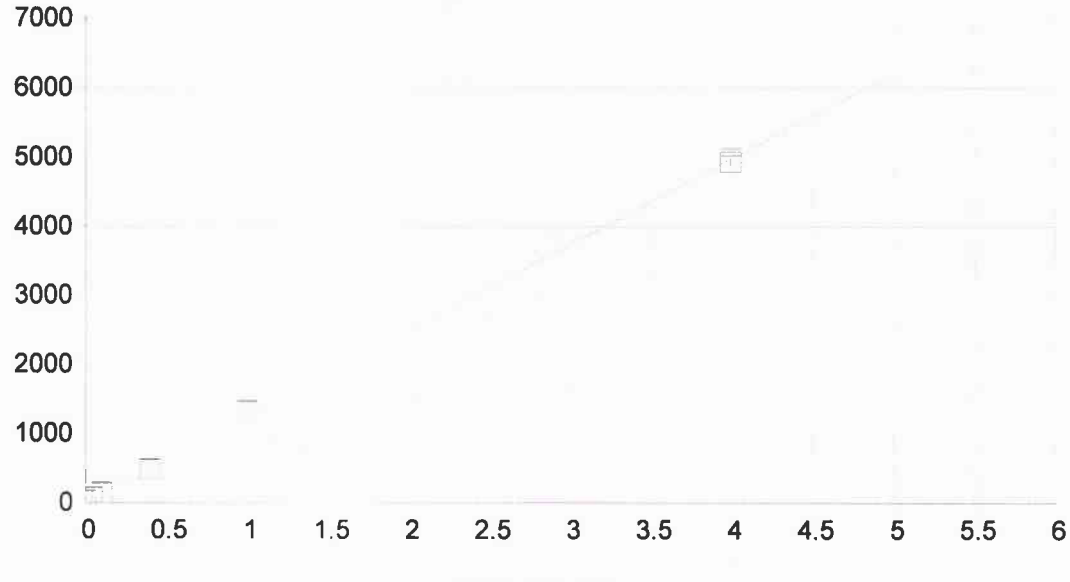
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	-.24860	1.18	1
STD 4	.10000	.08663	-.013	-13.4	43.607	.733	1
STD 5	.40000	.36692	-.033	-8.27	185.53	1.14	1
STD 6	1.0000	.89973	-.100	-10.0	455.30	1.40	1
STD 7	4.0000	4.1505	.150	3.76	2101.2	6.30	1
STD 3	.04000	.03626	-.004	-9.34	18.105	.777	1



Fecha de la	09/11/2015 13:51:26	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	19.352085	Reajustar P	1.000000
A1 (Ganancia)	10666.40868	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999782	Estatus:	OK.
Error Estándar de Est:	0.405646		
MDL:	0.000120		
MQL:	0.000399		

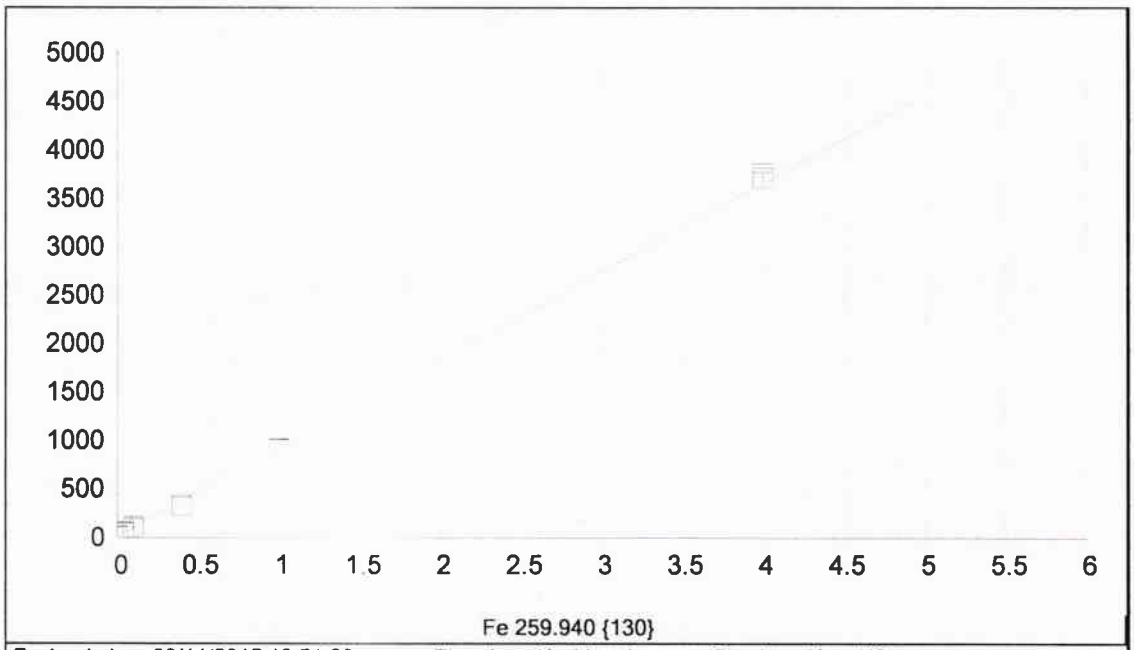
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	19.348	3.98	1
STD 1	.00400	.00390	-.000	-2.55	60.931	10.4	1
STD 2	.01000	.01116	.001	11.6	138.42	8.67	1
STD 3	.04000	.04149	.001	3.73	461.93	2.63	1
STD 4	.10000	.09782	-.002	-2.18	1062.7	3.20	1
STD 5	.40000	.39963	-.000	-.093	4281.9	.768	1



Cu 324.754 {104}

Fecha de la	09/11/2015 13:51:26	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	10.926092		Reajustar P	1.000000	
A1 (Ganancia)	1240.546351		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999518		Estatus:	OK.	
Error Estándar de Est:	0.702123				
MDL:	0.003684				
MQL:	0.012281				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	10.927	2.13	1
STD 5	.40000	.37911	-.021	-5.22	481.23	4.61	1
STD 6	1.0000	1.0601	.060	6.01	1326.0	6.66	1
STD 7	4.0000	3.9650	-.035	-.875	4929.7	53.3	1
STD 3	.04000	.04127	.001	3.17	62.123	4.00	1
STD 4	.10000	.09454	-.005	-5.46	128.20	5.82	1

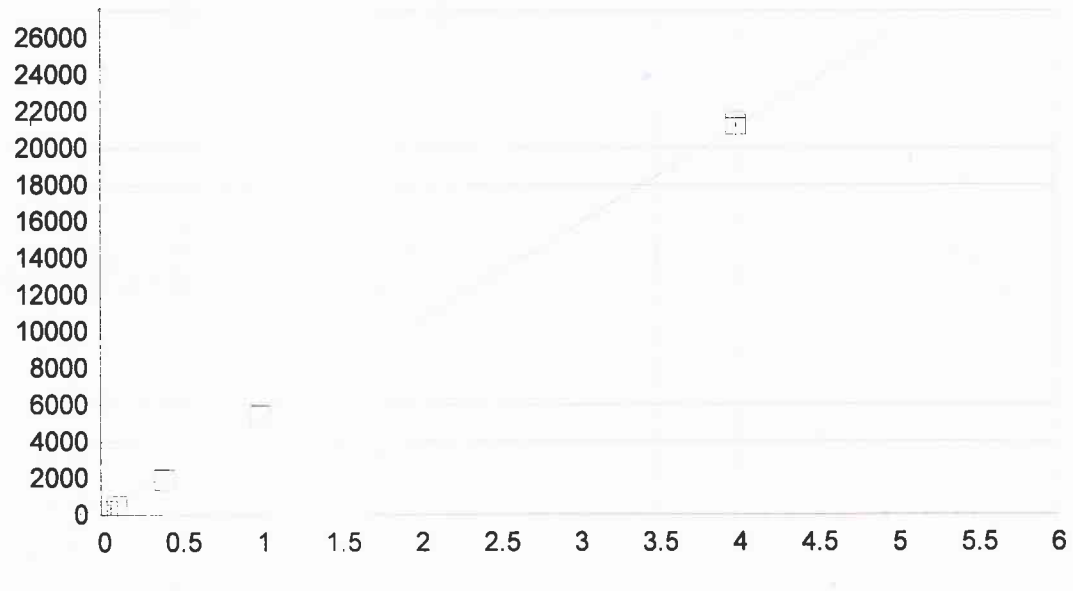


Fe 259.940 {130}

Fecha de la	09/11/2015 13:51:26	Tipo de unió	Lineal	Ponderación: 1/Conc

A0 (Compensación):	14.601788	Reajustar P	1.000000
A1 (Ganancia)	911.506255	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999237	Estatus:	OK.
Error Estándar de Est:	0.649159		
MDL:	0.003062		
MQL:	0.010207		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	14.603	5.23	1
STD 5	.40000	.34693	-.053	-13.3	330.83	15.9	1
STD 6	1.0000	.98863	-.011	-1.14	915.74	3.61	1
STD 3	.04000	.04373	.004	9.33	54.463	5.16	1
STD 4	.10000	.09930	-.001	-.697	105.12	13.1	1
STD 7	4.0000	4.0614	.061	1.54	3716.6	43.5	1

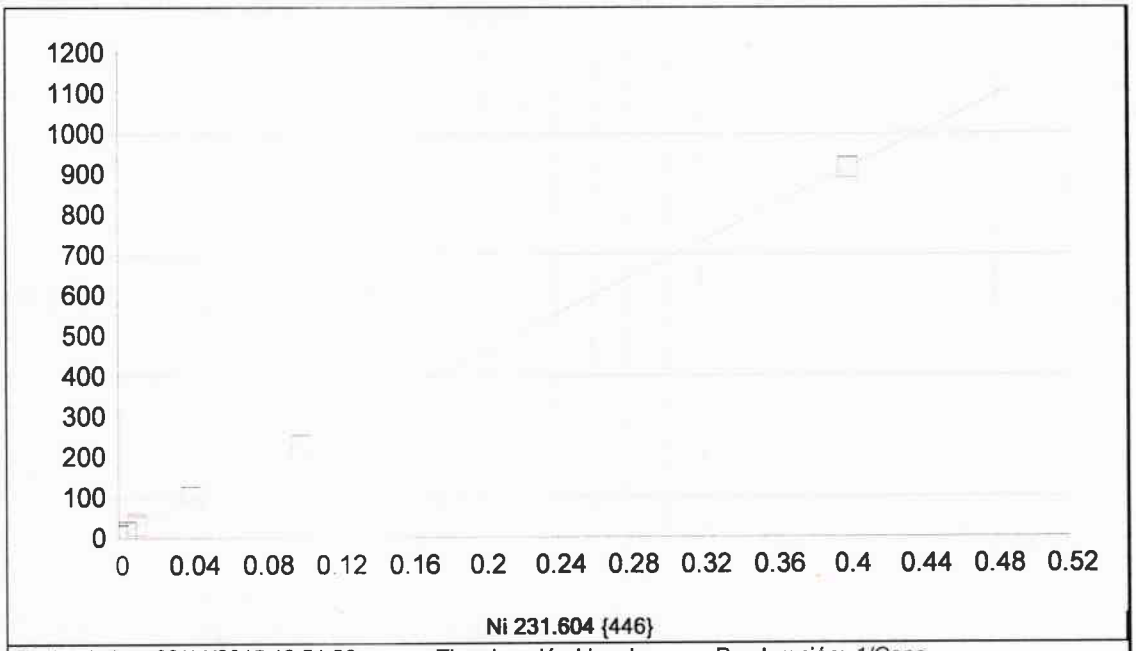


Mn 257.610 {131}

Fecha de la 09/11/2015 13:51:26 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	12.644685	Reajustar P	1.000000
A1 (Ganancia)	5271.797171	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999384	Estatus:	OK.
Error Estándar de Est:	3.371077		
MDL:	0.000489		
MQL:	0.001630		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	12.700	1.79	1
STD 5	.40000	.35974	-.040	-10.1	1909.1	10.3	1
STD 6	1.0000	1.0279	.028	2.79	5431.8	25.2	1
STD 3	.04000	.03720	-.003	-7.00	208.75	2.18	1
STD 4	.10000	.08735	-.013	-12.7	473.12	2.34	1
STD 7	4.0000	4.0278	.028	.694	21246.	194.	1

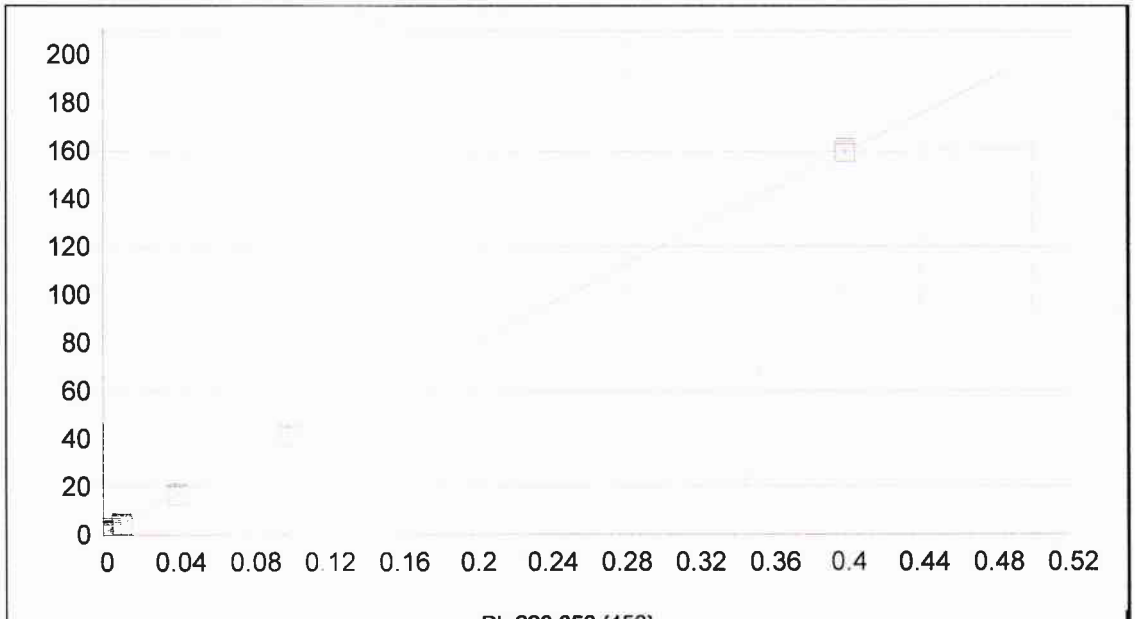


Ni 231.604 {446}

Fecha de la 09/11/2015 13:51:26 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	7.339661	Reajustar P	1.000000
A1 (Ganancia)	2268.717252	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999803	Estatus:	OK.
Error Estándar de Est:	0.081952		
MDL:	0.000510		
MQL:	0.001698		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	7.3396	1.08	1
STD 1	.00400	.00365	-.000	-8.73	15.623	2.12	1
STD 2	.01000	.01072	.001	7.20	31.661	3.17	1
STD 3	.04000	.04174	.002	4.36	102.04	.387	1
STD 4	.10000	.09757	-.002	-2.43	228.69	.849	1
STD 5	.40000	.40032	.000	.080	915.55	.532	1

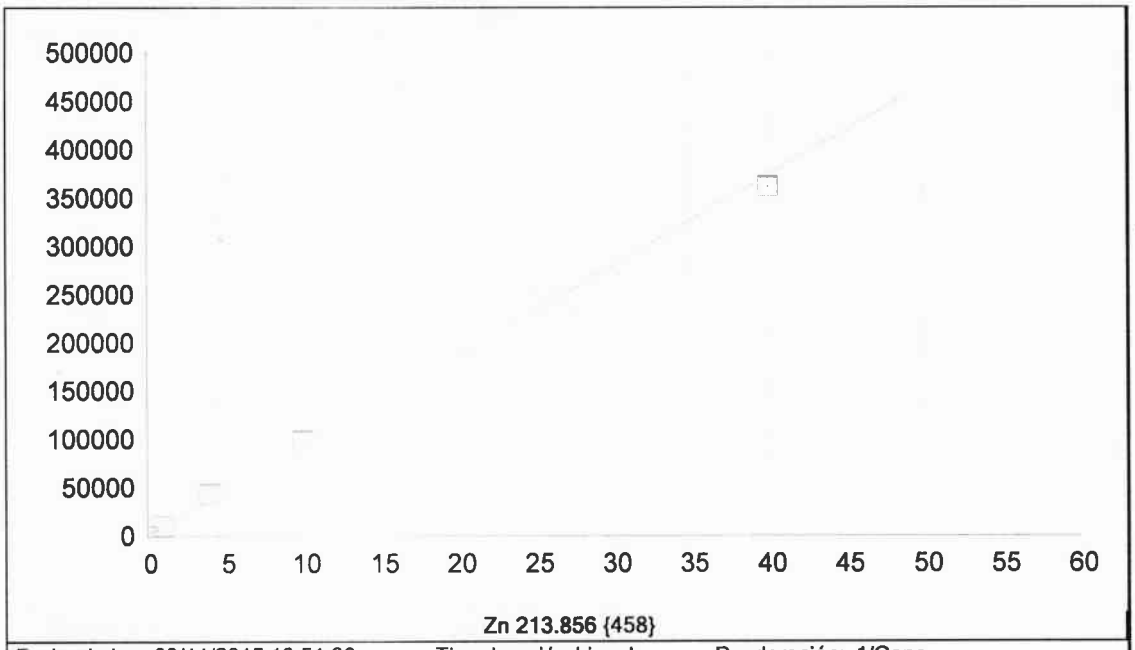


Pb 220.353 {453}

Fecha de la	09/11/2015 13:51:26	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	0.899583	Reajustar P	1.000000
A1 (Ganancia)	396.095079	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999522	Estatus:	OK.
Error Estándar de Est:	0.022325		
MDL:	0.003067		
MQL:	0.010223		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.90023	.697	1
STD 1	.00400	.00280	-.001	-30.0	2.0084	.853	1
STD 2	.01000	.00887	-.001	-11.3	4.4134	.408	1
STD 3	.04000	.03945	-.001	-1.38	16.525	.422	1
STD 4	.10000	.10176	.002	1.76	41.206	.551	1
STD 5	.40000	.40112	.001	.280	159.78	1.12	1

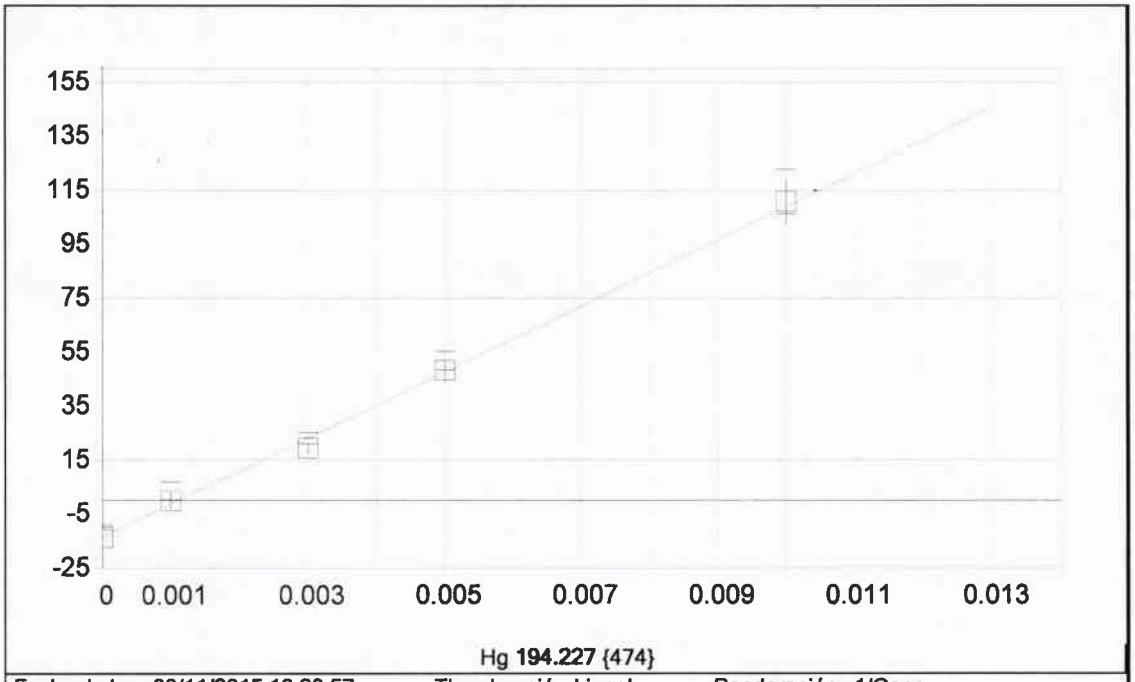


Zn 213.856 {458}

Fecha de la	09/11/2015 13:51:26	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	130.349194	Reajustar P	1.000000
A1 (Ganancia)	9330.506612	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998420	Estatus:	OK.
Error Estándar de Est:	158.859086		
MDL:	0.000127		
MQL:	0.000422		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00029	-.000	.000	127.65	3.19	1
STD 6	1.0000	1.1147	,115	11.5	10531.	24.3	1
STD 7	4.0000	4.6127	.613	15.3	43170.	114.	1
STD 8	10.000	10.527	.527	5.27	98349.	202.	1
STD 9	40.000	38.746	-1.25	-3.14	361650.	817.	1



Hg **194.227** {474}

Fecha de la	09/11/2015 16:20:57	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	-13.748296		Reajustar P	1.000000	
A1 (Ganancia)	12265.23042		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.998866		Estatus:	OK.	
Error Estándar de Est:	0.103886				
MDL:	0.000203				
MQL:	0.000676				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	-13.749	.786	1
STD 1	.00100	.00110	.000	10.2	-.22664	3.27	1
STD 2	.00300	.00270	-.000	-9.98	19.373	2.08	1
STD 3	.00500	.00505	.000	.912	48.137	3.44	1
STD 4	.01000	.01015	.000	1.52	110.76	8.17	1

Análisis: ***METALES PESADOS POR ICP-OES***

Lote analítico: DMP-HUEVO-151109

Fecha de Análisis: 09/11/2015

Fecha de Reporte: 09/11/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÓN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.0100
NIVEL 5		0.400	0.400	0.400	0.400	0.400	0.400	0.400		
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000								10.000	
NIVEL 9	40.000								40.000	
Correlación	0.9991	0.9981	0.9998	0.9995	0.9992	0.9994	0.9998	0.9995	0.9984	0.9989

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/Kg		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
2	QC:QC-3	Cadmio	0.0400	0.0377	94	8	Recuperación	Mercurio	0.5	0.4878	98
		Plomo	0.0400	0.0336	84	12	Recuperación	Aluminio	40.0000	39.0100	98
3	QC:QC-5	Arsénico	0.4000	0.4107	103			Arsenico	40.0000	40.4000	101
		Cobre	0.4000	0.3880	97			Cadmio	40.0000	40.3200	101
		Fierro	0.4000	0.3704	93			Cobre	40.0000	40.1400	100
		Manganeso	0.4000	0.3645	91			Fierro	40.0000	39.6000	99
		Níquel	0.4000	0.4272	107			Manganesc	40.0000	40.5500	101
4	QC: QC-7	Aluminio	4.0000	3.2910	82			Niquel	40.0000	40.2100	101
		Zinc	4.0000	4.0830	102			Plomo	40.0000	40.1900	100
								Zinc	40.0000	40.2800	101

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I. Gaudencio Vargas Espejel
ELABORÓ

Q.F.B. Leticia Velázquez Méndez
REVISÓ

PACE/GIS/I02-F01

GISCENA®

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Peso de muestra (g) Metales	Hg
GISC15-20326	Huevo		15/10/2015	0.5011	0.5090
GISC15-20381	Huevo		15/10/2015	0.5012	0.5092
GISC15-20396	Huevo		15/10/2015	0.5070	0.5029
GISC15-20397	Huevo		15/10/2015	0.5059	0.5063

I.B.I.Gaudencio Vargas Espejel

Q.F.B. Leticia Velazquez Méndez

1	Blanco: REACTIVO 09/11/2015 13:36:52 CONC D MP-151109: HUEVO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-.1262**	**-.0013**	**-.0007**	**.0016**	**.0051**	**-.0008**	**.0002**	**-.0026**	**.0050**
Desv. Est.	.0154	.0011	.0002	.0024	.0006	.0006	.0002	.0010	.0034
% RSD	12.20	86.05	28.11	155.7	11.19	78.39	101.3	39.20	67.95
Rep #1	-.1115	-.0001	-.0005	.0041	.0051	-.0008	.0001	-.0038	.0027
Rep #2	-.1248	-.0023	-.0009	-.0006	.0057	-.0002	.0001	-.0020	.0035
Rep #3	-.1422	-.0015	-.0007	.0011	.0046	-.0013	.0005	-.0021	.0090

2	QC: QC-3 09/11/2015 13:39:13 CONC D MP-151109: HUEVO:	
	Cd2265	Pb2203
Línea	226.502 {44	220.353 {45
Unidades	mg/Kg	mg/Kg
Media	**.0377**	**.0336**
Desv. Est.	.0003	.0015
% RSD	.9161	4.502
Rep #1	.0373	.0319
Rep #2	.0380	.0346
Rep #3	.0377	.0344
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

3	QC: QC-5 09/11/2015 13:41:30 CONC D MP-151109: HUEVO:				
	As1890	Cu3247	Fe2599	Mn2576	Ni2316
Línea	189.042 {47	324.754 {10	259.940 {13	257.610 {13	231.604 {44
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4107**	**.3880**	**.3704**	**.3645**	**.4272**
Desv. Est.	.0034	.0054	.0034	.0015	.0015
% RSD	.8366	1.399	.9082	.4004	.3537
Rep #1	.4091	.3895	.3668	.3633	.4256
Rep #2	.4147	.3926	.3709	.3661	.4286
Rep #3	.4084	.3820	.3735	.3642	.4272
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor					
Intervalo					

4	QC: QC-7 09/11/2015 13:43:39 CONC D MP-151109: HUEVO:	
	Al3082	Zn2138
Línea	308.215 {10	213.856 {45
Unidades	mg/Kg	mg/Kg
Media	**3.291**	**4.083**
Desv. Est.	.018	.006
% RSD	.5466	.1583
Rep #1	3.305	4.079
Rep #2	3.298	4.090
Rep #3	3.271	4.079
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

5	Blanco: REACTIVO 09/11/2015 13:45:43 CONC D MP-151109: HUEVO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Desv. Est.	5.255	.2046	.0022	.2418	.154	.0282	.0371	.2724	.028
% RSD	202.5	694.6	12.02	46.29	1.648	25.62	43.96	68.23	.4664
Rep #1	-3.061	-.1052	-.0159	.2792	9.166	.1425	-.0415	-.0968	6.085
Rep #2	2.878	-.0714	-.0182	.7629	9.347	.0921	-.1061	-.6252	6.030
Rep #3	-7.601	.2649	-.0203	.5251	9.472	.0953	-.1054	-.4758	6.071
11	Unk: GISC15-20326-R 09/11/2015 14:07:52 CONC x100 D MP-151109: HUEVO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	-3.393	-.0948	-.0103	.8214	31.93	-.0573	-.0983	-.2061	14.06
Desv. Est.	.052	.1786	.0162	.0961	.17	.0097	.0216	.1691	.10
% RSD	1.531	188.4	156.4	11.70	.5266	16.91	21.94	82.05	.6860
Rep #1	-3.435	-.1459	.0083	.9268	31.78	-.0683	-.1067	-.3365	13.98
Rep #2	-3.335	.1038	-.0202	.7986	32.11	-.0533	-.0738	-.2670	14.17
Rep #3	-3.410	-.2422	-.0192	.7387	31.89	-.0502	-.1144	-.0150	14.05

12	Unk: RECUPERACION 09/11/2015 14:10:11 CONC x100 D MP 151109: HUEVO:								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**39.01**	**40.40**	**40.32**	**40.14**	**39.60**	**40.55**	**40.21**	**40.19**	**40.28**
Desv. Est.	2.71	.24	.12	.20	.81	.14	.21	.41	.12
% RSD	6.944	.5911	.2914	.4905	2.047	.3407	.5193	1.023	.2957
Rep #1	40.81	40.60	40.25	40.33	40.07	40.68	40.20	39.83	40.22
Rep #2	35.90	40.13	40.24	40.17	38.66	40.41	40.01	40.10	40.20
Rep #3	40.33	40.47	40.45	39.93	40.06	40.55	40.43	40.64	40.42
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-.0480**	**-.0017**	**-.0005**	**.0037**	**.0443**	**.0004**	**.0035**	**-.0035**	**-.0038**
Desv. Est.	.0441	.0026	.0008	.0049	.0062	.0012	.0007	.0006	.0009
% RSD	91.78	157.3	185.3	134.8	13.93	302.6	19.76	16.90	24.48
Rep #1	-.0928	-.0006	.0004	.0094	.0511	.0017	.0041	-.0028	-.0029
Rep #2	-.0464	.0003	-.0004	.0005	.0426	.0002	.0037	-.0037	-.0036
Rep #3	-.0048	-.0046	-.0013	.0012	.0391	-.0007	.0027	-.0039	-.0048
6	Blanco: MUESTRA 09/11/2015 13:50:49 CONC x100 D MP-151109: HUEVO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-6.697**	**-1.034**	**-.1737**	**.0168**	**3.723**	**.0160**	**.2334**	**-.7920**	**-.5955**
Desv. Est.	2.507	.116	.0103	.1934	.050	.0098	.0279	.0990	.0039
% RSD	37.44	11.16	5.929	1149.	1.347	61.37	11.96	12.50	.6563
Rep #1	-6.414	-1.027	-.1676	-.1998	3.721	.0266	.2013	-.8577	-.5912
Rep #2	-9.333	-.9225	-.1856	.1719	3.673	.0144	.2515	-.8400	-.5989
Rep #3	-4.343	-1.153	-.1680	.0784	3.774	.0071	.2476	-.6781	-.5964
7	Unk: GISC15-20326 09/11/2015 13:55:20 CONC x100 D MP-151109: HUEVO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-.8816**	**-.3196**	**.0054**	**1.058**	**31.14**	**-.0057**	**-.0323**	**.2280**	**13.98**
Desv. Est.	3.500	.1064	.0040	.281	.70	.0367	.0223	.1892	.03
% RSD	397.0	33.30	74.27	26.62	2.258	639.6	69.14	83.00	.2107
Rep #1	-3.110	-.2295	.0061	1.278	31.92	.0314	-.0172	.3995	13.95
Rep #2	3.152	-.2922	.0011	.7404	30.54	-.0066	-.0217	.2595	14.00
Rep #3	-2.686	-.4370	.0089	1.154	30.97	-.0420	-.0579	.0250	13.98
8	Unk: GISC15-20381 09/11/2015 13:58:03 CONC x100 D MP-151109: HUEVO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-1.106**	**-.1557**	**-.0101**	**.6935**	**9.691**	**.1541**	**-.0402**	**-.2315**	**5.806**
Desv. Est.	3.899	.1803	.0083	.1696	.143	.0186	.0565	.1501	.010
% RSD	352.5	115.8	82.47	24.45	1.472	12.06	140.6	64.83	.1659
Rep #1	-4.333	.0101	-.0195	.5877	9.820	.1724	-.1007	-.0608	5.818
Rep #2	3.227	-.3477	-.0071	.8891	9.538	.1352	.0110	-.2906	5.801
Rep #3	-2.212	-.1297	-.0037	.6037	9.714	.1547	-.0308	-.3430	5.801
9	Unk: GISC15-20396 09/11/2015 14:00:37 CONC x100 D MP-151109: HUEVO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-3.377**	**-.2972**	**-.0126**	**.7893**	**14.30**	**.2943**	**-.1034**	**-.4933**	**9.077**
Desv. Est.	3.490	.1890	.0126	.3917	.15	.0408	.0595	.3086	.042
% RSD	103.4	63.57	100.2	49.62	1.022	13.87	57.59	62.57	.4622
Rep #1	.5323	-.0841	-.0143	.3405	14.46	.3269	-.1412	-.2307	9.112
Rep #2	-6.179	-.4443	.0008	1.062	14.24	.2485	-.1343	-.8333	9.087
Rep #3	-4.483	-.3633	-.0241	.9656	14.19	.3074	-.0348	-.4158	9.030
10	Unk: GISC15-20397 09/11/2015 14:02:50 CONC x100 D MP-151109: HUEVO:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**-2.595**	**.0295**	**-.0181**	**.5224**	**9.328**	**.1100**	**-.0843**	**-.3993**	**6.062**

1	Cal: Blanco 09/11/2015 16:08:15 IR D Hg-151109: HUEVO:
	Hg1942
Unidades	Cts/s
Media	**-13.75**
Desv. Est.	.79
% RSD	5.716
Rep #1	-12.92
Rep #2	-13.85
Rep #3	-14.48

2	Cal: STD 1 09/11/2015 16:09:39 IR D Hg-151109: HUEVO:
	Hg1942
Unidades	Cts/s
Media	**-.2266**
Desv. Est.	3.267
% RSD	1442.
Rep #1	-3.822
Rep #2	2.562
Rep #3	.5799

3	Cal: STD 2 09/11/2015 16:10:56 IR D Hg-151109: HUEVO:
	Hg1942
Unidades	Cts/s
Media	**19.37**
Desv. Est.	2.08
% RSD	10.73
Rep #1	16.98
Rep #2	20.48
Rep #3	20.66

4	Cal: STD 3 09/11/2015 16:12:17 IR D Hg-151109: HUEVO:
	Hg1942
Unidades	Cts/s
Media	**48.14**
Desv. Est.	3.44
% RSD	7.151
Rep #1	44.45
Rep #2	48.69
Rep #3	51.27

5	Cal: STD 4 09/11/2015 16:13:38 IR D Hg-151109: HUEVO:
	Hg1942
Unidades	Cts/s
Media	**110.8**
Desv. Est.	8.2
% RSD	7.380
Rep #1	101.9
Rep #2	112.2
Rep #3	118.1

6	Blanco: REACTIVO 09/11/2015 16:16:55 CONC D Hg-151109: HUEVO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0001**
Desv. Est.	.0002

% RSD	347.7
Rep #1	.0003
Rep #2	.0001
Rep #3	-.0002
7	Blanco: MUESTRA 09/11/2015 16:18:21 CONC x100 D Hg-151109: HUEVO:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.1090**
Desv. Est.	.0510
% RSD	46.79
Rep #1	-.0525
Rep #2	-.1230
Rep #3	-.1516
8	Unk: RECUPERACION 09/11/2015 16:19:50 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.4878**
Desv. Est.	.1026
% RSD	21.04
Rep #1	.3754
Rep #2	.5117
Rep #3	.5764
9	Unk: GISC15-20326 09/11/2015 16:22:01 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0140** ✓
Desv. Est.	.0139
% RSD	98.82
Rep #1	-.0295
Rep #2	-.0098
Rep #3	-.0028
10	Unk: GISC15-20381 09/11/2015 16:23:29 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.1492** ✓
Desv. Est.	.0177
% RSD	11.86
Rep #1	-.1490
Rep #2	-.1316
Rep #3	-.1671
11	Unk: GISC15-20396 09/11/2015 16:25:01 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.1598** ✓
Desv. Est.	.0182
% RSD	11.40
Rep #1	-.1392

Rep #2	-.1736
Rep #3	-.1668
12	Unk: GISC15-20397 09/11/2015 16:26:29 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	-.1628
Desv. Est.	.0133
% RSD	8.156
Rep #1	-.1477
Rep #2	-.1680
Rep #3	-.1726

SENA®

CONTENIDO

RAÍZ / SUELO / HUEVO

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA S.A. DE C.V.
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TEL/FAX: 01(595) 928 40 77 E-mail: gisena@prodigy.net.mx

LABORATORIO DE RESIDUOS TÓXICOS

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005
Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: RAÍZ/SUELO/HUEVO
Fecha de Recepción: 2015-11-05

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

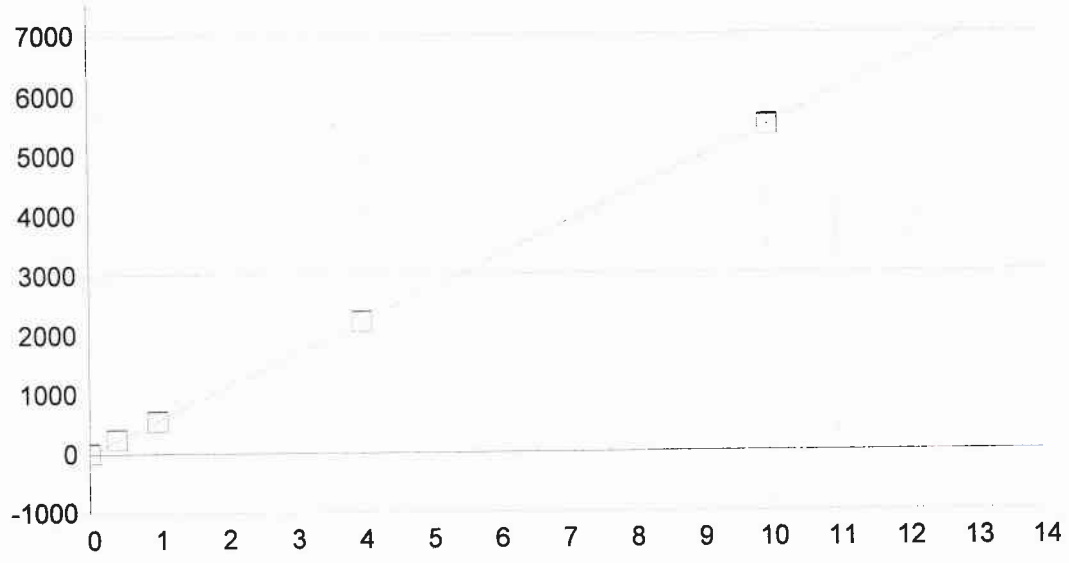
DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/11/05 (2)
Fecha de Analisis de Metales y Mercurio: 2015-12-23 2015-12-28
Fecha de Realización del Informe: 2015-12-29

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I013/15/0125	GISC15-21765
L-I017/15/0165	GISC15-21790
L-I034/15/0340	GISC15-21933
L-I035/15/0349	GISC15-21936
L-I046/15/0456	GISC15-22028
L-I046/15/0457	GISC15-22029
L-I046/15/0458	GISC15-22030
L-I054/15/0533	GISC15-22096
L-I054/15/0538	GISC15-22099
L-I057/15/0570	GISC15-22126
L-I058/15/0571	GISC15-22127
L-I058/15/0572	GISC15-22128
L-I056/15/0552	GIDC15-22110
L-I056/15/0553	GISC15-22111
L-I011/15/0109	GISC15-21750
L-I011/15/0110	GISC15-21751
L-I068/15/0676	GISC15-22219
L-I068/15/0677	GISC15- 22220
L-I068/15/0678	GISC15-22221

REVISÓ

Q.F.B.Leticia Velázquez Méndez
Gerente Técnico



Al 396.152 { 85}

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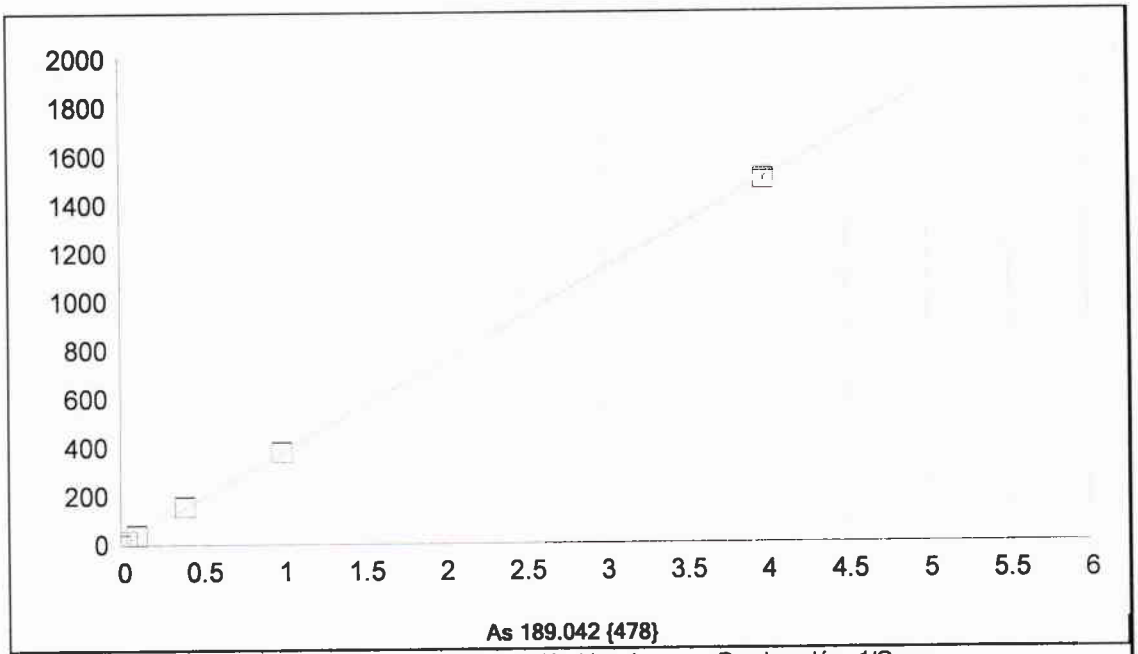
A0 (Compensación):	6.281688	Reajustar P	1.000000
A1 (Ganancia)	547.184875	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999901	Estatus:	OK.
Error Estándar de Est:	0.780270		
MDL:	0.015540		
MQL:	0.051801		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00003	-.000	.000	6.2667	8.18	1
STD 5	.40000	.43083	.031	7.71	242.03	3.61	1
STD 6	1.0000	.98855	-.011	-1.15	547.20	5.23	1
STD 7	4.0000	4.0330	.033	.824	2213.1	8.83	1
STD 8	10.000	9.9477	-.052	-.523	5449.5	14.2	1

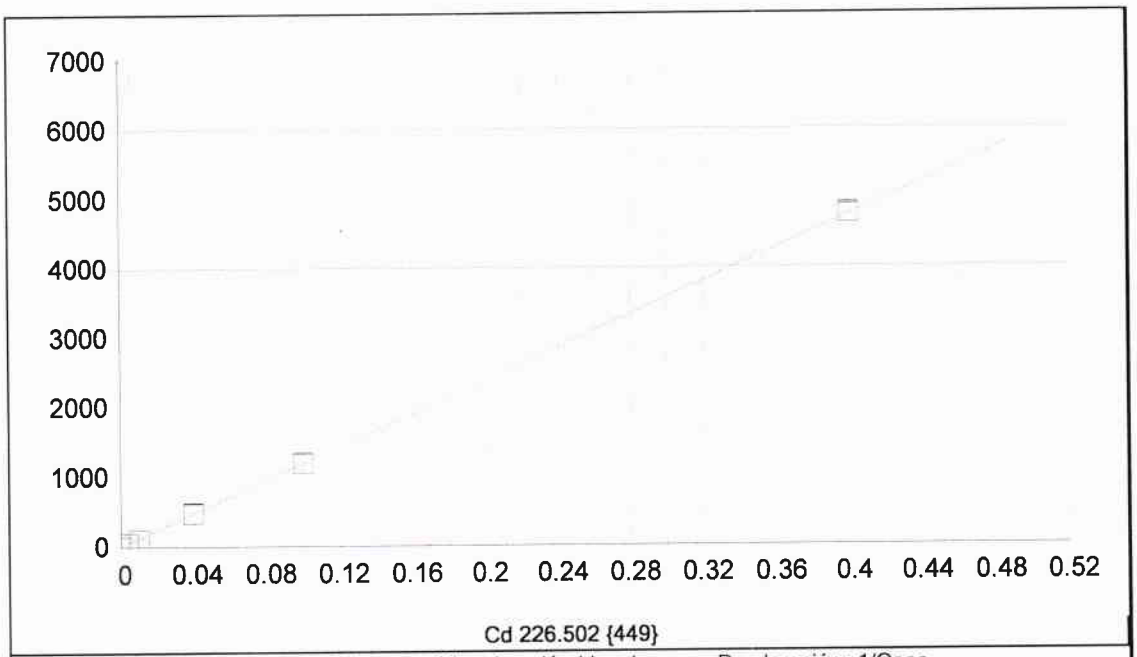


As 189.042 {478}

Fecha de la 23/12/2015 14:09:52 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	0.754435	Reajustar P	1.000000
A1 (Ganancia)	375.828638	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999944	Estatus:	OK.
Error Estándar de Est:	0.072470		
MDL:	0.002362		
MQL:	0.007872		

