

Level C Data Package Deliverables

Metals



Applied P & Ch Laboratory

Applied P & Ch Laboratory
Metal Analysis Results

Client Name: GEOFON, Inc.
 Project ID: JPL
 Sample ID: **DUPE-1-2Q03**
 Sample Type: Field Sample

Project No: 04-4428.10
 Service ID: 32809
 Lab Sample ID: 03-2809-1
 Sample Matrix: Water

Collection Date: 04/21/2003
 Collected by:
 Received Date: 04/21/2003
 Moisture %: -

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
ARSENIC	7440-38-2	µg/L	5	< 5	U	F		03M1360E	04/23/03	04/23/03	1	200.9
CALCIUM	7440-70-2	µg/L	200	24500		P		03M1359M	04/23/03	04/23/03	1	200.7
IRON	7439-89-6	µg/L	50	231		P		03M1359M	04/23/03	04/23/03	1	200.7
MAGNESIUM	7439-95-4	µg/L	100	11900		P		03M1359M	04/23/03	04/23/03	1	200.7
POTASSIUM	7440-09-7	µg/L	400	1930		P		03M1359M	04/23/03	04/23/03	1	200.7
SODIUM	7440-23-5	µg/L	2000	37500		P		03M1359M	04/23/03	04/23/03	1	200.7

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL

B - Less than RL (PQL, EQL or CRDL), but greater than IDL.

Q Qualifier: N - Spike recovery out of control

* - Duplicate analysis out of control

W - Post digestion spike for GFAA out of control

E - Serial dilution difference out of control

M Qualifier: P - ICP

A - FLAA

F - GFAA

CV - Cold Vapor

Applied P & Ch Laboratory
Metal Analysis Results

Client Name: GEOFON, Inc.
 Project ID: JPL
 Sample ID: MW-4-2
 Sample Type: Field Sample

Project No: 04-4428.10
 Service ID: 32809
 Lab Sample ID: 03-2809-4
 Sample Matrix: Water

Collection Date: 04/21/2003
 Collected by:
 Received Date: 04/21/2003
 Moisture %: -

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
ARSENIC	7440-38-2	µg/L	5	< 5	U	F		03M1360E	04/23/03	04/23/03	1	200.9
CALCIUM	7440-70-2	µg/L	200	115000		P		03M1359M	04/23/03	04/23/03	1	200.7
IRON	7439-89-6	µg/L	50	592		P		03M1359M	04/23/03	04/23/03	1	200.7
MAGNESIUM	7439-95-4	µg/L	100	39300		P		03M1359M	04/23/03	04/23/03	1	200.7
POTASSIUM	7440-09-7	µg/L	400	2990		P		03M1359M	04/23/03	04/23/03	1	200.7
SODIUM	7440-23-5	µg/L	2000	32500		P		03M1359M	04/23/03	04/23/03	1	200.7

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL

B - Less than RL (PQL, EQL or CRDL), but greater than IDL.

Q Qualifier: N - Spike recovery out of control

* - Duplicate analysis out of control

W - Post digestion spike for GFAA out of control

E - Serial dilution difference out of control

M Qualifier: P - ICP

A - FLAA

F - GFAA

CV - Cold Vapor

Applied P & Ch Laboratory
Metal Analysis Results

Client Name: GEOFON, Inc.
 Project ID: JPL
 Sample ID: **MW-4-3**
 Sample Type: Field Sample

Project No: 04-4428.10
 Service ID: 32809
 Lab Sample ID: 03-2809-5
 Sample Matrix: Water

Collection Date: 04/21/2003
 Collected by:
 Received Date: 04/21/2003
 Moisture %: -

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
ARSENIC	7440-38-2	µg/L	5	< 5	U	F		03M1360E	04/23/03	04/23/03	1	200.9
CALCIUM	7440-70-2	µg/L	200	38200		P		03M1359M	04/23/03	04/23/03	1	200.7
IRON	7439-89-6	µg/L	50	6410		P		03M1359M	04/23/03	04/23/03	1	200.7
MAGNESIUM	7439-95-4	µg/L	100	16100		P		03M1359M	04/23/03	04/23/03	1	200.7
POTASSIUM	7440-09-7	µg/L	400	2320		P		03M1359M	04/23/03	04/23/03	1	200.7
SODIUM	7440-23-5	µg/L	2000	32700		P		03M1359M	04/23/03	04/23/03	1	200.7

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor
 C Qualifier: U - Not Detected or less than IDL B - Less than RL (PQL, EQL or CRDL), but greater than IDL.
 Q Qualifier: N - Spike recovery out of control * - Duplicate analysis out of control
 W - Post digestion spike for GFAA out of control E - Serial dilution difference out of control
 M Qualifier: P - ICP A - FLAA F - GFAA CV - Cold Vapor

Applied P & Ch Laboratory
Metal Analysis Results

Client Name: GEOFON, Inc.
 Project ID: JPL

Project No: 04-4428.10
 Service ID: 32809
 Lab Sample ID: 03-2809-8
 Sample Matrix: Water

Collection Date: 04/21/2003
 Collected by:
 Received Date: 04/21/2003
 Moisture %: -

Sample ID: **SOURCE-2Q03**
 Sample Type: Field Sample

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
ARSENIC	7440-38-2	µg/L	5	< 5	U	F		03M1360E	04/23/03	04/23/03	1	200.9
CALCIUM	7440-70-2	µg/L	200	< 200	U	P		03M1359M	04/23/03	04/23/03	1	200.7
IRON	7439-89-6	µg/L	50	< 50	U	P		03M1359M	04/23/03	04/23/03	1	200.7
MAGNESIUM	7439-95-4	µg/L	100	< 100	U	P		03M1359M	04/23/03	04/23/03	1	200.7
POTASSIUM	7440-09-7	µg/L	400	66.7	B	P		03M1359M	04/23/03	04/23/03	1	200.7
SODIUM	7440-23-5	µg/L	2000	341	B	P		03M1359M	04/23/03	04/23/03	1	200.7

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL B - Less than RL (PQL, EQL or CRDL), but greater than IDL.
 Q Qualifier: N - Spike recovery out of control * - Duplicate analysis out of control
 W - Post digestion spike for GFAA out of control E - Serial dilution difference out of control
 M Qualifier: P - ICP A - FLAA F - GFAA CV - Cold Vapor

FORM-2A Metal
Applied P & Ch Laboratory
Initial and Continuing Calibration Verification

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Lab Code: APCL

Project Name: JPL

Service ID: 032809

Sequence No.: 03M1360E

Instrument: GFAA-E

Method: 200.9

Batch No.(s): 03M1360

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	ICV 12:59			CCV 14:17			CCV 15:33			CCV 16:50		
		True	Result	%R	True	Result	%R	True	Result	%R	True	Result	%R
1	Arsenic	50.0	47.60	95.2	50.0	55.10	110.2	50.0	55.10	110.2	50.0	55.50	111.0

(a) ICV Control Limit 95-105%; For Hg, 90-110%.