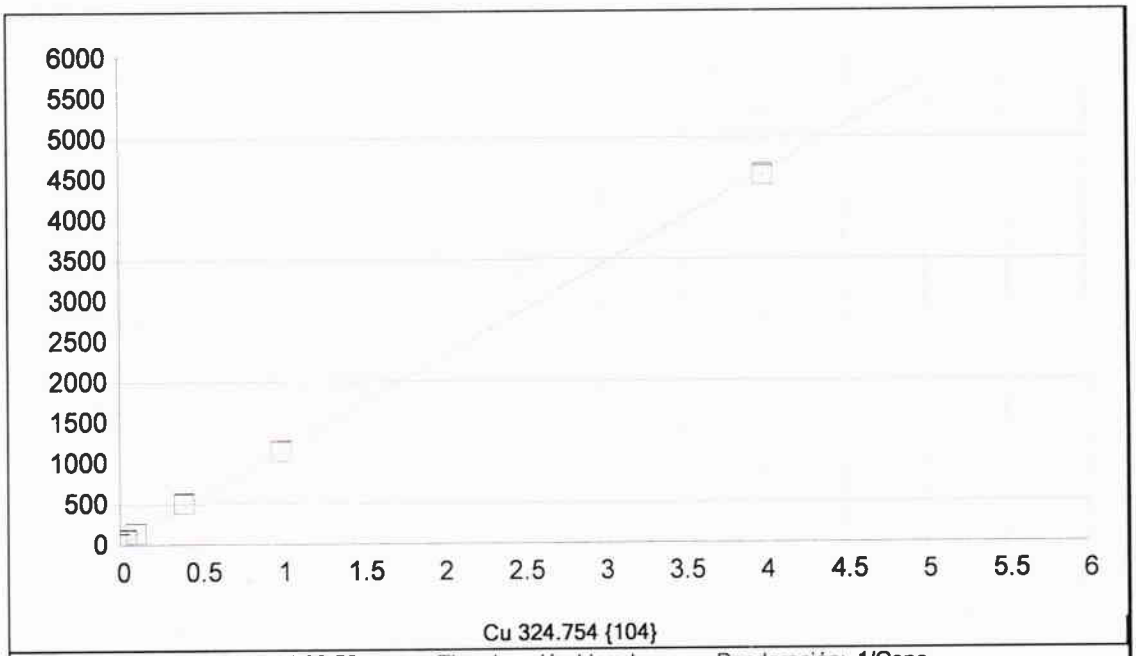
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	.75363	.377	1
STD 4	.10000	.10165	.002	1.65	38.959	1.12	1
STD 5	.40000	.41283	.013	3.21	155.91	1.34	1
STD 6	1.0000	1.0076	.008	.760	379.44	1.40	1
STD 7	4.0000	3.9778	-.022	-.555	1495.7	9.43	1
STD 3	.04000	.04012	.000	.299	15.832	.453	1



Fecha de la 23/12/2015 14:05:23 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	0.866515	Reajustar P	1.000000
A1 (Ganancia)	11887.90840	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999708	Estatus:	OK.
Error Estándar de Est:	0.523259		
MDL:	0.000121		
MQL:	0.000402		

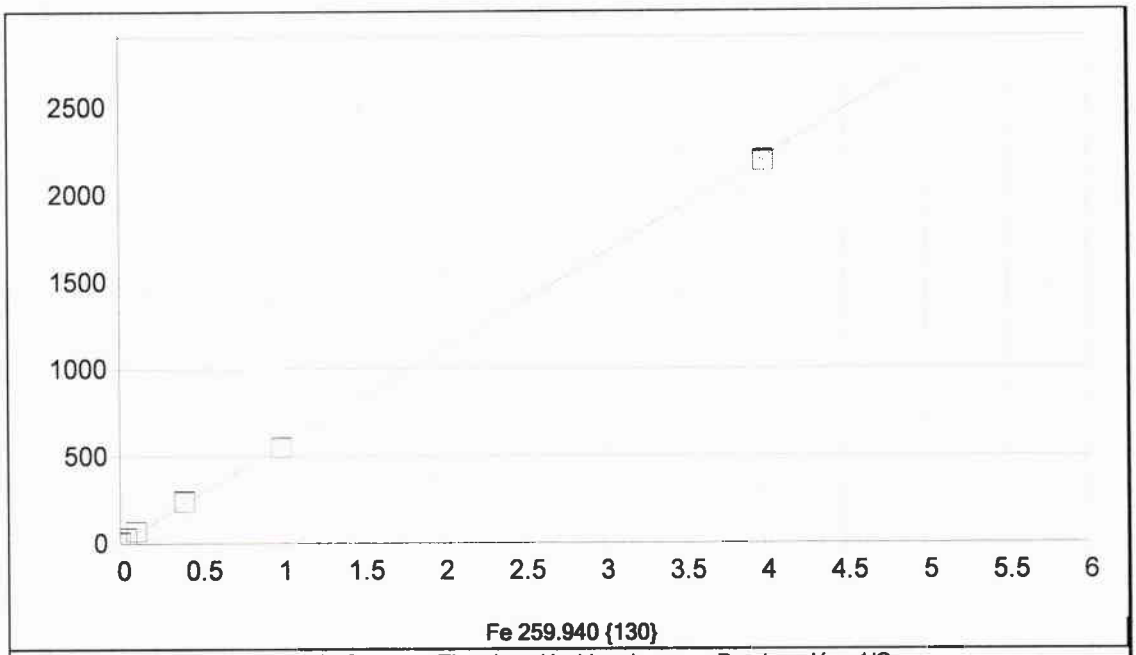
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.87325	.581	1
STD 1	.00400	.00413	.000	3.23	49.955	.405	1
STD 2	.01000	.00823	-.002	-17.7	98.748	.787	1
STD 3	.04000	.03984	-.000	-.403	474.47	3.94	1
STD 4	.10000	.10031	.000	.305	1193.3	10.3	1
STD 5	.40000	.40149	.001	.373	4773.8	16.7	1



Fecha de la 23/12/2015 14:09:52 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	10.365553	Reajustar P	1.000000
A1 (Ganancia)	1142.231457	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999588	Estatus:	OK.
Error Estándar de Est:	0.597380		
MDL:	0.004111		
MQL:	0.013702		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00001	-.000	.000	10.355	4.25	1
STD 5	.40000	.43228	.032	8.07	504.13	3.11	1
STD 6	1.0000	.99141	-.009	-.859	1142.8	8.31	1
STD 7	4.0000	3.9621	-.038	-.947	4536.0	15.4	1
STD 3	.04000	.04244	.002	6.09	58.838	6.19	1
STD 4	.10000	.11173	.012	11.7	137.99	1.61	1

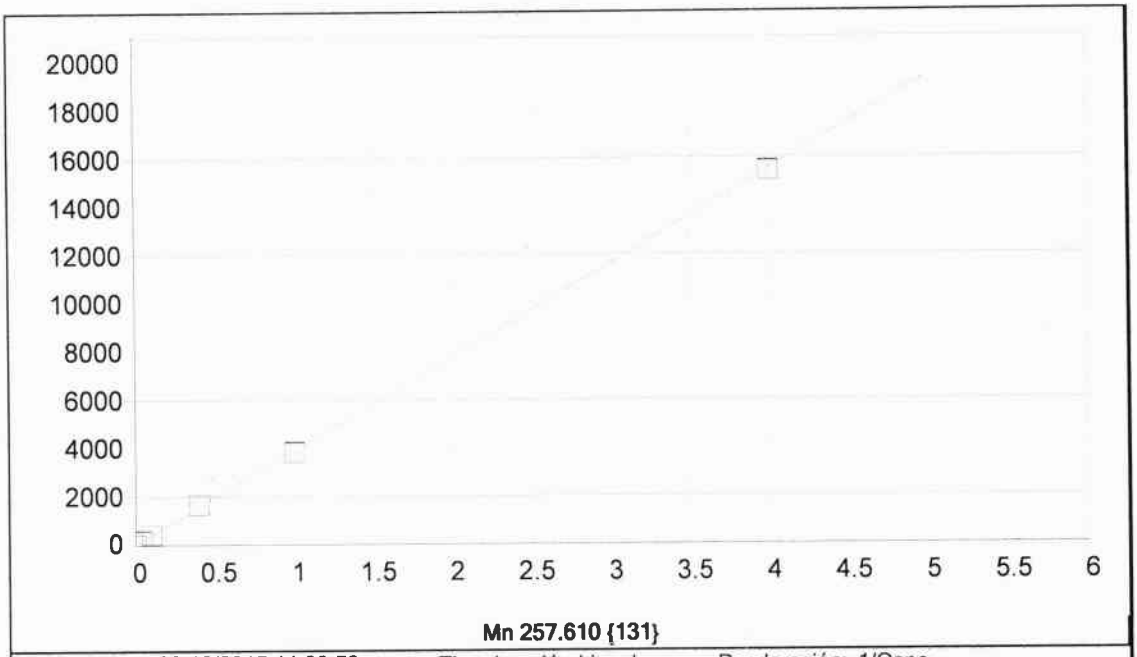


Fe 259.940 {130}

Fecha de la	23/12/2015 14:09:52	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	4.891805	Reajustar P	1.000000
A1 (Ganancia)	550.412795	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999457	Estatus:	OK.
Error Estándar de Est:	0.330571		
MDL:	0.003890		
MQL:	0.012967		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00002	-.000	.000	4.8833	2.53	1
STD 5	.40000	.42735	.027	6.84	240.11	2.08	1
STD 6	1.0000	.98568	-.014	-1.43	547.43	3.90	1
STD 3	.04000	.04775	.008	19.4	31.175	.988	1
STD 4	.10000	.11458	.015	14.6	67.958	.913	1
STD 7	4.0000	3.9646	-.035	-.884	2187.1	5.06	1

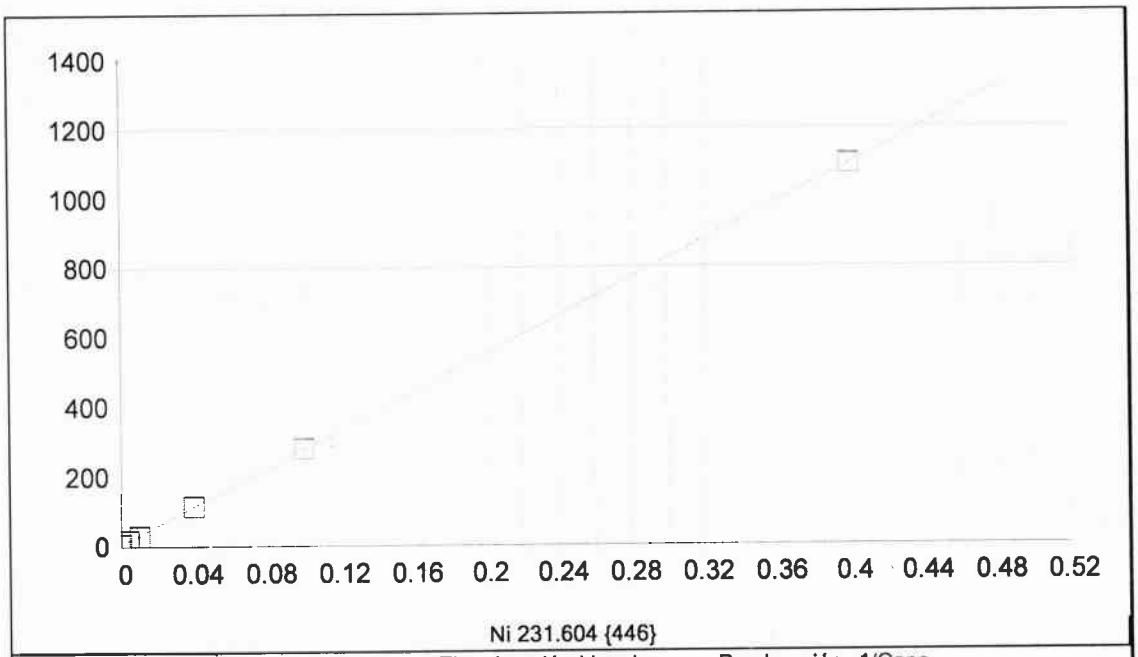


Mn 257.610 {131}

Fecha de la 23/12/2015 14:09:52 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	3.649141	Reajustar P	1.000000
A1 (Ganancia)	3881.118397	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999779	Estatus:	OK.
Error Estándar de Est:	1.487132		
MDL:	0.000641		
MQL:	0.002138		

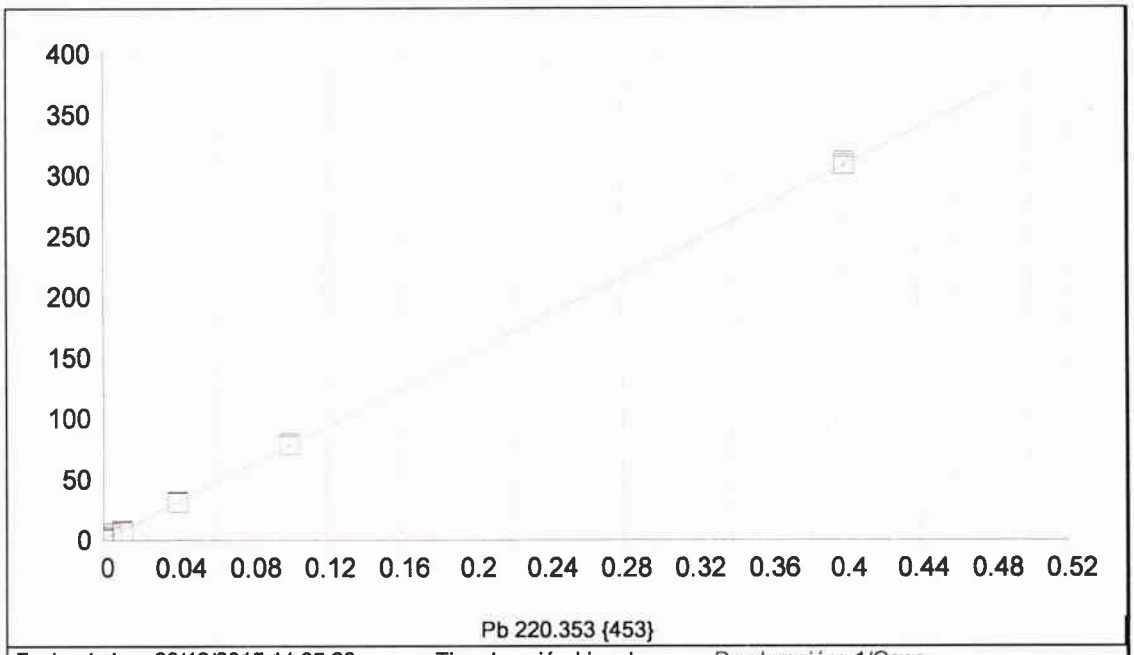
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00001	-.000	.000	3.6233	1.90	1
STD 5	.40000	.42469	.025	6.17	1651.9	4.53	1
STD 6	1.0000	.98735	-.013	-1.26	3835.7	17.5	1
STD 3	.04000	.04191	.002	4.77	166.30	2.82	1
STD 4	.10000	.10748	.007	7.48	420.81	1.24	1
STD 7	4.0000	3.9786	-.021	-.536	15445.	21.8	1



Fecha de la 23/12/2015 14:05:23 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	5.618516	Reajustar P	1.000000
A1 (Ganancia)	2725.585719	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999834	Estatus:	OK.
Error Estándar de Est:	0.090597		
MDL:	0.000471		
MQL:	0.001571		

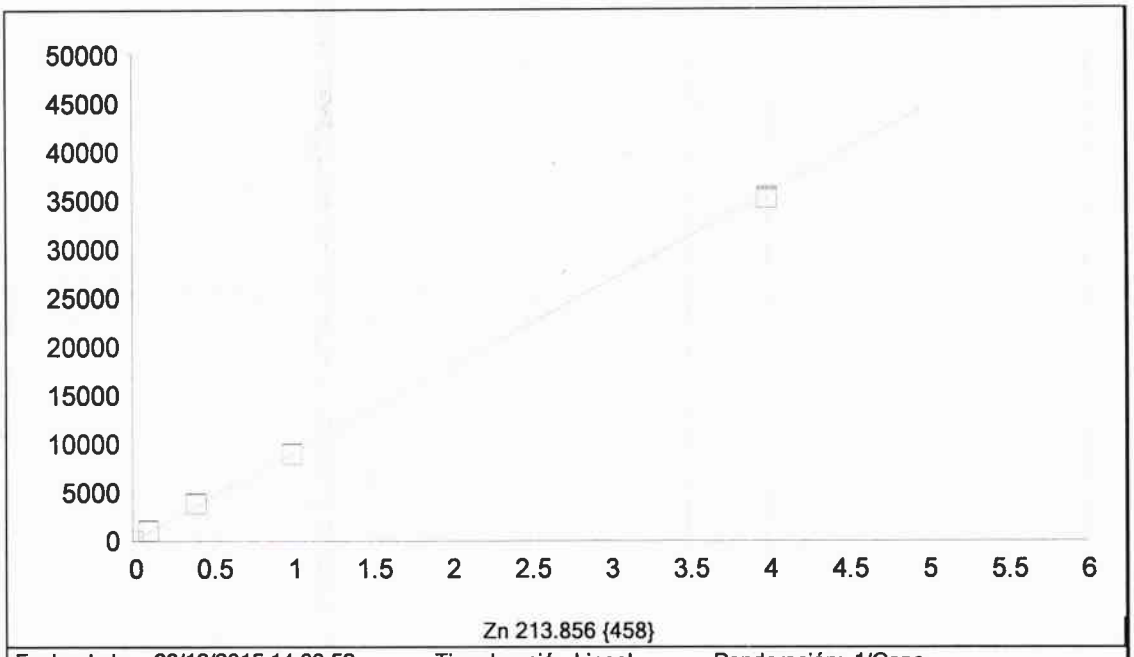
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	5.6193	1.30	1
STD 1	.00400	.00418	.000	4.43	17.004	1.58	1
STD 2	.01000	.00872	-.001	-12.8	29.389	1.03	1
STD 3	.04000	.04018	.000	.461	115.14	.133	1
STD 4	.10000	.10110	.001	1.10	281.18	2.50	1
STD 5	.40000	.39982	-.000	-.046	1095.4	2.72	1



Fecha de la	23/12/2015 14:05:23	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	0.890832	Reajustar P	1.000000
A1 (Ganancia)	768.488271	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999648	Estatus:	OK.
Error Estándar de Est:	0.037179		
MDL:	0.001570		
MQL:	0.005233		

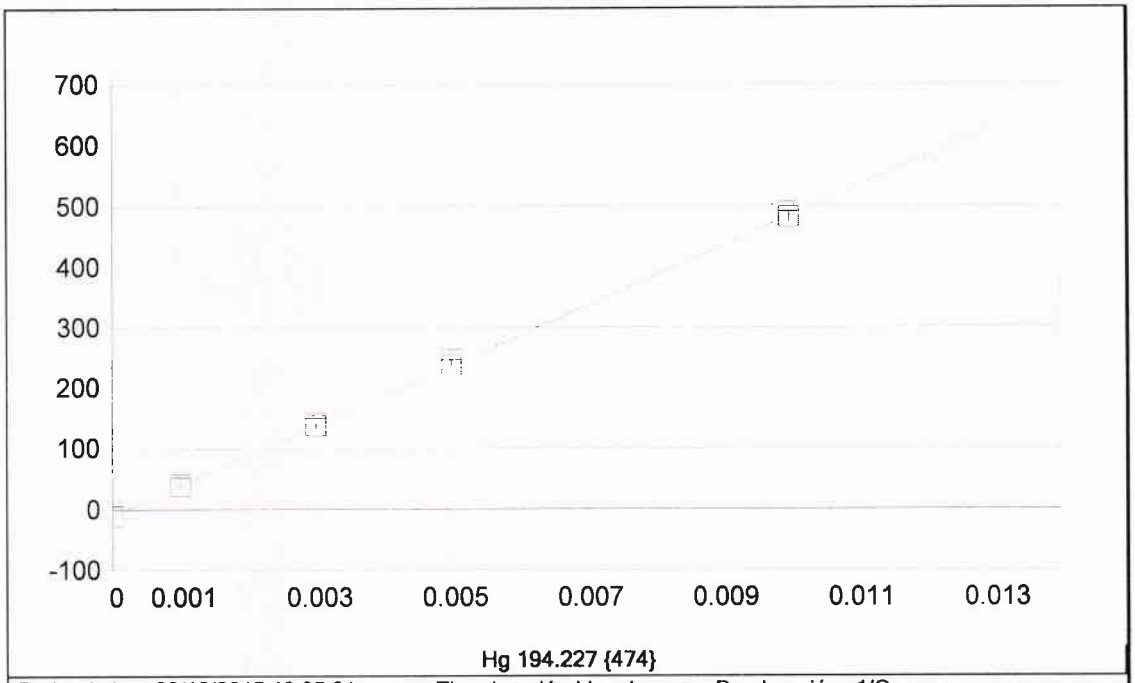
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.89102	.690	1
STD 1	.00400	.00446	.000	11.6	4.3212	1.61	1
STD 2	.01000	.00822	-.002	-17.8	7.2082	.567	1
STD 3	.04000	.03949	-.001	-1.27	31.240	.412	1
STD 4	.10000	.10112	.001	1.12	78.601	1.11	1
STD 5	.40000	.40070	.001	.176	308.83	2.04	1



Fecha de la	23/12/2015 14:09:52	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	25.972924	Reajustar P	1.000000
A1 (Ganancia)	8919.968979	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999371	Estatus:	OK.
Error Estándar de Est:	9.572179		
MDL:	0.000131		
MQL:	0.000436		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00003	-.000	.000	25.744	.704	1
STD 4	.10000	.11831	.018	18.3	1081.3	8.05	1
STD 5	.40000	.43323	.033	8.31	3890.3	11.5	1
STD 6	1.0000	1.0044	.004	.440	8985.2	29.1	1
STD 7	4.0000	3.9441	-.056	-1.40	35207.	125.	1



Hg 194.227 {474}

Fecha de la	28/12/2015 10:05:31	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	-10.775375	Reajustar P	1.000000
A1 (Ganancia)	49338.45180	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999984	Estatus:	OK.
Error Estándar de Est:	0.049161		
MDL:	0.000028		
MQL:	0.000095		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	-10.775	.349	1
STD 1	.00100	.00099	-.000	-1.37	37.889	3.18	1
STD 2	.00300	.00301	.000	.219	137.56	4.26	1
STD 3	.00500	.00504	.000	.771	237.82	8.80	1
STD 4	.01000	.00997	-.000	-.314	481.06	8.14	1

Análisis: ***METALES PESADOS POR ICP-OES***

Lote analítico: DMP-RAÍZ/SUELO/HUEVO-151223

Fecha de Análisis: 23/12/2015

Fecha de Reporte: 23/12/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÓN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.0100
NIVEL 5	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000									
NIVEL 9										
Correlación	0.9999	0.9999	0.9997	0.9996	0.9994	0.9998	0.9998	0.9996	0.9994	0.9999

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
10	QC:QC	Aluminio	0.4000	0.4357	109	36	QC:QC	Aluminio	0.4000	0.4498	112
		Arsénico	0.4000	0.4233	106			Arsénico	0.4000	0.4257	106
		Cadmio	0.4000	0.4186	105			Cadmio	0.4000	0.4186	105
		Cobre	0.4000	0.4379	109			Cobre	0.4000	0.4335	108
		Fierro	0.4000	0.4466	112			Fierro	0.4000	0.4519	113
		Manganeso	0.4000	0.4352	109			Manganeso	0.4000	0.4347	109
		Níquel	0.4000	0.4145	104			Níquel	0.4000	0.4159	104
		Plomo	0.4000	0.4195	105			Plomo	0.4000	0.4185	105
		Zinc	0.4000	0.4482	112			Zinc	0.4000	0.4547	114
21	QC:QC	Aluminio	0.4000	0.435	109	6	QC:QC	Mercurio	0.0050	0.0049	98
		Arsénico	0.4000	0.4182	105	17	QC:QC	Mercurio	0.0050	0.0048	96
		Cadmio	0.4000	0.4154	104	28	QC:QC	Mercurio	0.0050	0.0046	92
		Cobre	0.4000	0.4317	108	32	QC:QC	Mercurio	0.0050	0.0047	94
		Fierro	0.4000	0.4409	110						
		Manganeso	0.4000	0.4311	108						
		Níquel	0.4000	0.4104	103						
		Plomo	0.4000	0.4158	104						
		Zinc	0.4000	0.4452	111						
32	QC:QC	Aluminio	0.4000	0.4337	108						
		Arsénico	0.4000	0.4265	107						
		Cadmio	0.4000	0.4207	105						
		Cobre	0.4000	0.4371	109						
		Fierro	0.4000	0.4491	112						
		Manganeso	0.4000	0.4366	109						
		Níquel	0.4000	0.417	104						
		Plomo	0.4000	0.4214	105						
		Zinc	0.4000	0.4554	114						

Análisis: ***METALES PESADOS POR ICP-OES***
Lote analítico: DMP-RAÍZ/SUELO/HUEVO-151223
Fecha de Análisis: 23/12/2015
Fecha de Reporte: 23/12/2015

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/kg		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
12	Recuperación	Aluminio	40.0000	44.1900	110						
		Arsénico	40.0000	41.5200	104						
		Cadmio	40.0000	41.1100	103						
		Cobre	40.0000	42.3700	106						
		Fierro	40.0000	43.4700	109						
		Manganeso	40.0000	42.3400	106						
		Níquel	40.0000	40.7800	102						
		Plomo	40.0000	41.0300	103						
		Zinc	40.0000	44.4600	111						
8	Recuperación	Mercurio	0.5000	0.4951	99						

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I. Gaudencio Vargas Espejel
ELABORÓ

Q.F.B. Leticia Velázquez Méndez
REVISÓ

PACE/GIS/I02-F01

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Peso de muestra (g) Metales	Hg
GISC15-21765	Raíz		05/11/2015	0.5087	0.5072
GISC15-21790	Raíz		05/11/2015	0.5064	0.5070
GISC15-21933	Raíz		05/11/2015	0.5090	0.5069
GISC15-21936	Raíz		05/11/2015	0.5068	0.5038
GISC15-22028	Raíz		05/11/2015	0.5010	0.5061
GISC15-22029	Raíz		05/11/2015	0.5097	0.5035
GISC15-22030	Raíz		05/11/2015	0.5079	0.5021
GISC15-22096	Raíz		05/11/2015	0.5051	0.5042
GISC15-22099	Raíz		05/11/2015	0.5094	0.5022
GISC15-22126	Raíz		05/11/2015	0.5043	0.5059
GISC15-22127	Raíz		05/11/2015	0.5088	0.5088
GISC15-22128	Raíz		05/11/2015	0.5080	0.5024
GIDC15-22110	Suelo		05/11/2015	0.5024	0.5060
GISC15-22111	Suelo		05/11/2015	0.5036	0.5046
GISC15-21750	Huevo		05/11/2015	0.5025	0.5042
GISC15-21751	Huevo		05/11/2015	0.5018	0.5073
GISC15-22219	Huevo		05/11/2015	0.5039	0.5072
GISC15- 22220	Huevo		05/11/2015	0.5010	0.5029
GISC15-22221	Huevo		05/11/2015	0.5074	0.5032

P.A. Laudencio MF

I.B.T. Reyna Ivette Delgado

Q.F.B. Leticia Velazquez Méndez

1	Cal: Blanco 23/12/2015 13:50:33 IR D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**6.267**	**.7536**	**.8732**	**10.35**	**4.883**	**3.623**	**5.619**	**.8910**	**25.74**
Desv. Est.	8.175	.3766	.5810	4.25	2.529	1.897	1.303	.6903	.70
% RSD	130.5	49.97	66.53	41.09	51.79	52.36	23.20	77.48	2.733
Rep #1	-1.875	.4866	1.541	14.76	2.275	1.780	4.234	.2971	26.55
Rep #2	14.47	1.184	.4857	6.268	5.050	5.570	6.822	.7275	25.24
Rep #3	6.200	.5899	.5928	10.04	7.325	3.520	5.802	1.648	25.45

2	Cal: STD 1 23/12/2015 13:52:58 IR D MP 151223: UNAM (RAIZ):		
	Cd2265	Ni2316	Pb2203
Línea	226.502 {44	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s
Media	**49.96**	**17.00**	**4.321**
Desv. Est.	.41	1.58	1.612
% RSD	.8117	9.281	37.30
Rep #1	50.06	17.29	4.327
Rep #2	49.51	18.42	5.930
Rep #3	50.29	15.30	2.706

3	Cal: STD 2 23/12/2015 13:55:28 IR D MP 151223: UNAM (RAIZ):		
	Cd2265	Ni2316	Pb2203
Línea	226.502 {44	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s
Media	**98.75**	**29.39**	**7.208**
Desv. Est.	.79	1.03	.567
% RSD	.7971	3.496	7.868
Rep #1	98.89	28.58	7.339
Rep #2	99.46	30.55	6.587
Rep #3	97.90	29.04	7.698

4	Cal: STD 3 23/12/2015 13:58:14 IR D MP 151223: UNAM (RAIZ):						
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**15.83**	**474.5**	**58.84**	**31.17**	**166.3**	**115.1**	**31.24**
Desv. Est.	.45	3.9	6.19	.99	2.8	.1	.41
% RSD	2.859	.8304	10.53	3.168	1.695	.1156	1.320
Rep #1	15.98	478.2	52.09	30.18	167.2	115.2	31.65
Rep #2	15.32	470.4	60.17	31.20	168.6	115.2	30.83
Rep #3	16.19	474.8	64.25	32.15	163.1	115.0	31.24

5	Cal: STD 4 23/12/2015 14:00:55 IR D MP 151223: UNAM (RAIZ):							
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**38.96**	**1193.**	**138.0**	**67.96**	**420.8**	**281.2**	**78.60**	**1081.**
Desv. Est.	1.12	10.	1.6	.91	1.2	2.5	1.11	8.
% RSD	2.863	.8654	1.170	1.343	.2951	.8907	1.411	.7446
Rep #1	38.59	1204.	139.8	69.00	420.5	281.9	77.73	1087.
Rep #2	40.21	1193.	137.6	67.58	419.7	283.2	79.85	1085.
Rep #3	38.08	1183.	136.6	67.30	422.2	278.4	78.23	1072.

6	Cal: STD 5 23/12/2015 14:03:13 IR D MP 151223: UNAM (RAIZ):

	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**242.0**	**155.9**	**4774.**	**504.1**	**240.1**	**1652.**	**1095.**	**308.8**	**3890.**
Desv. Est.	3.6	1.3	17.	3.1	2.1	5.	3.	2.0	12.
% RSD	1.490	.8565	.3505	.6160	.8663	.2740	.2483	.6613	.2967
Rep #1	245.8	156.5	4792.	503.3	238.5	1649.	1098.	310.4	3903.
Rep #2	238.6	156.9	4758.	507.6	242.5	1650.	1093.	306.5	3886.
Rep #3	241.6	154.4	4772.	501.5	239.4	1657.	1095.	309.5	3882.

7	Cal: STD 6 23/12/2015 14:05:33 IR D MP 151223: UNAM (RAIZ):					
	Al3961	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	396.152 { 85	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**547.2**	**379.4**	**1143.**	**547.4**	**3836.**	**8985.**
Desv. Est.	5.2	1.4	8.	3.9	18.	29.
% RSD	.9559	.3692	.7275	.7130	.4568	.3235
Rep #1	552.0	378.0	1148.	549.2	3852.	8959.
Rep #2	541.6	379.5	1133.	543.0	3817.	8980.
Rep #3	548.0	380.8	1147.	550.1	3837.	9016.

8	Cal: STD 7 23/12/2015 14:07:48 IR D MP 151223: UNAM (RAIZ):					
	Al3961	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	396.152 { 85	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**2213.**	**1496.**	**4536.**	**2187.**	**15440.**	**35210.**
Desv. Est.	9.	9.	15.	5.	22.	125.
% RSD	.3989	.6303	.3399	.2315	.1413	.3544
Rep #1	2223.	1495.	4541.	2188.	15470.	35200.
Rep #2	2211.	1487.	4519.	2192.	15440.	35090.
Rep #3	2206.	1505.	4549.	2182.	15430.	35340.

9	Cal: STD 8 23/12/2015 14:10:02 IR D MP 151223: UNAM (RAIZ):
	Al3961
Línea	396.152 { 85
Unidades	Cts/s
Media	**5449.**
Desv. Est.	14.
% RSD	.2606
Rep #1	5433.
Rep #2	5455.
Rep #3	5460.

10	QC: QC 23/12/2015 14:13:05 CONC D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4357**	**.4233**	**.4186**	**.4379**	**.4466**	**.4352**	**.4145**	**.4195**	**.4482**
Desv. Est.	.0188	.0030	.0020	.0008	.0027	.0036	.0013	.0030	.0020
% RSD	4.319	.7145	.4797	.1860	.5983	.8192	.3056	.7124	.4470
Rep #1	.4491	.4268	.4207	.4369	.4436	.4362	.4157	.4224	.4504
Rep #2	.4438	.4218	.4167	.4385	.4472	.4382	.4131	.4165	.4465
Rep #3	.4142	.4214	.4184	.4382	.4489	.4313	.4147	.4195	.4478
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

11	Unk: BLANCO 23/12/2015 14:14:41 CONC D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.0033**	**.0027**	**.0047**	**.0078**	**.0057**	**.0048**	**.0045**	**.0061**	**.0048**
Desv. Est.	.0091	.0010	.0002	.0023	.0038	.0018	.0003	.0008	.0005
% RSD	274.3	35.83	4.709	29.36	66.36	38.13	5.889	12.69	9.477
Rep #1	.0125	.0038	.0044	.0061	.0101	.0068	.0043	.0057	.0042
Rep #2	.0033	.0021	.0048	.0105	.0033	.0034	.0044	.0070	.0050
Rep #3	-.0058	.0022	.0047	.0070	.0038	.0040	.0048	.0056	.0050
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

12	Unk: RECUPERACION 23/12/2015 14:17:08 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**44.19**	**41.52**	**41.11**	**42.37**	**43.47**	**42.34**	**40.78**	**41.03**	**44.46**
Desv. Est.	.29	.46	.19	.40	.84	.55	.23	.25	.17
% RSD	.6546	1.117	.4660	.9423	1.934	1.296	.5732	.6157	.3847
Rep #1	44.14	42.05	41.24	42.81	43.58	42.57	40.88	41.13	44.62
Rep #2	44.50	41.34	41.20	42.26	44.25	42.74	40.94	41.22	44.48
Rep #3	43.93	41.18	40.89	42.03	42.58	41.72	40.51	40.74	44.28
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

13	Blanco: REACTIVO 23/12/2015 14:19:39 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**5.868**	**-.2341**	**.2616**	**.1744**	**2.657**	**.4132**	**.3586**	**.3230**	**.4396**
Desv. Est.	.716	.2217	.0540	.3450	.128	.0650	.0151	.0839	.0430
% RSD	12.20	94.69	20.65	197.8	4.818	15.72	4.207	25.98	9.789
Rep #1	6.391	-.0296	.3209	.5319	2.699	.4862	.3581	.4187	.4808
Rep #2	6.162	-.2031	.2490	.1479	2.759	.3917	.3739	.2885	.4429
Rep #3	5.052	-.4697	.2150	-.1566	2.513	.3618	.3437	.2618	.3950

14	Unk: GISC15-21765 23/12/2015 14:22:30 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1072.**	**1.507**	**.1067**	**9.664**	**1157.**	**53.25**	**.7333**	**4.055**	**13.68**
Desv. Est.	29.	.075	.0712	.553	35.	1.49	.1027	.210	.01
% RSD	2.705	4.954	66.73	5.722	3.004	2.791	14.00	5.179	.0822
Rep #1	1039.	1.547	.1886	9.111	1117.	51.54	.8518	4.295	13.68
Rep #2	1094.	1.421	.0714	10.22	1181.	54.20	.6777	3.962	13.68
Rep #3	1082.	1.553	.0600	9.663	1172.	54.02	.6705	3.908	13.70
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

15	Unk: GISC15-21765-R 23/12/2015 14:24:52 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1081.**	**1.561**	**.1195**	**9.821**	**1176.**	**54.20**	**.7590**	**4.070**	**13.91**
Desv. Est.	3.	.236	.0289	.272	4.	.09	.0500	.171	.08
% RSD	.2972	15.10	24.20	2.771	.3017	.1658	6.588	4.210	.5422
Rep #1	1081.	1.767	.1459	10.07	1172.	54.16	.8127	4.236	13.91
Rep #2	1084.	1.613	.1241	9.533	1179.	54.14	.7507	4.081	13.99
Rep #3	1078.	1.304	.0886	9.859	1176.	54.31	.7138	3.893	13.84
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
16	Unk: GISC15-21790 23/12/2015 14:27:20 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**634.1**	**1.537**	**.0103**	**8.296**	**927.7**	**34.20**	**.4264**	**2.093**	**12.48**
Desv. Est.	3.6	.163	.0598	.357	6.3	.17	.0916	.116	.03
% RSD	.5619	10.60	582.1	4.305	.6780	.4957	21.48	5.545	.2790
Rep #1	632.7	1.519	.0705	8.052	921.2	34.05	.5233	2.105	12.52
Rep #2	638.2	1.708	.0094	8.706	933.8	34.38	.4147	1.972	12.48
Rep #3	631.6	1.384	-.0490	8.131	928.2	34.15	.3412	2.203	12.45
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
17	Unk: GISC15-21933 23/12/2015 14:29:46 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1245.**	**2.008**	**.0508**	**10.99**	**1417.**	**60.49**	**.7526**	**2.231**	**12.50**
Desv. Est.	8.	.167	.0270	.07	10.	.58	.0044	.045	.05
% RSD	.6086	8.295	53.23	.6141	.6852	.9537	.5831	2.000	.3870
Rep #1	1239.	2.109	.0232	10.95	1410.	60.04	.7502	2.275	12.47
Rep #2	1243.	2.099	.0772	11.07	1412.	60.29	.7499	2.186	12.48
Rep #3	1254.	1.816	.0520	10.95	1428.	61.14	.7576	2.231	12.56
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
18	Unk: GISC15-21936 23/12/2015 14:32:14 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1149.**	**1.288**	**.2988**	**5.089**	**1172.**	**52.06**	**.7442**	**1.695**	**16.49**
Desv. Est.	16.	.085	.0259	.137	9.	.53	.0323	.090	.01
% RSD	1.422	6.581	8.664	2.681	.7413	1.021	4.340	5.307	.0907
Rep #1	1167.	1.381	.3258	5.195	1180.	52.35	.7713	1.615	16.47
Rep #2	1146.	1.215	.2962	4.935	1172.	52.39	.7530	1.792	16.50
Rep #3	1134.	1.268	.2743	5.138	1163.	51.45	.7085	1.679	16.50
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
19	Unk: GISC15-22028 23/12/2015 14:34:51 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg

Media	**611.6**	**1.078**	**.0741**	**12.60**	**666.8**	**57.16**	**.1364**	**7.209**	**18.33**
Desv. Est.	6.5	.248	.0229	.40	2.3	.23	.0120	.094	.06
% RSD	1.063	22.97	30.85	3.153	.3374	.4039	8.782	1.304	.3362
Rep #1	618.5	.8245	.0916	13.05	669.3	57.42	.1343	7.123	18.38
Rep #2	610.9	1.091	.0824	12.44	666.1	56.99	.1493	7.309	18.34
Rep #3	605.5	1.319	.0482	12.30	665.0	57.06	.1257	7.193	18.26
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

20	Unk: GISC15-22029 23/12/2015 14:37:25 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**959.8**	**1.185**	**.0263**	**11.26**	**1022.**	**64.64**	**1.549**	**7.980**	**20.91**
Desv. Est.	3.8	.331	.0039	.34	5.	.22	.044	.094	.03
% RSD	.3952	27.94	14.88	3.026	.4793	.3435	2.835	1.176	.1658
Rep #1	961.4	.9808	.0259	10.94	1022.	64.47	1.528	7.962	20.95
Rep #2	955.5	1.566	.0226	11.22	1017.	64.57	1.518	7.896	20.89
Rep #3	962.6	1.007	.0303	11.61	1026.	64.89	1.599	8.081	20.90
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

21	QC: QC 23/12/2015 14:55:22 CONC D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4350**	**.4182**	**.4154**	**.4317**	**.4409**	**.4311**	**.4104**	**.4158**	**.4452**
Desv. Est.	.0086	.0009	.0012	.0030	.0054	.0034	.0010	.0014	.0004
% RSD	1.978	.2227	.2788	.6914	1.216	.7984	.2391	.3334	.0933
Rep #1	.4421	.4183	.4158	.4316	.4407	.4298	.4107	.4172	.4455
Rep #2	.4374	.4191	.4141	.4347	.4463	.4350	.4093	.4144	.4447
Rep #3	.4254	.4173	.4163	.4288	.4356	.4285	.4112	.4157	.4454
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

22	Unk: GISC15-22030 23/12/2015 14:56:44 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**420.8**	**1.112**	**<.0000**	**9.585**	**510.3**	**47.02**	**<.0000**	**5.873**	**15.54**
Desv. Est.	10.1	.141	.0082	.232	5.7	.51	.0228	.132	.05
% RSD	2.388	12.68	29.40	2.419	1.119	1.080	19.00	2.242	.3353
Rep #1	432.3	.9850	-.0227	9.818	516.5	47.10	-.1039	6.015	15.60
Rep #2	416.7	1.087	-.0239	9.582	509.2	47.49	-.1104	5.754	15.50
Rep #3	413.5	1.263	-.0375	9.355	505.2	46.48	-.1463	5.850	15.52
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

23	Unk: GISC15-22096 23/12/2015 14:59:21 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**311.4**	**1.168**	**<.0000**	**6.550**	**367.7**	**15.72**	**<.0000**	**.5514**	**7.593**

Desv. Est.	2.9	.216	.0081	.129	4.5	.21	.0402	.1215	.095
% RSD	.9304	18.48	6.279	1.970	1.211	1.331	59.69	22.03	1.256
Rep #1	308.3	1.059	-.1196	6.401	364.3	15.59	-.0766	.4812	7.551
Rep #2	311.7	1.417	-.1324	6.611	372.7	15.96	-.1021	.4814	7.526
Rep #3	314.1	1.029	-.1346	6.637	366.2	15.60	-.0233	.6917	7.702
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

24	Unk: GISC15-22099 23/12/2015 15:01:59 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1244.**	**2.043**	**.5944**	**9.002**	**1188.**	**66.35**	**.8293**	**1.968**	**24.04**
Desv. Est.	15.	.055	.0144	.196	9.	.66	.0385	.253	.05
% RSD	1.190	2.710	2.414	2.179	.7325	.9879	4.646	12.87	.1894
Rep #1	1252.	2.104	.6099	9.218	1193.	66.54	.8177	1.970	24.09
Rep #2	1253.	2.026	.5815	8.952	1193.	66.90	.7978	1.714	24.02
Rep #3	1227.	1.998	.5920	8.835	1178.	65.63	.8722	2.221	24.00
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

25	Unk: GISC15-22126 23/12/2015 15:04:26 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1364.**	**1.659**	**<.0000**	**4.166**	**929.1**	**55.81**	**.8528**	**1.859**	**11.36**
Desv. Est.	14.	.083	.0084	.111	9.2	.65	.0448	.037	.04
% RSD	1.006	5.026	5.041	2.664	.9955	1.170	5.253	2.019	.3423
Rep #1	1379.	1.649	-.1575	4.200	937.9	56.48	.9001	1.869	11.41
Rep #2	1362.	1.747	-.1676	4.257	929.9	55.79	.8474	1.818	11.36
Rep #3	1351.	1.582	-.1741	4.042	919.5	55.18	.8110	1.891	11.33
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

26	Unk: GISC15-22127 23/12/2015 15:06:52 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**914.9**	**1.433**	**<.0000**	**6.795**	**750.3**	**38.00**	**1.687**	**1.950**	**9.086**
Desv. Est.	6.1	.049	.0079	.251	3.5	.16	.045	.085	.022
% RSD	.6622	3.436	4.609	3.700	.4721	.4280	2.650	4.346	.2464
Rep #1	921.5	1.448	-.1678	7.008	752.5	37.93	1.636	1.977	9.064
Rep #2	909.6	1.473	-.1804	6.518	746.2	37.89	1.720	1.855	9.085
Rep #3	913.6	1.378	-.1658	6.858	752.2	38.19	1.706	2.018	9.109
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

27	Unk: GISC15-22128 23/12/2015 15:09:40 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1728.**	**1.671**	**<.0000**	**6.585**	**1154.**	**50.03**	**2.028**	**2.052**	**9.288**
Desv. Est.	271.	.117	.0029	.230	96.	.29	.029	.036	.050

% RSD	15.67	6.978	1.746	3.486	8.320	.5703	1.411	1.736	.5354
Rep #1	1582.	1.683	-.1694	6.386	1103.	50.04	2.025	2.011	9.239
Rep #2	1562.	1.549	-.1687	6.533	1093.	49.74	2.001	2.065	9.338
Rep #3	2040.	1.782	-.1640	6.836	1264.	50.31	2.058	2.079	9.287
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
28	Unk: GISC15-22110 23/12/2015 15:16:07 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**13300.**	**28.02**	**.9926**	**56.21**	**16250.**	**508.7**	**13.63**	**25.80**	**81.84**
Desv. Est.	99.	.30	.0217	.48	80.	3.2	.07	.11	.41
% RSD	.7438	1.057	2.191	.8602	.4906	.6233	.4982	.4070	.4998
Rep #1	13190.	27.98	1.008	56.19	16160.	505.1	13.63	25.83	82.01
Rep #2	13330.	28.33	1.002	56.70	16280.	509.9	13.70	25.68	82.14
Rep #3	13380.	27.74	.9677	55.74	16310.	511.1	13.57	25.88	81.38
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
29	Unk: GISC15-22111 23/12/2015 15:18:36 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**16350.**	**26.13**	**1.240**	**50.83**	**19430.**	**623.7**	**12.51**	**26.99**	**90.55**
Desv. Est.	107.	.35	.010	.34	114.	3.3	.01	.16	.19
% RSD	.6539	1.358	.7781	.6632	.5875	.5285	.0492	.5835	.2090
Rep #1	16430.	26.06	1.242	51.22	19530.	626.9	12.52	26.85	90.39
Rep #2	16230.	26.51	1.229	50.59	19300.	620.3	12.52	27.16	90.76
Rep #3	16380.	25.81	1.248	50.69	19450.	624.0	12.51	26.96	90.51
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
30	Unk: GISC15-21750 23/12/2015 15:22:22 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**<.0000**	**.7105**	**<.0000**	**1.383**	**15.99**	**.6183**	**<.0000**	**<.0000**	**8.897**
Desv. Est.	.2987	.0900	.0063	.136	.09	.0654	.0764	.1902	.055
% RSD	17.64	12.67	2.207	9.829	.5823	10.58	18.29	45.61	.6218
Rep #1	-2.009	.8076	-.2855	1.315	16.08	.6118	-.4736	-.5984	8.897
Rep #2	-1.415	.6300	-.2799	1.295	15.90	.5564	-.3308	-.4337	8.841
Rep #3	-1.657	.6938	-.2925	1.539	15.99	.6867	-.4495	-.2191	8.952
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
31	Unk: GISC15-21751 23/12/2015 15:24:31 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**<.0000**	**.7515**	**<.0000**	**.9024**	**16.48**	**.0326**	**<.0000**	**<.0000**	**15.77**
Desv. Est.	.2084	.3181	.0055	.3958	.43	.0346	.0468	.1290	.07
% RSD	23.36	42.33	2.011	43.86	2.602	106.2	11.00	55.51	.4728

Rep #1	-1.008	1.112	-.2672	.9437	16.79	.0681	-.4800	-.3809	15.84
Rep #2	-.6518	.5105	-.2779	.4876	16.67	-.0009	-.4012	-.1486	15.69
Rep #3	-1.017	.6320	-.2745	1.276	15.99	.0305	-.3968	-.1677	15.77
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
32	QC: QC 23/12/2015 15:27:48 CONC D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4337**	**.4265**	**.4207**	**.4371**	**.4491**	**.4366**	**.4170**	**.4214**	**.4554**
Desv. Est.	.0114	.0023	.0001	.0019	.0020	.0023	.0004	.0014	.0006
% RSD	2.625	.5468	.0222	.4405	.4450	.5274	.0903	.3292	.1217
Rep #1	.4386	.4262	.4208	.4390	.4470	.4393	.4171	.4200	.4557
Rep #2	.4207	.4243	.4207	.4370	.4509	.4352	.4174	.4214	.4557
Rep #3	.4418	.4290	.4206	.4352	.4495	.4354	.4166	.4228	.4547
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									
33	Unk: GISC15-22219 23/12/2015 15:28:21 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**<.0000**	**.9202**	**<.0000**	**.7849**	**37.28**	**.2329**	**<.0000**	**<.0000**	**27.33**
Desv. Est.	.5461	.0907	.0069	.5145	2.23	.0226	.0308	.1272	.18
% RSD	96.65	9.853	2.412	65.56	5.995	9.707	7.058	49.27	.6565
Rep #1	-.3183	.8215	-.2902	1.174	39.54	.2565	-.4025	-.1124	27.38
Rep #2	-.1858	.9395	-.2867	.2015	37.24	.2114	-.4626	-.3156	27.47
Rep #3	-1.191	.9998	-.2769	.9791	35.07	.2309	-.4442	-.3466	27.13
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
34	Unk: GISC15-22220 23/12/2015 15:31:40 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**<.0000**	**.8625**	**<.0000**	**.9701**	**39.59**	**.1987**	**<.0000**	**<.0000**	**22.04**
Desv. Est.	1.080	.0692	.0137	.2821	.47	.0280	.0499	.0676	.10
% RSD	40.77	8.024	4.513	29.09	1.182	14.09	11.05	20.23	.4561
Rep #1	-2.891	.9330	-.3042	.9711	40.13	.1931	-.4088	-.3534	22.09
Rep #2	-1.470	.7946	-.2880	.6874	39.37	.1740	-.5062	-.3902	22.10
Rep #3	-3.590	.8599	-.3151	1.252	39.27	.2291	-.4389	-.2591	21.93
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
35	Unk: GISC15-22221 23/12/2015 15:34:06 CONC x100 D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**<.0000**	**.6141**	**<.0000**	**.4014**	**33.55**	**.2659**	**.5415**	**<.0000**	**14.20**
Desv. Est.	.6133	.0706	.0068	.2855	1.35	.0156	.0432	.0942	.12
% RSD	91.52	11.50	2.413	71.13	4.020	5.860	7.971	32.53	.8387
Rep #1	-1.118	.5377	-.2902	.4518	32.00	.2482	.5435	-.3783	14.13

Rep #2	-.9214	.6276	-.2767	.0940	34.40	.2776	.4973	-.1907	14.14
Rep #3	.0289	.6770	-.2822	.6583	34.25	.2719	.5836	-.3000	14.34
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									
36	QC: QC 23/12/2015 15:45:18 CONC D MP 151223: UNAM (RAIZ):								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4498**	**.4257**	**.4186**	**.4335**	**.4519**	**.4347**	**.4159**	**.4185**	**.4547**
Desv. Est.	.0140	.0044	.0009	.0043	.0100	.0039	.0007	.0017	.0010
% RSD	3.111	1.030	.2049	1.002	2.205	.8948	.1675	.4134	.2172
Rep #1	.4658	.4284	.4177	.4364	.4448	.4387	.4166	.4165	.4536
Rep #2	.4433	.4206	.4188	.4285	.4633	.4309	.4152	.4195	.4554
Rep #3	.4401	.4281	.4194	.4356	.4475	.4345	.4160	.4195	.4552
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

1	Cal: Blanco 28/12/2015 09:58:41 IR D Hg 151228: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**-2.842**
Desv. Est.	.715
% RSD	25.14
Rep #1	-3.253
Rep #2	-3.257
Rep #3	-2.017
2	Cal: STD 1 28/12/2015 10:00:01 IR D Hg 151228: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**45.76**
Desv. Est.	3.05
% RSD	6.667
Rep #1	42.25
Rep #2	47.74
Rep #3	47.30
3	Cal: STD 2 28/12/2015 10:01:27 IR D Hg 151228: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**145.3**
Desv. Est.	3.1
% RSD	2.154
Rep #1	141.9
Rep #2	146.0
Rep #3	148.0
4	Cal: STD 3 28/12/2015 10:02:53 IR D Hg 151228: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**245.4**
Desv. Est.	9.1
% RSD	3.692
Rep #1	235.0
Rep #2	249.7
Rep #3	251.5
5	Cal: STD 4 28/12/2015 10:04:21 IR D Hg 151228: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**485.3**
Desv. Est.	7.7
% RSD	1.580
Rep #1	476.6
Rep #2	488.1
Rep #3	491.2
6	QC: QC 28/12/2015 10:05:45 CONC D Hg 151228: RAIZ:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0049**
Desv. Est.	.0000

% RSD	.3324
Rep #1	.0049
Rep #2	.0049
Rep #3	.0049
Comprobació	Pasa Comp
Valor	
Intervalo	
7	Unk: BLANCO 28/12/2015 10:06:42 CONC D Hg 151228: RAIZ:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0000**
Desv. Est.	.0000
% RSD	73.45
Rep #1	.0001
Rep #2	.0000
Rep #3	.0000
8	Unk: RECUPERACION 28/12/2015 10:08:13 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.4951**
Desv. Est.	.0040
% RSD	.8103
Rep #1	.4909
Rep #2	.4990
Rep #3	.4954
9	Blanco: REACTIVO 28/12/2015 10:10:02 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0006**
Desv. Est.	.0008
% RSD	135.1
Rep #1	.0003
Rep #2	-.0012
Rep #3	-.0008
10	Unk: GISC15-21765 28/12/2015 10:15:40 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0036**
Desv. Est.	.0022
% RSD	59.88
Rep #1	-.0029
Rep #2	-.0060
Rep #3	-.0019
11	Unk: GISC15-21765-R 28/12/2015 10:17:00 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0018**

Desv. Est.	.0046
% RSD	255.1
Rep #1	-.0066
Rep #2	-.0014
Rep #3	.0026
12	Unk: GISC15-21790 28/12/2015 10:18:37 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0123**
Desv. Est.	.0032
% RSD	25.82
Rep #1	-.0157
Rep #2	-.0094
Rep #3	-.0117
13	Unk: GISC15-21933 28/12/2015 10:20:09 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0104**
Desv. Est.	.0039
% RSD	38.10
Rep #1	-.0146
Rep #2	-.0098
Rep #3	-.0067
14	Unk: GISC15-21936 28/12/2015 10:21:36 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0090**
Desv. Est.	.0070
% RSD	78.21
Rep #1	-.0033
Rep #2	-.0068
Rep #3	-.0169
15	Unk: GISC15-22028 28/12/2015 10:29:19 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0084**
Desv. Est.	.0033
% RSD	39.23
Rep #1	-.0120
Rep #2	-.0078
Rep #3	-.0054
16	Unk: GISC15-22029 28/12/2015 10:30:43 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0108**
Desv. Est.	.0023
% RSD	21.36

Rep #1	-.0111
Rep #2	-.0083
Rep #3	-.0129
17	QC: QC 28/12/2015 10:32:12 CONC D Hg 151228: RAIZ:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0048**
Desv. Est.	.0001
% RSD	2.269
Rep #1	.0047
Rep #2	.0049
Rep #3	.0049
Comprobació	Pasa Comp
Valor	
Intervalo	
18	Unk: GISC15-22030 28/12/2015 10:35:16 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0098**
Desv. Est.	.0032
% RSD	32.65
Rep #1	-.0121
Rep #2	-.0112
Rep #3	-.0062
19	Unk: GISC15-22096 28/12/2015 10:36:47 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0036**
Desv. Est.	.0012
% RSD	34.59
Rep #1	-.0044
Rep #2	-.0042
Rep #3	-.0021
20	Unk: GISC15-22099 28/12/2015 10:38:10 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0109**
Desv. Est.	.0023
% RSD	21.43
Rep #1	-.0135
Rep #2	-.0093
Rep #3	-.0098
21	Unk: GISC15-22126 28/12/2015 10:39:29 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0035**
Desv. Est.	.0024

% RSD	69.25
Rep #1	-.0015
Rep #2	-.0062
Rep #3	-.0028
22	Unk: GISC15-22127 28/12/2015 10:41:09 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0087**
Desv. Est.	.0029
% RSD	33.00
Rep #1	-.0071
Rep #2	-.0069
Rep #3	-.0120
23	Unk: GISC15-22128 28/12/2015 10:42:28 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0116**
Desv. Est.	.0019
% RSD	16.25
Rep #1	-.0136
Rep #2	-.0112
Rep #3	-.0099
24	Unk: GISC15-22110 28/12/2015 10:43:30 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0359**
Desv. Est.	.0035
% RSD	9.882
Rep #1	.0368
Rep #2	.0320
Rep #3	.0389
25	Unk: GISC15-22111 28/12/2015 10:44:54 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0419**
Desv. Est.	.0046
% RSD	11.03
Rep #1	.0366
Rep #2	.0454
Rep #3	.0435
26	Unk: GISC15-21750 28/12/2015 10:46:38 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0091**
Desv. Est.	.0006
% RSD	6.324
Rep #1	-.0092

Rep #2	-.0097
Rep #3	-.0085
27	Unk: GISC15-21751 28/12/2015 10:47:59 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0087**
Desv. Est.	.0023
% RSD	25.98
Rep #1	-.0074
Rep #2	-.0074
Rep #3	-.0113
28	QC: QC 28/12/2015 10:49:25 CONC D Hg 151228: RAIZ:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0046**
Desv. Est.	.0001
% RSD	2.016
Rep #1	.0045
Rep #2	.0047
Rep #3	.0047
Comprobació	Pasa Comp
Valor	
Intervalo	
29	Unk: GISC15-22219 28/12/2015 10:51:28 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0076**
Desv. Est.	.0016
% RSD	21.35
Rep #1	-.0089
Rep #2	-.0058
Rep #3	-.0081
30	Unk: GISC15-22220 28/12/2015 10:52:43 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0121**
Desv. Est.	.0021
% RSD	17.59
Rep #1	-.0134
Rep #2	-.0096
Rep #3	-.0131
31	Unk: GISC15-22221 28/12/2015 10:53:58 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**-.0076**
Desv. Est.	.0026
% RSD	34.98

Rep #1	-.0048
Rep #2	-.0100
Rep #3	-.0079
32	QC: QC 28/12/2015 10:56:47 CONC D Hg 151228: RAIZ:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0047**
Desv. Est.	.0001
% RSD	1.159
Rep #1	.0047
Rep #2	.0048
Rep #3	.0047
Comprobació	Pasa Comp
Valor	
Intervalo	

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA, S.A. DE C.V.

CONTENIDO

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TEL/FAX: 01(595) 928 40 77 E-mail: gisena@prodigy.net.mx

LABORATORIO DE RESIDUOS TÓXICOS

ema entidad mexicana de acreditación, a.c.

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005 Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: RAIZ/SEDIMENTO
Fecha de Recepción: 2015-10-15

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

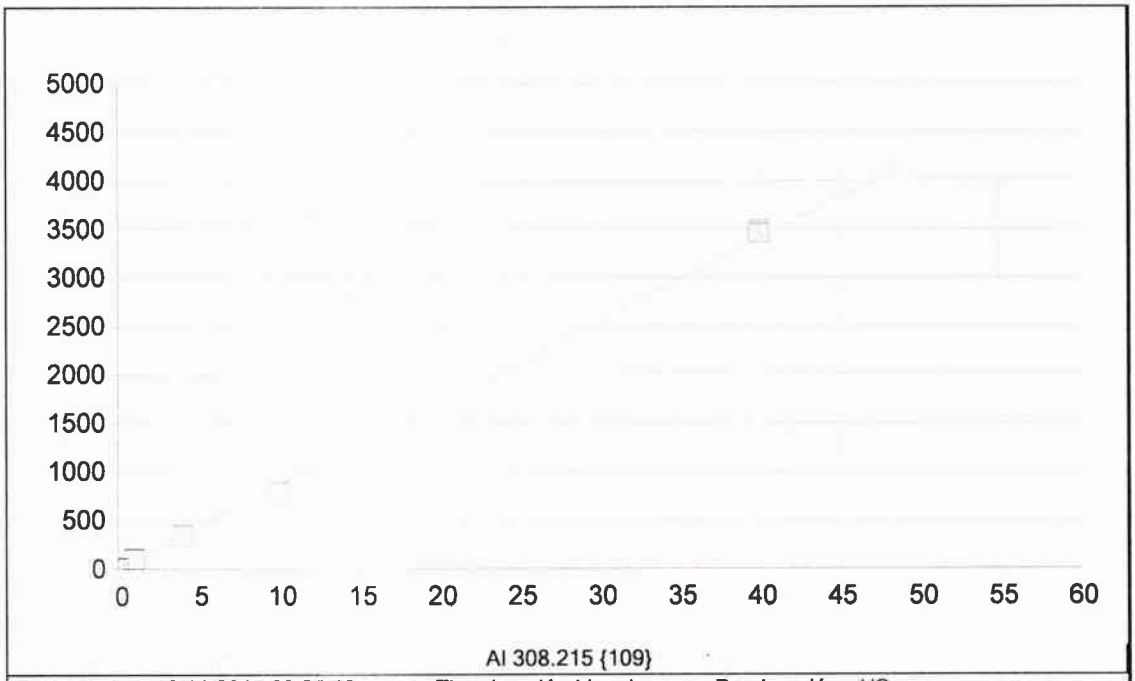
DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/10/15 (2)
Fecha de Analisis de Metales y Mercurio: 2015-11-10 2015-11-10
Fecha de Realización del Informe: 2015-11-11

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-1054/15/0537	GISC15-20379
L-1056/15/0551	GISC15-20382

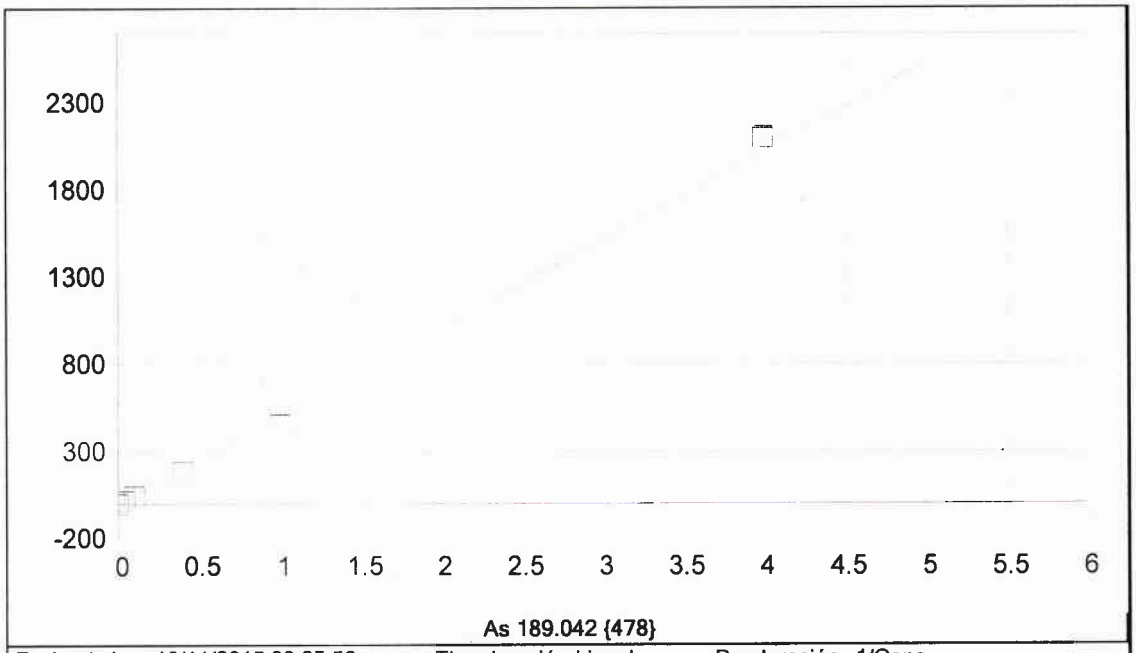
REVISÓ

Q.F.B.Leticia Velázquez Méndez
Gerente Técnico



Fecha de la	10/11/2015 09:25:56	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	10.781259		Reajustar P	1.000000	
A1 (Ganancia)	84.715218		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999139		Estatus:	OK.	
Error Estándar de Est:	1.063942				
MDL:	0.888399				
MQL:	2.961331				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00003	-.000	.000	10.778	5.31	1
STD 6	1.0000	1.1071	.107	10.7	104.57	4.00	1
STD 7	4.0000	3.9655	-.034	-.862	346.72	5.91	1
STD 8	10.000	9.1712	-.829	-8.29	787.72	8.65	1
STD 9	40.000	40.756	.756	1.89	3463.5	19.2	1

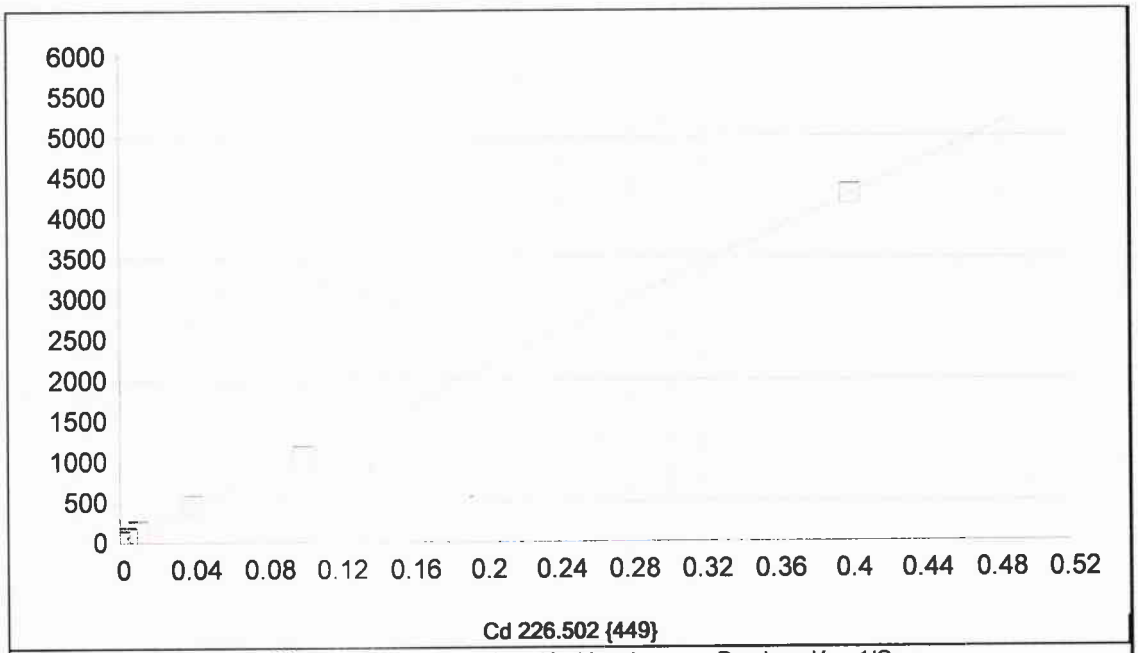


As 189.042 {478}

Fecha de la	10/11/2015 09:25:56	Tipo de unió	Lineal	Ponderación: 1/Conc

A0 (Compensación):	-0.256146	Reajustar P	1.000000
A1 (Ganancia)	506.325013	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998147	Estatus:	OK.
Error Estándar de Est:	0.562331		
MDL:	0.002424		
MQL:	0.008078		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	-.24860	1.18	1
STD 4	.10000	.08663	-.013	-13.4	43.607	.733	1
STD 5	.40000	.36692	-.033	-8.27	185.53	1.14	1
STD 6	1.0000	.89973	-.100	-10.0	455.30	1.40	1
STD 7	4.0000	4.1505	.150	3.76	2101.2	6.30	1
STD 3	.04000	.03626	-.004	-9.34	18.105	.777	1



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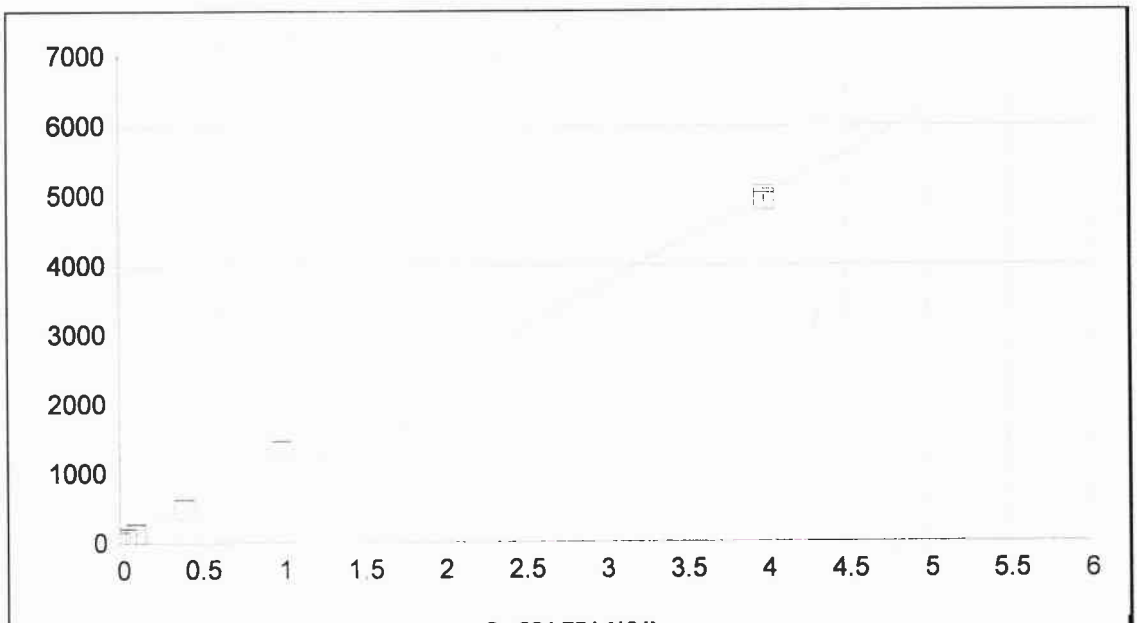
A0 (Compensación):	19.352085	Reajustar P	1.000000
A1 (Ganancia)	10666 40868	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999782	Estatus:	OK.
Error Estándar de Est:	0.405646		
MDL:	0.000606		
MQL:	0.002021		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	19.348	3.98	1
STD 1	.00400	.00390	-.000	-2.55	60.931	10.4	1
STD 2	.01000	.01116	.001	11.6	138.42	8.67	1
STD 3	.04000	.04149	.001	3.73	461.93	2.63	1
STD 4	.10000	.09782	-.002	-2.18	1062.7	3.20	1
STD 5	.40000	.39963	-.000	-.093	4281.9	.768	1

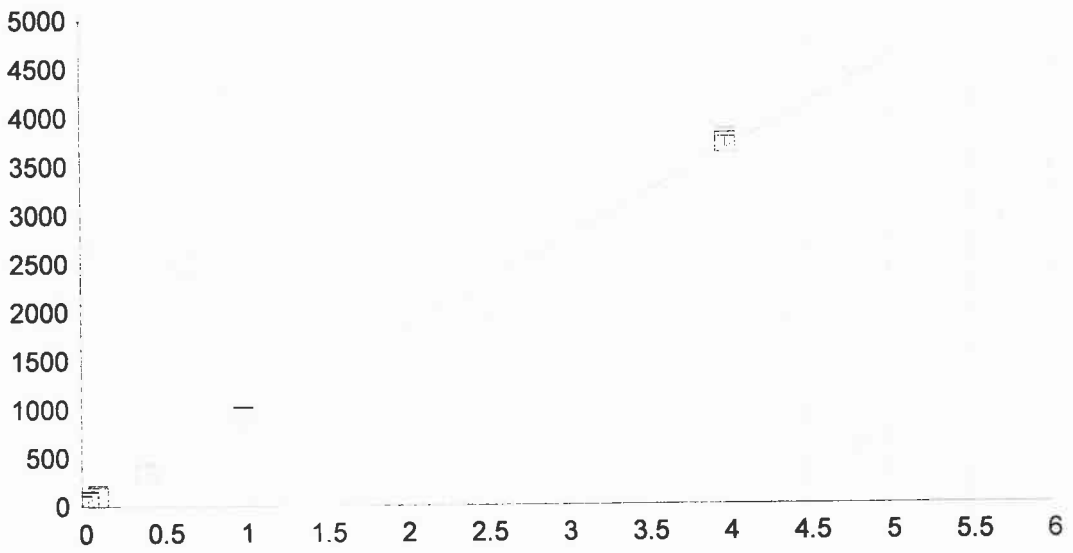


Cu 324.754 {104}

Fecha de la	10/11/2015 09:25:56	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	10.926092	Reajustar P	1.000000
A1 (Ganancia)	1240.546351	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999518	Estatus:	OK.
Error Estándar de Est:	0.702123		
MDL:	0.059543		
MQL:	0.198477		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	10.927	2.13	1
STD 5	.40000	.37911	-.021	-5.22	481.23	4.61	1
STD 6	1.0000	1.0601	.060	6.01	1326.0	6.66	1
STD 7	4.0000	3.9650	-.035	-.875	4929.7	53.3	1
STD 3	.04000	.04127	.001	3.17	62.123	4.00	1
STD 4	.10000	.09454	-.005	-5.46	128.20	5.82	1

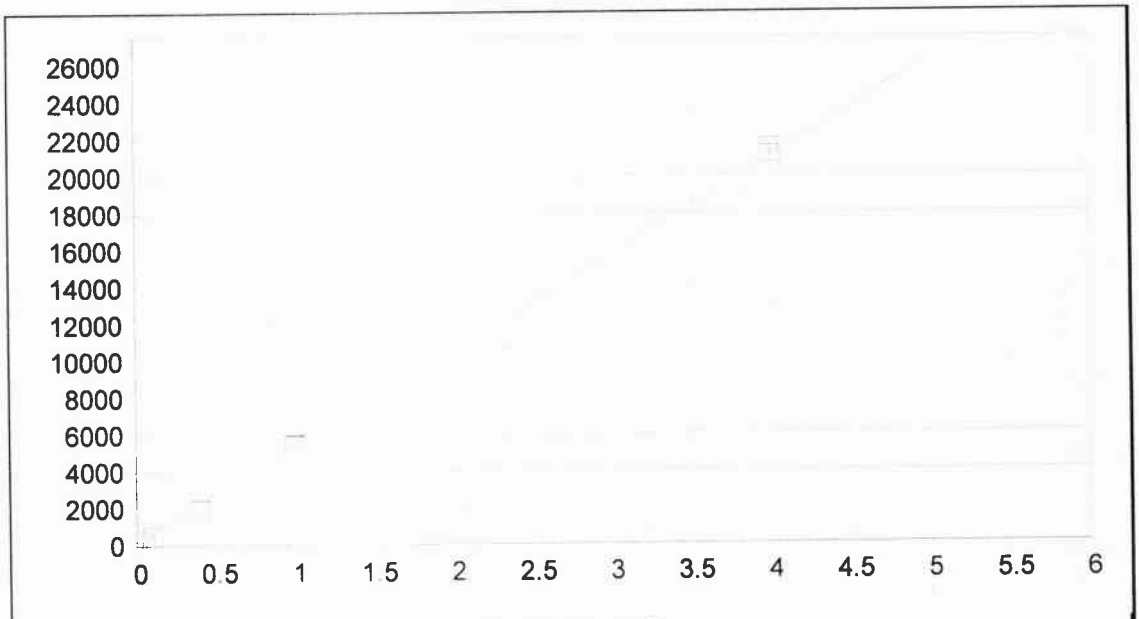


Fe 259.940 {130}

Fecha de la	10/11/2015 09:25:56	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	14.601788	Reajustar P	1.000000
A1 (Ganancia)	911.506255	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999237	Estatus:	OK.
Error Estándar de Est:	0.649159		
MDL:	0.116660		
MQL:	0.388868		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	14.603	5.23	1
STD 5	.40000	.34693	-.053	-13.3	330.83	15.9	1
STD 6	1.0000	.98863	-.011	-1.14	915.74	3.61	1
STD 3	.04000	.04373	.004	9.33	54.463	5.16	1
STD 4	.10000	.09930	-.001	-.697	105.12	13.1	1
STD 7	4.0000	4.0614	.061	1.54	3716.6	43.5	1

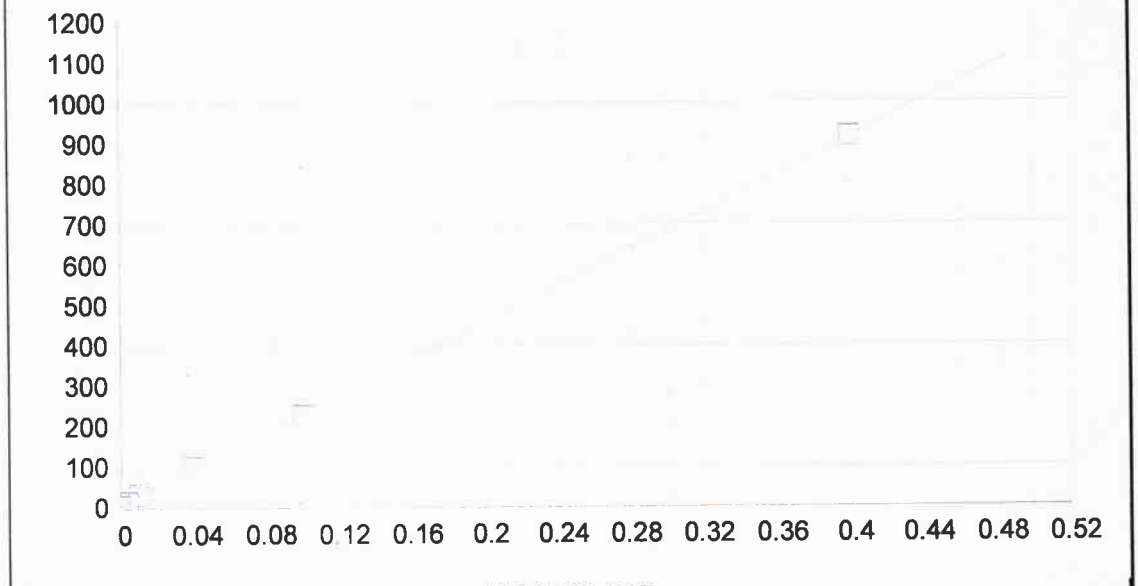


Mn 257.610 {131}

Fecha de la 10/11/2015 09:25:56 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	12.644685	Reajustar P	1.000000
A1 (Ganancia)	5271.797171	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999384	Estatus:	OK.
Error Estándar de Est:	3.371077		
MDL:	0.027439		
MQL:	0.091464		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	12.700	1.79	1
STD 5	.40000	.35974	-.040	-10.1	1909.1	10.3	1
STD 6	1.0000	1.0279	.028	2.79	5431.8	25.2	1
STD 3	.04000	.03720	-.003	-7.00	208.75	2.18	1
STD 4	.10000	.08735	-.013	-12.7	473.12	2.34	1
STD 7	4.0000	4.0278	.028	.694	21246.	194.	1

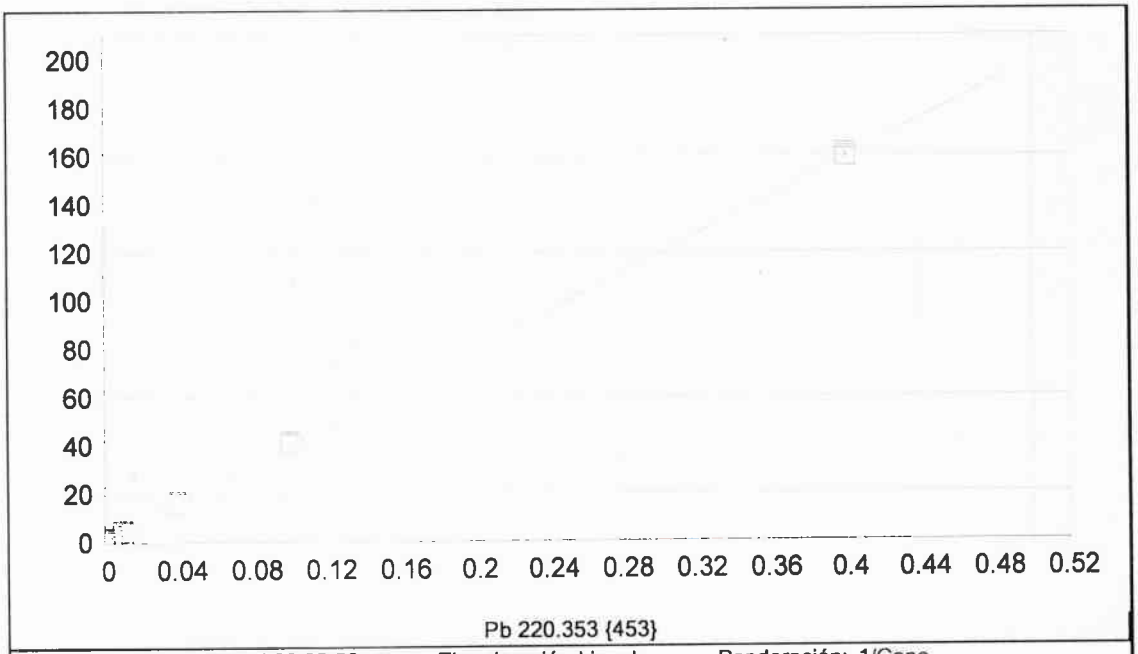


Ni 231.604 {446}

Fecha de la 10/11/2015 09:25:56 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	7.339661	Reajustar P	1.000000
A1 (Ganancia)	2268.717252	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999803	Estatus:	OK.
Error Estándar de Est:	0.081952		
MDL:	0.003542		
MQL:	0.011807		

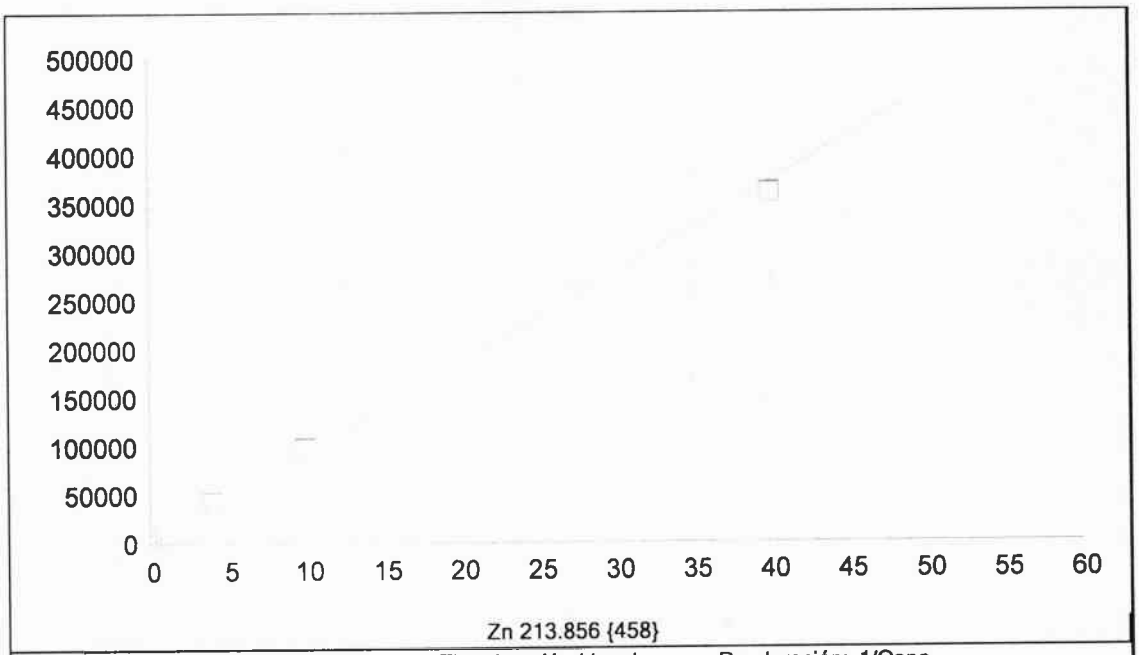
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	7.3396	1.08	1
STD 1	.00400	.00365	-.000	-8.73	15.623	2.12	1
STD 2	.01000	.01072	.001	7.20	31.661	3.17	1
STD 3	.04000	.04174	.002	4.36	102.04	.387	1
STD 4	.10000	.09757	-.002	-2.43	228.69	.849	1
STD 5	.40000	.40032	.000	.080	915.55	.532	1



Fecha de la 10/11/2015 09:25:56 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	0.899583	Reajustar P	1.000000
A1 (Ganancia)	396.095079	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999522	Estatus:	OK.
Error Estándar de Est:	0.022325		
MDL:	0.005908		
MQL:	0.019694		

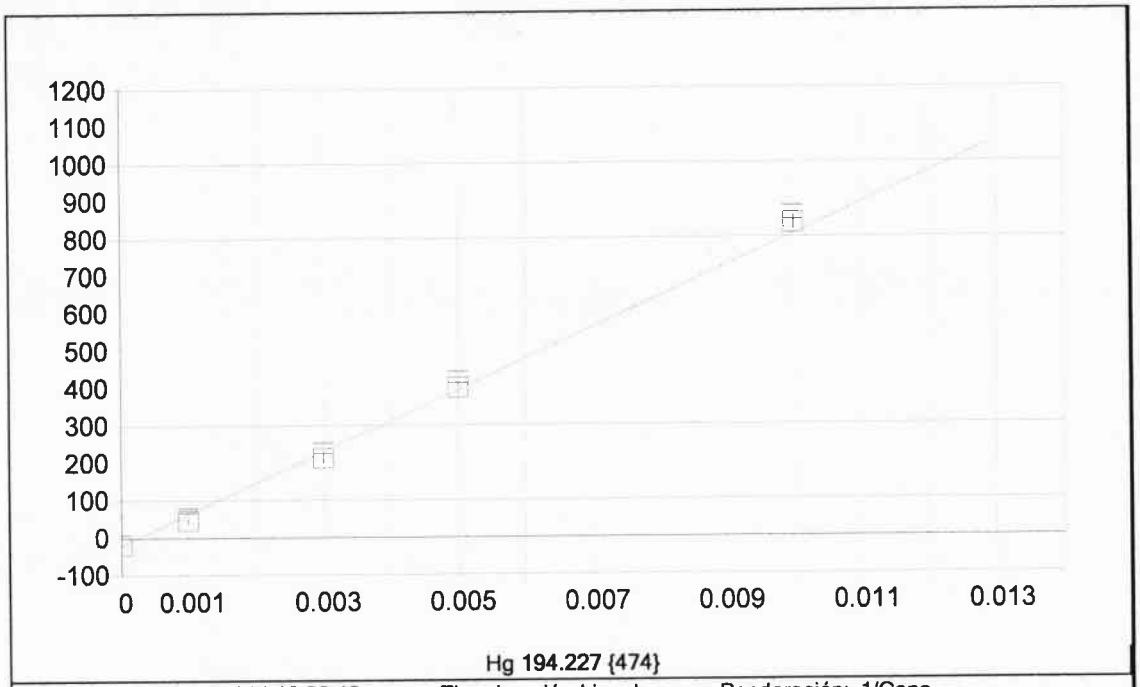
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.90023	.697	1
STD 1	.00400	.00280	-.001	-30.0	2.0084	.853	1
STD 2	.01000	.00887	-.001	-11.3	4.4134	.408	1
STD 3	.04000	.03945	-.001	-1.38	16.525	.422	1
STD 4	.10000	.10176	.002	1.76	41.206	.551	1
STD 5	.40000	.40112	.001	.280	159.78	1.12	1