(b) CCV Control Limit 90-110%; For Hg, 80-120%.

FORM-2A Metal
 Applied P & Ch Laboratory
Initial and Continuing Calibration Verification

Client Name: GEOFON, Inc.	Project No: 04-4428.10	Lab Code: APCL
Project Name: JPL	Service ID: 032809	Sequence No.: 03M1360E
Batch No.(s): 03M1360	Instrument: GFAA-E	Method: 200.9

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	CCV 17:09											
		True	Result	%R	True	Result	%R	True	Result	%R	True	Result	%R
1	Arsenic	50.0	57.00	114.0									

(a) ICV Control Limit 95-105%; For Hg, 90-110%.

(b) CCV Control Limit 90-110%; For Hg, 80-120%.

FORM-2A Metal
Applied P & Ch Laboratory
Initial and Continuing Calibration Verification

Client Name: GEOFON, Inc. Project No: 04-4428.10 Lab Code: APCL
Project Name: JPL Service ID: 032809 Sequence No.: 03M1359M
Batch No.(s): 03M1359 Instrument: ICP -M Method: 200.9

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	ICV 11:24			CCV 11:43			CCV 11:54			CCV 12:33		
		True	Result	%R	True	Result	%R	True	Result	%R	True	Result	%R
1	Aluminum	10000.0	9774.00	97.7	5000.0	5223.66	104.5	5000.0	5033.43	100.7	5000.0	4950.45	99.0
2	Antimony	4000.0	3883.28	97.1	2000.0	2009.98	100.5	2000.0	1994.01	99.7	2000.0	1996.02	99.8
3	Arsenic	1000.0	981.45	98.1	500.0	509.99	102.0	500.0	501.77	100.4	500.0	498.78	99.8
4	Barium	10000.0	9792.47	97.9	5000.0	5250.31	105.0	5000.0	5111.10	102.2	5000.0	5057.68	101.2
5	Beryllium	1000.0	983.49	98.3	500.0	509.46	101.9	500.0	501.76	100.4	500.0	492.60	98.5
6	Cadmium	2000.0	1942.34	97.1	1000.0	1021.72	102.2	1000.0	995.06	99.5	1000.0	993.63	99.4
7	Calcium	100000.0	97328.92	97.3	50000.0	51247.07	102.5	50000.0	49631.68	99.3	50000.0	49280.38	98.6
8	Chromium	1000.0	978.77	97.9	500.0	520.08	104.0	500.0	506.53	101.3	500.0	496.93	99.4
9	Cobalt	4000.0	3877.78	96.9	2000.0	2063.73	103.2	2000.0	2009.00	100.4	2000.0	2002.89	100.1
10	Copper	4000.0	3906.53	97.7	2000.0	2049.70	102.5	2000.0	1996.53	99.8	2000.0	1998.04	99.9
11	Iron	10000.0	9747.40	97.5	5000.0	5254.37	105.1	5000.0	5062.61	101.3	5000.0	4976.39	99.5
12	Lead	1000.0	969.99	97.0	500.0	511.64	102.3	500.0	508.77	101.8	500.0	517.01	103.4
13	Magnesium	50000.0	48838.58	97.7	25000.0	26160.14	104.6	25000.0	25361.19	101.4	25000.0	25083.50	100.3
14	Manganese	4000.0	3916.70	97.9	2000.0	2060.43	103.0	2000.0	2033.99	101.7	2000.0	2005.27	100.3
15	Nickel	4000.0	3852.50	96.3	2000.0	2067.09	103.4	2000.0	2016.93	100.8	2000.0	2008.05	100.4
16	Potassium	30000.0	29992.53	100.0	15000.0	15432.92	102.9	15000.0	15347.73	102.3	15000.0	14880.25	99.2
17	Selenium	1000.0	973.35	97.3	500.0	520.31	104.1	500.0	520.95	104.2	500.0	516.02	103.2
18	Silver	2000.0	1962.92	98.1	1000.0	1020.06	102.0	1000.0	993.46	99.3	1000.0	978.14	97.8
19	Sodium	200000.0	198146.50	99.1	100000.0	102989.66	103.0	100000.0	99973.70	100.0	100000.0	98182.82	98.2
20	Thallium	1000.0	972.73	97.3	500.0	514.61	102.9	500.0	507.11	101.4	500.0	504.44	100.9
21	Vanadium	4000.0	3929.28	98.2	2000.0	2082.29	104.1	2000.0	2024.02	101.2	2000.0	1988.06	99.4
22	Zinc	4000.0	3882.15	97.1	2000.0	2048.81	102.4	2000.0	2003.50	100.2	2000.0	1987.21	99.4
23	Molybdenum	4000.0	3901.90	97.5	2000.0	2058.61	102.9	2000.0	2005.06	100.3	2000.0	1988.23	99.4

(a) ICV Control Limit 95-105%; For Hg, 90-110%.

(b) CCV Control Limit 90-110%; For Hg, 80-120%.

FORM-2A Metal
Applied P & Ch Laboratory
Initial and Continuing Calibration Verification