Fecha de la 10/11/2015 09:25:56 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	130.349194	Reajustar P	1.000000
A1 (Ganancia)	9330.506612	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998420	Estatus:	OK.
Error Estándar de Est:	158.859086		
MDL:	0.000389		
MQL:	0.001296		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00029	-.000	.000	127.65	3.19	1
STD 6	1.0000	1.1147	.115	11.5	10531.	24.3	1
STD 7	4.0000	4.6127	.613	15.3	43170.	114.	1
STD 8	10.000	10.527	.527	5.27	98349.	202.	1
STD 9	40.000	38.746	-1.25	-3.14	361650.	817.	1



Hg **194.227** {474}

Fecha de la	10/11/2015 12:39:42	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	-19.352353		Reajustar P	1.000000	
A1 (Ganancia)	82712.89459		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.998075		Estatus:	OK.	
Error Estándar de Est:	0.913452				
MDL:	0.000024				
MQL:	0.000079				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	-19.333	.335	1
STD 1	.00100	.00079	-.000	-21.2	45.789	5.49	1
STD 2	.00300	.00279	-.000	-7.01	211.40	15.1	1
STD 3	.00500	.00507	.000	1.42	400.06	15.3	1
STD 4	.01000	.01035	.000	3.52	836.88	18.7	1

Análisis: ***METALES PESADOS POR ICP-OES***

Lote analítico: DMP-RAÍZ/SEDIMENTO-151110

Fecha de Análisis: 10/11/2015

Fecha de Reporte: 10/11/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÓN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.0100
NIVEL 5		0.400	0.400	0.400	0.400	0.400	0.400	0.400		
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000								10.000	
NIVEL 9	40.000								40.000	
Correlación	0.9991	0.9981	0.9998	0.9995	0.9992	0.9994	0.9998	0.9995	0.9984	0.9981

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/kg		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
2	QC:QC-3	Cadmio	0.0400	0.0445	111	8	Recuperación	Mercurio	0.5	0.49	98
		Plomo	0.0400	0.0388	97	10	Recuperación	Aluminio	40.0000	39.3200	98
3	QC:QC5	Arsénico	0.4000	0.4044	101			Arsenico	40.0000	40.1800	100
		Cobre	0.4000	0.4024	101			Cadmio	40.0000	40.1600	100
		Fierro	0.4000	0.4693	117			Cobre	40.0000	40.6800	102
		Manganeso	0.4000	0.4040	101			Fierro	40.0000	39.9000	100
		Níquel	0.4000	0.3728	93			Manganeso	40.0000	40.5000	101
4	QC: QC7	Aluminio	4.0000	4.2140	105			Niquel	40.0000	40.1300	100
		Zinc	4.0000	3.8880	97			Plomo	40.0000	40.3700	101
								Zinc	40.0000	40.3300	101

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I.Gaudencio Vargas Espejel

ELABORÓ

Q.F.B. Leticia Velázquez Méndez

REVISÓ

PACE/GIS/I02-F01

GISCENA®

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Peso de muestra (g) Metales	Hg
GISC15-20379	Raiz		15/10/2015	0.5099	0.5087
GISC15-20382	Sedimento		15/10/2015	0.5087	0.5082

I.B.I. Gaudencio Vargas Espejel

Q.F.B. Leticia Velazquez Méndez

1	Blanco: REACTIVO 10/11/2015 08:51:23 CONC D MP-151110: RAIZ:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.0633**	**.0036**	**.0007**	**.0063**	**-.0155**	**-.0020**	**-.0044**	**.0067**	**-.0094**
Desv. Est.	.0121	.0043	.0025	.0056	.0021	.0004	.0018	.0080	.0002
% RSD	19.19	119.4	367.3	88.67	13.30	18.91	42.31	119.3	2.097
Rep #1	.0601	.0070	.0033	.0109	-.0138	-.0018	-.0064	.0078	-.0096
Rep #2	.0767	-.0012	-.0016	.0001	-.0178	-.0017	-.0037	.0140	-.0095
Rep #3	.0530	.0050	.0003	.0079	-.0149	-.0024	-.0030	-.0018	-.0092

2	QC: QC-3 10/11/2015 08:58:06 CONC D MP-151110: RAIZ:	
	Cd2265	Pb2203
Línea	226.502 {44	220.353 {45
Unidades	mg/Kg	mg/Kg
Media	**.0445**	**.0388**
Desv. Est.	.0024	.0163
% RSD	5.376	42.15
Rep #1	.0422	.0570
Rep #2	.0444	.0339
Rep #3	.0469	.0254
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

3	QC: QC-5 10/11/2015 09:02:25 CONC D MP-151110: RAIZ:				
	As1890	Cu3247	Fe2599	Mn2576	Ni2316
Línea	189.042 {47	324.754 {10	259.940 {13	257.610 {13	231.604 {44
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**.4044**	**.4024**	**.4693**	**.4040**	**.3728**
Desv. Est.	.0064	.0476	.0772	.0536	.0049
% RSD	1.580	11.84	16.46	13.26	1.322
Rep #1	.4081	.4475	.4033	.4657	.3696
Rep #2	.4080	.4071	.5542	.3769	.3702
Rep #3	.3970	.3526	.4503	.3693	.3784
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor					
Intervalo					

4	QC: QC-7 10/11/2015 09:07:20 CONC D MP-151110: RAIZ:	
	Al3082	Zn2138
Línea	308.215 {10	213.856 {45
Unidades	mg/Kg	mg/Kg
Media	**4.214**	**3.888**
Desv. Est.	1.951	.155
% RSD	46.30	3.981
Rep #1	2.815	3.811
Rep #2	6.443	3.787
Rep #3	3.385	4.066
Comprobació	Pasa Comp	Pasa Comp
Valor		
Intervalo		

5	Blanco: REACTIVO 10/11/2015 09:09:29 CONC D MP-151110: RAIZ:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**2.340**	**.0020**	**.0005**	**.3564**	**-.0761**	**.0391**	**-.0163**	**.0043**	**-.0019**
Desv. Est.	1.066	.0087	.0008	.0523	.1261	.0231	.0070	.0069	.0009
% RSD	45.57	441.9	163.3	14.68	165.7	58.93	42.60	160.4	46.82
Rep #1	3.542	.0119	.0009	.3746	-.1693	.0327	-.0208	-.0003	-.0011
Rep #2	1.505	-.0038	-.0004	.3972	-.1264	.0647	-.0199	.0123	-.0018
Rep #3	1.975	-.0022	.0010	.2975	.0674	.0200	-.0083	.0010	-.0029
6	Unk: GISC15-20379 10/11/2015 09:32:52 CONC x100 D MP-151110: RAIZ:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**359.7**	**1.257**	**.5947**	**4.022**	**725.2**	**17.55**	**.4144**	**-.7756**	**12.48**
Desv. Est.	102.5	.018	.1526	2.693	19.7	2.42	1.179	1.118	.28
% RSD	28.48	1.418	25.66	66.95	2.710	13.79	284.6	144.2	2.249
Rep #1	241.6	1.274	.7528	.9876	708.0	18.15	.1864	-.4398	12.33
Rep #2	425.0	1.239	.5831	6.127	746.6	14.89	1.691	-2.023	12.81
Rep #3	412.6	1.257	.4482	4.951	721.0	19.62	-.6344	.1365	12.31
7	Unk: GISC15-20379-R 10/11/2015 09:36:54 CONC x100 D MP-151110: RAIZ:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**217.9**	**1.711**	**.6523**	**-.9216**	**645.7**	**14.86**	**1.793**	**-.6140**	**11.39**
Desv. Est.	139.4	.317	.1351	4.113	12.9	3.03	.378	1.534	.10
% RSD	63.99	18.52	20.72	446.3	2.003	20.39	21.10	249.9	.8632
Rep #1	219.4	1.667	.7210	-2.728	658.4	15.04	1.845	-.0504	11.28
Rep #2	356.6	2.047	.7392	-3.822	646.0	11.74	1.392	.5586	11.43
Rep #3	77.75	1.418	.4966	3.785	632.6	17.79	2.143	-2.350	11.47
8	Unk: GISC15-20382 10/11/2015 09:44:05 CONC x100 D MP-151110: RAIZ:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1983.**	**25.62**	**2.593**	**27.72**	**11840.**	**301.4**	**12.49**	**4.495**	**85.50**
Desv. Est.	56.	2.23	.094	5.58	833.	16.9	.12	.668	5.26
% RSD	2.820	8.692	3.626	20.12	7.038	5.589	.9924	14.86	6.155
Rep #1	1925.	23.92	2.645	21.58	10950.	282.5	12.47	3.725	80.60
Rep #2	1989.	24.79	2.484	29.11	11960.	307.0	12.62	4.913	84.85
Rep #3	2036.	28.14	2.650	32.47	12610.	314.7	12.38	4.847	91.06
9	Unk: GISC15-20382-R1 10/11/2015 09:46:08 CONC x100 D MP-151110: RAIZ:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	**1588.**	**24.10**	**2.097**	**22.77**	**10290.**	**257.7**	**10.33**	**4.722**	**76.70**
Desv. Est.	68.	.52	.025	5.69	131.	6.1	1.61	2.023	.73
% RSD	4.254	2.138	1.206	24.98	1.268	2.371	15.56	42.84	.9570
Rep #1	1559.	24.03	2.092	28.54	10430.	264.3	10.35	6.353	77.21
Rep #2	1665.	24.65	2.125	22.60	10260.	252.2	8.713	2.459	77.04
Rep #3	1539.	23.63	2.075	17.16	10180.	256.6	11.93	5.354	75.86

10	Unk: RECUPERACION 10/11/2015 10:03:13 CONC x100 D MP 151110:								
	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Media	39.32	40.18	40.16	40.68	39.90	40.50	40.13	40.37	40.33
Desv. Est.	.88	.12	.11	.12	.35	.15	.14	.21	.11
% RSD	2.234	.3080	.2709	.2900	.8694	.3600	.3519	.5113	.2811
Rep #1	38.53	40.04	40.28	40.81	39.73	40.66	40.29	40.50	40.45
Rep #2	39.15	40.20	40.13	40.61	39.67	40.46	40.08	40.47	40.22
Rep #3	40.27	40.29	40.07	40.61	40.30	40.38	40.01	40.13	40.32
Comprobació	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno	Ninguno
Valor									
Intervalo									

1	Cal: Blanco 10/11/2015 12:33:25 IR D Hg-151110: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**-19.33**
Desv. Est.	.34
% RSD	1.735
Rep #1	-19.10
Rep #2	-19.18
Rep #3	-19.72

2	Cal: STD 1 10/11/2015 12:34:42 IR D Hg-151110: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**45.79**
Desv. Est.	5.50
% RSD	12.00
Rep #1	39.45
Rep #2	48.83
Rep #3	49.10

3	Cal: STD 2 10/11/2015 12:35:59 IR D Hg-151110: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**211.4**
Desv. Est.	15.1
% RSD	7.124
Rep #1	195.1
Rep #2	214.2
Rep #3	224.8

4	Cal: STD 3 10/11/2015 12:37:15 IR D Hg-151110: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**400.1**
Desv. Est.	15.3
% RSD	3.818
Rep #1	384.8
Rep #2	400.1
Rep #3	415.3

5	Cal: STD 4 10/11/2015 12:38:31 IR D Hg-151110: RAIZ:
	Hg1942
Unidades	Cts/s
Media	**836.9**
Desv. Est.	18.7
% RSD	2.230
Rep #1	815.5
Rep #2	845.0
Rep #3	850.1

6	Blanco: REACTIVO 10/11/2015 12:40:08 CONC D Hg-151110: RAIZ:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	**.0002**
Desv. Est.	.0001

% RSD	45.32
Rep #1	.0003
Rep #2	.0002
Rep #3	.0002
7	Blanco: MUESTRA 10/11/2015 12:41:30 CONC x100 D Hg-151110: RAIZ:
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.0364
Desv. Est.	.0144
% RSD	39.51
Rep #1	.0487
Rep #2	.0399
Rep #3	.0206
8	Unk: RECUPERACION1 10/11/2015 12:45:14 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	.4900
Desv. Est.	.0072
% RSD	1.460
Rep #1	.4818
Rep #2	.4936
Rep #3	.4947
9	Unk: GISC15-20379 10/11/2015 12:46:42 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	-.1106
Desv. Est.	.0025
% RSD	2.241
Rep #1	-.1077
Rep #2	-.1120
Rep #3	-.1120
10	Unk: GISC15-20379-R 10/11/2015 12:48:10 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	-.1212
Desv. Est.	.0020
% RSD	1.635
Rep #1	-.1193
Rep #2	-.1232
Rep #3	-.1213
11	Unk: GISC15-20382 10/11/2015 12:49:40 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	-.0007
Desv. Est.	.0058
% RSD	834.9
Rep #1	.0029

Rep #2	-.0074
Rep #3	.0025
12	Unk: GISC15-20382-R 10/11/2015 12:51:02 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/kg
Media	-.0045
Desv. Est.	.0013
% RSD	28.16
Rep #1	-.0051
Rep #2	-.0053
Rep #3	-.0030

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA, S.A. DE C.V.

CONTENIDO

AGUA

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA S.A. DE C.V.
EMILIANO ZAPATA No. 10, SAN LUIS HUEXOTLA, TEXCOCO EDO. DE MEXICO.
C.P. 56250 TEL: 01(595) 928 41 78, 01(595) 931 39 60 y 01(595) 931 39 61
TEL/FAX: 01(595) 928 40 77 E-mail: gisena@prodigy.net.mx

LABORATORIO DE RESIDUOS TÓXICOS

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005
Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: AGUA
Fecha de Recepción: 2015-10-15

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/10/15 (1)
Fecha de Analisis de Metales y Mercurio: 2015-10-20 2015-10-20
Fecha de Realización del Informe: 2015-10-21

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I001/15/0003	GISC15-20273
L-I006/15/0060	GISC15-20287
L-I007/15/0061	GISC15-20288
L-I007/15/0062	GISC15-20289
L-I015/15/0148	GISC15-20304
L-I024/15/0240	GISC15-20320
L-I025/15/0241	GISC15-20321
L-I044/15/0433	GISC15-20361
L-I049/15/0485	GISC15-20371
L-I051/15/0509	GISC15-20372
L-I052/15/0511	GISC15-20373
L-I052/15/0513	GISC15-20374
L-I052/15/0517	GISC15-20375
L-I053/15/0525	GISC15-20376
L-I066/15/0654	GISC15-20391
L-I068/15/0671	GISC15-20395

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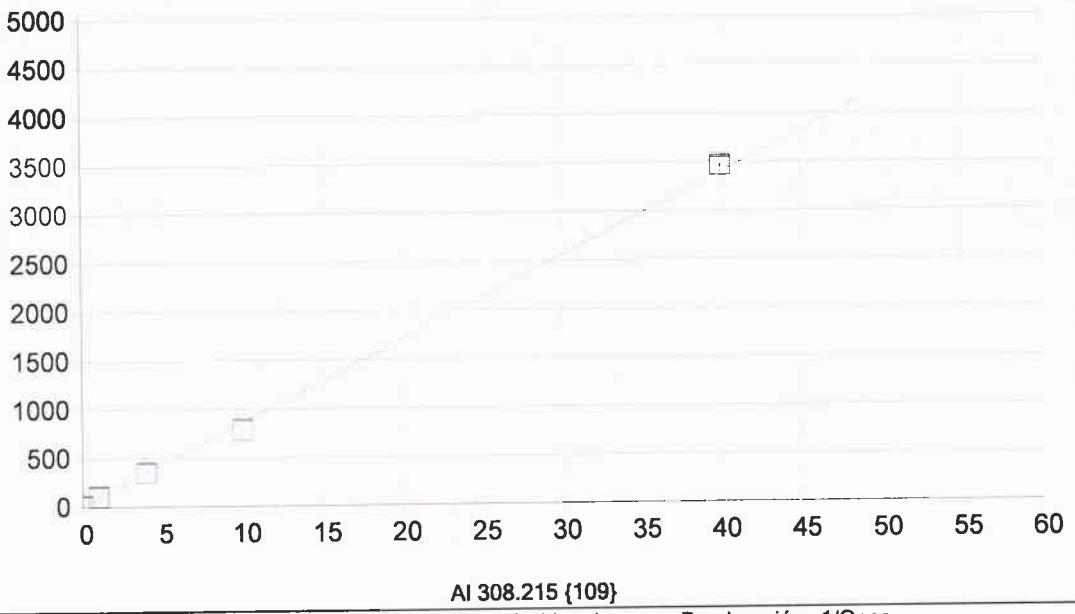
IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I068/15/0681	GISC15-20400
L-I069/15/0682	GISC15-20401
L-I069/15/0683	GISC15-20402
L-I070/15/0699	GISC15-20407
L-I071/15/0708	GISC15-20410
L-I072/15/0717	GISC15-20411
L-I073/15/0721	GISC15-20413

REVISÓ

Q.F.B. Leticia Velazquéz Méndez
Gerente Técnico



Al 308.215 {109}

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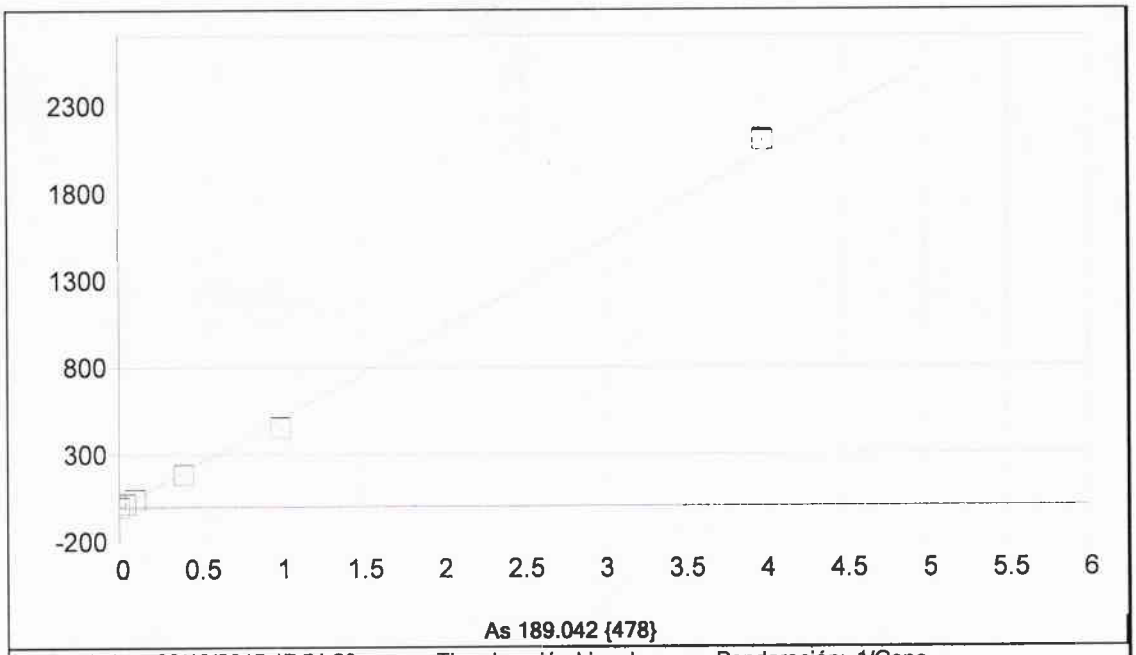
A0 (Compensación):	10.781259		Reajustar P	1.000000	
A1 (Ganancia)	84.715218		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.999139		Estatus:	OK.	
Error Estándar de Est:	1.063942				
MDL:	0.072283				
MQL:	0.240942				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00003	-.000	.000	10.778	5.31	1
STD 6	1.0000	1.1071	.107	10.7	104.57	4.00	1
STD 7	4.0000	3.9655	-.034	-.862	346.72	5.91	1
STD 8	10.000	9.1712	-.829	-8.29	787.72	8.65	1
STD 9	40.000	40.756	.756	1.89	3463.5	19.2	1

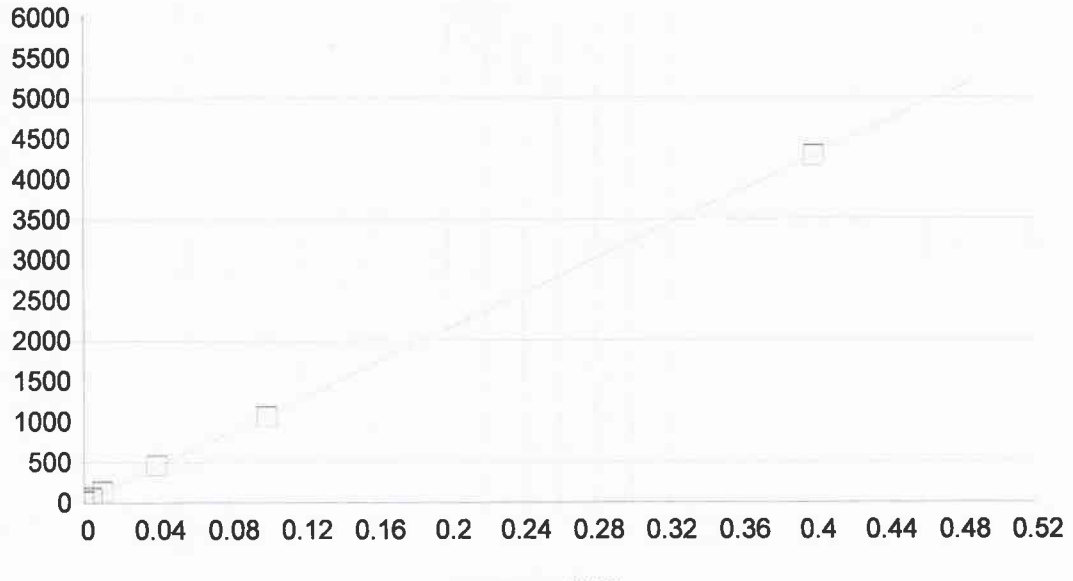


As 189.042 {478}

Fecha de la	22/10/2015 17:51:29	Tipo de unió	Lineal	Ponderación: 1/Conc

A0 (Compensación):	-0.256146	Reajustar P	1.000000
A1 (Ganancia)	506.325013	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998147	Estatus:	OK.
Error Estándar de Est:	0.562331		
MDL:	0.001621		
MQL:	0.005404		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	-.24860	1.18	1
STD 4	.10000	.08663	-.013	-13.4	43.607	.733	1
STD 5	.40000	.36692	-.033	-8.27	185.53	1.14	1
STD 6	1.0000	.89973	-.100	-10.0	455.30	1.40	1
STD 7	4.0000	4.1505	.150	3.76	2101.2	6.30	1
STD 3	.04000	.03626	-.004	-9.34	18.105	.777	1

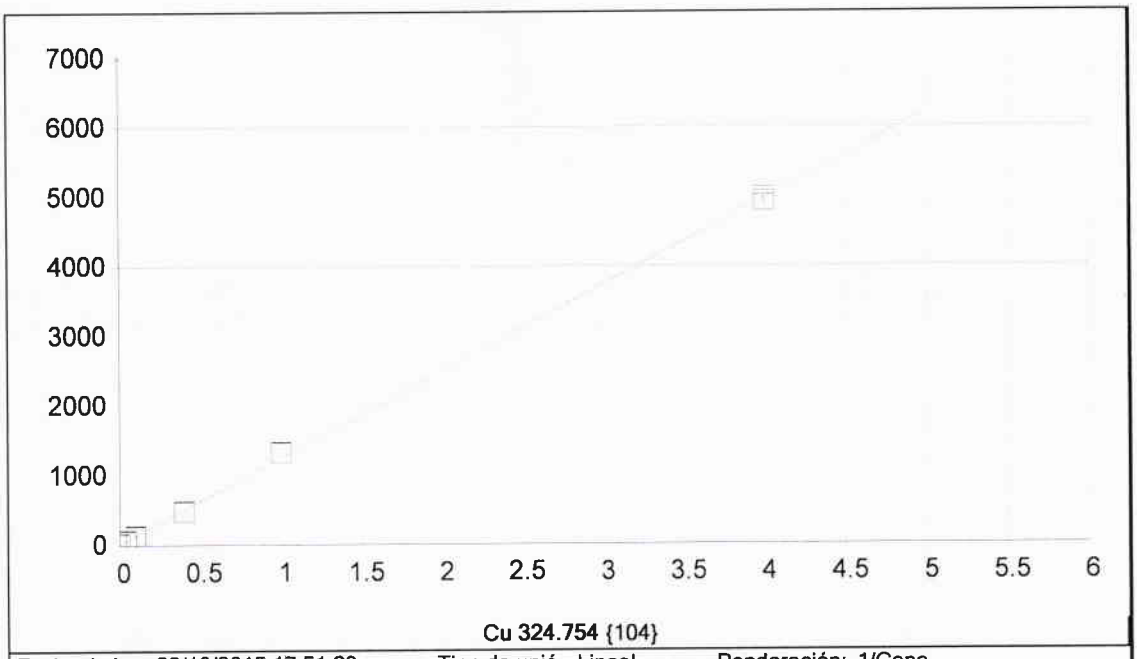


Cd 226.502 {449}

Fecha de la 22/10/2015 17:51:08 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	19.352085	Reajustar P	1.000000
A1 (Ganancia)	10666.40868	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999782	Estatus:	OK.
Error Estándar de Est:	0.405646		
MDL:	0.000100		
MQL:	0.000333		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	19.348	3.98	1
STD 1	.00400	.00390	-.000	-2.55	60.931	10.4	1
STD 2	.01000	.01116	.001	11.6	138.42	8.67	1
STD 3	.04000	.04149	.001	3.73	461.93	2.63	1
STD 4	.10000	.09782	-.002	-2.18	1062.7	3.20	1
STD 5	.40000	.39963	-.000	-.093	4281.9	.768	1

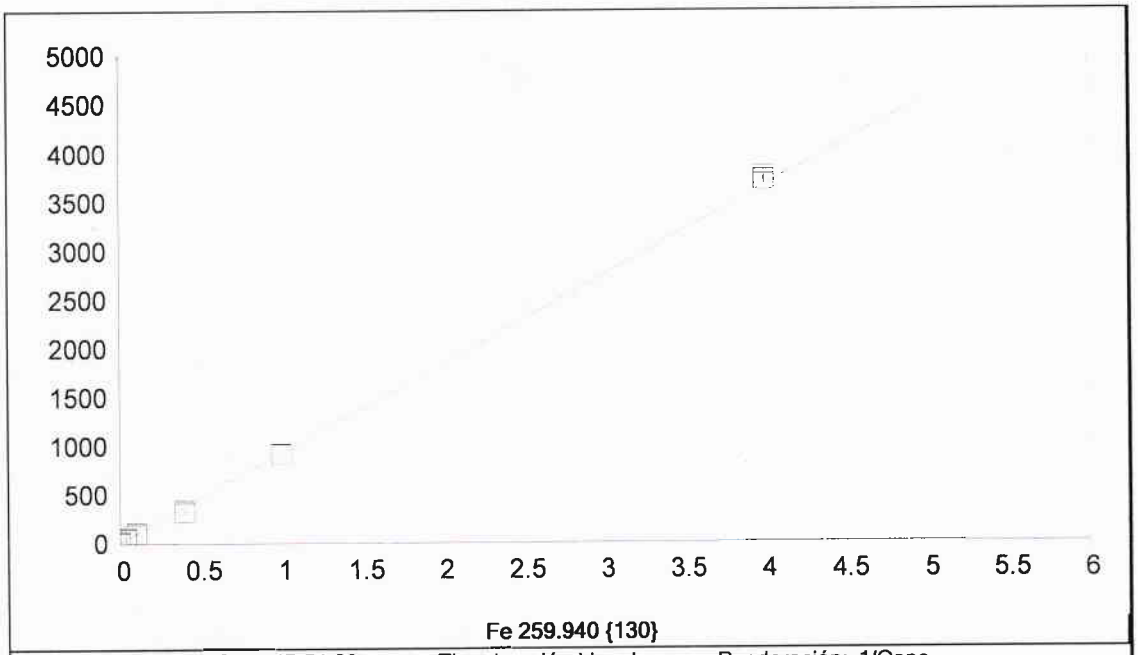


Cu 324.754 {104}

Fecha de la 22/10/2015 17:51:29 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	10.926092	Reajustar P	1.000000
A1 (Ganancia)	1240.546351	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999518	Estatus:	OK.
Error Estándar de Est:	0.702123		
MDL:	0.005562		
MQL:	0.018538		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	10.927	2.13	1
STD 5	.40000	.37911	-.021	-5.22	481.23	4.61	1
STD 6	1.0000	1.0601	.060	6.01	1326.0	6.66	1
STD 7	4.0000	3.9650	-.035	-.875	4929.7	53.3	1
STD 3	.04000	.04127	.001	3.17	62.123	4.00	1
STD 4	.10000	.09454	-.005	-5.46	128.20	5.82	1

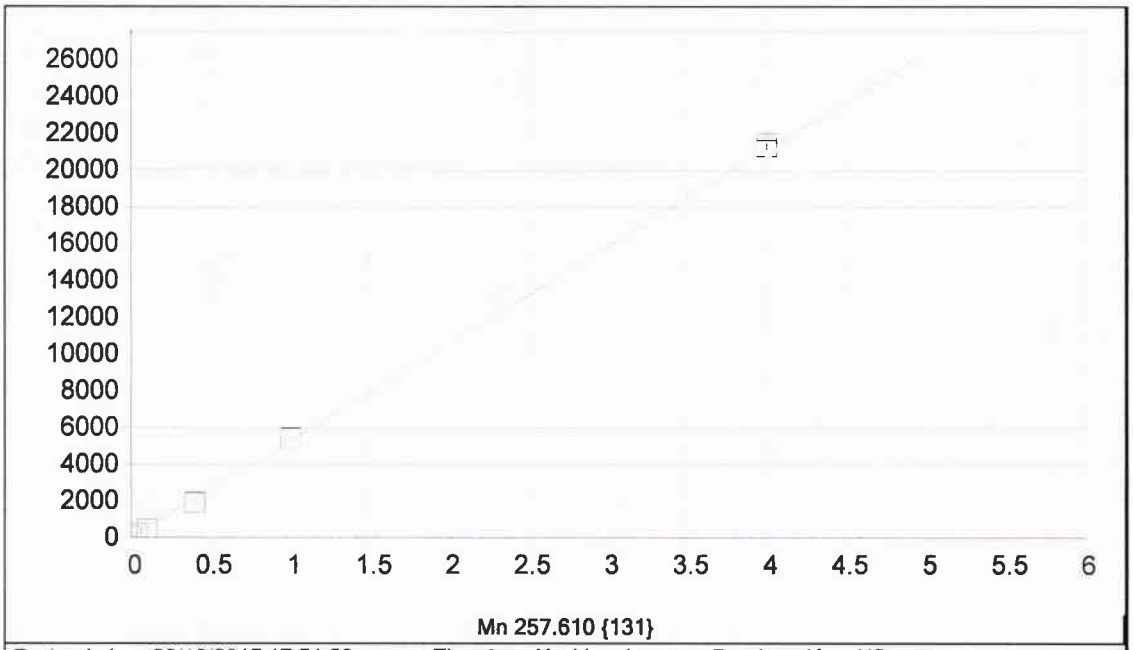


Fe 259.940 {130}

Fecha de la 22/10/2015 17:51:29 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	14.601788	Reajustar P	1.000000
A1 (Ganancia)	911.506255	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999237	Estatus:	OK.
Error Estándar de Est:	0.649159		
MDL:	0.003214		
MQL:	0.010714		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	14.603	5.23	1
STD 5	.40000	.34693	-.053	-13.3	330.83	15.9	1
STD 6	1.0000	.98863	-.011	-1.14	915.74	3.61	1
STD 3	.04000	.04373	.004	9.33	54.463	5.16	1
STD 4	.10000	.09930	-.001	-.697	105.12	13.1	1
STD 7	4.0000	4.0614	.061	1.54	3716.6	43.5	1

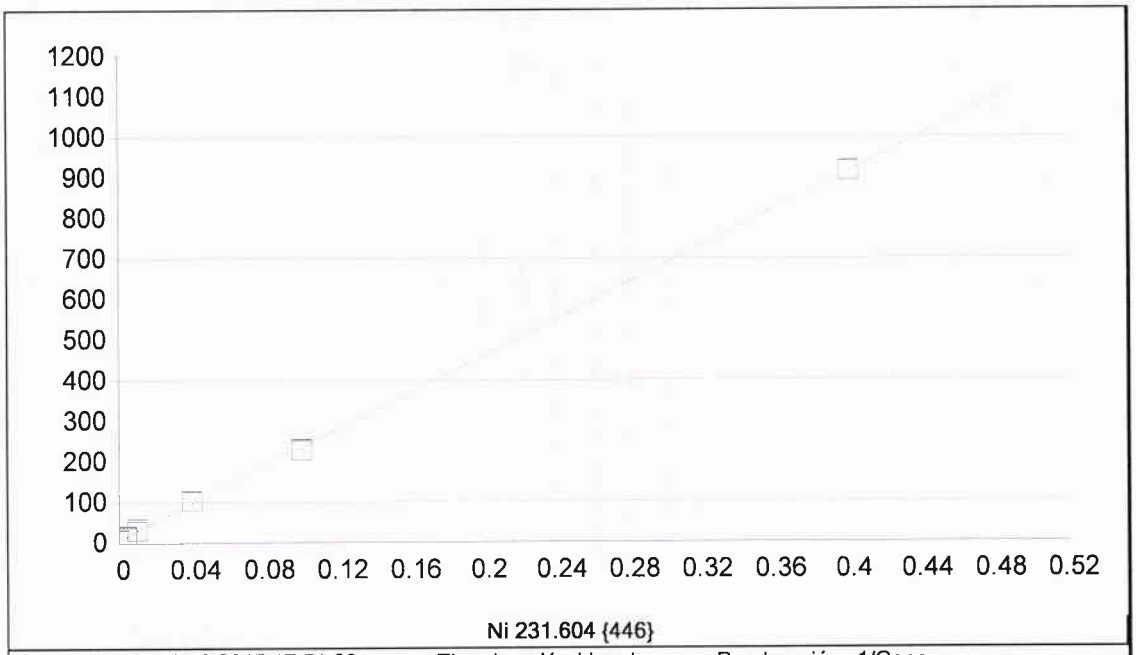


Mn 257.610 {131}

Fecha de la	22/10/2015 17:51:29	Tipo de unió	Lineal	Ponderación: 1/Conc

A0 (Compensación):	12.644685	Reajustar P	1.000000
A1 (Ganancia)	5271.797171	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999384	Estatus:	OK.
Error Estándar de Est:	3.371077		
MDL:	0.000692		
MQL:	0.002308		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00001	.000	.000	12.700	1.79	1
STD 5	.40000	.35974	-.040	-10.1	1909.1	10.3	1
STD 6	1.0000	1.0279	.028	2.79	5431.8	25.2	1
STD 3	.04000	.03720	-.003	-7.00	208.75	2.18	1
STD 4	.10000	.08735	-.013	-12.7	473.12	2.34	1
STD 7	4.0000	4.0278	.028	.694	21246.	194.	1

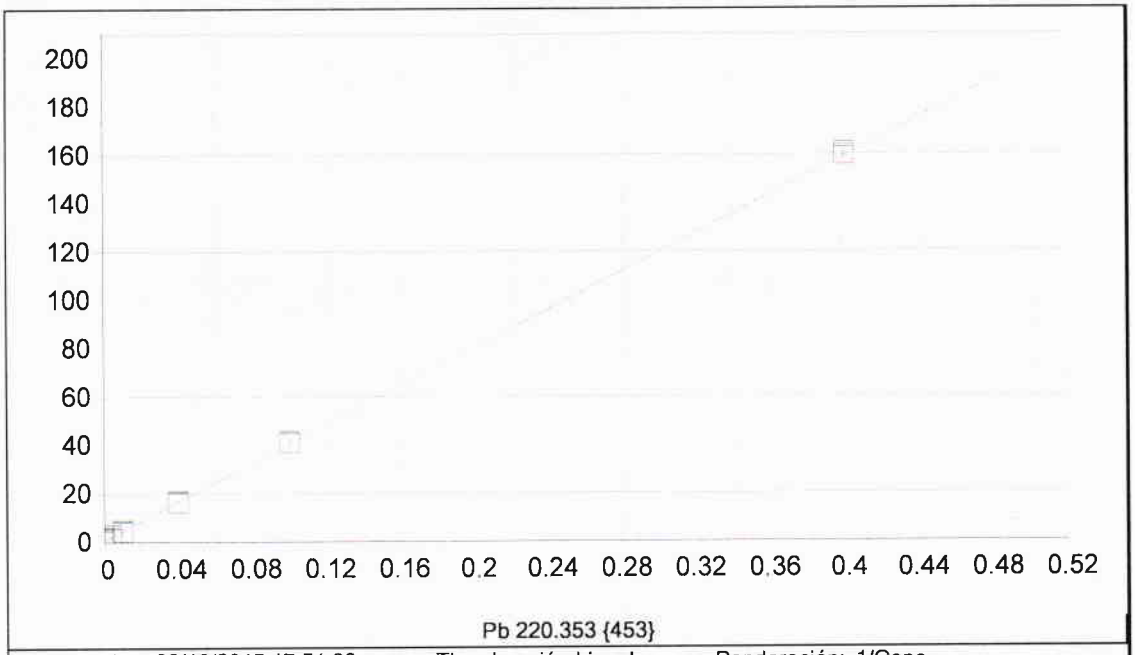


Ni 231.604 {446}

Fecha de la 22/10/2015 17:51:29 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	7.339661	Reajustar P	1.000000
A1 (Ganancia)	2268.717252	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999803	Estatus:	OK.
Error Estándar de Est:	0.081952		
MDL:	0.000689		
MQL:	0.002298		

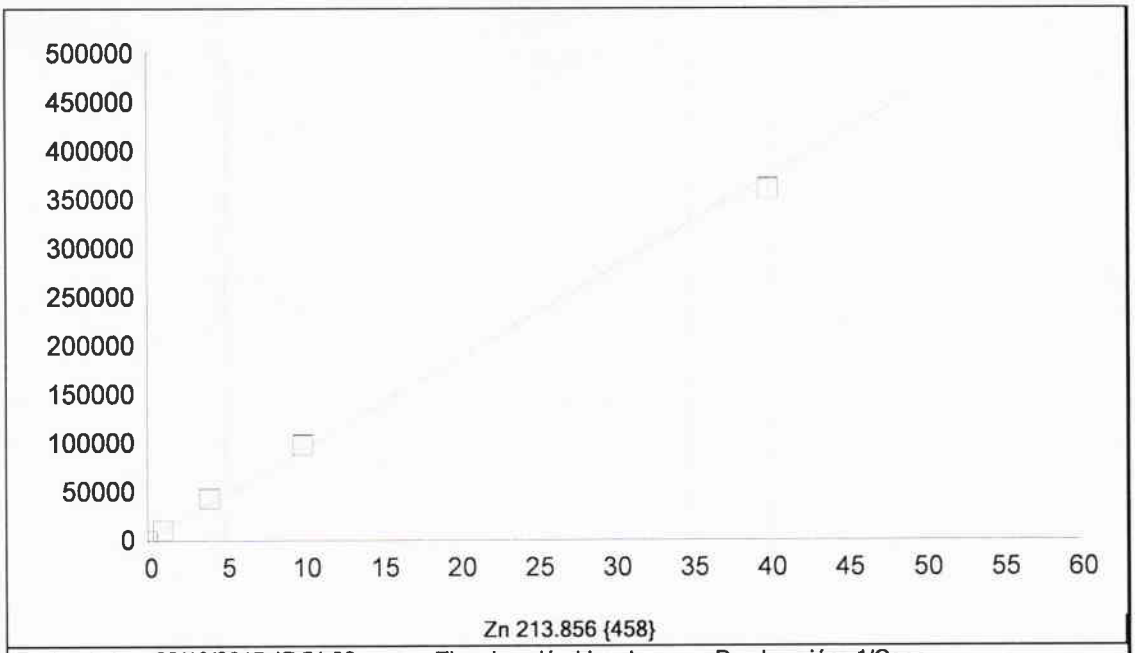
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	7.3396	1.08	1
STD 1	.00400	.00365	-.000	-8.73	15.623	2.12	1
STD 2	.01000	.01072	.001	7.20	31.661	3.17	1
STD 3	.04000	.04174	.002	4.36	102.04	.387	1
STD 4	.10000	.09757	-.002	-2.43	228.69	.849	1
STD 5	.40000	.40032	.000	.080	915.55	.532	1



Fecha de la 22/10/2015 17:51:08 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	0.899583	Reajustar P	1.000000
A1 (Ganancia)	396.095079	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999522	Estatus:	OK.
Error Estándar de Est:	0.022325		
MDL:	0.003089		
MQL:	0.010295		

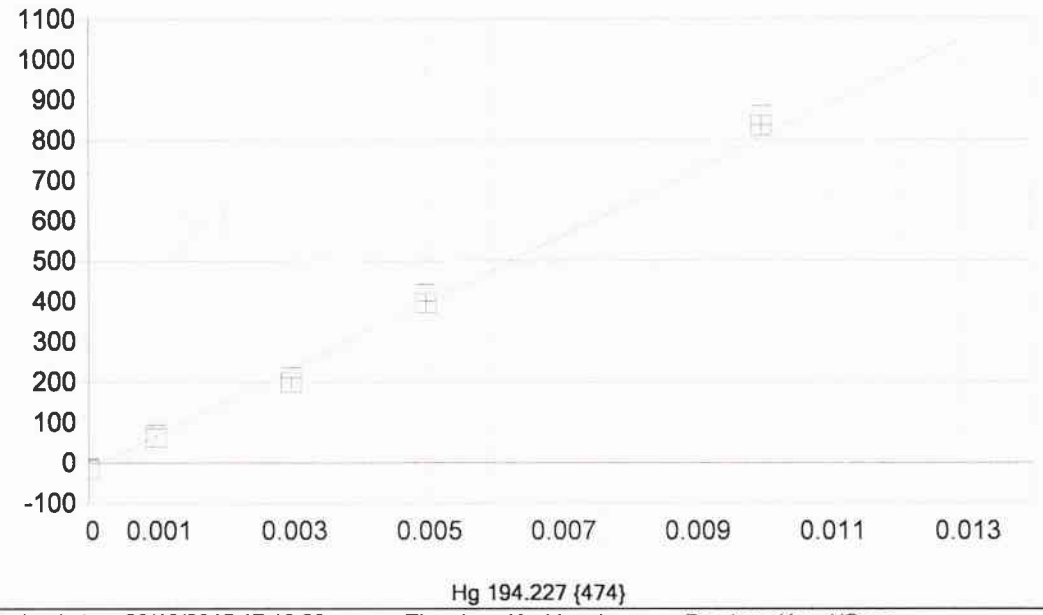
Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	.90023	.697	1
STD 1	.00400	.00280	-.001	-30.0	2.0084	.853	1
STD 2	.01000	.00887	-.001	-11.3	4.4134	.408	1
STD 3	.04000	.03945	-.001	-1.38	16.525	.422	1
STD 4	.10000	.10176	.002	1.76	41.206	.551	1
STD 5	.40000	.40112	.001	.280	159.78	1.12	1



Fecha de la	22/10/2015 17:51:08	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	130.349194	Reajustar P	1.000000
A1 (Ganancia)	9330.506612	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998420	Estatus:	OK.
Error Estándar de Est:	158.859086		
MDL:	0.000106		
MQL:	0.000352		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00029	-.000	.000	127.65	3.19	1
STD 6	1.0000	1.1147	.115	11.5	10531.	24.3	1
STD 7	4.0000	4.6127	.613	15.3	43170.	114.	1
STD 8	10.000	10.527	.527	5.27	98349.	202.	1
STD 9	40.000	38.746	-1.25	-3.14	361650.	817.	1



Hg 194.227 {474}

Fecha de la	20/10/2015 17:13:29	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	-16.096554		Reajustar P	1.000000	
A1 (Ganancia)	82053.75894		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.998365		Estatus:	OK.	
Error Estándar de Est:	0.835068				
MDL:	0.000024				
MQL:	0.000081				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	-16.088	2.41	1
STD 1	.00100	.00099	-.000	-1.48	64.747	4.88	1
STD 2	.00300	.00262	-.000	-12.7	198.86	12.1	1
STD 3	.00500	.00503	.000	.508	396.26	21.1	1
STD 4	.01000	.01037	.000	3.70	834.78	23.8	1

GISENA®

Análisis: ***METALES PESADOS POR ICP-OES***

Lote analítico: DMP-AGUA-151022

Fecha de Análisis: 22/10/2015

Fecha de Reporte: 22/10/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÓN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.0100
NIVEL 5		0.400	0.400	0.400	0.400	0.400	0.400	0.400		
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000								10.000	
NIVEL 9	40.000								40.000	
Correlación	0.9991	0.9981	0.9998	0.9995	0.9992	0.9994	0.9998	0.9995	0.9984	0.9984

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
16.1	ESTANDAR DE CHEQUEO 1 SE CAMBIO DE LUGAR	Aluminio	0.4000	0.4061	102	35.1	ESTANDAR DE CHEQUEO	Aluminio	0.4000	0.4006	100
		Arsénico	0.4000	0.3953	99			Arsénico	0.4000	0.3829	96
		Cadmio	0.4000	0.4017	100			Cadmio	0.4000	0.3950	99
		Cobre	0.4000	0.4310	108			Cobre	0.4000	0.4177	104
		Fierro	0.4000	0.4094	102			Fierro	0.4000	0.3743	94
		Manganeso	0.4000	0.4195	105			Manganes	0.4000	0.4080	102
		Níquel	0.4000	0.4002	100			Níquel	0.4000	0.3902	98
		Plomo	0.4000	0.4048	101			Plomo	0.4000	0.3963	99
		Zinc	0.4000	0.3905	98			Zinc	0.4000	0.3720	93
26.1	ESTANDAR DE CHEQUEO	Aluminio	0.4000	0.4106	103	8	QC: Estándar de Chequeo 1	Mercurio	0.005	0.005	100
		Arsénico	0.4000	0.392	98	15	QC: Estándar de Chequeo 1	Mercurio	0.005	0.0056	112
		Cadmio	0.4000	0.3987	100						
		Cobre	0.4000	0.422	106	26	QC: Estándar de Chequeo 1	Mercurio	0.005	0.0056	112
		Fierro	0.4000	0.3963	99						
		Manganeso	0.4000	0.4134	103						
		Níquel	0.4000	0.3956	99						
		Plomo	0.4000	0.4000	100						
		Zinc	0.4000	0.3826	96						

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I. Gaudencio Vargas Espejel

ELABORÓ

PACE/GIS/I02-F01

Q.F.B. Leticia Velázquez Méndez

REVISÓ

GISCENA®

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Cantidad de muestra (mL) Metales	Hg
GISC15-20273	Agua		15/10/2015	50	50
GISC15-20287	Agua		15/10/2015	50	50
GISC15-20288	Agua		15/10/2015	50	50
GISC15-20289	Agua		15/10/2015	50	50
GISC15-20304	Agua		15/10/2015	50	50
GISC15-20320	Agua		15/10/2015	50	50
GISC15-20321	Agua		15/10/2015	50	50
GISC15-20361	Agua		15/10/2015	50	50
GISC15-20371	Agua		15/10/2015	50	50
GISC15-20372	Agua		15/10/2015	50	50
GISC15-20373	Agua		15/10/2015	50	50
GISC15-20374	Agua		15/10/2015	50	50
GISC15-20375	Agua		15/10/2015	50	50
GISC15-20376	Agua		15/10/2015	50	50
GISC15-20391	Agua		15/10/2015	50	50
GISC15-20395	Agua		15/10/2015	50	50
GISC15-20400	Agua		15/10/2015	50	50
GISC15-20401	Agua		15/10/2015	50	50
GISC15-20402	Agua		15/10/2015	50	50
GISC15-20407	Agua		15/10/2015	50	50
GISC15-20410	Agua		15/10/2015	50	50
GISC15-20411	Agua		15/10/2015	50	50
GISC15-20413	Agua		15/10/2015	50	50

P.A

I.B.T. Reyna Ivette Delgado

Q.F.B. Leticia Velazquez Méndez

1	Cal: Blanco 20/10/2015 13:34:49 IR D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**10.78**	**-.2486**	**19.35**	**10.93**	**14.60**	**12.70**	**7.340**	**.9002**	**127.7**
Desv. Est.	5.31	1.183	3.98	2.13	5.23	1.79	1.084	.6968	3.2
% RSD	49.31	475.8	20.57	19.47	35.83	14.08	14.78	77.40	2.501
Rep #1	7.025	-1.425	14.76	12.45	10.80	12.63	7.049	.0962	124.0
Rep #2	8.450	-.2623	21.88	8.495	12.44	14.53	6.430	1.327	129.9
Rep #3	16.86	.9411	21.41	11.84	20.57	10.95	8.540	1.277	129.1

2	Cal: STD 1 20/10/2015 13:35:31 IR D MP-151020: AGUA:		
	Cd2265	Ni2316	Pb2203
Línea	226.502 {44	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s
Media	**60.93**	**15.62**	**2.008**
Desv. Est.	10.35	2.12	.853
% RSD	16.99	13.59	42.48
Rep #1	56.35	14.61	1.134
Rep #2	72.78	18.06	2.838
Rep #3	53.66	14.20	2.053

3	Cal: STD 2 20/10/2015 13:37:26 IR D MP-151020: AGUA:		
	Cd2265	Ni2316	Pb2203
Línea	226.502 {44	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s
Media	**138.4**	**31.66**	**4.413**
Desv. Est.	8.7	3.17	.408
% RSD	6.263	10.01	9.238
Rep #1	148.4	34.99	4.741
Rep #2	133.6	31.32	3.957
Rep #3	133.2	28.67	4.542

4	Cal: STD 3 20/10/2015 13:39:37 IR D MP-151020: AGUA:						
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**18.10**	**461.9**	**62.12**	**54.46**	**208.8**	**102.0**	**16.52**
Desv. Est.	.78	2.6	4.00	5.16	2.2	.4	.42
% RSD	4.292	.5685	6.445	9.467	1.044	.3794	2.556
Rep #1	18.72	463.9	66.73	52.35	206.5	102.2	16.35
Rep #2	18.36	462.9	60.13	50.70	208.9	101.6	17.01
Rep #3	17.23	458.9	59.51	60.34	210.9	102.3	16.21

5	Cal: STD 4 20/10/2015 13:41:59 IR D MP-151020: AGUA:						
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**43.61**	**1063.**	**128.2**	**105.1**	**473.1**	**228.7**	**41.21**
Desv. Est.	.73	3.	5.8	13.1	2.3	.8	.55
% RSD	1.682	.3009	4.540	12.42	.4954	.3713	1.337
Rep #1	42.83	1059.	121.7	90.39	475.7	227.9	41.63
Rep #2	44.28	1064.	133.0	115.3	471.0	229.6	41.40
Rep #3	43.71	1065.	129.8	109.7	472.7	228.6	40.58

6	Cal: STD 5 20/10/2015 13:44:27 IR D MP-151020: AGUA:

	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**185.5**	**4282.**	**481.2**	**330.8**	**1909.**	**915.6**	**159.8**
Desv. Est.	1.1	1.	4.6	15.9	10.	.5	1.1
% RSD	.6153	.0179	.9578	4.812	.5403	.0581	.7013
Rep #1	184.3	4281.	476.4	319.9	1903.	916.2	160.9
Rep #2	186.6	4283.	485.6	349.1	1921.	915.2	158.7
Rep #3	185.7	4282.	481.7	323.5	1904.	915.2	159.7

7	Cal: STD 6 20/10/2015 13:46:47 IR D MP-151020: AGUA:					
	Al3082	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	308.215 {10	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**104.6**	**455.3**	**1326.**	**915.7**	**5432.**	**10530.**
Desv. Est.	4.0	1.4	7.	3.6	25.	24.
% RSD	3.821	.3077	.5020	.3938	.4643	.2303
Rep #1	107.5	453.7	1334.	917.7	5451.	10530.
Rep #2	106.2	456.1	1321.	911.6	5403.	10510.
Rep #3	100.0	456.2	1323.	918.0	5441.	10550.

8	Cal: STD 7 20/10/2015 13:49:45 IR D MP-151020: AGUA:					
	Al3082	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	308.215 {10	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**372.7**	**2495.**	**5221.**	**3816.**	**22200.**	**43580.**
Desv. Est.	11.0	15.	110.	80.	501.	163.
% RSD	2.962	.5979	2.108	2.089	2.256	.3730
Rep #1	384.6	2479.	5347.	3908.	22770.	43390.
Rep #2	362.7	2500.	5171.	3773.	21930.	43680.
Rep #3	370.7	2507.	5144.	3767.	21890.	43660.

9	Cal: STD 8 20/10/2015 13:51:48 IR D MP-151020: AGUA:	
	Al3082	Zn2138
Línea	308.215 {10	213.856 {45
Unidades	Cts/s	Cts/s
Media	**787.7**	**98350.**
Desv. Est.	8.6	202.
% RSD	1.098	.2054
Rep #1	781.2	98130.
Rep #2	797.5	98520.
Rep #3	784.5	98400.

10	Cal: STD 9 20/10/2015 13:58:54 IR D MP-151020: AGUA:	
	Al3082	Zn2138
Línea	308.215 {10	213.856 {45
Unidades	Cts/s	Cts/s
Media	**3463.**	**361600.**
Desv. Est.	19.	817.
% RSD	.5551	.2260
Rep #1	3441.	360700.
Rep #2	3476.	362200.
Rep #3	3473.	362000.

11	Blanco: MUESTRA 20/10/2015 14:04:07 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0157**	**.0012**	**.0498**	**.0675**	**.0737**	**.0642**	**.0481**	**.0372**	**.0555**
Desv. Est.	.0114	.0015	.0149	.0322	.0416	.0354	.0137	.0135	.0153
% RSD	72.61	123.5	29.99	47.70	56.41	55.18	28.53	36.36	27.60
Rep #1	.0275	.0029	.0635	.1034	.1215	.1047	.0607	.0463	.0695
Rep #2	.0151	.0008	.0520	.0413	.0456	.0392	.0500	.0435	.0577
Rep #3	.0046	-.0000	.0339	.0577	.0541	.0487	.0335	.0216	.0391
12	Unk: GISC15-20273 20/10/2015 14:33:37 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0085**	**-.0024**	**-.0501**	**-.0550**	**-.0775**	**-.0629**	**-.0482**	**-.0394**	**-.0618**
Desv. Est.	.0303	.0020	.0002	.0018	.0034	.0005	.0003	.0016	.0004
% RSD	354.6	80.55	.4383	3.237	4.401	.8248	.7019	4.071	.5846
Rep #1	-.0234	-.0016	-.0499	-.0529	-.0811	-.0632	-.0483	-.0388	-.0615
Rep #2	.0122	-.0010	-.0502	-.0559	-.0769	-.0623	-.0478	-.0413	-.0617
Rep #3	.0368	-.0047	-.0504	-.0561	-.0743	-.0632	-.0484	-.0383	-.0622
13	Unk: GISC15-20287 20/10/2015 14:37:16 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0185**	**-.0063**	**-.0459**	**-.0532**	**-.0782**	**-.0594**	**-.0432**	**-.0353**	**-.0238**
Desv. Est.	.0191	.0031	.0017	.0010	.0019	.0010	.0022	.0020	.0020
% RSD	103.0	49.51	3.692	1.800	2.402	1.765	4.998	5.590	8.492
Rep #1	-.0347	-.0065	-.0465	-.0522	-.0804	-.0594	-.0438	-.0362	-.0244
Rep #2	.0025	-.0031	-.0441	-.0540	-.0774	-.0604	-.0408	-.0330	-.0216
Rep #3	-.0234	-.0093	-.0473	-.0536	-.0769	-.0583	-.0450	-.0366	-.0255
14	Unk: GISC15-20288 20/10/2015 14:40:00 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0518**	**.0010**	**-.0466**	**-.0551**	**-.0669**	**-.0578**	**-.0438**	**-.0318**	**-.0603**
Desv. Est.	.0428	.0005	.0009	.0015	.0027	.0007	.0014	.0012	.0011
% RSD	82.71	48.40	2.010	2.699	4.102	1.184	3.124	3.725	1.798
Rep #1	.0052	.0008	-.0461	-.0560	-.0652	-.0584	-.0427	-.0318	-.0597
Rep #2	.0608	.0016	-.0476	-.0534	-.0700	-.0579	-.0453	-.0331	-.0615
Rep #3	.0894	.0007	-.0459	-.0560	-.0653	-.0571	-.0433	-.0307	-.0597
15	Unk: GISC15-20289 20/10/2015 14:42:46 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.1905**	**-.0013**	**-.0509**	**-.0594**	**.0125**	**-.0598**	**-.0486**	**-.0373**	**-.0634**
Desv. Est.	.0727	.0024	.0001	.0019	.0098	.0004	.0001	.0012	.0002
% RSD	38.16	180.7	.2237	3.217	78.53	.7338	.3025	3.333	.2499
Rep #1	.1213	.0009	-.0510	-.0609	.0065	-.0593	-.0486	-.0375	-.0633
Rep #2	.1840	-.0009	-.0510	-.0573	.0238	-.0598	-.0485	-.0385	-.0635
Rep #3	.2663	-.0039	-.0508	-.0600	.0071	-.0602	-.0488	-.0360	-.0636
16	Unk: GISC15-20304 20/10/2015 14:45:47 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0029**	**-.0050**	**-.0507**	**-.0579**	**-.0841**	**.2988**	**-.0487**	**-.0373**	**-.0631**

+ 16.1	QC: ESTANDAR DE CHEQUEO 20/10/2015 15:01:31 CONC D MP-151020: AGUA:								
2015-10-20	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.4061**	**.3953**	**.4017**	**.4310**	**.4094**	**.4195**	**.4002**	**.4048**	**.3905**
Desv. Est.	.0044	.0020	.0004	.0115	.0081	.0022	.0011	.0031	.0011
% RSD	1.085	.5092	.1003	2.677	1.990	.5264	.2732	.7591	.2807
Rep #1	.4054	.3942	.4021	.4236	.4060	.4177	.4014	.4064	.3917
Rep #2	.4021	.3976	.4016	.4251	.4187	.4189	.4002	.4012	.3903
Rep #3	.4109	.3941	.4013	.4443	.4036	.4220	.3992	.4068	.3895
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

Desv. Est.	.0390	.0018	.0006	.0034	.0012	.0057	.0012	.0057	.0009
% RSD	1330.	36.26	1.249	5.791	1.436	1.913	2.544	15.41	1.500
Rep #1	.0176	-.0046	-.0509	-.0558	-.0851	.2971	-.0483	-.0391	-.0636
Rep #2	-.0413	-.0034	-.0511	-.0618	-.0827	.2942	-.0501	-.0419	-.0637
Rep #3	.0324	-.0070	-.0499	-.0562	-.0843	.3052	-.0477	-.0308	-.0620
17	Unk: GISC15-20320 20/10/2015 14:48:07 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.2334**	**-.0097**	**-.0495**	**-.0565**	**.0850**	**-.0392**	**-.0473**	**-.0387**	**-.0604**
Desv. Est.	.0515	.0011	.0005	.0040	.0144	.0012	.0008	.0025	.0007
% RSD	22.07	11.79	.9551	7.079	16.97	3.001	1.614	6.567	1.189
Rep #1	.1966	-.0110	-.0494	-.0605	.1016	-.0379	-.0469	-.0386	-.0603
Rep #2	.2113	-.0092	-.0500	-.0525	.0763	-.0396	-.0482	-.0363	-.0612
Rep #3	.2922	-.0088	-.0490	-.0565	.0770	-.0401	-.0469	-.0414	-.0598
18	Unk: GISC15-20321 20/10/2015 14:50:25 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0161**	**-.0021**	**-.0490**	**-.0559**	**-.0582**	**-.0532**	**-.0463**	**-.0370**	**-.0633**
Desv. Est.	.0526	.0014	.0003	.0003	.0090	.0022	.0008	.0020	.0006
% RSD	327.1	63.48	.6915	.5207	15.51	4.124	1.681	5.302	.8897
Rep #1	-.0489	-.0030	-.0490	-.0556	-.0609	-.0520	-.0458	-.0381	-.0632
Rep #2	-.0440	-.0006	-.0493	-.0557	-.0482	-.0518	-.0472	-.0347	-.0639
Rep #3	.0446	-.0028	-.0487	-.0562	-.0656	-.0557	-.0458	-.0382	-.0628
19	Unk: GISC15-20361 20/10/2015 14:52:50 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0162**	**-.0040**	**-.0487**	**-.0529**	**-.0482**	**-.0517**	**-.0465**	**-.0368**	**-.0350**
Desv. Est.	.0267	.0021	.0008	.0008	.0011	.0011	.0013	.0012	.0013
% RSD	165.3	53.22	1.701	1.483	2.373	2.043	2.863	3.258	3.679
Rep #1	-.0157	-.0055	-.0491	-.0536	-.0478	-.0525	-.0467	-.0354	-.0359
Rep #2	.0103	-.0050	-.0494	-.0521	-.0474	-.0505	-.0477	-.0375	-.0356
Rep #3	-.0432	-.0016	-.0478	-.0531	-.0496	-.0521	-.0451	-.0375	-.0335
20	Unk: GISC15-20371 20/10/2015 14:55:07 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0287**	**-.0040**	**-.0491**	**-.0587**	**-.0651**	**-.0569**	**-.0475**	**-.0338**	**-.0422**
Desv. Est.	.0522	.0010	.0001	.0028	.0016	.0011	.0002	.0024	.0002
% RSD	182.0	24.51	.1233	4.719	2.513	1.881	.4898	7.222	.4294
Rep #1	.0226	-.0046	-.0491	-.0605	-.0635	-.0581	-.0475	-.0343	-.0420
Rep #2	-.0817	-.0046	-.0491	-.0555	-.0650	-.0562	-.0477	-.0312	-.0422
Rep #3	-.0270	-.0029	-.0492	-.0601	-.0668	-.0564	-.0472	-.0360	-.0424
21	Unk: GISC15-20372 20/10/2015 14:57:34 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0201**	**-.0057**	**-.0498**	**-.0576**	**-.0817**	**-.0595**	**-.0458**	**-.0370**	**.2776**
Desv. Est.	.0271	.0009	.0006	.0045	.0022	.0006	.0011	.0020	.0026
% RSD	135.0	15.49	1.263	7.828	2.708	1.014	2.404	5.545	.9388

Rep #1	-.0098	-.0055	-.0499	-.0622	-.0814	-.0591	-.0455	-.0347	.2758
Rep #2	.0431	-.0066	-.0503	-.0573	-.0797	-.0591	-.0470	-.0387	.2764
Rep #3	.0269	-.0048	-.0491	-.0532	-.0841	-.0602	-.0449	-.0375	.2806
22	Unk: GISC15-20273 20/10/2015 15:00:08 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0258**	**-.0027**	**-.0502**	**-.0582**	**-.0800**	**-.0633**	**-.0484**	**-.0373**	**-.0626**
Desv. Est.	.0272	.0003	.0001	.0017	.0022	.0005	.0001	.0023	.0001
% RSD	105.3	10.07	.1222	2.886	2.804	.7668	.2595	6.148	.1472
Rep #1	-.0566	-.0029	-.0502	-.0581	-.0807	-.0630	-.0485	-.0368	-.0627
Rep #2	-.0055	-.0029	-.0502	-.0565	-.0775	-.0638	-.0483	-.0353	-.0625
Rep #3	-.0152	-.0024	-.0501	-.0598	-.0818	-.0630	-.0484	-.0398	-.0625
23	Unk: GISC15-20373-R 20/10/2015 15:04:05 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0101**	**-.0080**	**-.0505**	**-.0590**	**-.0815**	**-.0619**	**-.0485**	**-.0376**	**-.0529**
Desv. Est.	.0315	.0006	.0003	.0035	.0018	.0003	.0003	.0015	.0007
% RSD	310.7	7.869	.6093	5.857	2.192	.4596	.6930	4.102	1.287
Rep #1	-.0118	-.0077	-.0502	-.0595	-.0808	-.0622	-.0482	-.0392	-.0522
Rep #2	.0462	-.0088	-.0508	-.0554	-.0835	-.0619	-.0489	-.0375	-.0535
Rep #3	-.0041	-.0076	-.0505	-.0622	-.0802	-.0616	-.0484	-.0361	-.0530
24	Unk: GISC15-20374 20/10/2015 15:06:15 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0051**	**-.0046**	**-.0508**	**-.0591**	**-.0745**	**-.0629**	**-.0480**	**-.0372**	**-.0308**
Desv. Est.	.0463	.0012	.0001	.0013	.0006	.0002	.0007	.0001	.0019
% RSD	908.0	26.18	.1834	2.271	.8338	.3068	1.517	.1940	6.167
Rep #1	-.0324	-.0032	-.0507	-.0576	-.0750	-.0631	-.0484	-.0371	-.0287
Rep #2	-.0092	-.0053	-.0509	-.0602	-.0746	-.0628	-.0484	-.0372	-.0317
Rep #3	.0568	-.0053	-.0508	-.0596	-.0738	-.0628	-.0471	-.0372	-.0322
25	Unk: GISC15-20375 20/10/2015 15:08:39 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0068**	**-.0048**	**-.0508**	**-.0600**	**-.0795**	**-.0639**	**-.0500**	**-.0394**	**-.0630**
Desv. Est.	.0072	.0005	.0002	.0020	.0026	.0004	.0002	.0024	.0002
% RSD	106.1	10.91	.3238	3.355	3.210	.6089	.4568	6.139	.3399
Rep #1	-.0077	-.0043	-.0509	-.0600	-.0779	-.0634	-.0500	-.0412	-.0631
Rep #2	.0008	-.0054	-.0509	-.0580	-.0824	-.0639	-.0502	-.0403	-.0631
Rep #3	-.0134	-.0047	-.0506	-.0620	-.0782	-.0642	-.0498	-.0366	-.0628
26	Unk: GISC15-20376 20/10/2015 15:10:55 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0086**	**-.0063**	**-.0509**	**-.0611**	**-.0662**	**-.0629**	**-.0498**	**-.0396**	**-.0645**
Desv. Est.	.0343	.0008	.0001	.0021	.0025	.0003	.0004	.0035	.0001
% RSD	399.0	11.93	.1282	3.484	3.830	.5358	.8914	8.784	.1656
Rep #1	-.0102	-.0055	-.0509	-.0601	-.0657	-.0631	-.0493	-.0371	-.0644
Rep #2	.0482	-.0065	-.0509	-.0635	-.0640	-.0625	-.0501	-.0435	-.0646

4 26.1	QC: ESTANDAR DE CHEQUEO 20/10/2015 15:28:13 CONC D MP-151020: AGUA:								
2015-10-20	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	.4106	.3920	.3987	.4220	.3963	.4134	.3956	.4000	.3826
Desv. Est.	.0064	.0020	.0007	.0074	.0143	.0016	.0011	.0015	.0024
% RSD	1.550	.4977	.1699	1.744	3.600	.3877	.2869	.3742	.6259
Rep #1	.4113	.3915	.3993	.4286	.4120	.4149	.3963	.3984	.3848
Rep #2	.4039	.3942	.3988	.4232	.3929	.4135	.3961	.4014	.3829
Rep #3	.4166	.3904	.3979	.4141	.3841	.4117	.3943	.4000	.3800
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

Rep #3	-.0122	-.0070	-.0510	-.0596	-.0690	-.0630	-.0500	-.0380	-.0645
27	Unk: GISC15-20391 20/10/2015 15:13:16 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0284**	**-.0094**	**-.0510**	**-.0559**	**-.0802**	**-.0622**	**-.0494**	**-.0399**	**-.0528**
Desv. Est.	.0417	.0004	.0000	.0033	.0044	.0004	.0004	.0026	.0001
% RSD	146.7	4.188	.0706	5.920	5.501	.5674	.7836	6.539	.2385
Rep #1	-.0361	-.0098	-.0510	-.0589	-.0837	-.0619	-.0492	-.0370	-.0528
Rep #2	.0166	-.0094	-.0511	-.0564	-.0817	-.0623	-.0499	-.0420	-.0527
Rep #3	-.0658	-.0090	-.0510	-.0524	-.0753	-.0625	-.0492	-.0408	-.0530
28	Unk: GISC15-20395 20/10/2015 15:15:30 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0003**	**-.0074**	**-.0512**	**-.0581**	**-.0840**	**-.0645**	**-.0500**	**-.0396**	**-.0480**
Desv. Est.	.0443	.0004	.0000	.0037	.0024	.0004	.0005	.0010	.0003
% RSD	14950.	5.638	.0814	6.436	2.890	.5558	1.008	2.491	.5363
Rep #1	.0397	-.0079	-.0512	-.0545	-.0814	-.0642	-.0495	-.0405	-.0478
Rep #2	-.0477	-.0071	-.0512	-.0620	-.0863	-.0645	-.0505	-.0386	-.0483
Rep #3	.0089	-.0072	-.0512	-.0579	-.0843	-.0649	-.0499	-.0397	-.0479
29	Unk: GISC15-20400 20/10/2015 15:17:50 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0028**	**-.0003**	**-.0508**	**-.0550**	**-.0749**	**-.0630**	**-.0484**	**-.0386**	**-.0490**
Desv. Est.	.0106	.0008	.0001	.0011	.0021	.0002	.0002	.0017	.0006
% RSD	377.1	266.9	.2548	2.047	2.742	.3818	.4764	4.356	1.211
Rep #1	.0016	-.0011	-.0507	-.0563	-.0739	-.0627	-.0484	-.0375	-.0485
Rep #2	-.0071	.0005	-.0507	-.0542	-.0773	-.0631	-.0482	-.0406	-.0487
Rep #3	.0140	-.0003	-.0509	-.0545	-.0735	-.0632	-.0487	-.0379	-.0496
30	Unk: GISC15-20401 20/10/2015 15:20:18 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0599**	**-.0018**	**-.0509**	**-.0550**	**-.0635**	**-.0627**	**-.0492**	**-.0381**	**-.0486**
Desv. Est.	.0495	.0004	.0001	.0034	.0009	.0008	.0005	.0034	.0007
% RSD	82.60	20.79	.2317	6.156	1.476	1.340	.9799	9.004	1.541
Rep #1	-.0332	-.0017	-.0511	-.0566	-.0640	-.0637	-.0497	-.0415	-.0495
Rep #2	-.0296	-.0022	-.0509	-.0572	-.0624	-.0624	-.0487	-.0347	-.0481
Rep #3	-.1171	-.0015	-.0509	-.0511	-.0641	-.0621	-.0492	-.0383	-.0483
31	Unk: GISC15-20402 20/10/2015 15:22:32 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0022**	**-.0019**	**-.0512**	**-.0587**	**-.0703**	**-.0630**	**-.0487**	**-.0409**	**-.0479**
Desv. Est.	.0419	.0010	.0001	.0033	.0032	.0006	.0007	.0022	.0004
% RSD	1904.	51.56	.2458	5.563	4.604	.8965	1.475	5.422	.8145
Rep #1	.0260	-.0008	-.0512	-.0557	-.0680	-.0624	-.0479	-.0430	-.0474
Rep #2	-.0503	-.0025	-.0514	-.0622	-.0740	-.0635	-.0493	-.0411	-.0482
Rep #3	.0177	-.0025	-.0512	-.0582	-.0690	-.0631	-.0488	-.0386	-.0480

32	Unk: GISC15-20407 20/10/2015 15:24:50 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0730**	**-.0087**	**-.0513**	**-.0624**	**-.0473**	**-.0638**	**-.0500**	**-.0386**	**-.0617**
Desv. Est.	.0228	.0022	.0001	.0059	.0037	.0004	.0008	.0022	.0002
% RSD	31.19	24.91	.1594	9.442	7.753	.6800	1.531	5.629	.3855
Rep #1	-.0820	-.0103	-.0512	-.0571	-.0432	-.0639	-.0499	-.0372	-.0616
Rep #2	-.0471	-.0062	-.0513	-.0612	-.0485	-.0641	-.0508	-.0411	-.0620
Rep #3	-.0898	-.0096	-.0514	-.0687	-.0503	-.0633	-.0493	-.0375	-.0616
33	Unk: GISC15-20410 20/10/2015 15:39:55 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0144**	**-.0095**	**-.0513**	**-.0617**	**-.0840**	**-.0292**	**-.0502**	**-.0377**	**-.0624**
Desv. Est.	.0302	.0016	.0000	.0016	.0014	.0002	.0009	.0012	.0001
% RSD	209.9	16.88	.0853	2.524	1.675	.5985	1.708	3.149	.1539
Rep #1	-.0464	-.0076	-.0513	-.0626	-.0824	-.0290	-.0511	-.0389	-.0624
Rep #2	-.0106	-.0103	-.0512	-.0599	-.0852	-.0293	-.0499	-.0366	-.0623
Rep #3	.0138	-.0105	-.0512	-.0625	-.0843	-.0293	-.0495	-.0376	-.0625
34	Unk: GISC15-20411 20/10/2015 15:42:09 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0202**	**.0011**	**-.0514**	**-.0601**	**-.0213**	**-.0407**	**-.0500**	**-.0395**	**-.0561**
Desv. Est.	.0657	.0023	.0001	.0035	.0052	.0013	.0001	.0011	.0004
% RSD	326.1	217.8	.1337	5.778	24.50	3.296	.2453	2.845	.6839
Rep #1	.0847	.0037	-.0514	-.0561	-.0273	-.0423	-.0499	-.0401	-.0558
Rep #2	-.0467	.0000	-.0514	-.0621	-.0183	-.0398	-.0502	-.0382	-.0559
Rep #3	.0225	-.0005	-.0513	-.0621	-.0183	-.0401	-.0501	-.0403	-.0565
35	Unk: GISC15-20413 20/10/2015 15:44:22 CONC D MP-151020: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0213**	**-.0043**	**-.0513**	**-.0601**	**-.0833**	**-.0617**	**-.0504**	**-.0385**	**-.0629**
Desv. Est.	.0674	.0011	.0001	.0021	.0029	.0003	.0004	.0009	.0002
% RSD	317.1	26.29	.1565	3.409	3.520	.4839	.7939	2.220	.2450
Rep #1	-.0896	-.0030	-.0512	-.0582	-.0806	-.0615	-.0506	-.0385	-.0627
Rep #2	.0452	-.0051	-.0514	-.0623	-.0864	-.0615	-.0507	-.0377	-.0630
Rep #3	-.0194	-.0048	-.0513	-.0599	-.0830	-.0621	-.0499	-.0394	-.0629

35.1	QC: ESTANDAR DE CHEQUEO 20/10/2015 15:45:56 CONC D MP-151020: AGUA:								
2015-10-20	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	.4006	.3829	.3950	.4177	.3743	.4080	.3902	.3963	.3720
Desv. Est.	.0128	.0023	.0008	.0061	.0138	.0027	.0015	.0018	.0020
% RSD	3.192	.5917	.1921	1.465	3.678	.6697	.3733	.4600	.5440
Rep #1	.3992	.3819	.3958	.4220	.3597	.4077	.3915	.3967	.3744
Rep #2	.4141	.3854	.3944	.4205	.3871	.4109	.3886	.3943	.3708
Rep #3	.3886	.3812	.3948	.4107	.3762	.4055	.3904	.3979	.3709
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

1	Cal: Blanco 20/10/2015 17:01:46 IR D MP-151020: AGUA:
	Hg1942
Unidades	Cts/s
Media	**-16.09**
Desv. Est.	2.41
% RSD	14.97
Rep #1	-18.24
Rep #2	-13.49
Rep #3	-16.54

2	Cal: STD 1 20/10/2015 17:03:34 IR D MP-151020: AGUA:
	Hg1942
Unidades	Cts/s
Media	**64.75**
Desv. Est.	4.88
% RSD	7.539
Rep #1	59.12
Rep #2	67.25
Rep #3	67.87

3	Cal: STD 2 20/10/2015 17:05:23 IR D MP-151020: AGUA:
	Hg1942
Unidades	Cts/s
Media	**198.9**
Desv. Est.	12.1
% RSD	6.098
Rep #1	186.8
Rep #2	198.8
Rep #3	211.0

4	Cal: STD 3 20/10/2015 17:06:43 IR D MP-151020: AGUA:
	Hg1942
Unidades	Cts/s
Media	**396.3**
Desv. Est.	21.1
% RSD	5.334
Rep #1	372.6
Rep #2	403.0
Rep #3	413.2

5	Cal: STD 4 20/10/2015 17:09:06 IR D MP-151020: AGUA:
	Hg1942
Unidades	Cts/s
Media	**834.8**
Desv. Est.	23.8
% RSD	2.853
Rep #1	807.6
Rep #2	845.0
Rep #3	851.8

6	Blanco: REACTIVO 20/10/2015 17:10:49 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0007**
Desv. Est.	.0002

% RSD	32.69
Rep #1	.0010
Rep #2	.0007
Rep #3	.0005
7	Unk: MUESTRA 20/10/2015 17:12:11 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0000
% RSD	3.992
Rep #1	-.0005
Rep #2	-.0005
Rep #3	-.0005
8	Unk: ESTANDAR DE CHEQUEO 20/10/2015 17:13:43 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0050**
Desv. Est.	.0003
% RSD	5.364
Rep #1	.0047
Rep #2	.0050
Rep #3	.0052
9	Unk: GISC15-20273 20/10/2015 17:21:46 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	27.62
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0001
10	Unk: GISC15-20287 20/10/2015 17:23:10 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	33.90
Rep #1	-.0000
Rep #2	-.0001
Rep #3	-.0000
11	Unk: GISC15-20288 20/10/2015 17:24:36 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0000**
Desv. Est.	.0000
% RSD	93.11
Rep #1	-.0000

Rep #2	-.0000
Rep #3	-.0001
12	Unk: GISC15-20289 20/10/2015 17:26:06 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	22.86
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0001
13	Unk: GISC15-20304 20/10/2015 17:27:28 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	24.14
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0001
14	Unk: GISC15-20320 20/10/2015 17:28:52 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	27.91
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0001
15	QC: ESTANDAR DE CHEQUEO1 20/10/2015 17:31:34 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0056**
Desv. Est.	.0001
% RSD	1.246
Rep #1	.0055
Rep #2	.0056
Rep #3	.0056
Comprobació	Pasa Comp
Valor	
Intervalo	
16	Unk: GISC15-20321 20/10/2015 17:33:17 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0003**
Desv. Est.	.0001
% RSD	29.34

Rep #1	.0003
Rep #2	.0003
Rep #3	.0002
17	Unk: GISC15-20361 20/10/2015 17:34:38 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0001**
Desv. Est.	.0000
% RSD	13.10
Rep #1	.0001
Rep #2	.0001
Rep #3	.0001
18	Unk: GISC15-20371 20/10/2015 17:35:57 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0000**
Desv. Est.	.0000
% RSD	87.29
Rep #1	.0001
Rep #2	-.0000
Rep #3	.0001
19	Unk: GISC15-20372 20/10/2015 17:37:17 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0001**
Desv. Est.	.0000
% RSD	37.64
Rep #1	.0001
Rep #2	.0001
Rep #3	.0000
20	Unk: GISC15-20373 20/10/2015 17:38:37 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0001
% RSD	77.06
Rep #1	-.0000
Rep #2	-.0001
Rep #3	-.0001
21	Unk: GISC15-20374 20/10/2015 17:39:52 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	23.72
Rep #1	-.0001
Rep #2	-.0001

Rep #3	-.0001
22	Unk: GISC15-20375 20/10/2015 17:41:07 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	8.530
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0001
23	Unk: GISC15-20376 20/10/2015 17:42:22 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	11.01
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0002
24	Unk: GISC15-20391 20/10/2015 17:43:47 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	9.255
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0001
25	Unk: GISC15-20395 20/10/2015 17:45:05 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0000
% RSD	8.810
Rep #1	-.0002
Rep #2	-.0002
Rep #3	-.0002
26	QC: ESTANDAR DE CHEQUEO1 20/10/2015 17:47:45 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0056**
Desv. Est.	.0001
% RSD	1.361
Rep #1	.0055
Rep #2	.0055
Rep #3	.0056
Comprobació	Pasa Comp

Valor	
Intervalo	
27	Unk: GISC15-20400 20/10/2015 17:49:22 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0006**
Desv. Est.	.0001
% RSD	24.07
Rep #1	.0008
Rep #2	.0005
Rep #3	.0005
28	Unk: GISC15-20401 20/10/2015 17:50:48 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0002**
Desv. Est.	.0001
% RSD	38.08
Rep #1	.0002
Rep #2	.0002
Rep #3	.0001
29	Unk: GISC15-20402 20/10/2015 17:52:09 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0000**
Desv. Est.	.0000
% RSD	223.6
Rep #1	.0000
Rep #2	.0000
Rep #3	-.0000
30	Unk: GISC15-20407 20/10/2015 17:53:28 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0000
% RSD	28.03
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0001
31	Unk: GISC15-20410 20/10/2015 17:54:49 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0000
% RSD	9.856
Rep #1	-.0002
Rep #2	-.0002
Rep #3	-.0001

32	Unk: GISC15-20411 20/10/2015 17:56:08 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0001
Desv. Est.	.0000
% RSD	15.32
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0001
33	Unk: GISC15-20413 20/10/2015 17:57:31 CONC D MP-151020: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0001
Desv. Est.	.0000
% RSD	17.44
Rep #1	-.0001
Rep #2	-.0001
Rep #3	-.0001

CONTENIDO

AGUA

GRUPO INTEGRAL DE SERVICIOS FITOSANITARIOS ENA S.A. DE C.V.
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TEL/FAX: 01(595) 928 40 77 E-mail: gisena@prodigy.net.mx

LABORATORIO DE RESIDUOS TÓXICOS

Número de acreditación No. SA-159-005/11
Vigencia de acreditación a partir de 2011-05-10
"Acreditación otorgada bajo la norma NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005
Requisitos generales para la competencia de laboratorios de ensayo y calibración".