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Lab Code: APCL

Project Name: JPL

Service ID: 032809

Sequence No.: 03M1359M

Instrument: ICP -M

Method: 200.9

Batch No.(s): 03M1359

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	CCV 13:11			CCV 13:41			CCV 14:19			CCV 15:16		
		True	Result	%R	True	Result	%R	True	Result	%R	True	Result	%R
1	Aluminum	5000.0	5039.81	100.8	5000.0	5009.48	100.2	5000.0	5073.07	101.5	5000.0	4959.27	99.2
2	Antimony	2000.0	2015.21	100.8	2000.0	2008.15	100.4	2000.0	2026.45	101.3	2000.0	2036.08	101.8
3	Arsenic	500.0	497.72	99.5	500.0	497.59	99.5	500.0	498.13	99.6	500.0	496.49	99.3
4	Barium	5000.0	5139.17	102.8	5000.0	5101.27	102.0	5000.0	5158.92	103.2	5000.0	5041.57	100.8
5	Beryllium	500.0	500.83	100.2	500.0	507.83	101.6	500.0	507.75	101.5	500.0	499.09	99.8
6	Cadmium	1000.0	1014.88	101.5	1000.0	1007.48	100.7	1000.0	1019.91	102.0	1000.0	1001.58	100.2
7	Calcium	50000.0	50492.20	101.0	50000.0	49746.34	99.5	50000.0	50436.38	100.9	50000.0	49292.73	98.6
8	Chromium	500.0	505.24	101.0	500.0	499.62	99.9	500.0	503.61	100.7	500.0	491.21	98.2
9	Cobalt	2000.0	2047.24	102.4	2000.0	2033.61	101.7	2000.0	2059.07	103.0	2000.0	2021.68	101.1
10	Copper	2000.0	2018.34	100.9	2000.0	1998.00	99.9	2000.0	2020.34	101.0	2000.0	1972.17	98.6
11	Iron	5000.0	5045.89	100.9	5000.0	5011.38	100.2	5000.0	5245.48	104.9	5000.0	5090.30	101.8
12	Lead	500.0	510.87	102.2	500.0	507.34	101.5	500.0	513.22	102.6	500.0	513.87	102.8
13	Magnesium	25000.0	25552.74	102.2	25000.0	25397.94	101.6	25000.0	25719.45	102.9	25000.0	25243.31	101.0
14	Manganese	2000.0	2034.44	101.7	2000.0	2063.49	103.2	2000.0	2065.88	103.3	2000.0	2036.17	101.8
15	Nickel	2000.0	2047.83	102.4	2000.0	2035.68	101.8	2000.0	2064.71	103.2	2000.0	2027.21	101.4
16	Potassium	15000.0	15124.29	100.8	15000.0	15486.87	103.2	15000.0	15477.16	103.2	15000.0	15296.44	102.0
17	Selenium	500.0	519.30	103.9	500.0	513.61	102.7	500.0	521.15	104.2	500.0	520.66	104.1
18	Silver	1000.0	995.71	99.6	1000.0	984.99	98.5	1000.0	997.56	99.8	1000.0	969.26	96.9
19	Sodium	100000.0	99845.82	99.8	100000.0	99043.67	99.0	100000.0	99920.35	99.9	100000.0	97804.68	97.8
20	Thallium	500.0	504.59	100.9	500.0	501.73	100.3	500.0	505.43	101.1	500.0	503.11	100.6
21	Vanadium	2000.0	2018.07	100.9	2000.0	1999.60	100.0	2000.0	2012.09	100.6	2000.0	1962.75	98.1
22	Zinc	2000.0	2026.13	101.3	2000.0	2008.22	100.4	2000.0	2024.16	101.2	2000.0	1987.40	99.4
23	Molybdenum	2000.0	2017.75	100.9	2000.0	2006.79	100.3	2000.0	2024.99	101.2	2000.0	1983.13	99.2

(a) ICV Control Limit 95-105%; For Hg, 90-110%.

(b) CCV Control Limit 90-110%; For Hg, 80-120%.

FORM-2A Metal
Applied P & Ch Laboratory
Initial and Continuing Calibration Verification

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Lab Code: APCL

Project Name: JPL

Service ID: 032809

Sequence No.: 03M1359M

Instrument: ICP -M

Method: 200.9

Batch No.(s): 03M1359

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	CCV 16:10			CCV 16:30			CCV 17:12			CCV 18:19		
		True	Result	%R	True	Result	%R	True	Result	%R	True	Result	%R
1	Aluminum	5000.0	5100.90	102.0	5000.0	4943.69	98.9	5000.0	5115.38	102.3	5000.0	5097.24	101.9
2	Antimony	2000.0	2052.91	102.6	2000.0	2072.36	103.6	2000.0	2063.38	103.2	2000.0	2038.47	101.9
3	Arsenic	500.0	495.43	99.1	500.0	497.82	99.6	500.0	494.83	99.0	500.0	521.99	104.4
4	Barium	5000.0	5177.13	103.5	5000.0	5037.18	100.7	5000.0	5214.70	104.3	5000.0	5210.36	104.2
5	Beryllium	500.0	512.94	102.6	500.0	506.36	101.3	500.0	511.96	102.4	500.0	513.25	102.7
6	Cadmium	1000.0	1040.72	104.1	1000.0	1017.89	101.8	1000.0	1056.35	105.6	1000.0	1040.89	104.1
7	Calcium	50000.0	51671.96	103.3	50000.0	50266.11	100.5	50000.0	52860.49	105.7	50000.0	51815.71	103.6
8	Chromium	500.0	503.23	100.6	500.0	488.47	97.7	500.0	501.68	100.3	500.0	511.18	102.2
9	Cobalt	2000.0	2094.54	104.7	2000.0	2046.19	102.3	2000.0	2123.75	106.2	2000.0	2084.69	104.2
10	Copper	2000.0	2036.03	101.8	2000.0	1984.25	99.2	2000.0	2059.46	103.0	2000.0	2082.22	104.1
11	Iron	5000.0	5225.37	104.5	5000.0	5082.18	101.6	5000.0	5234.11	104.7	5000.0	5034.64	100.7
12	Lead	500.0	516.31	103.3	500.0	517.42	103.5	500.0	516.76	103.4	500.0	512.22	102.4
13	Magnesium	25000.0	26061.58	104.2	25000.0	25380.44	101.5	25000.0	26233.66	104.9	25000.0	26130.88	104.5
14	Manganese	2000.0	2091.51	104.6	2000.0	2064.00	103.2	2000.0	2085.23	104.3	2000.0	2068.96	103.4
15	Nickel	2000.0	2098.34	104.9	2000.0	2054.63	102.7	2000.0	2128.05	106.4	2000.0	2107.75	105.4
16	Potassium	15000.0	15454.91	103.0	15000.0	15227.61	101.5	15000.0	15088.53	100.6	15000.0	15104.58	100.7
17	Selenium	500.0	518.84	103.8	500.0	521.54	104.3	500.0	515.69	103.1	500.0	518.26	103.7
18	Silver	1000.0	992.52	99.3	1000.0	963.58	96.4	1000.0	995.20	99.5	1000.0	1013.05	101.3
19	Sodium	100000.0	100017.03	100.0	100000.0	96715.55	96.7	100000.0	99290.77	99.3	100000.0	100487.02	100.5
20	Thallium	500.0	501.50	100.3	500.0	505.06	101.0	500.0	498.67	99.7	500.0	517.05	103.4
21	Vanadium	2000.0	2002.09	100.1	2000.0	1941.74	97.1	2000.0	1998.29	99.9	2000.0	2062.48	103.1
22	Zinc	2000.0	2057.25	102.9	2000.0	2002.56	100.1	2000.0	2078.38	103.9	2000.0	2076.48	103.8
23	Molybdenum	2000.0	2043.84	102.2	2000.0	1981.71	99.1	2000.0	2053.44	102.7	2000.0	2045.75	102.3

(a) ICV Control Limit 95-105%; For Hg, 90-110%.