INFORME DE RESULTADOS DE PRUEBA

DATOS DE LA MUESTRA

Matriz: AGUA
Fecha de Recepción: 2015-11-05

INTERESADO

Nombre : Laboratorio Nacional de las Ciencias de la Sostenibilidad; Instituto de Ecología-UNAM
Dirección: Av. Universidad No. 3000, Col. UNAM, CU, Del. Coyoacán, Distrito Federal, CP 04510

DATOS DEL ANÁLISIS

Método: Determinación de metales y metaloides en agua y alimentos por Espectometría de Emisión de Plasma de Acoplamiento Inductivo (ICP-OES)
Referencia: EPA 6010C-2007
Resultados: Ver hoja excell 2015/11/05 (1)
Fecha de Analisis de Metales y Mercurio: 2015-11-12 2015-11-13
Fecha de Realización del Informe: 2015-11-13

IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I001/15/0002	GISC15-21668
L-I001/15/0004	GISC15-21669
L-I004/15/0035	GISC15-21688
L-I004/15/0039	GISC15-21691
L-I005/15/0046	GISC15-21697
L-I006/15/0053	GISC15-21704
L-I007/15/0063	GISC15-21709
L-I007/15/0070	GISC15-21714
L-I009/15/0081	GISC15-21724
L-I009/15/0082	GISC15-21725
L-I009/15/0083	GISC15-21726
L-I009/15/0089	GISC15-21730
L-I012/15/0112	GISC15-21752
L-I012/15/0119	GISC15-21759
L-I012/15/0120	GISC15-21760
L-I013/15/0121	GISC15-21761
L-I013/15/0129	GISC15-21769
L-I015/15/0149	GISC15-21778
L-I015/15/0150	GISC15-21779
L-I016/15/0157	GISC15-21786

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IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I018/15/0171	GISC15-21795
L-I019/15/0186	GISC15-21808
L-I020/15/0199	GISC15-21821
L-I021/15/0209	GISC15-21828
L-I023/15/0222	GISC15-21832
L-I024/15/0239	GISC15-21855
L-I028/15/0278	GISC15-21886
L-I031/15/0302	GISC15-21902
L-I032/15/0313	GISC15-21912
L-I037/15/0367	GISC15-21955
L-I037/15/0368	GISC15-21956
L-I039/15/0381	GISC15-21964
L-I039/15/0382	GISC15-21965
L-I039/15/0383	GISC15-21966
L-I041/15/0402	GISC15-21984
L-I041/15/0410	GISC15-21990
L-I042/15/0412	GISC15-21992
L-I042/15/0420	GISC15-22000
L-I050/15/0500	GISC15-22069
L-I051/15/0508	GISC15-22077
L-I051/15/0510	GISC15-22078
L-I052/15/0512	GISC15-22079
L-I052/15/0514	GISC15-22080
L-I052/15/0515	GISC15-22081
L-I052/15/0516	GISC15-22082
L-I052/15/0518	GISC15-22083
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L-I052/15/0520	GISC15-22085
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L-I053/15/0523	GISC15-22088
L-I053/15/0524	GISC15-22089
L-I053/15/0526	GISC15-22090
L-I053/15/0527	GISC15-22091
L-I053/15/0528	GISC15-22092

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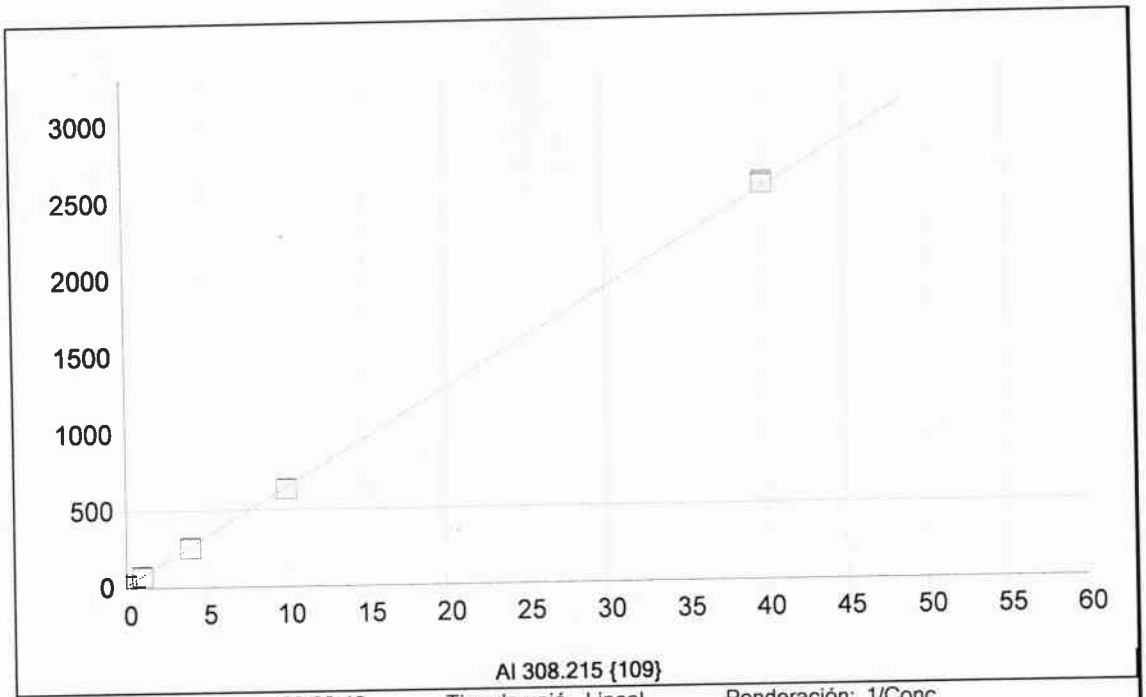
IDENTIFICACIÓN CLIENTE	CLAVE DE IDENTIFICACIÓN
L-I060/15/0595	GISC15-22149
L-I063/15/0629	GISC15-22179
L-I063/15/0630	GISC15-22180
L-I065/15/0646	GISC15-22196
L-I065/15/0647	GISC15-22197
L-I066/15/0655	GISC15-22203
L-I066/15/0656	GISC15-22204
L-I068/15/0672	GISC15-22217
L-I070/15/0700	GISC15-22233
L-I071/15/0701	GISC15-22234
L-I071/15/0709	GISC15-22239
L-I071/15/0710	GISC15-22240
L-I072/15/0718	GISC15-22247
L-I072/15/0719	GISC15-22248
L-I073/15/0722	GISC15-22249

REVISÓ

Q.F.B.Leticia Velázquez Méndez
Gerente Técnico



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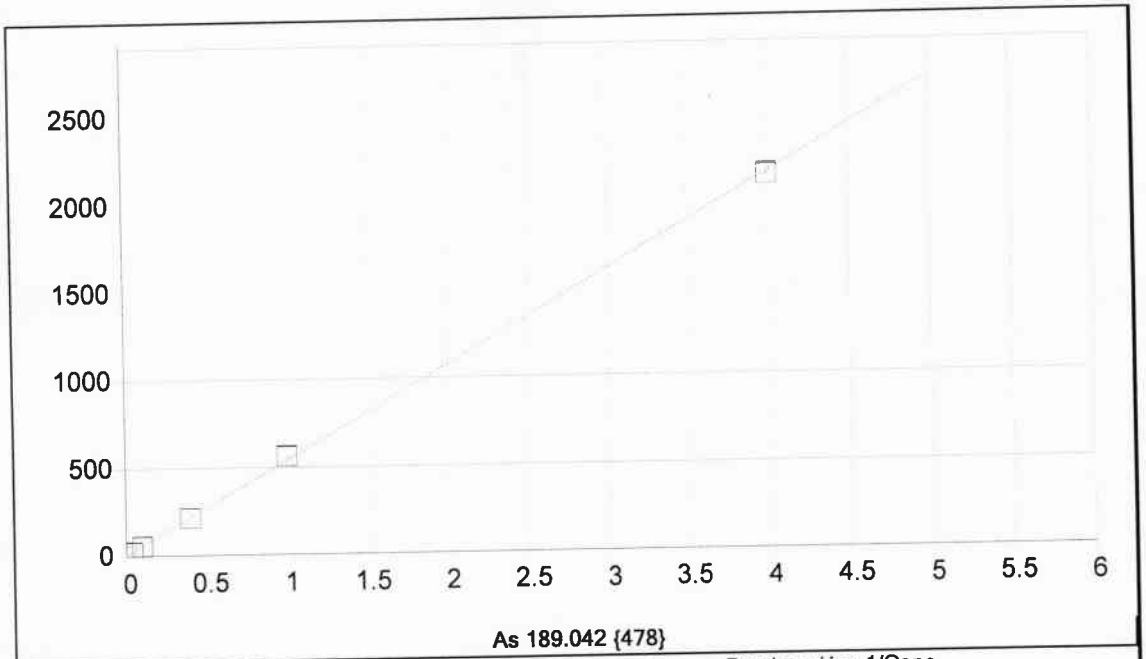
A0 (Compensación):	11.194332	Reajustar P	1.000000
A1 (Ganancia)	63.544753	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999888	Estatus:	OK.
Error Estándar de Est:	0.288246		
MDL:	0.072082		
MQL:	0.240272		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00009	.000	.000	11.200	2.84	1
STD 6	1.0000	.94916	-.051	-5.08	71.508	2.43	1
STD 7	4.0000	3.8856	-.114	-2.86	258.10	3.91	1
STD 8	10.000	9.8149	-.185	-1.85	634.88	1.52	1
STD 9	40.000	40.350	.350	.876	2575.3	11.1	1



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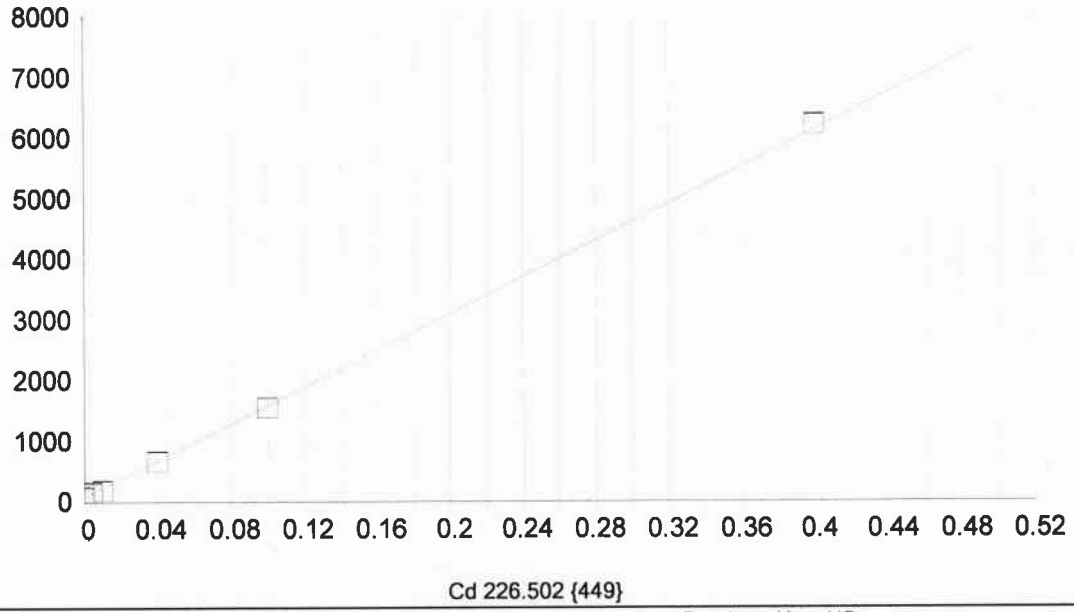
A1 (Ganancia)	537.574603	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999780	Estatus:	OK.
Error Estándar de Est:	0.205280		
MDL:	0.001580		
MQL:	0.005266		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	1.8210	.499	1
STD 4	.10000	.09516	-.005	-4.84	52.977	.271	1
STD 5	.40000	.39306	-.007	-1.73	213.12	.776	1
STD 6	1.0000	1.0416	.042	4.16	561.75	2.03	1
STD 7	4.0000	3.9727	-.027	-.682	2137.5	6.11	1
STD 3	.04000	.03744	-.003	-6.39	21.947	1.16	1



Fecha de la	12/11/2015 02:02:19	Tipo de unió	Lineal	Ponderación:	1/Conc

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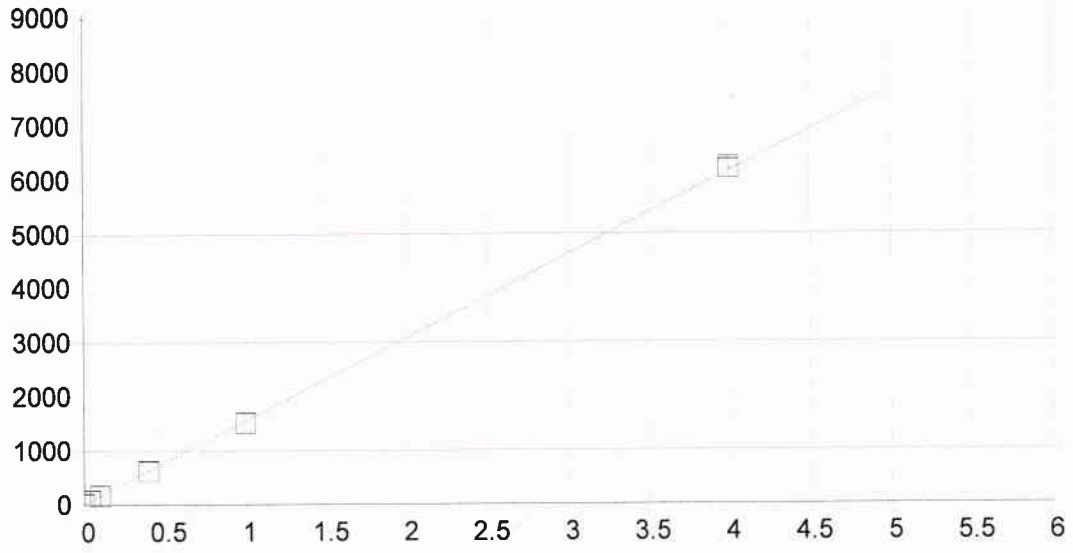
A1 (Ganancia)	15104.80777	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998899	Estatus:	OK.
Error Estándar de Est:	1.291988		
MDL:	0.000097		
MQL:	0.000323		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	78.918	14.3	1
STD 1	.00400	.00490	.001	22.6	152.99	9.75	1
STD 2	.01000	.00707	-.003	-29.3	185.65	4.27	1
STD 3	.04000	.03883	-.001	-2.92	665.49	6.32	1
STD 4	.10000	.09778	-.002	-2.22	1555.9	2.90	1
STD 5	.40000	.40541	.005	1.35	6202.6	10.9	1

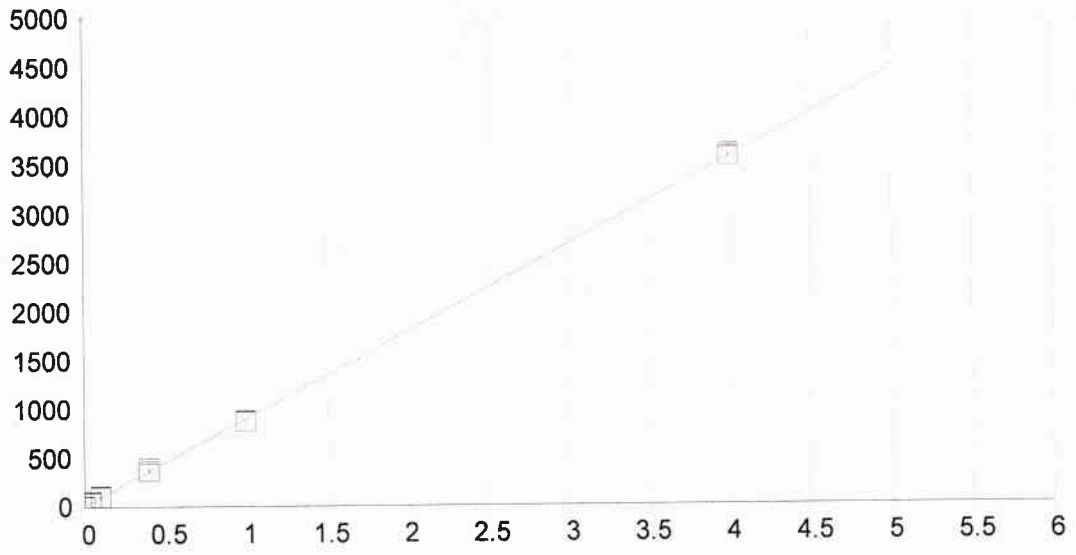


Cu 324.754 {104}

Fecha de la	12/11/2015 02:06:47	Tipo de unió	Lineal	Ponderación: 1/Conc

A0 (Compensación):	18.931247	Reajustar P	1.000000
A1 (Ganancia)	1532.128962	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999907	Estatus:	OK.
Error Estándar de Est:	0.379814		
MDL:	0.002867		
MQL:	0.009557		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	18.932	2.63	1
STD 5	.40000	.39629	-.004	-.927	626.10	8.14	1
STD 6	1.0000	.97327	-.027	-2.67	1510.1	3.89	1
STD 7	4.0000	4.0303	.030	.758	6193.9	33.6	1
STD 3	.04000	.04119	.001	2.98	82.045	1.50	1
STD 4	.10000	.09892	-.001	-1.08	170.50	3.05	1

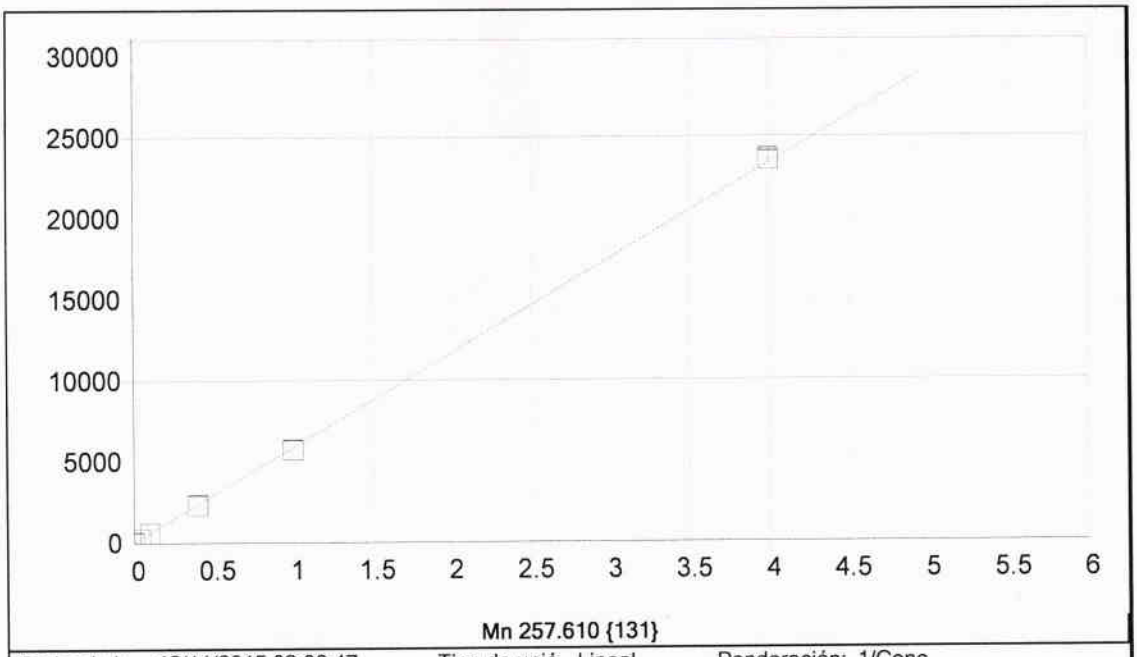


Fe 259.940 {130}

Fecha de la 12/11/2015 02:06:47 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	8.401788	Reajustar P	1.000000
A1 (Ganancia)	891.379499	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999690	Estatus:	OK.
Error Estándar de Est:	0.404606		
MDL:	0.002471		
MQL:	0.008235		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00001	-.000	.000	8.3917	1.48	1
STD 5	.40000	.40635	.006	1.59	370.62	25.1	1
STD 6	1.0000	.97245	-.028	-2.75	875.23	4.65	1
STD 3	.04000	.04741	.007	18.5	50.658	2.59	1
STD 4	.10000	.11097	.011	11.0	107.32	3.93	1
STD 7	4.0000	4.0028	.003	.071	3576.4	19.1	1

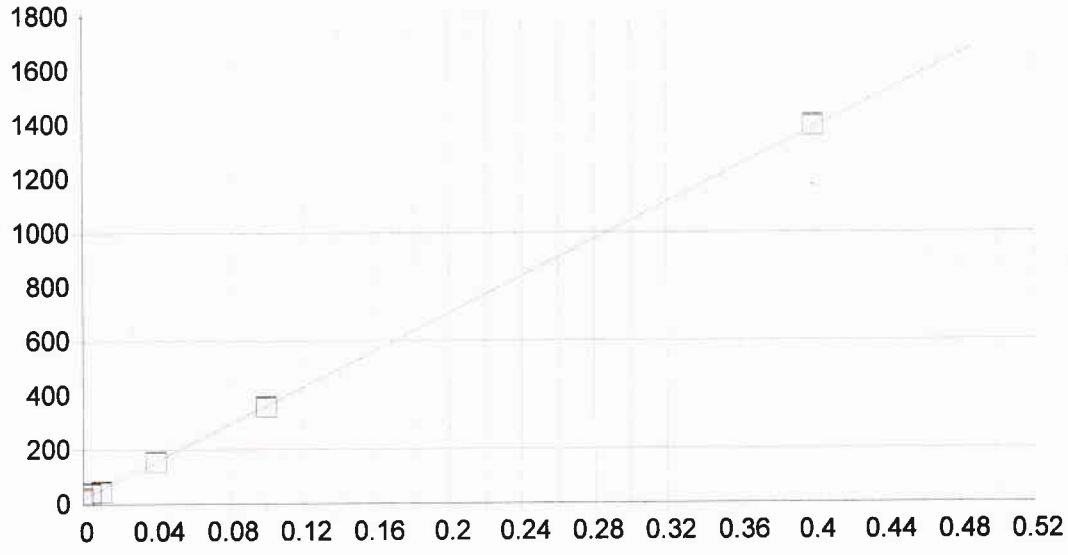


Mn 257.610 {131}

Fecha de la 12/11/2015 02:06:47 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	29.367576	Reajustar P	1.000000
A1 (Ganancia)	5826.860203	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999890	Estatus:	OK.
Error Estándar de Est:	1.572713		
MDL:	0.000413		
MQL:	0.001376		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	29.387	3.20	1
STD 5	.40000	.39216	-.008	-1.96	2314.4	13.8	1
STD 6	1.0000	.97476	-.025	-2.52	5709.1	17.7	1
STD 3	.04000	.03926	-.001	-1.86	258.12	2.85	1
STD 4	.10000	.09723	-.003	-2.77	595.94	2.91	1
STD 7	4.0000	4.0366	.037	.915	23550.	112.	1

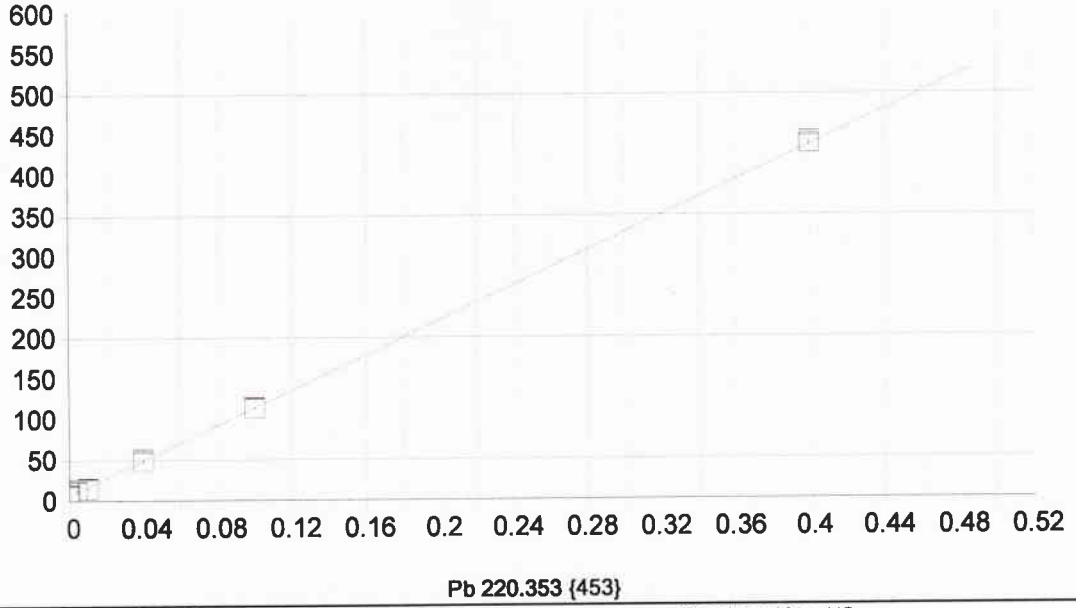


Ni 231.604 {446}

Fecha de la	12/11/2015 02:02:19	Tipo de unió	Lineal	Ponderación: 1/Conc

A0 (Compensación):	18.980428	Reajustar P	1.000000
A1 (Ganancia)	3417.674499	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.998685	Estatus:	OK.
Error Estándar de Est:	0.319600		
MDL:	0.000385		
MQL:	0.001282		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	18.978	3.79	1
STD 1	.00400	.00580	.002	45.0	38.798	1.87	1
STD 2	.01000	.00753	-.002	-24.7	44.721	1.59	1
STD 3	.04000	.03951	-.000	-1.23	154.00	.870	1
STD 4	.10000	.09861	-.001	-1.39	355.99	1.72	1
STD 5	.40000	.40255	.003	.639	1394.8	2.98	1

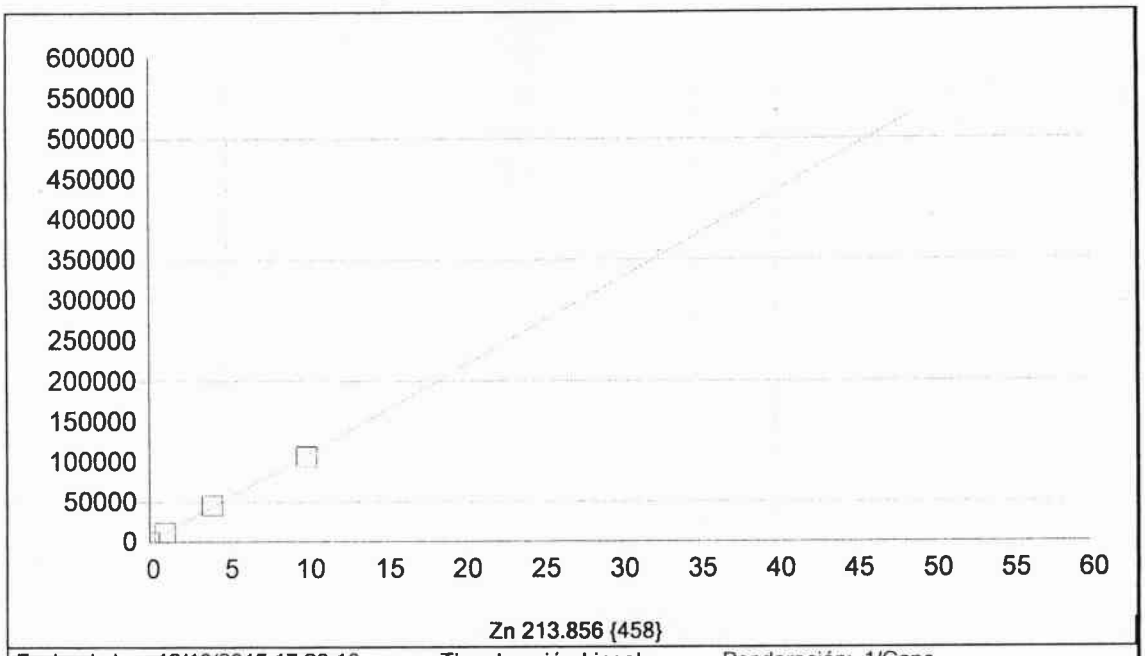


Pb 220.353 {453}

Fecha de la	12/11/2015 02:02:19	Tipo de unió	Lineal	Ponderación:	1/Conc

A0 (Compensación):	6.205685	Reajustar P	1.000000
A1 (Ganancia)	1076.832317	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999085	Estatus:	OK.
Error Estándar de Est:	0.083968		
MDL:	0.001281		
MQL:	0.004269		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00000	-.000	.000	6.2051	1.14	1
STD 1	.00400	.00545	.001	36.3	12.077	1.94	1
STD 2	.01000	.00781	-.002	-21.9	14.613	.573	1
STD 3	.04000	.03969	-.000	-.770	48.947	2.15	1
STD 4	.10000	.09980	-.000	-.201	113.67	1.03	1
STD 5	.40000	.40125	.001	.312	438.28	2.69	1

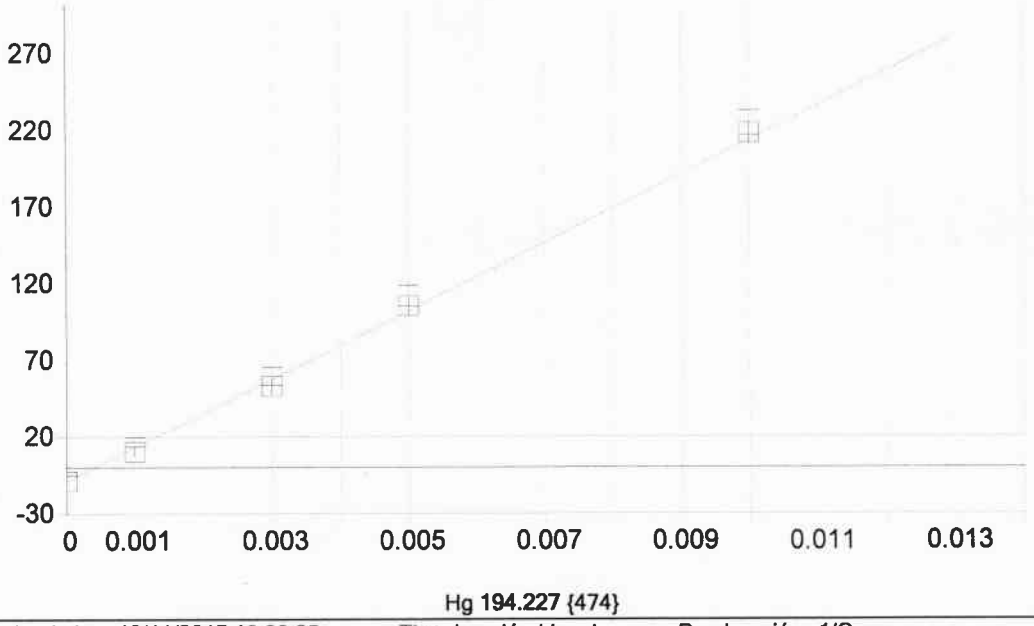


Zn 213.856 {458}

Fecha de la 12/10/2015 17:20:16 Tipo de unió Lineal Ponderación: 1/Conc

A0 (Compensación):	157.390504	Reajustar P	1.000000
A1 (Ganancia)	10888.19359	Y-int:	0.000000
A2 (Curvatura):	0.000000		
n (Exponente):	1.000000		
Correlación:	0.999451	Estatus:	OK.
Error Estándar de Est:	62.480934		
MDL:	0.000110		
MQL:	0.000367		

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	-.00008	-.000	.000	156.51	14.3	1
STD 6	1.0000	1.0612	.061	6.12	11712.	19.4	1
STD 7	4.0000	4.1712	.171	4.28	45575.	118.	1
STD 8	10.000	9.7676	-.232	-2.32	106510.	275.	1
STD 9	40.000	33.348	-6.65	-16.6	363260.	127.	0



Hg **194.227** {474}

Fecha de la	13/11/2015 13:30:25	Tipo de unió	Lineal	Ponderación:	1/Conc
A0 (Compensación):	-9.101213		Reajustar P	1.000000	
A1 (Ganancia)	22240.67911		Y-int:	0.000000	
A2 (Curvatura):	0.000000				
n (Exponente):	1.000000				
Correlación:	0.998915		Estatus:	OK.	
Error Estándar de Est:	0.184291				
MDL:	0.000106				
MQL:	0.000355				

Nombre Est.	Conc. Establecida	Conc. Encontrada	Diferencia	% Dif.	(S)IR:	Desv. Est.	Énfasis
Blanco	.00000	.00000	.000	.000	-9.0978	2.58	1
STD 1	.00100	.00086	-.000	-13.5	10.128	3.04	1
STD 2	.00300	.00279	-.000	-6.97	52.970	5.89	1
STD 3	.00500	.00515	.000	3.05	105.49	6.75	1
STD 4	.01000	.01019	.000	1.92	217.58	8.01	1

Análisis: ***METALES PESADOS POR ICP-OES***

Lote analítico: DMP-AGUA-151112

Fecha de Análisis: 12/11/2015

Fecha de Reporte: 12/11/2015

CONCENTRACIONES DE LAS CURVAS DE CALIBRACION.

DESCRIPCIÓN	CONCENTRACION mg/L									
	Al	As	Cd	Cu	Fe	Mn	Ni	Pb	Zn	Hg
NIVEL I			0.004				0.004	0.004		0.0010
NIVEL 2			0.010				0.010	0.010		0.0030
NIVEL 3		0.040	0.040	0.040	0.040	0.040	0.040	0.040		0.0050
NIVEL 4		0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.0100
NIVEL 5		0.400	0.400	0.400	0.400	0.400	0.400	0.400		
NIVEL 6	1.000	1.000		1.000	1.000	1.000			1.000	
NIVEL 7	4.000	4.000		4.000	4.000	4.000			4.000	
NIVEL 8	10.000								10.000	
NIVEL 9	40.000								40.000	
Correlación	0.9999	0.9998	0.9989	0.9999	0.9997	0.9999	0.9987	0.9991	0.9994	0.9989

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
16.1	QC:QC	Aluminio	0.4000	0.3943	99	47.1	QC:QC	Aluminio	0.4000	0.3744	94
		Arsénico	0.4000	0.4208	105			Arsénico	0.4000	0.4316	108
		Cadmio	0.4000	0.3868	97			Cadmio	0.4000	0.3857	96
		Cobre	0.4000	0.3938	98			Cobre	0.4000	0.3941	99
		Fierro	0.4000	0.4007	100			Fierro	0.4000	0.3996	100
		Manganeso	0.4000	0.3757	94			Mangane	0.4000	0.3708	93
		Níquel	0.4000	0.3759	94			Níquel	0.4000	0.3709	93
		Plomo	0.4000	0.4207	105			Plomo	0.4000	0.4272	107
		Zinc	0.4000	0.4118	103			Zinc	0.4000	0.4167	104
26.1	QC:QC	Aluminio	0.4000	0.3931	98	57.1	QC:QC	Aluminio	0.4000	0.3853	96
		Arsénico	0.4000	0.3971	99			Arsénico	0.4000	0.4306	108
		Cadmio	0.4000	0.4004	100			Cadmio	0.4000	0.3834	96
		Cobre	0.4000	0.4024	101			Cobre	0.4000	0.3923	98
		Fierro	0.4000	0.4055	101			Fierro	0.4000	0.3969	99
		Manganeso	0.4000	0.3988	100			Mangane	0.4000	0.3681	92
		Níquel	0.4000	0.3979	99			Níquel	0.4000	0.3678	92
		Plomo	0.4000	0.3961	99			Plomo	0.4000	0.4285	107
		Zinc	0.4000	0.3981	100			Zinc	0.4000	0.4175	104
35	ESTANDAR DE CHEQUEO	Aluminio	0.4000	0.3512	88	67.1	QC:QC	Aluminio	0.4000	0.3625	91
		Arsénico	0.4000	0.3430	86			Arsénico	0.4000	0.4342	109
		Cadmio	0.4000	0.3380	85			Cadmio	0.4000	0.3825	96
		Cobre	0.4000	0.3820	96			Cobre	0.4000	0.3883	97
		Fierro	0.4000	0.3698	92			Fierro	0.4000	0.3939	98
		Manganeso	0.4000	0.3851	96			Mangane	0.4000	0.3660	92
		Níquel	0.4000	0.3329	83			Níquel	0.4000	0.3653	91
		Plomo	0.4000	0.3230	81			Plomo	0.4000	0.4288	107
		Zinc	0.4000	0.4052	101			Zinc	0.4000	0.4184	105

Análisis: ***METALES PESADOS POR ICP-OES***
Lote analítico: DMP-AGUA-151112
Fecha de Análisis: 12/11/2015
Fecha de Reporte: 12/11/2015

EVALUACIÓN DE LAS MUESTRAS DE CONTROL DE CALIDAD

No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]	No.[1]	Identificación	Analito	Concentración mg/l		% Recobro[2]
			Teórica	Práctica					Teórica	Práctica	
79.1	QC: QC	Aluminio	0.4000	0.3880	97	68	Estandar de chequeo	Mercurio	0.005	0.0052	104
		Arsénico	0.4000	0.4358	109						
		Cadmio	0.4000	0.3812	95	80	Estandar de chequeo	Mercurio	0.005	0.0053	106
		Cobre	0.4000	0.3933	98						
		Fierro	0.4000	0.3982	100						
		Manganeso	0.4000	0.3644	91						
		Níquel	0.4000	0.3632	91						
		Plomo	0.4000	0.4325	108						
		Zinc	0.4000	0.4183	105						
8	Recuperación	Mercurio	0.005	0.005	94						
20	Estandar de chequeo	Mercurio	0.005	0.005	104						
33	Estandar de chequeo	Mercurio	0.005	0.005	104						
45	Estandar de chequeo	Mercurio	0.005	0.005	104						
57	Estandar de chequeo	Mercurio	0.005	0.005	106						

[1] NÚMERO EN LA HOJA DE RESULTADOS EMITIDA POR EL EQUIPO ICP-OES

[2] REFERENCIA: GUIAS TÉCNICA DE TRAZABILIDAD E INCERTIDUMBRE, CENAM-ema, NOV.2012, PARA % DE RECOBRO (80-120%)

I.B.I. Gaudencio Vargas Espejel
ELABORÓ

Q.F.B. Leticia Velázquez Méndez
REVISÓ

PACE/GIS/I02-F01

GISENA®

Residuos Tóxicos..

Hoja de Trabajo (Preparación) - Metales y metaloides (2)

Analista:
I.B.T. Reyna Ivette Delgado Ramos

Fecha Hora de Impresión: 2015/11/10 11:13 a.m.

Clave	Matriz	Tejido	Fecha Recepción	Observaciones Cantidad de muestra (mL)
GISC15-21668	AGUA		05/11/2015	50
GISC15-21669	AGUA		05/11/2015	50
GISC15-21688	AGUA		05/11/2015	50
GISC15-21691	AGUA		05/11/2015	50
GISC15-21697	AGUA		05/11/2015	50
GISC15-21704	AGUA		05/11/2015	50
GISC15-21709	AGUA		05/11/2015	50
GISC15-21714	AGUA		05/11/2015	50
GISC15-21724	AGUA		05/11/2015	50
GISC15-21725	AGUA		05/11/2015	50
GISC15-21726	AGUA		05/11/2015	50
GISC15-21730	AGUA		05/11/2015	50
GISC15-21752	AGUA		05/11/2015	50
GISC15-21759	AGUA		05/11/2015	50
GISC15-21760	AGUA		05/11/2015	50
GISC15-21761	AGUA		05/11/2015	50
GISC15-21769	AGUA		05/11/2015	50
GISC15-21778	AGUA		05/11/2015	50
GISC15-21779	AGUA		05/11/2015	50
GISC15-21786	AGUA		05/11/2015	50
GISC15-21795	AGUA		05/11/2015	50
GISC15-21808	AGUA		05/11/2015	50
GISC15-21821	AGUA		05/11/2015	50
GISC15-21828	AGUA		05/11/2015	50
GISC15-21832	AGUA		05/11/2015	50
GISC15-21855	AGUA		05/11/2015	50
GISC15-21886	AGUA		05/11/2015	50
GISC15-21902	AGUA		05/11/2015	50
GISC15-21912	AGUA		05/11/2015	50

P.A. Laudencio M.S

I.B.T. Reyna Ivette Delgado

Q.F.B. Leticia Velazquez Méndez

Residuos Tóxicos..

Hoja de Trabajo (Preparación) - Metales y metaloides (2)

Analista:
I.B.T. Reyna Ivette Delgado Ramos

Fecha Hora de Impresión: 2015/11/10 11:13 a.m.

Clave	Matriz	Tejido	Fecha Recepción	Observaciones Cantidad de muestra (mL)
GISC15-21955	AGUA		05/11/2015	50
GISC15-21956	AGUA		05/11/2015	50
GISC15-21964	AGUA		05/11/2015	50
GISC15-21965	AGUA		05/11/2015	50
GISC15-21966	AGUA		05/11/2015	50
GISC15-21984	AGUA		05/11/2015	50
GISC15-21990	AGUA		05/11/2015	50
GISC15-21992	AGUA		05/11/2015	50
GISC15-22000	AGUA		05/11/2015	50
GISC15-22069	AGUA		05/11/2015	50
GISC15-22077	AGUA		05/11/2015	50
GISC15-22078	AGUA		05/11/2015	50
GISC15-22079	AGUA		05/11/2015	50
GISC15-22080	AGUA		05/11/2015	50
GISC15-22081	AGUA		05/11/2015	50
GISC15-22082	AGUA		05/11/2015	50
GISC15-22083	AGUA		05/11/2015	50
GISC15-22084	AGUA		05/11/2015	50
GISC15-22085	AGUA		05/11/2015	50
GISC15-22086	AGUA		05/11/2015	50
GISC15-22087	AGUA		05/11/2015	50
GISC15-22088	AGUA		05/11/2015	50
GISC15-22089	AGUA		05/11/2015	50
GISC15-22090	AGUA		05/11/2015	50
GISC15-22091	AGUA		05/11/2015	50
GISC15-22092	AGUA		05/11/2015	50
GISC15-22149	AGUA		05/11/2015	50
GISC15-22179	AGUA		05/11/2015	50
GISC15-22180	AGUA		05/11/2015	50

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I.B.T. Reyna Ivette Delgado

Q.F.B. Leticia Velazquez Méndez

Residuos Tóxicos

Hoja de Trabajo (Preparación) -Metales y Metaloides-(2)

Clave	Matriz	Tejido	Fecha de Recepción	Cantidad de muestra (mL) Observaciones
GISC15-22196	Agua		05/10/2015	50
GISC15-22197	Agua		05/10/2015	50
GISC15-22203	Agua		05/10/2015	50
GISC15-22204	Agua		05/10/2015	50
GISC15-22217	Agua		05/10/2015	50
GISC15-22233	Agua		05/10/2015	50
GISC15-22234	Agua		05/10/2015	50
GISC15-22239	Agua		05/10/2015	50
GISC15-22240	Agua		05/10/2015	50
GISC15-22247	Agua		05/10/2015	50
GISC15-22248	Agua		05/10/2015	50
GISC15-22249	Agua		05/10/2015	50

I.B.I. Gaudencio Vargas Espejel

Q.F.B. Leticia Velazquez Méndez

1	Cal: Blanco 12/11/2015 01:49:27 IR D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**11.20**	**1.821**	**78.92**	**18.93**	**8.392**	**29.39**	**18.98**	**6.205**	**156.5**
Desv. Est.	2.84	.499	14.29	2.64	1.484	3.20	3.79	1.139	14.3
% RSD	25.39	27.40	18.11	13.92	17.68	10.90	19.98	18.36	9.162
Rep #1	11.43	1.299	68.62	16.79	7.275	27.70	15.90	5.730	144.7
Rep #2	13.93	1.872	72.90	21.87	10.07	27.38	17.82	5.380	152.3
Rep #3	8.250	2.293	95.23	18.14	7.825	33.08	23.21	7.505	172.5
2	Cal: STD 1 12/11/2015 01:51:38 IR D MP-151112: AGUA:								
	Cd2265	Ni2316	Pb2203						
Línea	226.502 {44	231.604 {44	220.353 {45						
Unidades	Cts/s	Cts/s	Cts/s						
Media	**153.0**	**38.80**	**12.08**						
Desv. Est.	9.8	1.87	1.94						
% RSD	6.373	4.820	16.08						
Rep #1	149.6	37.70	14.09						
Rep #2	145.4	37.73	10.21						
Rep #3	164.0	40.96	11.93						
3	Cal: STD 2 12/11/2015 01:53:48 IR D MP-151112: AGUA:								
	Cd2265	Ni2316	Pb2203						
Línea	226.502 {44	231.604 {44	220.353 {45						
Unidades	Cts/s	Cts/s	Cts/s						
Media	**185.6**	**44.72**	**14.61**						
Desv. Est.	4.3	1.59	.57						
% RSD	2.302	3.548	3.924						
Rep #1	189.9	46.52	15.27						
Rep #2	181.4	43.50	14.20						
Rep #3	185.6	44.15	14.37						
4	Cal: STD 3 12/11/2015 01:56:00 IR D MP-151112: AGUA:								
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203		
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45		
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s		
Media	**21.95**	**665.5**	**82.05**	**50.66**	**258.1**	**154.0**	**48.95**		
Desv. Est.	1.16	6.3	1.50	2.59	2.9	.9	2.15		
% RSD	5.284	.9493	1.827	5.109	1.106	.5647	4.386		
Rep #1	20.61	659.5	81.48	47.67	255.4	153.2	46.47		
Rep #2	22.60	672.1	83.75	52.00	257.9	153.8	50.25		
Rep #3	22.64	664.8	80.91	52.30	261.1	154.9	50.12		
5	Cal: STD 4 12/11/2015 01:58:12 IR D MP-151112: AGUA:								
	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203		
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45		
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s		
Media	**52.98**	**1556.**	**170.5**	**107.3**	**595.9**	**356.0**	**113.7**		
Desv. Est.	.27	3.	3.1	3.9	2.9	1.7	1.0		
% RSD	.5124	.1864	1.790	3.659	.4876	.4844	.9020		
Rep #1	53.15	1559.	173.9	110.1	598.5	357.9	112.8		
Rep #2	52.66	1553.	168.1	102.8	596.5	354.6	114.8		
Rep #3	53.11	1556.	169.5	109.0	592.8	355.4	113.4		
6	Cal: STD 5 12/11/2015 02:00:20 IR D MP-151112: AGUA:								

	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203
Línea	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**213.1**	**6203.**	**626.1**	**370.6**	**2314.**	**1395.**	**438.3**
Desv. Est.	.8	11.	8.1	25.1	14.	3.	2.7
% RSD	.3639	.1762	1.301	6.768	.5950	.2137	.6132
Rep #1	213.1	6211.	628.5	399.4	2321.	1398.	439.1
Rep #2	213.9	6207.	632.8	359.2	2324.	1395.	440.5
Rep #3	212.4	6190.	617.0	353.3	2299.	1392.	435.3

7 Cal: STD 6 12/11/2015 02:02:28 IR
D MP-151112: AGUA:

	Al3082	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	308.215 {10	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**71.51**	**561.8**	**1510.**	**875.2**	**5709.**	**11710.**
Desv. Est.	2.43	2.0	4.	4.6	18.	19.
% RSD	3.397	.3620	.2573	.5311	.3108	.1653
Rep #1	70.35	563.8	1514.	873.7	5696.	11730.
Rep #2	69.88	561.7	1507.	880.5	5729.	11690.
Rep #3	74.30	559.7	1509.	871.6	5703.	11710.