(b) CCV Control Limit 90-110%; For Hg, 80-120%.

FORM-2A Metal
Applied P & Ch Laboratory
Initial and Continuing Calibration Verification

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Lab Code: APCL

Project Name: JPL

Service ID: 032809

Sequence No.: 03M1359M

Instrument: ICP -M

Method: 200.9

Batch No.(s): 03M1359

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	CCV 19:04			True	Result	%R	True	Result	%R	True	Result	%R
		True	Result	%R									
1	Aluminum	5000.0	5216.18	104.3									
2	Antimony	2000.0	2043.59	102.2									
3	Arsenic	500.0	527.23	105.4									
4	Barium	5000.0	5242.65	104.9									
5	Beryllium	500.0	511.64	102.3									
6	Cadmium	1000.0	1038.70	103.9									
7	Calcium	50000.0	51692.54	103.4									
8	Chromium	500.0	516.48	103.3									
9	Cobalt	2000.0	2083.70	104.2									
10	Copper	2000.0	2079.62	104.0									
11	Iron	5000.0	5156.71	103.1									
12	Lead	500.0	516.26	103.3									
13	Magnesium	25000.0	26390.99	105.6									
14	Manganese	2000.0	2065.90	103.3									
15	Nickel	2000.0	2106.67	105.3									
16	Potassium	15000.0	14887.23	99.2									
17	Selenium	500.0	526.94	105.4									
18	Silver	1000.0	1017.93	101.8									
19	Sodium	100000.0	101112.48	101.1									
20	Thallium	500.0	522.29	104.5									
21	Vanadium	2000.0	2079.23	104.0									
22	Zinc	2000.0	2081.81	104.1									
23	Molybdenum	2000.0	2061.96	103.1									

(a) ICV Control Limit 95-105%; For Hg, 90-110%.

(b) CCV Control Limit 90-110%; For Hg, 80-120%.

FORM-2B Metal
Applied P & Ch Laboratory
CRDL Standard For AA and ICP

Client Name: GEOFON, Inc.
Project Name: JPL
Batch No.(s): 03M1359

Project No: 04-4428.10
Service ID: 032809
Instrument: ICP -M

Lab Code: APCL
Sequence No.: 03M1359M
Method: 200.9

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	True	11:34		Time	
			Found	R%	Found	R%
1	Aluminum	200.0	190.34	95.2		
2	Antimony	20.0	20.76	103.8		
3	Arsenic	20.0	19.77	98.9		
4	Barium	10.0	11.34	113.4		
5	Beryllium	4.0	4.45	111.3		
6	Cadmium	5.0	5.48	109.7		
7	Calcium	1000.0	1358.36	135.8		
8	Chromium	10.0	10.36	103.6		
9	Cobalt	20.0	22.76	113.8		
10	Copper	10.0	7.14	71.4		
11	Iron	50.0	48.43	96.9		
12	Lead	10.0	8.88	88.8		
13	Magnesium		8.73			
14	Manganese	10.0	9.84	98.4		
15	Nickel	20.0	22.07	110.4		
16	Potassium		44.61			
17	Selenium	10.0	10.81	108.1		
18	Silver	10.0	10.13	101.3		
19	Sodium		164.10			
20	Thallium	10.0	10.97	109.7		
21	Vanadium	10.0	9.97	99.7		
22	Zinc	20.0	15.32	76.6		
23	Molybdenum	15.0	15.35	102.3		

FORM-3 Metal
 Applied P & Ch Laboratory
Metal ICB/CCB Summary

Client Name: GEOFON, Inc.
 Project Name: JPL
 Batch No.(s): 03M1360

Project No: 04-4428.10 Lab Code: APCL
 Service ID: 032809 Sequence No.: 03M1360E
 Instrument: GFAA-E Method: 200.9

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	ICB 13:05		CCB 14:23		CCB 15:39		CCB 16:56		CCB 17:15	
		Result	C	Result	C	Result	C	Result	C	Result	C
1	Arsenic	2.10	U	2.10	U	2.10	U	2.10	U	2.10	U

FORM-3 Metal
Applied P & Ch Laboratory
Metal ICB/CCB Summary

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Lab Code: APCL

Project Name: JPL

Service ID: 032809

Sequence No.: 03M1359M

Instrument: ICP -M

Method: 200.9

Batch No.(s): 03M1359

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	ICB Result	11:31 C	CCB Result	11:49 C	CCB Result	11:57 C	CCB Result	12:36 C	CCB Result	13:14 C
1	Aluminum	5.50	U	5.50	U	5.50	U	5.50	U	-6.21	B
2	Antimony	3.91	B	2.39	B	1.90	U	1.90	U	1.90	U
3	Arsenic	1.40	U	1.40	U	1.40	U	-2.29	B	1.40	U
4	Barium	1.10	U	1.10	U	1.37	B	1.27	B	1.10	U
5	Beryllium	0.25	B	0.18	B	0.17	U	0.17	U	0.17	U
6	Cadmium	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
7	Calcium	135.00	U	135.00	U	135.00	U	135.00	U	135.00	U
8	Chromium	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
9	Cobalt	1.09	B	0.67	U	0.80	B	0.67	U	0.67	U
10	Copper	1.10	U	-1.24	B	2.10	B	5.54	B	2.43	B
11	Iron	10.29	B	6.11	B	2.30	U	-3.83	B	-7.90	B
12	Lead	1.60	U	1.60	U	1.60	U	1.78	B	1.60	U
13	Magnesium	8.21	B	99.01	B	-34.05	B	-46.98	B	-61.56	B
14	Manganese	0.33	B	0.31	U	0.73	B	0.48	B	0.37	B
15	Nickel	1.10	U	1.10	U	1.10	U	1.10	U	1.10	U
16	Potassium	43.28	B	51.90	B	48.41	B	49.52	B	57.20	B
17	Selenium	2.60	U	2.60	U	2.60	U	3.07	B	2.60	U
18	Silver	0.65	U	-0.78	B	0.65	U	0.65	U	0.65	U
19	Sodium	328.00	U	414.93	B	328.00	U	340.09	B	328.00	U
20	Thallium	2.28	B	2.84	B	1.50	U	1.50	U	1.50	U
21	Vanadium	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U
22	Zinc	-3.24	B	-4.47	B	1.30	U	1.30	U	1.30	U
23	Molybdenum	0.34	U	0.46	B	1.33	B	1.43	B	1.24	B

FORM-3 Metal
Applied P & Ch Laboratory
Metal ICB/CCB Summary

Client Name: GEOFON, Inc.
Project Name: JPL

Project No: 04-4428.10
Service ID: 032809
Instrument: ICP -M

Lab Code: APCL
Sequence No.: 03M1359M
Method: 200.9

Batch No.(s): 03M1359

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	CCB 13:44		CCB 14:22		CCB 15:19		CCB 16:13		CCB 16:33	
		Result	C	Result	C	Result	C	Result	C	Result	C
1	Aluminum	-5.82	B	5.50	U	5.68	B	7.57	B	10.14	B
2	Antimony	2.42	B	1.90	U	1.90	U	2.14	B	1.90	U
3	Arsenic	1.40	U	1.40	U	1.40	U	1.40	U	1.40	U
4	Barium	1.10	U	1.10	U	1.10	U	1.10	U	1.10	U
5	Beryllium	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
6	Cadmium	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
7	Calcium	135.00	U	135.00	U	135.00	U	139.77	B	135.00	U
8	Chromium	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
9	Cobalt	0.67	U	1.02	B	0.67	U	0.67	U	0.67	U
10	Copper	2.12	B	2.55	B	1.83	B	1.10	U	1.10	U
11	Iron	2.30	U	54.65		56.62		61.92		63.34	
12	Lead	1.60	U	1.60	U	1.60	U	1.60	U	1.60	U
13	Magnesium	-58.94	B	-93.52	B	-90.31	B	-95.71	B	-93.41	B
14	Manganese	0.33	B	2.06	B	1.88	B	1.41	B	1.72	B
15	Nickel	1.10	U	1.10	U	1.10	U	1.10	U	1.10	U
16	Potassium	40.99	B	48.62	B	63.65	B	46.00	B	64.88	B
17	Selenium	2.60	U	3.00	B	3.75	B	2.60	U	3.50	B
18	Silver	0.65	U	0.65	U	0.65	U	0.65	U	0.65	U
19	Sodium	328.00	U	421.31	B	457.59	B	473.12	B	328.00	U
20	Thallium	1.50	U	1.50	U	1.50	U	1.52	B	2.31	B
21	Vanadium	0.66	U	0.66	U	0.71	B	0.66	U	0.66	U
22	Zinc	1.30	U	1.30	U	1.30	U	1.30	U	1.30	U
23	Molybdenum	0.73	B	1.21	B	1.20	B	0.77	B	0.52	B

FORM-3 Metal
Applied P & Ch Laboratory
Metal ICB/CCB Summary

Client Name: GEOFON, Inc.
Project Name: JPL
Batch No.(s): 03M1359

Project No: 04-4428.10
Service ID: 032809
Instrument: ICP -M
Lab Code: APCL
Sequence No.: 03M1359M
Method: 200.9

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	CCB Result	17:16 C	CCB Result	18:22 C	CCB Result	19:07 C	CCB Result	Time C	CCB Result	Time C
1	Aluminum	15.11	B	5.50	U	22.66	B				
2	Antimony	4.28	B	3.15	B	1.90	U				
3	Arsenic	-2.54	B	1.40	U	1.40	U				
4	Barium	2.16	B	2.42	B	1.56	B				
5	Beryllium	0.17	U	0.35	B	0.28	B				
6	Cadmium	0.31	U	0.31	U	0.31	U				
7	Calcium	241.36		135.00	U	135.00	U				
8	Chromium	0.50	U	0.50	U	0.50	U				
9	Cobalt	0.67	U	0.72	B	0.67	U				
10	Copper	3.08	B	3.86	B	3.25	B				
11	Iron	86.02		-59.67		-39.42	B				
12	Lead	1.60	U	1.60	U	-1.63	B				
13	Magnesium	-88.25	B	6.40	U	28.54	B				
14	Manganese	1.77	B	0.51	B	0.31	U				
15	Nickel	1.10	U	1.10	U	1.10	U				
16	Potassium	52.65	B	131.66	B	145.74	B				
17	Selenium	4.97	B	2.60	U	2.75	B				
18	Silver	0.65	B	0.65	U	0.71	B				
19	Sodium	328.00	U	714.37	B	448.27	B				
20	Thallium	2.13	B	2.61	B	5.00	B				
21	Vanadium	0.66	U	0.73	B	0.66	U				
22	Zinc	1.30	U	1.30	U	1.30	U				
23	Molybdenum	0.90	B	1.60	B	1.30	B				

FORM-4 Metal
Applied P & Ch Laboratory
ICP Interference Check Sample

Client Name: GEOFON, Inc.
Project Name: JPL

Project No: 04-4428.10
Service ID: 032809
ICP ID Number: ICP -M

Lab Code: APCL
Sequence No.: 03M1359M

Batch No.(s): 03M1359

Analysis Date: 04/23/03

Concentration Units: UG/L

#	Analyte	Expected		Initial	Found	%R	Final	Found	%R
		Sol. A	Sol. AB	11:37 Sol. A	11:40 Sol. AB		18:58 Sol. A	19:00 Sol. AB	
1	Aluminum	500000	500000	486589	461107.5	92.2	496319	467498.9	93.5
2	Antimony	0	1000	8	921.5	92.1	13	938.5	93.9
3	Arsenic	0	1000	3	891.9	89.2	-3	931.9	93.2
4	Barium	0	500	4	491.4	98.3	3	499.1	99.8
5	Beryllium	0	500	0	466.5	93.3	0	480.3	96.1
6	Cadmium	0	1000	-1	903.8	90.4	0	942.4	94.2
7	Calcium	500000	500000	512968	474168.0	94.8	528233	488944.7	97.8
8	Chromium	0	500	5	471.4	94.3	6	481.7	96.3
9	Cobalt	0	500	3	440.9	88.2	2	454.4	90.9
10	Copper	0	500	0	457.5	91.5	1	479.5	95.9
11	Iron	200000	200000	187545	172422.5	86.2	188072	172183.7	86.1
12	Lead	0	1000	-9	878.8	87.9	-6	909.3	90.9
13	Magnesium	500000	500000	490002	460955.7	92.2	503803	471591.6	94.3
14	Manganese	0	500	-1	461.6	92.3	-2	478.1	95.6
15	Nickel	0	1000	-2	854.6	85.5	-2	885.6	88.6
16	Potassium	0	0	123	121.3		220	212.6	
17	Selenium	0	1000	15	929.5	92.9	7	945.1	94.5
18	Silver	0	1000	-3	938.5	93.8	-3	963.7	96.4
19	Sodium	0	0	-150	37.6		263	381.5	
20	Thallium	0	1000	6	870.1	87.0	7	909.0	90.9
21	Vanadium	0	500	-8	449.7	89.9	-5	464.9	93.0
22	Zinc	0	1000	0	912.9	91.3	5	948.3	94.8
23	Molybdenum	0	1000	2	878.4	87.8	2	905.3	90.5