8 Cal: STD 7 12/11/2015 02:04:53 IR
D MP-151112: AGUA:

	Al3082	As1890	Cu3247	Fe2599	Mn2576	Zn2138
Línea	308.215 {10	189.042 {47	324.754 {10	259.940 {13	257.610 {13	213.856 {45
Unidades	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s	Cts/s
Media	**258.1**	**2137.**	**6194.**	**3576.**	**23550.**	**45570.**
Desv. Est.	3.9	6.	34.	19.	112.	118.
% RSD	1.514	.2860	.5428	.5336	.4741	.2583
Rep #1	255.0	2144.	6180.	3583.	23570.	45710.
Rep #2	262.5	2132.	6232.	3592.	23650.	45530.
Rep #3	256.8	2137.	6170.	3555.	23430.	45490.

9 Cal: STD 8 12/11/2015 02:06:47 IR
D MP-151112: AGUA:

	Al3082	Zn2138
Línea	308.215 {10	213.856 {45
Unidades	Cts/s	Cts/s
Media	**643.8**	**105700.**
Desv. Est.	4.0	60.
% RSD	.6223	.0564
Rep #1	641.9	105700.
Rep #2	641.0	105800.
Rep #3	648.4	105700.

10 Cal: STD 9 12/11/2015 02:09:36 IR
D MP-151112: AGUA:

	Al3082	Zn2138
Línea	308.215 {10	213.856 {45
Unidades	Cts/s	Cts/s
Media	**2756.**	**359600.**
Desv. Est.	17.	597.
% RSD	.6032	.1661
Rep #1	2775.	359300.
Rep #2	2746.	359200.
Rep #3	2746.	360300.

1	Blanco: REACTIVO 12/11/2015 02:22:30 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0468**	**-.0038**	**.0263**	**.0280**	**.0321**	**.0271**	**.0266**	**.0250**	**.0327**
Desv. Est.	.0097	.0003	.0015	.0064	.0053	.0049	.0015	.0010	.0017
% RSD	20.64	8.884	5.773	22.86	16.64	18.00	5.675	4.013	5.275
Rep #1	-.0474	-.0041	.0254	.0290	.0319	.0273	.0258	.0245	.0316
Rep #2	-.0561	-.0039	.0281	.0339	.0376	.0320	.0284	.0261	.0347
Rep #3	-.0368	-.0035	.0255	.0212	.0269	.0222	.0257	.0243	.0318
2	Unk: GISC15-21668 12/11/2015 14:24:37 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0527**	**-.0045**	**-.0282**	**-.0273**	**-.0245**	**-.0266**	**-.0273**	**-.0174**	**-.0152**
Desv. Est.	.0397	.0008	.0005	.0018	.0025	.0003	.0008	.0010	.0007
% RSD	75.21	17.81	1.932	6.546	10.03	1.145	3.093	5.549	4.310
Rep #1	-.0832	-.0051	-.0286	-.0262	-.0234	-.0264	-.0278	-.0185	-.0160
Rep #2	-.0672	-.0047	-.0286	-.0293	-.0228	-.0264	-.0278	-.0166	-.0148
Rep #3	-.0079	-.0036	-.0276	-.0263	-.0273	-.0269	-.0264	-.0171	-.0149
3	Unk: GISC15-21668-R 12/11/2015 14:25:48 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0563**	**-.0044**	**-.0276**	**-.0261**	**-.0240**	**-.0254**	**-.0268**	**-.0184**	**-.0144**
Desv. Est.	.0479	.0012	.0004	.0014	.0018	.0007	.0005	.0008	.0012
% RSD	85.19	28.01	1.406	5.313	7.653	2.746	1.767	4.624	8.649
Rep #1	-.1108	-.0056	-.0280	-.0251	-.0235	-.0247	-.0273	-.0181	-.0155
Rep #2	-.0210	-.0031	-.0273	-.0277	-.0224	-.0255	-.0266	-.0177	-.0130
Rep #3	-.0370	-.0045	-.0275	-.0255	-.0260	-.0261	-.0264	-.0193	-.0146
4	Unk: GISC15-21669 12/11/2015 14:27:56 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0322**	**-.0055**	**-.0271**	**-.0286**	**-.0330**	**-.0260**	**-.0267**	**-.0182**	**-.0150**
Desv. Est.	.0384	.0017	.0006	.0034	.0006	.0010	.0007	.0011	.0006
% RSD	119.1	31.56	2.223	12.07	1.800	4.016	2.725	6.208	3.845
Rep #1	.0114	-.0073	-.0270	-.0252	-.0336	-.0251	-.0264	-.0171	-.0150
Rep #2	-.0472	-.0039	-.0265	-.0321	-.0325	-.0259	-.0261	-.0180	-.0144
Rep #3	-.0610	-.0054	-.0277	-.0284	-.0327	-.0271	-.0275	-.0194	-.0155
5	Unk: GISC15-21688 12/11/2015 14:30:08 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0375**	**-.0048**	**-.0298**	**-.0291**	**-.0338**	**-.0282**	**-.0293**	**-.0211**	**.0378**
Desv. Est.	.0368	.0023	.0001	.0016	.0026	.0004	.0002	.0017	.0006
% RSD	98.34	46.47	.3686	5.625	7.679	1.392	.6156	8.012	1.486
Rep #1	-.0624	-.0050	-.0298	-.0286	-.0320	-.0277	-.0293	-.0205	.0374
Rep #2	.0048	-.0025	-.0298	-.0278	-.0368	-.0284	-.0295	-.0198	.0385
Rep #3	-.0548	-.0070	-.0300	-.0310	-.0325	-.0284	-.0291	-.0230	.0376
6	Unk: GISC15-21691 12/11/2015 14:32:26 CONC D MP-151112: AGUA:								

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0610**	**-.0068**	**-.0298**	**-.0256**	**-.0344**	**-.0290**	**-.0293**	**-.0203**	**-.0299**
Desv. Est.	.0501	.0005	.0002	.0020	.0009	.0002	.0001	.0005	.0008
% RSD	82.20	7.484	.7327	7.966	2.543	.7584	.3954	2.258	2.794
Rep #1	-.0130	-.0067	-.0299	-.0232	-.0348	-.0288	-.0292	-.0202	-.0309
Rep #2	-.0570	-.0073	-.0300	-.0269	-.0350	-.0292	-.0294	-.0199	-.0293
Rep #3	-.1130	-.0063	-.0296	-.0266	-.0334	-.0289	-.0293	-.0208	-.0295

7	Unk: GISC15-21697 12/11/2015 14:34:36 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0504**	**-.0050**	**-.0296**	**-.0269**	**-.0321**	**-.0282**	**-.0290**	**-.0196**	**-.0349**
Desv. Est.	.0179	.0013	.0004	.0010	.0013	.0003	.0006	.0004	.0005
% RSD	35.51	24.92	1.380	3.557	4.069	1.006	2.005	1.923	1.333
Rep #1	-.0650	-.0045	-.0296	-.0264	-.0334	-.0282	-.0293	-.0192	-.0355
Rep #2	-.0559	-.0042	-.0292	-.0263	-.0308	-.0279	-.0284	-.0199	-.0347
Rep #3	-.0304	-.0065	-.0301	-.0280	-.0320	-.0284	-.0295	-.0196	-.0347

8	Unk: GISC15-21704 12/11/2015 14:36:51 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0461**	**-.0069**	**-.0298**	**-.0277**	**-.0337**	**-.0283**	**-.0294**	**-.0208**	**.0262**
Desv. Est.	.0419	.0009	.0001	.0015	.0016	.0005	.0001	.0004	.0002
% RSD	90.93	12.32	.4269	5.575	4.842	1.685	.3859	1.892	.8566
Rep #1	-.0217	-.0061	-.0299	-.0260	-.0355	-.0278	-.0293	-.0210	.0260
Rep #2	-.0944	-.0070	-.0296	-.0290	-.0333	-.0285	-.0295	-.0203	.0260
Rep #3	-.0221	-.0078	-.0298	-.0281	-.0323	-.0288	-.0295	-.0209	.0264

9	Unk: GISC15-21709 12/11/2015 14:39:03 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0410**	**-.0003**	**-.0301**	**-.0312**	**-.0035**	**-.0285**	**-.0298**	**-.0198**	**-.0445**
Desv. Est.	.0389	.0017	.0002	.0017	.0065	.0004	.0001	.0005	.0002
% RSD	94.97	567.4	.6930	5.482	182.6	1.393	.3747	2.315	.3403
Rep #1	.0849	-.0003	-.0298	-.0327	-.0110	-.0285	-.0298	-.0199	-.0445
Rep #2	.0274	.0014	-.0302	-.0315	.0001	-.0289	-.0297	-.0193	-.0444
Rep #3	.0107	-.0020	-.0302	-.0294	.0002	-.0281	-.0300	-.0202	-.0447

10	Unk: GISC15-21714 12/11/2015 14:41:14 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0713**	**-.0021**	**-.0301**	**-.0284**	**-.0334**	**-.0292**	**-.0294**	**-.0213**	**-.0279**
Desv. Est.	.0542	.0017	.0002	.0004	.0014	.0009	.0002	.0010	.0004
% RSD	75.99	80.24	.5807	1.393	4.043	2.925	.6733	4.884	1.363
Rep #1	-.0101	-.0021	-.0302	-.0288	-.0319	-.0294	-.0296	-.0203	-.0282
Rep #2	-.0908	-.0039	-.0302	-.0284	-.0345	-.0282	-.0292	-.0224	-.0280
Rep #3	-.1130	-.0004	-.0299	-.0280	-.0337	-.0299	-.0294	-.0213	-.0275

11	Unk: GISC15-21724 12/11/2015 14:43:29 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0353**	**.0011**	**-.0295**	**-.0307**	**-.0296**	**-.0287**	**-.0292**	**-.0164**	**-.0283**
Desv. Est.	.0676	.0019	.0005	.0020	.0017	.0008	.0001	.0006	.0007
% RSD	191.7	183.5	1.710	6.507	5.615	2.634	.3510	3.929	2.496
Rep #1	-.0541	-.0005	-.0297	-.0330	-.0280	-.0284	-.0292	-.0162	-.0287
Rep #2	-.0915	.0005	-.0290	-.0300	-.0294	-.0296	-.0291	-.0159	-.0275
Rep #3	.0398	.0032	-.0299	-.0292	-.0313	-.0282	-.0292	-.0172	-.0288
12	Unk: GISC15-21725 12/11/2015 14:45:45 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0598**	**.0026**	**-.0304**	**-.0296**	**-.0358**	**-.0294**	**-.0301**	**-.0182**	**-.0353**
Desv. Est.	.0424	.0009	.0006	.0021	.0012	.0004	.0007	.0006	.0001
% RSD	70.93	33.60	2.075	6.972	3.443	1.394	2.264	3.540	.3280
Rep #1	-.1013	.0017	-.0300	-.0288	-.0344	-.0294	-.0293	-.0187	-.0353
Rep #2	-.0166	.0034	-.0301	-.0320	-.0363	-.0290	-.0303	-.0175	-.0352
Rep #3	-.0613	.0026	-.0311	-.0281	-.0366	-.0299	-.0306	-.0184	-.0354
13	Unk: GISC15-21726 12/11/2015 14:47:57 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0398**	**.0013**	**-.0310**	**-.0316**	**-.0361**	**-.0303**	**-.0302**	**-.0169**	**-.0266**
Desv. Est.	.0554	.0018	.0001	.0017	.0012	.0005	.0002	.0008	.0006
% RSD	139.2	136.7	.2278	5.227	3.420	1.488	.6621	4.843	2.266
Rep #1	.0038	.0006	-.0309	-.0326	-.0349	-.0298	-.0300	-.0174	-.0270
Rep #2	-.1021	.0033	-.0310	-.0325	-.0361	-.0307	-.0304	-.0160	-.0270
Rep #3	-.0210	-.0001	-.0311	-.0297	-.0374	-.0303	-.0302	-.0174	-.0259
14	Unk: GISC15-21726-R 12/11/2015 14:50:07 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0312**	**.0000**	**-.0311**	**-.0316**	**-.0346**	**-.0304**	**-.0304**	**-.0180**	**-.0263**
Desv. Est.	.0596	.0012	.0000	.0021	.0018	.0003	.0001	.0015	.0001
% RSD	191.3	7224.	.1511	6.505	5.076	1.101	.3680	8.566	.2750
Rep #1	-.0984	-.0005	-.0311	-.0339	-.0363	-.0300	-.0305	-.0188	-.0264
Rep #2	.0150	-.0009	-.0311	-.0310	-.0328	-.0306	-.0302	-.0163	-.0262
Rep #3	-.0101	.0014	-.0312	-.0299	-.0345	-.0306	-.0304	-.0191	-.0263
15	Unk: GISC15-21730 12/11/2015 14:52:20 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0091**	**.0022**	**-.0308**	**-.0304**	**-.0083**	**-.0289**	**-.0302**	**-.0218**	**.0163**
Desv. Est.	.0251	.0009	.0000	.0007	.0027	.0003	.0004	.0021	.0005
% RSD	276.6	38.63	.1303	2.175	31.82	1.053	1.206	9.677	3.115
Rep #1	.0038	.0012	-.0308	-.0297	-.0060	-.0290	-.0299	-.0235	.0166
Rep #2	-.0381	.0028	-.0307	-.0307	-.0112	-.0291	-.0301	-.0224	.0157
Rep #3	.0070	.0026	-.0308	-.0309	-.0077	-.0285	-.0306	-.0194	.0166
16	Unk: GISC15-21752 12/11/2015 14:54:31 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0211**	**-.0063**	**-.0310**	**-.0289**	**-.0210**	**-.0303**	**-.0299**	**-.0212**	**-.0279**

+ 16.1	QC: QC 12/11/2015 14:46:27 CONC D MP-151112: AGUA:								
2015-11-12	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	.3943	.4208	.3868	.3938	.4007	.3757	.3759	.4207	.4118
Desv. Est.	.0145	.0021	.0011	.0049	.0056	.0028	.0009	.0002	.0013
% RSD	3.690	.5004	.2879	1.244	1.389	.7560	.2445	.0378	.3086
Rep #1	.3969	.4193	.3881	.3993	.4036	.3765	.3763	.4206	.4122
Rep #2	.4074	.4199	.3860	.3923	.4042	.3781	.3749	.4206	.4103
Rep #3	.3786	.4232	.3863	.3898	.3943	.3726	.3766	.4209	.4128
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

Desv. Est.	.0709	.0008	.0002	.0018	.0039	.0003	.0000	.0010	.0004
% RSD	336.3	12.84	.5710	6.269	18.51	1.083	.1045	4.735	1.416
Rep #1	.0590	-.0065	-.0308	-.0309	-.0238	-.0300	-.0299	-.0222	-.0282
Rep #2	-.0759	-.0069	-.0311	-.0273	-.0227	-.0305	-.0299	-.0202	-.0281
Rep #3	-.0464	-.0054	-.0311	-.0286	-.0166	-.0305	-.0299	-.0211	-.0274
17	Unk: GISC15-21759 12/11/2015 14:56:42 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0409**	**-.0053**	**-.0307**	**-.0211**	**-.0336**	**-.0279**	**-.0296**	**-.0230**	**-.0330**
Desv. Est.	.0155	.0015	.0001	.0024	.0012	.0004	.0004	.0010	.0004
% RSD	38.02	27.69	.4155	11.55	3.422	1.443	1.499	4.156	1.332
Rep #1	-.0352	-.0055	-.0306	-.0185	-.0330	-.0276	-.0291	-.0241	-.0334
Rep #2	-.0290	-.0066	-.0308	-.0233	-.0329	-.0279	-.0300	-.0229	-.0332
Rep #3	-.0584	-.0037	-.0306	-.0215	-.0349	-.0284	-.0297	-.0222	-.0325
18	Unk: GISC15-21760 12/11/2015 14:58:56 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.1183**	**-.0065**	**-.0309**	**-.0197**	**-.0276**	**-.0275**	**-.0299**	**-.0240**	**-.0362**
Desv. Est.	.0572	.0014	.0001	.0003	.0011	.0006	.0004	.0003	.0003
% RSD	48.31	21.03	.3432	1.686	3.903	2.056	1.477	1.318	.8049
Rep #1	-.1359	-.0080	-.0308	-.0194	-.0284	-.0275	-.0295	-.0243	-.0364
Rep #2	-.0544	-.0058	-.0309	-.0200	-.0264	-.0269	-.0300	-.0237	-.0363
Rep #3	-.1646	-.0056	-.0310	-.0197	-.0281	-.0281	-.0304	-.0241	-.0358
19	Unk: GISC15-21761 12/11/2015 15:01:06 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0573**	**-.0061**	**-.0310**	**-.0203**	**-.0306**	**-.0291**	**-.0292**	**-.0237**	**-.0366**
Desv. Est.	.0434	.0012	.0002	.0021	.0021	.0005	.0003	.0002	.0002
% RSD	75.64	19.00	.6513	10.15	6.817	1.641	1.050	.9897	.4848
Rep #1	-.0242	-.0048	-.0308	-.0182	-.0319	-.0287	-.0288	-.0240	-.0365
Rep #2	-.1064	-.0071	-.0312	-.0223	-.0282	-.0291	-.0292	-.0237	-.0368
Rep #3	-.0413	-.0064	-.0309	-.0205	-.0317	-.0296	-.0294	-.0235	-.0365
20	Unk: GISC15-21769 12/11/2015 15:03:15 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0748**	**-.0080**	**-.0309**	**-.0276**	**-.0359**	**-.0301**	**-.0304**	**-.0181**	**.0306**
Desv. Est.	.0765	.0030	.0000	.0016	.0008	.0001	.0003	.0013	.0013
% RSD	102.3	37.61	.0980	5.774	2.155	.2322	.8873	7.035	4.095
Rep #1	-.1581	-.0047	-.0309	-.0261	-.0362	-.0301	-.0307	-.0167	.0309
Rep #2	-.0075	-.0107	-.0309	-.0275	-.0351	-.0302	-.0302	-.0183	.0317
Rep #3	-.0588	-.0085	-.0309	-.0292	-.0366	-.0300	-.0302	-.0192	.0292
21	Unk: GISC15-21778 12/11/2015 15:05:25 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0719**	**-.0034**	**-.0308**	**-.0319**	**-.0355**	**.2609**	**-.0299**	**-.0215**	**-.0367**
Desv. Est.	.0236	.0017	.0001	.0012	.0007	.0075	.0004	.0009	.0005
% RSD	32.87	50.47	.4301	3.891	2.037	2.887	1.463	4.224	1.390

Rep #1	-.0992	-.0051	-.0308	-.0307	-.0353	.2524	-.0295	-.0225	-.0373
Rep #2	-.0577	-.0035	-.0310	-.0318	-.0349	.2635	-.0300	-.0209	-.0365
Rep #3	-.0588	-.0016	-.0307	-.0332	-.0363	.2668	-.0303	-.0209	-.0363
22	Unk: GISC15-21779 12/11/2015 15:07:09 CONC								
	D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0525**	**-.0081**	**-.0311**	**-.0298**	**-.0350**	**-.0302**	**-.0304**	**-.0192**	**-.0224**
Desv. Est.	.0091	.0008	.0001	.0036	.0022	.0002	.0005	.0009	.0006
% RSD	17.28	10.00	.4517	12.12	6.290	.7149	1.586	4.793	2.724
Rep #1	-.0628	-.0089	-.0312	-.0261	-.0374	-.0303	-.0308	-.0202	-.0231
Rep #2	-.0457	-.0073	-.0313	-.0300	-.0331	-.0304	-.0307	-.0192	-.0223
Rep #3	-.0490	-.0080	-.0310	-.0334	-.0344	-.0300	-.0299	-.0183	-.0218
23	Unk: GISC15-21786 12/11/2015 15:07:35 CONC								
	D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0555**	**-.0041**	**-.0311**	**-.0313**	**-.0344**	**.4797**	**-.0297**	**-.0221**	**-.0366**
Desv. Est.	.0463	.0007	.0001	.0015	.0015	.0081	.0003	.0008	.0001
% RSD	83.40	16.50	.2718	4.949	4.457	1.681	1.004	3.441	.2498
Rep #1	-.0021	-.0034	-.0311	-.0331	-.0340	.4890	-.0301	-.0213	-.0366
Rep #2	-.0832	-.0042	-.0312	-.0306	-.0361	.4743	-.0295	-.0227	-.0367
Rep #3	-.0813	-.0048	-.0310	-.0302	-.0331	.4758	-.0297	-.0224	-.0366
24	Unk: GISC15-21795 12/11/2015 15:09:15 CONC								
	D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0404**	**-.0088**	**-.0312**	**-.0291**	**-.0364**	**-.0305**	**-.0306**	**-.0198**	**.0297**
Desv. Est.	.0636	.0017	.0001	.0017	.0017	.0005	.0002	.0007	.0005
% RSD	157.7	18.88	.4091	5.871	4.548	1.529	.7127	3.672	1.808
Rep #1	-.1126	-.0072	-.0310	-.0273	-.0345	-.0300	-.0304	-.0198	.0293
Rep #2	.0074	-.0105	-.0313	-.0293	-.0371	-.0310	-.0307	-.0206	.0303
Rep #3	-.0159	-.0088	-.0312	-.0306	-.0375	-.0306	-.0308	-.0191	.0294
25	Unk: GISC15-21795-R 12/11/2015 15:11:25 CONC								
	D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0706**	**-.0086**	**-.0312**	**-.0291**	**-.0331**	**-.0299**	**-.0306**	**-.0193**	**-.0258**
Desv. Est.	.0300	.0013	.0002	.0009	.0027	.0002	.0002	.0005	.0003
% RSD	42.53	15.26	.5388	3.069	8.190	.7443	.7141	2.677	1.334
Rep #1	-.1006	-.0096	-.0311	-.0284	-.0301	-.0297	-.0308	-.0188	-.0259
Rep #2	-.0406	-.0092	-.0314	-.0289	-.0339	-.0300	-.0303	-.0198	-.0260
Rep #3	-.0704	-.0071	-.0312	-.0301	-.0353	-.0301	-.0306	-.0194	-.0254
26	Unk: GISC15-21808 12/11/2015 15:13:35 CONC								
	D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0767**	**-.0095**	**-.0313**	**-.0265**	**-.0317**	**-.0283**	**-.0300**	**-.0191**	**.2435**
Desv. Est.	.0213	.0023	.0001	.0011	.0011	.0002	.0001	.0009	.0019
% RSD	27.70	24.46	.3196	4.231	3.584	.6755	.3138	4.667	.7775
Rep #1	-.0904	-.0095	-.0312	-.0254	-.0311	-.0285	-.0300	-.0202	.2450
Rep #2	-.0875	-.0072	-.0313	-.0265	-.0310	-.0281	-.0300	-.0186	.2441

+ 26.1

QC: QC 12/11/2015 15:08:07 CONC
D MP-151112: AGUA:

2015-11-12	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Linea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	.3931	.3971	.4004	.4024	.4055	.3988	.3979	.3961	.3981
Desv. Est.	.0078	.0042	.0022	.0053	.0040	.0008	.0020	.0001	.0015
% RSD	1.984	1.070	.5375	1.318	.9764	.2053	.4938	.0166	.3893
Rep #1	.3980	.3969	.4023	.3995	.4067	.3986	.3998	.3962	.3992
Rep #2	.3842	.3929	.3981	.3991	.4011	.3980	.3958	.3962	.3963
Rep #3	.3973	.4014	.4008	.4085	.4087	.3996	.3981	.3961	.3986
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

Rep #3	-.0522	-.0119	-.0314	-.0277	-.0330	-.0282	-.0298	-.0186	.2414
27	Unk: GISC15-21821 12/11/2015 15:15:19 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0663**	**-.0076**	**-.0313**	**-.0252**	**-.0349**	**-.0288**	**-.0302**	**-.0197**	**.2382**
Desv. Est.	.0564	.0012	.0001	.0009	.0015	.0003	.0003	.0006	.0077
% RSD	84.99	15.14	.3866	3.541	4.357	.9455	.9153	3.195	3.220
Rep #1	-.0919	-.0089	-.0313	-.0245	-.0339	-.0285	-.0299	-.0198	.2468
Rep #2	-.1053	-.0068	-.0315	-.0262	-.0342	-.0289	-.0305	-.0190	.2320
Rep #3	-.0017	-.0072	-.0312	-.0250	-.0367	-.0290	-.0302	-.0202	.2359
28	Unk: GISC15-21828 12/11/2015 15:16:25 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0760**	**-.0097**	**-.0314**	**-.0203**	**-.0351**	**-.0308**	**-.0305**	**-.0201**	**-.0271**
Desv. Est.	.0298	.0016	.0001	.0008	.0010	.0002	.0001	.0009	.0002
% RSD	39.23	16.43	.3065	3.936	2.746	.7591	.4348	4.390	.6757
Rep #1	-.1093	-.0079	-.0314	-.0195	-.0359	-.0305	-.0304	-.0203	-.0270
Rep #2	-.0668	-.0110	-.0315	-.0211	-.0341	-.0310	-.0306	-.0191	-.0273
Rep #3	-.0519	-.0101	-.0314	-.0204	-.0354	-.0308	-.0306	-.0208	-.0270
29	Unk: GISC15-21832 12/11/2015 15:18:44 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0112**	**-.0064**	**-.0313**	**-.0319**	**-.0360**	**-.0308**	**-.0305**	**-.0228**	**-.0251**
Desv. Est.	.0107	.0023	.0002	.0007	.0008	.0003	.0003	.0005	.0001
% RSD	96.24	36.60	.4996	2.105	2.301	.9202	.8959	2.170	.5794
Rep #1	-.0166	-.0090	-.0315	-.0317	-.0350	-.0310	-.0304	-.0223	-.0253
Rep #2	-.0181	-.0045	-.0312	-.0327	-.0365	-.0309	-.0303	-.0228	-.0251
Rep #3	.0012	-.0057	-.0314	-.0315	-.0364	-.0305	-.0308	-.0233	-.0250
30	Unk: GISC15-21855 12/11/2015 15:21:01 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0329**	**-.0068**	**-.0313**	**-.0290**	**-.0231**	**-.0268**	**-.0301**	**-.0271**	**-.0404**
Desv. Est.	.0469	.0007	.0000	.0015	.0019	.0004	.0004	.0009	.0000
% RSD	142.8	9.763	.0479	5.133	8.443	1.631	1.265	3.333	.0600
Rep #1	-.0341	-.0062	-.0313	-.0292	-.0214	-.0263	-.0301	-.0268	-.0404
Rep #2	-.0792	-.0068	-.0313	-.0275	-.0252	-.0270	-.0298	-.0281	-.0404
Rep #3	.0147	-.0076	-.0313	-.0304	-.0227	-.0272	-.0305	-.0264	-.0404
31	Unk: GISC15-21886 12/11/2015 15:23:22 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0285**	**-.0055**	**-.0315**	**-.0321**	**-.0353**	**-.0307**	**-.0305**	**-.0262**	**-.0402**
Desv. Est.	.0374	.0013	.0001	.0023	.0005	.0002	.0001	.0016	.0002
% RSD	131.2	23.19	.4254	7.272	1.473	.5521	.4438	6.006	.5921
Rep #1	-.0643	-.0066	-.0314	-.0295	-.0347	-.0307	-.0304	-.0277	-.0404
Rep #2	.0103	-.0041	-.0316	-.0340	-.0358	-.0309	-.0305	-.0265	-.0401
Rep #3	-.0315	-.0057	-.0314	-.0329	-.0353	-.0306	-.0307	-.0246	-.0400

32	Unk: GISC15-21902 12/11/2015 15:25:32 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0576**	**-.0053**	**-.0314**	**-.0334**	**-.0344**	**-.0305**	**-.0301**	**-.0241**	**-.0397**
Desv. Est.	.0434	.0003	.0001	.0009	.0010	.0006	.0001	.0004	.0001
% RSD	75.35	6.490	.1920	2.548	2.858	1.935	.2568	1.685	.2079
Rep #1	-.0079	-.0051	-.0314	-.0327	-.0354	-.0310	-.0301	-.0238	-.0398
Rep #2	-.0879	-.0052	-.0314	-.0344	-.0343	-.0307	-.0301	-.0246	-.0398
Rep #3	-.0770	-.0057	-.0315	-.0332	-.0335	-.0298	-.0302	-.0241	-.0396
33	Unk: GISC15-21912 12/11/2015 15:27:45 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0656**	**-.0097**	**-.0315**	**-.0269**	**-.0379**	**-.0313**	**-.0306**	**-.0271**	**-.0033**
Desv. Est.	.0568	.0003	.0001	.0029	.0019	.0004	.0004	.0005	.0013
% RSD	86.65	3.566	.3682	10.65	4.934	1.119	1.318	1.682	38.76
Rep #1	-.0592	-.0100	-.0314	-.0272	-.0371	-.0314	-.0303	-.0276	-.0019
Rep #2	-.0122	-.0096	-.0316	-.0239	-.0401	-.0317	-.0306	-.0269	-.0038
Rep #3	-.1254	-.0094	-.0314	-.0296	-.0367	-.0310	-.0311	-.0268	-.0043
34	Unk: GISC15-21955 12/11/2015 15:30:02 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0388**	**-.0071**	**-.0315**	**-.0310**	**-.0366**	**-.0306**	**-.0308**	**-.0265**	**-.0380**
Desv. Est.	.0396	.0015	.0001	.0002	.0021	.0002	.0001	.0005	.0002
% RSD	102.1	21.79	.2226	.7342	5.827	.5628	.3148	1.808	.4050
Rep #1	-.0446	-.0053	-.0316	-.0310	-.0362	-.0305	-.0307	-.0268	-.0382
Rep #2	.0034	-.0080	-.0314	-.0308	-.0347	-.0305	-.0308	-.0268	-.0379
Rep #3	-.0752	-.0078	-.0315	-.0312	-.0389	-.0308	-.0309	-.0259	-.0381
35	Unk: ESTANDAR DE CHEQUEO 12/11/2015 15:31:36 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.3512**	**.3430**	**.3380**	**.3820**	**.3698**	**.3851**	**.3329**	**.3230**	**.4052**
Desv. Est.	.0503	.1207	.1240	.0078	.0053	.0056	.1217	.1192	.1460
% RSD	14.33	35.20	36.70	2.039	1.441	1.463	36.55	36.92	36.04
Rep #1	.4093	.4094	.4120	.3771	.3666	.3805	.4052	.3944	.4920
Rep #2	.3238	.4160	.4071	.3910	.3759	.3914	.4010	.3893	.4870
Rep #3	.3205	.2037	.1948	.3779	.3668	.3833	.1924	.1854	.2366
36	Unk: GISC15-21956 12/11/2015 15:32:26 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0353**	**-.0045**	**-.0314**	**-.0327**	**-.0366**	**-.0314**	**-.0307**	**-.0249**	**-.0353**
Desv. Est.	.0078	.0016	.0000	.0029	.0004	.0003	.0002	.0002	.0006
% RSD	22.05	34.46	.0985	8.789	.9715	.8257	.4905	.7181	1.588
Rep #1	-.0312	-.0055	-.0314	-.0301	-.0369	-.0311	-.0309	-.0249	-.0360
Rep #2	-.0304	-.0054	-.0314	-.0358	-.0366	-.0316	-.0307	-.0248	-.0351
Rep #3	-.0442	-.0027	-.0314	-.0322	-.0362	-.0315	-.0306	-.0251	-.0350
37	Unk: GISC15-21956-R 12/11/2015 15:34:44 CONC D MP-151112: AGUA:								

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0600**	**-.0049**	**-.0314**	**-.0311**	**-.0358**	**-.0310**	**-.0307**	**-.0263**	**-.0350**
Desv. Est.	.0454	.0006	.0001	.0016	.0032	.0005	.0001	.0014	.0001
% RSD	75.70	11.76	.2213	5.203	8.999	1.645	.3996	5.265	.1933
Rep #1	-.0643	-.0056	-.0313	-.0293	-.0321	-.0314	-.0306	-.0266	-.0349
Rep #2	-.1032	-.0046	-.0314	-.0323	-.0374	-.0312	-.0308	-.0274	-.0350
Rep #3	-.0126	-.0046	-.0313	-.0318	-.0379	-.0304	-.0308	-.0247	-.0350

38	Unk: GISC15-21964 12/11/2015 15:36:52 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0509**	**.0001**	**-.0309**	**-.0332**	**-.0348**	**-.0307**	**-.0303**	**-.0236**	**-.0413**
Desv. Est.	.0216	.0017	.0000	.0027	.0011	.0002	.0002	.0001	.0003
% RSD	42.48	2220.	.1526	8.137	3.278	.6817	.5819	.3676	.6076
Rep #1	-.0744	.0018	-.0309	-.0301	-.0361	-.0304	-.0304	-.0237	-.0416
Rep #2	-.0464	.0000	-.0309	-.0342	-.0342	-.0308	-.0301	-.0235	-.0413
Rep #3	-.0319	-.0016	-.0309	-.0352	-.0342	-.0308	-.0304	-.0236	-.0411

39	Unk: GISC15-21965 12/11/2015 15:39:03 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0261**	**.0001**	**-.0314**	**-.0336**	**-.0359**	**-.0309**	**-.0310**	**-.0271**	**-.0448**
Desv. Est.	.0038	.0011	.0001	.0025	.0007	.0002	.0003	.0013	.0002
% RSD	14.57	833.2	.4137	7.586	2.024	.7098	.8765	4.850	.4197
Rep #1	-.0279	-.0002	-.0315	-.0354	-.0362	-.0308	-.0308	-.0276	-.0451
Rep #2	-.0286	.0013	-.0314	-.0307	-.0365	-.0307	-.0308	-.0280	-.0448
Rep #3	-.0217	-.0007	-.0313	-.0347	-.0351	-.0312	-.0313	-.0256	-.0447

40	Unk: GISC15-21966 12/11/2015 15:41:28 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0481**	**-.0003**	**-.0314**	**-.0315**	**-.0315**	**-.0305**	**-.0304**	**-.0258**	**-.0385**
Desv. Est.	.0710	.0002	.0001	.0011	.0016	.0002	.0001	.0015	.0001
% RSD	147.5	63.44	.1755	3.580	4.988	.7755	.4220	5.733	.1520
Rep #1	.0259	-.0001	-.0314	-.0326	-.0299	-.0302	-.0303	-.0251	-.0385
Rep #2	-.0548	-.0004	-.0314	-.0315	-.0315	-.0307	-.0306	-.0248	-.0384
Rep #3	-.1155	-.0004	-.0313	-.0304	-.0331	-.0305	-.0304	-.0275	-.0384

41	Unk: GISC15-21984 12/11/2015 15:43:50 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0418**	**-.0007**	**-.0315**	**-.0336**	**-.0338**	**-.0306**	**-.0307**	**-.0278**	**-.0423**
Desv. Est.	.0746	.0007	.0000	.0020	.0011	.0003	.0001	.0009	.0002
% RSD	178.3	99.64	.1535	5.918	3.221	.9716	.2234	3.251	.3711
Rep #1	-.1275	-.0002	-.0315	-.0350	-.0341	-.0305	-.0307	-.0289	-.0425
Rep #2	.0081	-.0005	-.0314	-.0314	-.0348	-.0303	-.0307	-.0271	-.0422
Rep #3	-.0061	-.0016	-.0315	-.0345	-.0326	-.0309	-.0308	-.0275	-.0422

42	Unk: GISC15-21990 12/11/2015 15:45:59 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0841**	**-.0022**	**-.0315**	**-.0319**	**-.0340**	**-.0303**	**-.0307**	**-.0278**	**-.0392**
Desv. Est.	.0266	.0007	.0000	.0016	.0020	.0004	.0001	.0009	.0001
% RSD	31.58	30.34	.1211	5.037	5.868	1.160	.3909	3.265	.3271
Rep #1	-.0693	-.0027	-.0316	-.0334	-.0362	-.0307	-.0305	-.0276	-.0394
Rep #2	-.1148	-.0023	-.0315	-.0321	-.0332	-.0302	-.0307	-.0288	-.0391
Rep #3	-.0683	-.0014	-.0315	-.0302	-.0325	-.0301	-.0308	-.0271	-.0392
43	Unk: GISC15-21992 12/11/2015 15:48:23 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0507**	**-.0011**	**-.0315**	**-.0329**	**-.0333**	**-.0305**	**-.0297**	**-.0275**	**-.0412**
Desv. Est.	.0349	.0008	.0000	.0006	.0009	.0000	.0002	.0002	.0001
% RSD	68.90	71.95	.1164	1.824	2.770	.0875	.6160	.6172	.1447
Rep #1	-.0399	-.0018	-.0315	-.0329	-.0339	-.0304	-.0299	-.0273	-.0413
Rep #2	-.0224	-.0014	-.0314	-.0323	-.0323	-.0305	-.0295	-.0276	-.0412
Rep #3	-.0897	-.0002	-.0315	-.0335	-.0338	-.0305	-.0296	-.0275	-.0411
44	Unk: GISC15-22000 12/11/2015 15:50:36 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0672**	**-.0012**	**-.0315**	**-.0319**	**-.0357**	**-.0304**	**-.0306**	**-.0270**	**-.0381**
Desv. Est.	.0110	.0008	.0000	.0005	.0009	.0002	.0001	.0011	.0002
% RSD	16.35	66.40	.0702	1.462	2.582	.5499	.2264	4.141	.6305
Rep #1	-.0555	-.0004	-.0315	-.0317	-.0350	-.0305	-.0307	-.0282	-.0384
Rep #2	-.0773	-.0011	-.0315	-.0324	-.0368	-.0304	-.0305	-.0262	-.0381
Rep #3	-.0686	-.0020	-.0315	-.0315	-.0354	-.0302	-.0306	-.0265	-.0379
45	Unk: GISC15-22069 12/11/2015 15:52:30 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0822**	**-.0037**	**-.0315**	**-.0337**	**-.0331**	**-.0275**	**-.0288**	**-.0225**	**.3527**
Desv. Est.	.0076	.0015	.0000	.0014	.0030	.0004	.0004	.0007	.0005
% RSD	9.285	41.34	.0626	4.151	9.130	1.365	1.351	3.031	.1325
Rep #1	-.0795	-.0023	-.0314	-.0328	-.0366	-.0273	-.0285	-.0232	.3529
Rep #2	-.0763	-.0053	-.0315	-.0329	-.0310	-.0272	-.0286	-.0218	.3531
Rep #3	-.0908	-.0035	-.0315	-.0353	-.0317	-.0279	-.0292	-.0224	.3522
46	Unk: GISC15-22077 12/11/2015 15:52:47 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0232**	**-.0040**	**-.0314**	**-.0317**	**-.0261**	**-.0235**	**-.0306**	**-.0229**	**.1598**
Desv. Est.	.0324	.0007	.0000	.0015	.0003	.0006	.0006	.0025	.0010
% RSD	140.1	16.98	.1168	4.666	1.137	2.380	1.922	10.78	.6458
Rep #1	-.0046	-.0032	-.0314	-.0300	-.0265	-.0229	-.0310	-.0242	.1608
Rep #2	-.0042	-.0045	-.0314	-.0326	-.0261	-.0237	-.0299	-.0201	.1597
Rep #3	-.0606	-.0043	-.0315	-.0325	-.0259	-.0240	-.0309	-.0245	.1587
47	Unk: GISC15-22078 12/11/2015 15:54:42 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0119**	**-.0046**	**-.0315**	**-.0327**	**-.0339**	**-.0268**	**-.0277**	**-.0217**	**.3092**

+ 47.1	QC: QC 12/11/2015 15:53:16 CONC D MP-151112: AGUA:								
2015-11-12	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.3744**	**.4316**	**.3857**	**.3941**	**.3996**	**.3708**	**.3709**	**.4272**	**.4167**
Desv. Est.	.0086	.0035	.0004	.0031	.0033	.0020	.0006	.0014	.0008
% RSD	2.295	.8141	.0963	.7992	.8185	.5423	.1498	.3374	.1857
Rep #1	.3836	.4354	.3854	.3955	.3974	.3700	.3715	.4256	.4163
Rep #2	.3666	.4284	.3855	.3963	.3981	.3693	.3709	.4278	.4161
Rep #3	.3732	.4310	.3861	.3905	.4034	.3731	.3704	.4283	.4176
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

Desv. Est.	.0699	.0010	.0001	.0009	.0012	.0002	.0002	.0007	.0019
% RSD	588.6	21.44	.3353	2.779	3.475	.6005	.8494	3.096	.6240
Rep #1	.0681	-.0056	-.0315	-.0331	-.0343	-.0270	-.0275	-.0218	.3101
Rep #2	-.0424	-.0046	-.0316	-.0334	-.0349	-.0268	-.0279	-.0211	.3106
Rep #3	-.0613	-.0036	-.0314	-.0317	-.0326	-.0266	-.0275	-.0224	.3070
48	Unk: GISC15-22078-R 12/11/2015 15:54:59 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0696**	**-.0045**	**-.0315**	**-.0316**	**-.0348**	**-.0275**	**-.0284**	**-.0223**	**.3550**
Desv. Est.	.0411	.0018	.0001	.0010	.0011	.0005	.0001	.0006	.0023
% RSD	59.08	40.36	.3901	3.016	3.263	1.726	.2211	2.766	.6426
Rep #1	-.1013	-.0063	-.0316	-.0325	-.0342	-.0269	-.0285	-.0216	.3575
Rep #2	-.0843	-.0027	-.0315	-.0318	-.0341	-.0278	-.0284	-.0226	.3545
Rep #3	-.0232	-.0044	-.0313	-.0306	-.0361	-.0277	-.0285	-.0226	.3531
49	Unk: GISC15-22079 12/11/2015 15:56:51 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0452**	**-.0029**	**-.0316**	**-.0323**	**-.0330**	**-.0301**	**-.0308**	**-.0185**	**-.0367**
Desv. Est.	.0175	.0014	.0000	.0019	.0004	.0004	.0002	.0008	.0002
% RSD	38.78	49.47	.1421	6.024	1.324	1.426	.4930	4.275	.6655
Rep #1	-.0472	-.0043	-.0316	-.0328	-.0328	-.0297	-.0310	-.0191	-.0370
Rep #2	-.0268	-.0027	-.0315	-.0339	-.0335	-.0305	-.0307	-.0187	-.0366
Rep #3	-.0617	-.0015	-.0315	-.0301	-.0328	-.0301	-.0307	-.0176	-.0365
50	Unk: GISC15-22080 12/11/2015 15:59:00 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0086**	**-.0015**	**-.0315**	**-.0300**	**-.0345**	**-.0309**	**-.0298**	**-.0244**	**-.0444**
Desv. Est.	.0563	.0026	.0001	.0023	.0001	.0002	.0001	.0004	.0002
% RSD	654.1	169.2	.4598	7.550	.3724	.8101	.3563	1.620	.3551
Rep #1	-.0668	-.0023	-.0314	-.0275	-.0347	-.0310	-.0298	-.0241	-.0446
Rep #2	-.0046	.0013	-.0316	-.0306	-.0344	-.0310	-.0300	-.0242	-.0444
Rep #3	.0456	-.0036	-.0314	-.0319	-.0345	-.0306	-.0298	-.0248	-.0442
51	Unk: GISC15-22081 12/11/2015 16:01:07 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0331**	**-.0024**	**-.0313**	**-.0277**	**-.0330**	**-.0306**	**-.0306**	**-.0255**	**-.0416**
Desv. Est.	.0483	.0017	.0001	.0021	.0018	.0002	.0004	.0011	.0001
% RSD	146.0	72.32	.1759	7.514	5.400	.6919	1.227	4.319	.2662
Rep #1	-.0373	-.0043	-.0312	-.0253	-.0316	-.0308	-.0301	-.0266	-.0417
Rep #2	.0172	-.0010	-.0313	-.0287	-.0350	-.0308	-.0307	-.0244	-.0416
Rep #3	-.0792	-.0018	-.0314	-.0290	-.0324	-.0304	-.0308	-.0256	-.0415
52	Unk: GISC15-22082 12/11/2015 16:03:12 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0295**	**-.0030**	**-.0314**	**-.0298**	**-.0354**	**-.0305**	**-.0308**	**-.0234**	**-.0450**
Desv. Est.	.0889	.0012	.0001	.0025	.0006	.0005	.0005	.0006	.0002
% RSD	301.6	39.43	.2124	8.259	1.645	1.475	1.633	2.358	.5261