FORM-7 Metal

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 200.9

Client Name: GEOFON, Inc.	Contract No:	Lab Code: APCL
Case No:	SAS No:	Service ID: 32809
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03M1360E	
LCS Filename: -	Date Analyzed: 042303	Time Analyzed: 13:18
LCSD Filename: -	Date Analyzed: 042303	Time Analyzed: 13:24

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
ARSENIC	µg/L	50	0	50.5	101	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
ARSENIC	µg/L	50	49.9	100	1	20	80-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

FORM-5A Metal

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 200.7

Client Name: GEOFON, Inc.	Contract No:	Lab Code: APCL
Case No:	SAS No:	Service ID: 32809
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03M1359M	
MS Filename: -	Date Analyzed: 042303	Time Analyzed: 12:22
MSD Filename: -	Date Analyzed: 042303	Time Analyzed: 12:25
MS Sample No: MW-4-2	Sample Lab ID: 03-2809-4	

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
CALCIUM	µg/L	20000	115000	138000	115	75-125
IRON	µg/L	1000	592	1600	101	75-125
MAGNESIUM	µg/L	10000	39300	48800	95	75-125
POTASSIUM	µg/L	5000	2990	8760	115	75-125
SODIUM	µg/L	40000	32500	75000	106	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
CALCIUM	µg/L	20000	138000	115	0	20	75-125
IRON	µg/L	1000	1590	100	1	20	75-125
MAGNESIUM	µg/L	10000	49800	105	10	20	75-125
POTASSIUM	µg/L	5000	8930	119	3	20	75-125
SODIUM	µg/L	40000	74800	106	0	20	75-125
# of Out-of-control					0	0	

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

FORM-5B Metal
Applied P & Ch Laboratory
Post Digest Spike Sample Recovery

Client Name: GEOFON, Inc.	Project No: 04-4428.10	Lab Code: APCL
Project Name: JPL	Service ID: 032809	Sequence No.: 03M1360E
	Batch No.: 03M1360	Method: 200.9
Spike Sample No. : 03-2809-04	Matrix: WATER	Instrument: GFAA-E
Client Sample No.: MW-4-2	Analysis Date: 04/23/03	

Concentration Units: UG/L

#	Analyte	Spiked Sample Result(SSR)	14:04 C	Sample Result(SR)	13:31 C	Spike Added(SA)	% Rec.	Control Limit	Q
1	Arsenic	54.4000		1.6000	U	50.00	108.8	75-125	

FORM-5B Metal
Applied P & Ch Laboratory
Post Digest Spike Sample Recovery

Client Name: GEOFON, Inc.	Project No: 04-4428.10	Lab Code: APCL
Project Name: JPL	Service ID: 032809	Sequence No.: 03M1359M
	Batch No.: 03M1359	Method: 200.9
Spike Sample No. : 03-2809-04	Matrix: WATER	Instrument: ICP -M
Client Sample No.: MW-4-2	Analysis Date: 04/23/03	

Concentration Units: UG/L

#	Analyte	Spiked Sample Result(SSR)	12:29 C	Sample Result(SR)	12:11 C	Spike Added(SA)	% Rec.	Control Limit	Q
1	Aluminum	2152.6475		6.4455	B	2000.00	107.3	75-125	
2	Antimony	511.0278		0.9577	U	500.00	102.2	75-125	
3	Arsenic	527.5773		1.0426	U	500.00	105.5	75-125	
4	Barium	4608.1479		135.0541		4000.00	111.8	75-125	
5	Beryllium	199.9555		0.0299	U	200.00	100.0	75-125	
6	Cadmium	258.3370		0.0581	U	250.00	103.3	75-125	
7	Calcium	136942.1094		114938.3984		20000.00	110.0		
8	Chromium	1059.8134		6.5204		1000.00	105.3	75-125	
9	Cobalt	1001.7222		0.2007	U	1000.00	100.2	75-125	
10	Copper	948.2534		3.5266	B	1000.00	94.5	75-125	
11	Iron	1581.2958		591.9648		1000.00	98.9	75-125	
12	Lead	3106.1758		2.4127	B	3000.00	103.5	75-125	
13	Magnesium	49445.2734		39263.4141		10000.00	101.8	75-125	
14	Manganese	996.6694		8.8164		1000.00	98.8	75-125	
15	Nickel	961.0024		3.0797	B	1000.00	95.8	75-125	
16	Potassium	8807.3311		2991.2029		5000.00	116.3	75-125	
17	Selenium	533.6947		3.0846	B	500.00	106.1	75-125	
18	Silver	1010.3154		0.9365	B	1000.00	100.9	75-125	
19	Sodium	74075.4063		32466.1758		40000.00	104.0	75-125	
20	Thallium	526.4744		3.8375	B	500.00	104.5	75-125	
21	Vanadium	2051.5576		4.8818	B	2000.00	102.3	75-125	
22	Zinc	509.9943		4.6182	B	500.00	101.1	75-125	
23	Molybdenum	2197.0459		2.9490	B	2000.00	109.7	75-125	

FORM-6 Metal
 Applied P & Ch Laboratory
Duplicates Verification

Client Name: GEOFON, Inc.	Project No: 04-4428.10	Lab Code: APCL
Project Name: JPL	Service ID: 032809	Sequence No.: 03M1360E
	Batch No.: 03M1360	Method: 200.9
Spike Sample No. 03-2809-04	Matrix: WATER	Instrument: GFAA-E
Client Sample No. MW-4-2	% Solid: 0.00	Analysis Date: 04/23/03

Concentration Unit: UG/L

#	Analyte	13:31		13:37		RPD(%)	Q
		Sample(s)	C	Duplicate	C		
1	Arsenic	1.6000	U	1.5000	U		

FORM-6 Metal
Applied P & Ch Laboratory
Duplicates Verification

Client Name: GEOFON, Inc.
Project Name: JPL
Spike Sample No. 03-2809-04
Client Sample No. MW-4-2

Project No: 04-4428.10
Service ID: 032809
Batch No.: 03M1359
Matrix: WATER
% Solid: 0.00

Lab Code: APCL
Sequence No.: 03M1359M
Method: 200.9
Instrument: ICP -M
Analysis Date: 04/23/03

Concentration Unit: UG/L

#	Analyte	12:11 Sample(s)	C	12:15 Duplicate	C	RPD(%)	Q
1	Aluminum	6.4455	B	5.3406	U	200.0	
2	Antimony	0.9577	U	-1.3483	U		
3	Arsenic	1.0426	U	2.5780	B	200.0	
4	Barium	135.0541		134.4062		0.5	
5	Beryllium	0.0299	U	-0.0727	U		
6	Cadmium	0.0581	U	0.0271	U		
7	Calcium	114938.3984		115935.4688		0.9	
8	Chromium	6.5204		5.9648		8.9	
9	Cobalt	0.2007	U	-0.1390	U		
10	Copper	3.5266	B	2.3609	B	39.6	
11	Iron	591.9648		576.9722		2.6	
12	Lead	2.4127	B	1.2496	U	200.0	
13	Magnesium	39263.4141		39501.7500		0.6	
14	Manganese	8.8164		8.3274		5.7	
15	Nickel	3.0797	B	2.9096	B	5.7	
16	Potassium	2991.2029		2984.8088		0.2	
17	Selenium	3.0846	B	1.7890	U	200.0	
18	Silver	0.9365	B	0.2060	U	200.0	
19	Sodium	32466.1758		32717.0254		0.8	
20	Thallium	3.8375	B	6.0425	B	44.6	
21	Vanadium	4.8818	B	3.7062	B	27.4	
22	Zinc	4.6182	B	4.1056	B	11.8	
23	Molybdenum	2.9490	B	1.0182	B	97.3	

FORM-7 Metal

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 200.9

Client Name: GEOFON, Inc.	Contract No:	Lab Code: APCL
Case No:	SAS No:	Service ID: 32809
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03M1360E	
LCS Filename: -	Date Analyzed: 042303	Time Analyzed: 13:18
LCSD Filename: -	Date Analyzed: 042303	Time Analyzed: 13:24

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
ARSENIC	µg/L	50	0	50.5	101	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
ARSENIC	µg/L	50	49.9	100	1	20	80-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

FORM-7 Metal

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 200.7

Client Name: GEOFON, Inc.	Contract No:	Lab Code: APCL
Case No:	SAS No:	Service ID: 32809
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03M1359M	
LCS Filename: -	Date Analyzed: 042303	Time Analyzed: 12:04
LCSD Filename: -	Date Analyzed: 042303	Time Analyzed: 12:08

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
CALCIUM	µg/L	20000	0	20000	100	80-120
IRON	µg/L	1000	0	1010	101	80-120
MAGNESIUM	µg/L	10000	0	10100	101	80-120
POTASSIUM	µg/L	5000	0	5620	112	80-120
SODIUM	µg/L	40000	0	38600	97	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD REC	
						RPD	REC
CALCIUM	µg/L	20000	20100	101	1	20	80-120
IRON	µg/L	1000	1020	102	1	20	80-120
MAGNESIUM	µg/L	10000	10200	102	1	20	80-120
POTASSIUM	µg/L	5000	5490	110	2	20	80-120
SODIUM	µg/L	40000	38800	97	0	20	80-120
# of Out-of-control					0	0	

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

FORM-9 Metal
Applied P & Ch Laboratory
Serial Dilution

Client Name: GEOFON, Inc.	Project No: 04-4428.10	Lab Code: APCL
Project Name: JPL	Service ID: 032809	Sequence No.: 03M1360E
	Batch No.: 03M1360	Method: 200.9
Dilution Sample No.: 03-2809-04	Matrix: WATER	Instrument: GFAA-E
Client Sample No.: MW-4-2	Analysis Date: 04/23/03	

Concentration Units: **UG/L**

#	Analyte	Initial Sample		Serial Dilut		% Diff.	Q
		Results(I)	13:31 C	Results(S)	13:44 C		
1	Arsenic	1.60	U	5.50	U		

FORM-9 Metal
Applied P & Ch Laboratory
Serial Dilution

Client Name: GEOFON, Inc.	Project No: 04-4428.10	Lab Code: APCL
Project Name: JPL	Service ID: 032809	Sequence No.: 03M1359M
	Batch No.: 03M1359	Method: 200.9
Dilution Sample No.: 03-2809-04	Matrix: WATER	Instrument: ICP -M
Client Sample No.: MW-4-2	Analysis Date: 04/23/03	

Concentration Units: UG/L

#	Analyte	Initial Sample		Serial Dilut		% Diff.	Q
		Results(I)	12:11 C	Results(S)	12:18 C		
1	Aluminum	6.45	B	-17.15	U	100.0	
2	Antimony	0.96	U	1.27	U		
3	Arsenic	1.04	U	-11.94	U		
4	Barium	135.05		134.66		0.3	
5	Beryllium	0.03	U	-0.51	U		
6	Cadmium	0.06	U	-0.57	U		
7	Calcium	114938.40		117685.54		2.4	
8	Chromium	6.52		5.66	B	13.2	
9	Cobalt	0.20	U	-0.70	U		
10	Copper	3.53	B	0.57	U	100.0	
11	Iron	591.96		564.33		4.7	
12	Lead	2.41	B	-0.54	U	100.0	
13	Magnesium	39263.41		40954.57		4.3	
14	Manganese	8.82		6.43	B	27.0	
15	Nickel	3.08	B	0.17	U	100.0	
16	Potassium	2991.20		2503.82		16.3	E
17	Selenium	3.08	B	10.80	U	100.0	
18	Silver	0.94	B	-0.45	U	100.0	
19	Sodium	32466.18		31605.13		2.7	
20	Thallium	3.84	B	9.31	B	142.5	
21	Vanadium	4.88	B	2.15	U	100.0	
22	Zinc	4.62	B	-0.11	U	100.0	
23	Molybdenum	2.95	B	0.49	U	100.0	

FORM-13 Metal
Applied P & Ch Laboratory
Preparation Log

Client Name: GEOFON, Inc.	Project No: 04-4428.10	Lab Code: APCL
Project Name: JPL	Service ID: 032809	Sequence No.: 03M1360E
	Batch No.: 03M1360	Method: 200.9
Preparation Matrix: WATER	Instrument: GFAA-E	