Rep #1	.0074	-.0024	-.0315	-.0301	-.0349	-.0308	-.0313	-.0240	-.0448
Rep #2	-.1308	-.0022	-.0313	-.0321	-.0360	-.0300	-.0307	-.0229	-.0450
Rep #3	.0350	-.0043	-.0314	-.0272	-.0353	-.0308	-.0303	-.0232	-.0453
53	Unk: GISC15-22083 12/11/2015 16:05:17 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0028**	**-.0043**	**-.0315**	**-.0314**	**-.0341**	**-.0304**	**-.0297**	**-.0228**	**-.0434**
Desv. Est.	.0373	.0014	.0000	.0011	.0020	.0004	.0004	.0007	.0003
% RSD	1337.	32.72	.1156	3.442	5.811	1.287	1.481	3.217	.6174
Rep #1	-.0344	-.0054	-.0314	-.0312	-.0327	-.0308	-.0302	-.0223	-.0434
Rep #2	.0383	-.0047	-.0315	-.0305	-.0364	-.0303	-.0295	-.0225	-.0437
Rep #3	-.0122	-.0027	-.0315	-.0326	-.0333	-.0300	-.0295	-.0236	-.0432
54	Unk: GISC15-22084 12/11/2015 16:05:29 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0125**	**-.0051**	**-.0314**	**-.0305**	**-.0350**	**-.0305**	**-.0306**	**-.0222**	**-.0233**
Desv. Est.	.0580	.0014	.0001	.0021	.0022	.0005	.0003	.0005	.0012
% RSD	464.3	28.13	.2783	6.998	6.416	1.648	1.024	2.459	5.270
Rep #1	.0252	-.0063	-.0314	-.0326	-.0376	-.0310	-.0306	-.0219	-.0248
Rep #2	.0630	-.0035	-.0315	-.0284	-.0333	-.0305	-.0309	-.0228	-.0226
Rep #3	-.0508	-.0055	-.0313	-.0305	-.0342	-.0300	-.0303	-.0218	-.0227
55	Unk: GISC15-22085 12/11/2015 16:07:55 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0162**	**-.0062**	**-.0315**	**-.0319**	**-.0337**	**-.0310**	**-.0306**	**-.0213**	**-.0313**
Desv. Est.	.0361	.0012	.0000	.0010	.0014	.0005	.0001	.0011	.0003
% RSD	222.0	19.51	.1503	3.144	4.156	1.484	.4368	5.231	.8928
Rep #1	-.0115	-.0068	-.0314	-.0329	-.0345	-.0315	-.0306	-.0218	-.0316
Rep #2	.0172	-.0048	-.0315	-.0320	-.0321	-.0307	-.0308	-.0200	-.0313
Rep #3	-.0544	-.0071	-.0315	-.0309	-.0346	-.0308	-.0305	-.0221	-.0311
56	Unk: GISC15-22086 12/11/2015 16:10:08 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0145**	**-.0067**	**-.0315**	**-.0329**	**-.0360**	**-.0305**	**-.0302**	**-.0223**	**-.0042**
Desv. Est.	.0850	.0010	.0001	.0022	.0016	.0004	.0002	.0005	.0013
% RSD	584.2	15.31	.3783	6.685	4.484	1.187	.8093	2.237	30.05
Rep #1	-.0835	-.0055	-.0316	-.0349	-.0360	-.0306	-.0304	-.0221	-.0039
Rep #2	.0667	-.0072	-.0315	-.0332	-.0343	-.0308	-.0303	-.0219	-.0031
Rep #3	.0605	-.0073	-.0313	-.0305	-.0376	-.0301	-.0300	-.0229	-.0056
57	Unk: GISC15-22087 12/11/2015 16:12:13 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0097**	**-.0058**	**-.0315**	**-.0317**	**-.0353**	**-.0310**	**-.0305**	**-.0228**	**-.0385**
Desv. Est.	.0240	.0012	.0001	.0029	.0006	.0004	.0001	.0008	.0002
% RSD	247.9	20.17	.4338	9.010	1.641	1.164	.3154	3.605	.4798
Rep #1	-.0122	-.0054	-.0316	-.0348	-.0349	-.0307	-.0304	-.0221	-.0384
Rep #2	.0059	-.0071	-.0313	-.0292	-.0359	-.0310	-.0305	-.0225	-.0388

+ [signature] 57.1

QC: QC 12/11/2015 16:14:46 CONC
D MP-151112: AGUA:

2015/11/12	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.3853**	**.4306**	**.3834**	**.3923**	**.3969**	**.3681**	**.3678**	**.4285**	**.4175**
Desv. Est.	.0136	.0022	.0016	.0013	.0067	.0051	.0018	.0029	.0011
% RSD	3.525	.5208	.4058	.3275	1.686	1.386	.4980	.6693	.2709
Rep #1	.3704	.4332	.3848	.3938	.4041	.3740	.3692	.4317	.4188
Rep #2	.3887	.4296	.3817	.3915	.3910	.3659	.3657	.4264	.4168
Rep #3	.3969	.4290	.3837	.3915	.3955	.3646	.3685	.4273	.4168
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

Rep #3	.0354	-.0049	-.0316	-.0311	-.0350	-.0314	-.0306	-.0237	-.0384
58	Unk: GISC15-22088 12/11/2015 16:16:23 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0070**	**-.0074**	**-.0315**	**-.0254**	**-.0367**	**-.0309**	**-.0308**	**-.0224**	**-.0253**
Desv. Est.	.0233	.0015	.0000	.0029	.0003	.0001	.0002	.0009	.0012
% RSD	331.4	19.62	.1551	11.59	.8523	.2409	.5968	3.878	4.930
Rep #1	-.0330	-.0075	-.0315	-.0235	-.0363	-.0309	-.0306	-.0227	-.0260
Rep #2	.0121	-.0088	-.0315	-.0287	-.0369	-.0308	-.0308	-.0230	-.0260
Rep #3	-.0002	-.0059	-.0315	-.0239	-.0368	-.0308	-.0310	-.0214	-.0238
59	Unk: GISC15-22088-R 12/11/2015 16:18:28 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0880**	**-.0050**	**-.0315**	**-.0229**	**-.0347**	**-.0305**	**-.0308**	**-.0218**	**-.0233**
Desv. Est.	.0329	.0013	.0001	.0022	.0012	.0003	.0001	.0016	.0003
% RSD	37.33	26.14	.1710	9.456	3.322	.9209	.4528	7.319	1.379
Rep #1	-.0508	-.0054	-.0315	-.0253	-.0335	-.0308	-.0307	-.0217	-.0236
Rep #2	-.1003	-.0035	-.0316	-.0211	-.0349	-.0302	-.0309	-.0235	-.0231
Rep #3	-.1130	-.0060	-.0315	-.0224	-.0358	-.0305	-.0307	-.0203	-.0231
60	Unk: GISC15-22089 12/11/2015 16:20:33 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0307**	**-.0065**	**-.0315**	**-.0315**	**-.0385**	**-.0311**	**-.0310**	**-.0218**	**-.0378**
Desv. Est.	.0539	.0010	.0001	.0006	.0011	.0001	.0002	.0003	.0001
% RSD	175.6	15.80	.2126	1.960	2.799	.2006	.5177	1.386	.2593
Rep #1	-.0890	-.0074	-.0314	-.0309	-.0391	-.0311	-.0309	-.0214	-.0377
Rep #2	-.0202	-.0054	-.0315	-.0316	-.0391	-.0312	-.0309	-.0218	-.0379
Rep #3	.0172	-.0067	-.0315	-.0321	-.0372	-.0310	-.0312	-.0220	-.0377
61	Unk: GISC15-22090 12/11/2015 16:22:37 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0179**	**-.0042**	**-.0315**	**-.0324**	**-.0182**	**-.0296**	**-.0304**	**-.0226**	**-.0437**
Desv. Est.	.0350	.0013	.0001	.0035	.0013	.0002	.0001	.0017	.0001
% RSD	195.1	30.55	.2998	10.65	7.144	.5573	.2966	7.316	.2803
Rep #1	-.0199	-.0052	-.0314	-.0291	-.0197	-.0296	-.0304	-.0238	-.0436
Rep #2	.0492	-.0027	-.0314	-.0322	-.0171	-.0294	-.0304	-.0233	-.0438
Rep #3	.0245	-.0046	-.0316	-.0360	-.0179	-.0298	-.0303	-.0207	-.0437
62	Unk: GISC15-22091 12/11/2015 16:24:47 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0433**	**-.0022**	**-.0314**	**-.0315**	**-.0345**	**-.0306**	**-.0310**	**-.0221**	**-.0480**
Desv. Est.	.0622	.0031	.0000	.0008	.0043	.0002	.0000	.0004	.0002
% RSD	143.8	136.3	.1140	2.536	12.46	.7779	.0875	1.588	.5015
Rep #1	-.1108	.0008	-.0314	-.0321	-.0296	-.0308	-.0310	-.0217	-.0482
Rep #2	.0118	-.0053	-.0315	-.0306	-.0368	-.0306	-.0309	-.0222	-.0478
Rep #3	-.0308	-.0021	-.0314	-.0318	-.0372	-.0304	-.0310	-.0224	-.0479

63	Unk: GISC15-22092 12/11/2015 16:26:55 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0661**	**-.0094**	**-.0315**	**-.0297**	**-.0369**	**-.0311**	**-.0311**	**-.0209**	**-.0430**
Desv. Est.	.0325	.0019	.0001	.0027	.0013	.0002	.0003	.0012	.0000
% RSD	49.22	19.74	.3436	9.041	3.506	.7845	.9163	5.580	.0327
Rep #1	-.0624	-.0113	-.0315	-.0328	-.0359	-.0313	-.0309	-.0213	-.0430
Rep #2	-.1003	-.0093	-.0315	-.0287	-.0364	-.0309	-.0310	-.0196	-.0430
Rep #3	-.0355	-.0076	-.0317	-.0277	-.0384	-.0310	-.0314	-.0218	-.0430
64	Unk: GISC15-22149 12/11/2015 16:29:03 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0293**	**-.0037**	**-.0314**	**-.0292**	**-.0360**	**-.0314**	**-.0301**	**-.0198**	**-.0099**
Desv. Est.	.0232	.0011	.0001	.0017	.0006	.0001	.0002	.0008	.0009
% RSD	79.08	28.63	.2347	5.943	1.699	.3928	.7439	3.887	9.040
Rep #1	-.0395	-.0036	-.0313	-.0285	-.0354	-.0316	-.0299	-.0204	-.0091
Rep #2	-.0457	-.0027	-.0314	-.0312	-.0361	-.0314	-.0304	-.0200	-.0097
Rep #3	-.0028	-.0049	-.0315	-.0280	-.0366	-.0313	-.0301	-.0189	-.0109
65	Unk: GISC15-22179 12/11/2015 16:31:14 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0081**	**.0009**	**-.0315**	**-.0292**	**-.0406**	**-.0311**	**-.0311**	**-.0208**	**-.0411**
Desv. Est.	.0334	.0012	.0001	.0014	.0004	.0002	.0006	.0010	.0008
% RSD	411.7	132.5	.2016	4.659	.9793	.7893	1.896	4.683	1.856
Rep #1	.0194	.0023	-.0314	-.0301	-.0402	-.0311	-.0317	-.0218	-.0419
Rep #2	.0016	.0003	-.0316	-.0300	-.0409	-.0309	-.0305	-.0207	-.0411
Rep #3	-.0453	.0001	-.0315	-.0277	-.0407	-.0314	-.0310	-.0199	-.0404
66	Unk: GISC15-22180 12/11/2015 16:32:30 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0804**	**.0004**	**-.0314**	**-.0285**	**-.0397**	**-.0295**	**-.0308**	**-.0202**	**-.0248**
Desv. Est.	.0557	.0013	.0000	.0010	.0017	.0002	.0002	.0008	.0022
% RSD	69.35	319.9	.0431	3.468	4.353	.6796	.7624	3.774	8.710
Rep #1	-.0217	-.0007	-.0314	-.0282	-.0377	-.0296	-.0307	-.0207	-.0271
Rep #2	-.1326	.0018	-.0314	-.0296	-.0403	-.0296	-.0311	-.0207	-.0247
Rep #3	-.0868	.0001	-.0314	-.0277	-.0410	-.0292	-.0307	-.0193	-.0228
67	Unk: GISC15-22196 12/11/2015 16:34:38 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0321**	**-.0076**	**-.0314**	**-.0262**	**-.0353**	**-.0311**	**-.0303**	**-.0209**	**.0396**
Desv. Est.	.0487	.0014	.0000	.0023	.0018	.0006	.0004	.0006	.0013
% RSD	151.5	18.78	.1517	8.831	5.074	1.919	1.369	2.916	3.194
Rep #1	-.0875	-.0060	-.0314	-.0237	-.0344	-.0312	-.0305	-.0204	.0399
Rep #2	.0038	-.0085	-.0314	-.0282	-.0373	-.0316	-.0299	-.0207	.0382
Rep #3	-.0126	-.0083	-.0315	-.0268	-.0341	-.0304	-.0306	-.0216	.0407
68	Unk: GISC15-22197 12/11/2015 16:36:48 CONC D MP-151112: AGUA:								

4- G7.1	QC: QC 12/11/2015 16:38:18 CONC D MP-151112: AGUA:								
2015-11-12	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.3625**	**.4342**	**.3825**	**.3883**	**.3939**	**.3660**	**.3653**	**.4288**	**.4184**
Desv. Est.	.0113	.0011	.0018	.0105	.0028	.0050	.0023	.0016	.0013
% RSD	3.117	.2468	.4729	2.702	.7222	1.367	.6382	.3803	.3041
Rep #1	.3583	.4334	.3843	.3999	.3970	.3714	.3676	.4288	.4194
Rep #2	.3539	.4337	.3807	.3857	.3914	.3650	.3629	.4271	.4170
Rep #3	.3753	.4354	.3826	.3794	.3933	.3616	.3655	.4304	.4189
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0148**	**-.0020**	**-.0315**	**-.0336**	**-.0422**	**-.0307**	**-.0308**	**-.0212**	**-.0420**
Desv. Est.	.0692	.0007	.0001	.0016	.0017	.0003	.0001	.0003	.0005
% RSD	468.1	36.34	.1843	4.695	4.137	.8633	.4164	1.458	1.174
Rep #1	.0579	-.0015	-.0315	-.0354	-.0441	-.0304	-.0309	-.0215	-.0425
Rep #2	-.0799	-.0017	-.0315	-.0328	-.0419	-.0309	-.0307	-.0208	-.0420
Rep #3	-.0224	-.0028	-.0314	-.0325	-.0407	-.0308	-.0308	-.0212	-.0415

69 Unk: GISC15-22203 12/11/2015 16:39:09 CONC
D MP-151112: AGUA:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0229**	**-.0081**	**-.0314**	**-.0309**	**-.0371**	**-.0294**	**-.0304**	**-.0227**	**-.0353**
Desv. Est.	.0394	.0024	.0000	.0009	.0020	.0002	.0007	.0010	.0004
% RSD	172.1	30.39	.1280	2.872	5.448	.7988	2.331	4.610	1.216
Rep #1	.0183	-.0086	-.0315	-.0299	-.0378	-.0293	-.0296	-.0222	-.0355
Rep #2	-.0268	-.0054	-.0314	-.0315	-.0348	-.0293	-.0308	-.0239	-.0356
Rep #3	-.0603	-.0102	-.0314	-.0313	-.0386	-.0297	-.0308	-.0220	-.0349

70 Unk: GISC15-22203-R 12/11/2015 16:41:18 CONC
D MP-151112: AGUA:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0481**	**-.0079**	**-.0316**	**-.0280**	**-.0373**	**-.0297**	**-.0301**	**-.0217**	**-.0334**
Desv. Est.	.0526	.0003	.0000	.0004	.0009	.0003	.0002	.0016	.0001
% RSD	109.3	4.319	.1073	1.390	2.476	1.041	.6476	7.168	.4177
Rep #1	.0099	-.0077	-.0316	-.0284	-.0369	-.0299	-.0302	-.0228	-.0333
Rep #2	-.0926	-.0083	-.0315	-.0281	-.0384	-.0299	-.0299	-.0223	-.0336
Rep #3	-.0617	-.0076	-.0315	-.0276	-.0366	-.0293	-.0301	-.0199	-.0334

71 Unk: GISC15-22204 12/11/2015 16:43:23 CONC
D MP-151112: AGUA:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**.0044**	**-.0061**	**-.0316**	**-.0295**	**-.0357**	**-.0296**	**-.0302**	**-.0212**	**-.0337**
Desv. Est.	.0422	.0008	.0001	.0011	.0034	.0002	.0002	.0003	.0001
% RSD	965.9	12.29	.4361	3.597	9.613	.6458	.6573	1.353	.4107
Rep #1	-.0162	-.0053	-.0315	-.0307	-.0332	-.0296	-.0303	-.0213	-.0337
Rep #2	.0529	-.0064	-.0315	-.0285	-.0343	-.0297	-.0300	-.0209	-.0336
Rep #3	-.0235	-.0067	-.0317	-.0294	-.0396	-.0293	-.0303	-.0215	-.0339

72 Unk: GISC15-22217 12/11/2015 16:45:32 CONC
D MP-151112: AGUA:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0653**	**-.0078**	**-.0313**	**-.0323**	**-.0353**	**-.0305**	**-.0304**	**-.0228**	**-.0381**
Desv. Est.	.0031	.0015	.0001	.0007	.0028	.0002	.0002	.0003	.0002
% RSD	4.755	18.73	.2901	2.304	8.037	.6235	.7979	1.274	.4877
Rep #1	-.0657	-.0063	-.0312	-.0325	-.0348	-.0307	-.0306	-.0225	-.0381
Rep #2	-.0621	-.0079	-.0314	-.0314	-.0328	-.0305	-.0304	-.0231	-.0383
Rep #3	-.0683	-.0092	-.0314	-.0328	-.0384	-.0303	-.0301	-.0228	-.0379

73 Unk: GISC15-22233 12/11/2015 16:47:40 CONC
D MP-151112: AGUA:

	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45

Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0326**	**-.0076**	**-.0315**	**-.0305**	**-.0356**	**-.0306**	**-.0304**	**-.0223**	**-.0442**
Desv. Est.	.0158	.0004	.0001	.0016	.0005	.0002	.0004	.0020	.0001
% RSD	48.57	5.002	.3980	5.115	1.461	.6863	1.437	8.878	.1924
Rep #1	-.0192	-.0081	-.0314	-.0287	-.0362	-.0305	-.0300	-.0215	-.0443
Rep #2	-.0286	-.0075	-.0317	-.0309	-.0351	-.0305	-.0308	-.0246	-.0441
Rep #3	-.0501	-.0073	-.0315	-.0318	-.0356	-.0309	-.0304	-.0209	-.0442
74	Unk: GISC15-22234 12/11/2015 16:49:45 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0165**	**-.0079**	**-.0315**	**-.0324**	**-.0384**	**-.0307**	**-.0305**	**-.0232**	**-.0453**
Desv. Est.	.0332	.0010	.0001	.0008	.0017	.0004	.0004	.0004	.0001
% RSD	201.3	13.26	.3092	2.346	4.321	1.193	1.215	1.625	.2178
Rep #1	.0194	-.0074	-.0316	-.0319	-.0389	-.0306	-.0301	-.0236	-.0453
Rep #2	-.0461	-.0072	-.0314	-.0321	-.0365	-.0304	-.0308	-.0231	-.0453
Rep #3	-.0228	-.0091	-.0316	-.0333	-.0397	-.0311	-.0306	-.0229	-.0452
75	Unk: GISC15-22239 12/11/2015 16:51:51 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0210**	**-.0073**	**-.0315**	**-.0303**	**-.0375**	**-.0006**	**-.0307**	**-.0230**	**-.0420**
Desv. Est.	.0291	.0010	.0002	.0014	.0006	.0004	.0002	.0005	.0001
% RSD	138.6	13.83	.5953	4.489	1.571	60.95	.6810	2.011	.1904
Rep #1	.0103	-.0068	-.0313	-.0317	-.0381	-.0002	-.0306	-.0235	-.0421
Rep #2	-.0261	-.0066	-.0317	-.0301	-.0373	-.0009	-.0310	-.0229	-.0420
Rep #3	-.0472	-.0085	-.0316	-.0290	-.0370	-.0008	-.0306	-.0226	-.0420
76	Unk: GISC15-22240 12/11/2015 16:52:53 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0398**	**-.0074**	**-.0315**	**-.0323**	**-.0360**	**-.0014**	**-.0307**	**-.0230**	**-.0427**
Desv. Est.	.0158	.0006	.0002	.0018	.0029	.0003	.0001	.0003	.0002
% RSD	39.66	8.184	.4942	5.653	8.171	23.02	.3346	1.293	.5123
Rep #1	-.0217	-.0069	-.0316	-.0344	-.0349	-.0012	-.0306	-.0227	-.0426
Rep #2	-.0468	-.0081	-.0315	-.0310	-.0338	-.0012	-.0308	-.0229	-.0425
Rep #3	-.0508	-.0073	-.0313	-.0315	-.0393	-.0018	-.0307	-.0233	-.0429
77	Unk: GISC15-22247 12/11/2015 16:55:32 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0874**	**-.0008**	**-.0314**	**-.0331**	**-.0277**	**-.0119**	**-.0302**	**-.0263**	**-.0366**
Desv. Est.	.0323	.0019	.0002	.0030	.0012	.0005	.0002	.0008	.0002
% RSD	36.96	224.9	.5117	9.175	4.414	4.228	.5372	2.903	.5814
Rep #1	-.1224	.0006	-.0312	-.0314	-.0264	-.0122	-.0304	-.0263	-.0367
Rep #2	-.0810	-.0002	-.0313	-.0313	-.0289	-.0122	-.0302	-.0255	-.0363
Rep #3	-.0588	-.0030	-.0315	-.0366	-.0277	-.0113	-.0300	-.0270	-.0367
78	Unk: GISC15-22248 12/11/2015 16:57:37 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0314**	**.0001**	**-.0316**	**-.0301**	**-.0332**	**-.0142**	**-.0306**	**-.0268**	**-.0321**

Desv. Est.	.0353	.0004	.0001	.0014	.0023	.0010	.0001	.0019	.0006
% RSD	112.4	454.9	.2554	4.639	7.016	7.335	.4188	7.081	1.973
Rep #1	-.0490	.0004	-.0316	-.0286	-.0336	-.0146	-.0306	-.0275	-.0324
Rep #2	-.0544	.0002	-.0315	-.0314	-.0352	-.0149	-.0307	-.0246	-.0314
Rep #3	.0092	-.0004	-.0316	-.0302	-.0306	-.0130	-.0305	-.0282	-.0326
79	Unk: GISC15-22249 12/11/2015 16:58:41 CONC D MP-151112: AGUA:								
	Al3082	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	308.215 {10	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	**-.0753**	**.0001**	**-.0315**	**-.0306**	**-.0358**	**-.0304**	**-.0310**	**-.0232**	**-.0451**
Desv. Est.	.0368	.0023	.0001	.0021	.0004	.0003	.0001	.0004	.0001
% RSD	48.87	2567.	.2368	6.928	1.023	1.082	.3850	1.558	.2295
Rep #1	-.1021	.0011	-.0316	-.0301	-.0361	-.0308	-.0309	-.0235	-.0450
Rep #2	-.0904	.0018	-.0314	-.0329	-.0359	-.0303	-.0311	-.0232	-.0450
Rep #3	-.0333	-.0026	-.0315	-.0288	-.0354	-.0303	-.0310	-.0228	-.0452

+ 79.1	QC: QC 12/11/2015 17:00:50 CONC D MP-151112: AGUA:								
2015-11-12	Al3961	As1890	Cd2265	Cu3247	Fe2599	Mn2576	Ni2316	Pb2203	Zn2138
Línea	396.152 { 85	189.042 {47	226.502 {44	324.754 {10	259.940 {13	257.610 {13	231.604 {44	220.353 {45	213.856 {45
Unidades	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Media	.3880	.4358	.3812	.3933	.3982	.3644	.3632	.4325	.4183
Desv. Est.	.0094	.0027	.0024	.0040	.0022	.0002	.0006	.0024	.0025
% RSD	2.417	.6140	.6414	1.010	.5426	.0686	.1757	.5600	.5913
Rep #1	.3986	.4336	.3799	.3976	.3983	.3644	.3637	.4300	.4168
Rep #2	.3811	.4387	.3840	.3925	.3960	.3647	.3635	.4348	.4212
Rep #3	.3842	.4350	.3797	.3897	.4003	.3642	.3625	.4328	.4169
Comprobació	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp	Pasa Comp
Valor									
Intervalo									

1	Cal: Blanco 13/11/2015 13:23:59 IR D Hg-151113: AGUA:
	Hg1942
Unidades	Cts/s
Media	**-9.098**
Desv. Est.	2.576
% RSD	28.32
Rep #1	-11.38
Rep #2	-9.605
Rep #3	-6.305

2	Cal: STD 1 13/11/2015 13:25:17 IR D Hg-151113: AGUA:
	Hg1942
Unidades	Cts/s
Media	**10.13**
Desv. Est.	3.04
% RSD	30.05
Rep #1	6.883
Rep #2	10.58
Rep #3	12.92

3	Cal: STD 2 13/11/2015 13:26:33 IR D Hg-151113: AGUA:
	Hg1942
Unidades	Cts/s
Media	**52.97**
Desv. Est.	5.89
% RSD	11.12
Rep #1	46.61
Rep #2	54.06
Rep #3	58.24

4	Cal: STD 3 13/11/2015 13:27:57 IR D Hg-151113: AGUA:
	Hg1942
Unidades	Cts/s
Media	**105.5**
Desv. Est.	6.8
% RSD	6.400
Rep #1	97.82
Rep #2	108.1
Rep #3	110.5

5	Cal: STD 4 13/11/2015 13:29:14 IR D Hg-151113: AGUA:
	Hg1942
Unidades	Cts/s
Media	**217.6**
Desv. Est.	8.0
% RSD	3.682
Rep #1	208.5
Rep #2	220.6
Rep #3	223.6

6	Blanco: REACTIVO 13/11/2015 13:30:49 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0007**
Desv. Est.	.0003

% RSD	40.93
Rep #1	.0010
Rep #2	.0007
Rep #3	.0004
7	Blanco: MUESTRA 13/11/2015 13:32:10 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0001**
Desv. Est.	.0000
% RSD	37.27
Rep #1	.0001
Rep #2	.0002
Rep #3	.0001
8	Unk: RECUPERACION 13/11/2015 13:33:54 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0047**
Desv. Est.	.0004
% RSD	8.865
Rep #1	.0043
Rep #2	.0047
Rep #3	.0051
9	Unk: GISC15-21668 13/11/2015 13:35:16 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0000
% RSD	18.48
Rep #1	-.0002
Rep #2	-.0002
Rep #3	-.0002
10	Unk: GISC15-21668-R 13/11/2015 13:36:34 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0001
% RSD	24.46
Rep #1	-.0002
Rep #2	-.0002
Rep #3	-.0003
11	Unk: GISC15-21669 13/11/2015 13:38:00 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0001
% RSD	17.88
Rep #1	-.0004

Rep #2	-.0005
Rep #3	-.0005
12	Unk: GISC15-21688 13/11/2015 13:39:19 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0006**
Desv. Est.	.0000
% RSD	3.978
Rep #1	-.0006
Rep #2	-.0006
Rep #3	-.0006
13	Unk: GISC15-21691 13/11/2015 13:40:36 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0001
% RSD	16.97
Rep #1	-.0005
Rep #2	-.0004
Rep #3	-.0004
14	Unk: GISC15-21697 13/11/2015 13:41:55 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0000
% RSD	5.457
Rep #1	-.0005
Rep #2	-.0005
Rep #3	-.0006
15	Unk: GISC15-21704 13/11/2015 13:43:12 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0001
% RSD	15.48
Rep #1	-.0005
Rep #2	-.0004
Rep #3	-.0005
16	Unk: GISC15-21709 13/11/2015 13:44:29 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0003**
Desv. Est.	.0000
% RSD	15.29
Rep #1	-.0002
Rep #2	-.0003
Rep #3	-.0003

17	Unk: GISC15-21714 13/11/2015 13:45:45 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0003**
Desv. Est.	.0000
% RSD	15.26
Rep #1	-.0003
Rep #2	-.0003
Rep #3	-.0003
18	Unk: GISC15-21724 13/11/2015 13:47:03 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0006**
Desv. Est.	.0001
% RSD	24.96
Rep #1	-.0005
Rep #2	-.0005
Rep #3	-.0007
19	Unk: GISC15-21725 13/11/2015 13:48:39 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0003**
Desv. Est.	.0001
% RSD	23.79
Rep #1	-.0004
Rep #2	-.0004
Rep #3	-.0003
20	Unk: ESTANDAR DE CHEQUEO 13/11/2015 14:05:26 CONC
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0052**
Desv. Est.	.0001
% RSD	1.035
Rep #1	.0053
Rep #2	.0052
Rep #3	.0052
21	Unk: GISC15-21726 13/11/2015 14:06:04 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0006**
Desv. Est.	.0000
% RSD	2.578
Rep #1	-.0006
Rep #2	-.0006
Rep #3	-.0006
22	Unk: GISC15-21726-R 13/11/2015 14:08:10 CONC D Hg-151113: AGUA:

	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0001
% RSD	40.85
Rep #1	-.0001
Rep #2	-.0003
Rep #3	-.0002
23	Unk: GISC15-21730 13/11/2015 14:08:41 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0001
% RSD	20.51
Rep #1	-.0005
Rep #2	-.0003
Rep #3	-.0004
24	Unk: GISC15-21752 13/11/2015 14:10:12 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0000
% RSD	3.959
Rep #1	-.0005
Rep #2	-.0005
Rep #3	-.0006
25	Unk: GISC15-21759 13/11/2015 14:11:27 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0000
% RSD	5.394
Rep #1	-.0005
Rep #2	-.0005
Rep #3	-.0005
26	Unk: GISC15-21760 13/11/2015 14:12:44 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0001
% RSD	16.92
Rep #1	-.0005
Rep #2	-.0006
Rep #3	-.0005
27	Unk: GISC15-21761 13/11/2015 14:14:37 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47

Unidades	mg/L
Media	**-.0006**
Desv. Est.	.0001
% RSD	13.89
Rep #1	-.0005
Rep #2	-.0007
Rep #3	-.0006
28	Unk: GISC15-21769 13/11/2015 14:15:54 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0006**
Desv. Est.	.0001
% RSD	8.074
Rep #1	-.0007
Rep #2	-.0006
Rep #3	-.0006
29	Unk: GISC15-21778 13/11/2015 14:17:10 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0001
% RSD	24.18
Rep #1	-.0004
Rep #2	-.0005
Rep #3	-.0004
30	Unk: GISC15-21779 13/11/2015 14:18:37 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0001
% RSD	23.22
Rep #1	-.0004
Rep #2	-.0003
Rep #3	-.0005
31	Unk: GISC15-21786 13/11/2015 14:20:03 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0007**
Desv. Est.	.0001
% RSD	9.556
Rep #1	-.0006
Rep #2	-.0008
Rep #3	-.0007
32	Unk: GISC15-21795 13/11/2015 14:21:31 CONC x100
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.3641**

Desv. Est.	.0549
% RSD	15.08
Rep #1	.3085
Rep #2	.3654
Rep #3	.4183
33	Unk: ESTANDAR DE CHEQUEO 13/11/2015 14:36:52 CONC
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0052**
Desv. Est.	.0001
% RSD	1.784
Rep #1	.0053
Rep #2	.0052
Rep #3	.0051
34	Unk: GISC15-21808 13/11/2015 14:37:28 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0008**
Desv. Est.	.0000
% RSD	3.425
Rep #1	-.0007
Rep #2	-.0008
Rep #3	-.0008
35	Unk: GISC15-21808-R 13/11/2015 14:38:56 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0007**
Desv. Est.	.0001
% RSD	7.079
Rep #1	-.0007
Rep #2	-.0008
Rep #3	-.0007
36	Unk: GISC15-21821 13/11/2015 14:40:13 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0008**
Desv. Est.	.0000
% RSD	5.321
Rep #1	-.0008
Rep #2	-.0007
Rep #3	-.0008
37	Unk: GISC15-21828 13/11/2015 14:41:43 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0007**
Desv. Est.	.0001
% RSD	9.128

Rep #1	-.0006
Rep #2	-.0006
Rep #3	-.0007
38	Unk: GISC15-21832 13/11/2015 14:43:18 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0009**
Desv. Est.	.0001
% RSD	12.11
Rep #1	-.0008
Rep #2	-.0010
Rep #3	-.0010
39	Unk: GISC15-21855 13/11/2015 14:44:34 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0006**
Desv. Est.	.0001
% RSD	11.43
Rep #1	-.0006
Rep #2	-.0005
Rep #3	-.0005
40	Unk: GISC15-21886 13/11/2015 14:45:51 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0000
% RSD	7.716
Rep #1	-.0005
Rep #2	-.0006
Rep #3	-.0005
41	Unk: GISC15-21902 13/11/2015 14:47:20 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0000
% RSD	9.590
Rep #1	-.0003
Rep #2	-.0004
Rep #3	-.0004
42	Unk: GISC15-21912 13/11/2015 14:48:40 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0000
% RSD	6.439
Rep #1	-.0004
Rep #2	-.0005

Rep #3	-.0004
43	Unk: GISC15-21955 13/11/2015 14:50:54 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0007**
Desv. Est.	.0001
% RSD	18.47
Rep #1	-.0006
Rep #2	-.0008
Rep #3	-.0008
44	Unk: GISC15-21956 13/11/2015 14:52:13 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0009**
Desv. Est.	.0001
% RSD	7.856
Rep #1	-.0009
Rep #2	-.0010
Rep #3	-.0010
45	Unk: ESTANDAR DE CHEQUEO 13/11/2015 15:08:14 CONC
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0052**
Desv. Est.	.0000
% RSD	.8256
Rep #1	.0053
Rep #2	.0053
Rep #3	.0052
46	Unk: GISC15-21964 13/11/2015 15:08:32 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0008**
Desv. Est.	.0000
% RSD	1.911
Rep #1	-.0008
Rep #2	-.0008
Rep #3	-.0008
47	Unk: GISC15-21964-R 13/11/2015 15:09:50 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0003**
Desv. Est.	.0001
% RSD	23.86
Rep #1	-.0004
Rep #2	-.0004
Rep #3	-.0003

48	Unk: GISC15-21965 13/11/2015 15:11:23 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0000
% RSD	18.34
Rep #1	-.0003
Rep #2	-.0002
Rep #3	-.0002
49	Unk: GISC15-21966 13/11/2015 15:12:44 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0000
% RSD	3.801
Rep #1	-.0002
Rep #2	-.0002
Rep #3	-.0003
50	Unk: GISC15-21984 13/11/2015 15:14:11 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0001
% RSD	48.00
Rep #1	-.0001
Rep #2	-.0003
Rep #3	-.0002
51	Unk: GISC15-21990 13/11/2015 15:15:43 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0000
% RSD	3.550
Rep #1	-.0004
Rep #2	-.0003
Rep #3	-.0004
52	Unk: GISC15-21992 13/11/2015 15:17:13 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0001
% RSD	23.64
Rep #1	-.0003
Rep #2	-.0005
Rep #3	-.0003
53	Unk: GISC15-22000 13/11/2015 15:18:29 CONC D Hg-151113: AGUA:

	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0003**
Desv. Est.	.0000
% RSD	15.20
Rep #1	-.0003
Rep #2	-.0003
Rep #3	-.0003
54	Unk: GISC15-22069 13/11/2015 15:19:52 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0000
% RSD	17.89
Rep #1	-.0003
Rep #2	-.0002
Rep #3	-.0002
55	Unk: GISC15-22077 13/11/2015 15:21:28 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0001
% RSD	40.31
Rep #1	-.0002
Rep #2	-.0003
Rep #3	-.0001
56	Unk: GISC15-22078 13/11/2015 15:24:08 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0001
% RSD	41.63
Rep #1	-.0001
Rep #2	-.0002
Rep #3	-.0003
57	Unk: ESTANDAR DE CHEQUEO 13/11/2015 15:39:40 CONC
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0053**
Desv. Est.	.0000
% RSD	.7949
Rep #1	.0053
Rep #2	.0053
Rep #3	.0053
58	Unk: GISC15-22078-R 13/11/2015 15:41:05 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47

Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0001
% RSD	40.35
Rep #1	-.0002
Rep #2	-.0002
Rep #3	-.0004
59	Unk: GISC15-22079 13/11/2015 15:42:46 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0000
% RSD	3.057
Rep #1	-.0004
Rep #2	-.0004
Rep #3	-.0004
60	Unk: GISC15-22080 13/11/2015 15:44:02 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0003**
Desv. Est.	.0000
% RSD	5.506
Rep #1	-.0003
Rep #2	-.0003
Rep #3	-.0003
61	Unk: GISC15-22081 13/11/2015 15:45:18 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0003**
Desv. Est.	.0000
% RSD	15.30
Rep #1	-.0003
Rep #2	-.0003
Rep #3	-.0003
62	Unk: GISC15-22082 13/11/2015 15:46:34 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0003**
Desv. Est.	.0001
% RSD	42.71
Rep #1	-.0001
Rep #2	-.0003
Rep #3	-.0003
63	Unk: GISC15-22083 13/11/2015 15:47:49 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**

Desv. Est.	.0001
% RSD	18.11
Rep #1	-.0003
Rep #2	-.0004
Rep #3	-.0004
64	Unk: GISC15-22084 13/11/2015 15:49:05 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0005
Desv. Est.	.0001
% RSD	12.13
Rep #1	-.0005
Rep #2	-.0004
Rep #3	-.0006
65	Unk: GISC15-22085 13/11/2015 15:50:20 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0005
Desv. Est.	.0001
% RSD	11.28
Rep #1	-.0006
Rep #2	-.0005
Rep #3	-.0006
66	Unk: GISC15-22086 13/11/2015 15:51:34 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0006
Desv. Est.	.0001
% RSD	10.31
Rep #1	-.0007
Rep #2	-.0006
Rep #3	-.0006
67	Unk: GISC15-22087 13/11/2015 15:52:56 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0006
Desv. Est.	.0000
% RSD	6.544
Rep #1	-.0006
Rep #2	-.0007
Rep #3	-.0007
68	Unk: ESTANDAR DE CHEQUEO 13/11/2015 16:11:03 CONC
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	.0052
Desv. Est.	.0001
% RSD	1.486

Rep #1	.0052
Rep #2	.0052
Rep #3	.0051
69	Unk: GISC15-22088 13/11/2015 16:12:29 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0000
% RSD	6.756
Rep #1	-.0005
Rep #2	-.0006
Rep #3	-.0005
70	Unk: GISC15-22088-R 13/11/2015 16:13:48 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0006**
Desv. Est.	.0000
% RSD	3.115
Rep #1	-.0006
Rep #2	-.0006
Rep #3	-.0006
71	Unk: GISC15-22089 13/11/2015 16:16:03 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0005**
Desv. Est.	.0001
% RSD	14.60
Rep #1	-.0004
Rep #2	-.0006
Rep #3	-.0006
72	Unk: GISC15-22090 13/11/2015 16:17:30 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0004**
Desv. Est.	.0000
% RSD	8.556
Rep #1	-.0004
Rep #2	-.0004
Rep #3	-.0004
73	Unk: GISC15-22091 13/11/2015 16:18:46 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0002**
Desv. Est.	.0001
% RSD	87.30
Rep #1	-.0000
Rep #2	.0002

Rep #3	.0003
74	Unk: GISC15-22092 13/11/2015 16:20:05 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0017**
Desv. Est.	.0002
% RSD	10.12
Rep #1	-.0015
Rep #2	-.0018
Rep #3	-.0018
75	Unk: GISC15-22149 13/11/2015 16:21:29 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0019**
Desv. Est.	.0000
% RSD	1.838
Rep #1	-.0019
Rep #2	-.0019
Rep #3	-.0019
76	Unk: GISC15-22179 13/11/2015 16:22:54 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0001**
Desv. Est.	.0001
% RSD	119.8
Rep #1	-.0002
Rep #2	-.0002
Rep #3	.0000
77	Unk: GISC15-22180 13/11/2015 16:24:09 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0001**
Desv. Est.	.0001
% RSD	58.67
Rep #1	.0001
Rep #2	.0002
Rep #3	.0001
78	Unk: GISC15-22196 13/11/2015 16:25:47 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0018**
Desv. Est.	.0001
% RSD	7.776
Rep #1	-.0017
Rep #2	-.0019
Rep #3	-.0020

79	Unk: GISC15-22197 13/11/2015 16:27:01 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0002**
Desv. Est.	.0002
% RSD	88.40
Rep #1	-.0003
Rep #2	-.0002
Rep #3	-.0000
80	Unk: ESTANDAR DE CHEQUEO 13/11/2015 16:32:27 CONC
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**.0053**
Desv. Est.	.0001
% RSD	.9478
Rep #1	.0053
Rep #2	.0052
Rep #3	.0053
81	Unk: GISC15-22203 13/11/2015 16:33:40 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0012**
Desv. Est.	.0001
% RSD	6.308
Rep #1	-.0012
Rep #2	-.0013
Rep #3	-.0011
82	Unk: GISC15-22203-R 13/11/2015 16:35:04 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0013**
Desv. Est.	.0000
% RSD	3.192
Rep #1	-.0013
Rep #2	-.0012
Rep #3	-.0013
83	Unk: GISC15-22204 13/11/2015 16:36:52 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	**-.0011**
Desv. Est.	.0000
% RSD	2.664
Rep #1	-.0011
Rep #2	-.0011
Rep #3	-.0011
84	Unk: GISC15-22217 13/11/2015 16:38:31 CONC D Hg-151113: AGUA:

	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0015
Desv. Est.	.0001
% RSD	9.729
Rep #1	-.0013
Rep #2	-.0015
Rep #3	-.0016
85	Unk: GISC15-22233 13/11/2015 16:45:25 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0045
Desv. Est.	.0001
% RSD	1.982
Rep #1	-.0046
Rep #2	-.0044
Rep #3	-.0045
86	Unk: GISC15-22234 13/11/2015 16:47:05 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0051
Desv. Est.	.0000
% RSD	.2557
Rep #1	-.0051
Rep #2	-.0051
Rep #3	-.0051
87	Unk: GISC15-22239 13/11/2015 16:48:24 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0047
Desv. Est.	.0001
% RSD	2.238
Rep #1	-.0048
Rep #2	-.0046
Rep #3	-.0047
88	Unk: GISC15-22240 13/11/2015 16:50:04 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0052
Desv. Est.	.0002
% RSD	3.140
Rep #1	-.0051
Rep #2	-.0053
Rep #3	-.0053
89	Unk: GISC15-22247 13/11/2015 16:51:24 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47

Unidades	mg/L
Media	-.0026
Desv. Est.	.0002
% RSD	7.724
Rep #1	-.0028
Rep #2	-.0026
Rep #3	-.0024
90	Unk: GISC15-22248 13/11/2015 16:53:11 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0023
Desv. Est.	.0001
% RSD	3.311
Rep #1	-.0024
Rep #2	-.0023
Rep #3	-.0024
91	Unk: GISC15-22249 13/11/2015 16:54:30 CONC D Hg-151113: AGUA:
	Hg1942
Línea	194.227 {47
Unidades	mg/L
Media	-.0032
Desv. Est.	.0001
% RSD	3.425
Rep #1	-.0031
Rep #2	-.0032
Rep #3	-.0033