#	Client Sample No.	APCL Sample No.	Preparation Date	Weight (gram)	Volume (ml)
1	EB-1-4/17/03	03-2767-01	04/23/03		50.0
2	MW-21-1	03-2767-02	04/23/03		50.0
3	MW-21-2	03-2767-03	04/23/03		50.0
4	MW-21-3	03-2767-04	04/23/03		50.0
5	MW-21-4	03-2767-05	04/23/03		50.0
6	MW-21-5	03-2767-06	04/23/03		50.0
7	MW-4-2	03-2809-04DM	04/23/03		50.0
8	DUPE-1-2Q03	03-2809-01	04/23/03		50.0
9	EB-2-4/21/03	03-2809-02	04/23/03		50.0
10	MW-4-1	03-2809-03	04/23/03		50.0
11	MW-4-3	03-2809-05	04/23/03		50.0
12	MW-4-4	03-2809-06	04/23/03		50.0
13	MW-4-5	03-2809-07	04/23/03		50.0
14	SOURCE-2Q03	03-2809-08	04/23/03		50.0
15	EB-3-4/22/03	03-2819-01	04/23/03		50.0
16	MW-19-1	03-2819-02	04/23/03		50.0
17	MW-19-2	03-2819-03	04/23/03		50.0
18	MW-19-3	03-2819-04	04/23/03		50.0
19	MW-19-4	03-2819-05	04/23/03		50.0
20	MW-19-5	03-2819-06	04/23/03		50.0
21		03M1360MB	04/23/03		50.0
22		03M1360LCS	04/23/03		50.0
23		03M1360LCSD	04/23/03		50.0
24	MW-4-2 Dup.	03M1360MD	04/23/03		50.0
25	MW-4-2 MS	03M1360MS	04/23/03		50.0
26	MW-4-2 MSD	03M1360MSD	04/23/03		50.0

FORM-13 Metal
Applied P & Ch Laboratory
Preparation Log

Client Name: GEOFON, Inc.	Project No: 04-4428.10	Lab Code: APCL
Project Name: JPL	Service ID: 032809	Sequence No.: 03M1359M
	Batch No.: 03M1359	Method: 200.9
Preparation Matrix: WATER	Instrument: ICP -M	

#	Client Sample No.	APCL Sample No.	Preparation Date	Weight (gram)	Volume (ml)
1	10GP-06-1-GW	03-2805-19	04/23/03		50.0
2	MW-4-2	03-2809-04DM	04/23/03		50.0
3	DUPE-1-2Q03	03-2809-01	04/23/03		50.0
4	EB-2-4/21/03	03-2809-02	04/23/03		50.0
5	MW-4-1	03-2809-03	04/23/03		50.0
6	MW-4-3	03-2809-05	04/23/03		50.0
7	MW-4-4	03-2809-06	04/23/03		50.0
8	MW-4-5	03-2809-07	04/23/03		50.0
9	SOURCE-2Q03	03-2809-08	04/23/03		50.0
10	10GP-01-1-GW	03-2820-05	04/23/03		50.0
11	10GP-01-3-GW	03-2820-06	04/23/03		50.0
12	10GP-04-1-GW	03-2820-09	04/23/03		50.0
13	046EB1-14639	03-2822-01	04/23/03		50.0
14	EB30017	03-2815-01	04/23/03		50.0
15		03M1359MB	04/23/03		50.0
16		03M1359LCS	04/23/03		50.0
17		03M1359LCSD	04/23/03		50.0
18	MW-4-2 Dup.	03M1359MD	04/23/03		50.0
19	MW-4-2 MS	03M1359MS	04/23/03		50.0
20	MW-4-2 MSD	03M1359MSD	04/23/03		50.0

FORM-14 Metal
Applied P & Ch Laboratory
Analysis Run Log

Client Name: GEOFON, Inc.
Project Name: JPL

Project No: 04-4428.10
Service ID: 032809
Instrument: GFAA-E
Start Date: 04/23/03

Lab Code: APCL
Sequence No.: 03M1360E
Method: 200.9
End Date: 04/23/03

Batch No.(s): 03M1360

#	APCL Sample No.	D/F	Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Mo	Sr	Ti	Sn	Li	B	Si	
1	AS Position 002	1.00	12:10			✓																												
2	AS Position 001	1.00	12:14			✓																												
3	Calib. Blank	1.00	12:18			✓																												
4	1/2 STD1 1269A	1.00	12:24			✓																												
5	STD1 1269A	1.00	12:30			✓																												
6	STD2 1269B	1.00	12:36			✓																												
7	STD3 1269C	1.00	12:43			✓																												
8	ICV A1271	1.00	12:59			✓																												
9	ICB	1.00	13:05			✓																												
10	M-BL 03M1360	1.00	13:11			✓																												
11	LCS-03M1360	1.00	13:18			✓																												
12	LCSD-03M1360	1.00	13:24			✓																												
13	2809-4 S F=1	1.00	13:31			✓																												
14	2809-4 D F=1	1.00	13:37			✓																												
15	2809-4 1/5 F=5	5.00	13:44			✓																												
16	2809-4 MS F=1	1.00	13:50			✓																												
17	2809-4 MSD F=1	1.00	13:57			✓																												
18	2809-4 PS F=1	1.00	14:04			✓																												
19	2809-1 F=1	1.00	14:10			✓																												
20	CCV A1271	1.00	14:17			✓																												
21	CCB	1.00	14:23			✓																												
22	2809-2 F=1	1.00	14:29			✓																												
23	2809-3 F=1	1.00	14:36			✓																												
24	2809-5 F=1	1.00	14:42			✓																												
25	2809-6 F=1	1.00	14:48			✓																												
26	2809-7 F=1	1.00	14:55			✓																												
27	2809-8 F=1	1.00	15:01			✓																												
28	2819-1 F=1	1.00	15:07			✓																												
29	2819-2 F=1	1.00	15:13			✓																												
30	2819-3 F=1	1.00	15:20			✓																												
31	CCV A1271	1.00	15:33			✓																												
32	CCB	1.00	15:39			✓																												
33	2819-4 F=1	1.00	15:58			✓																												
34	2819-5 F=1	1.00	16:05			✓																												
35	2819-6 F=1	1.00	16:12			✓																												
36	2767-1 F=1	1.00	16:18			✓																												
37	2767-2 F=1	1.00	16:25			✓																												
38	2767-3 F=1	1.00	16:31			✓																												
39	2767-4 F=1	1.00	16:37			✓																												
40	2767-5 F=1	1.00	16:44			✓																												

FORM-14 Metal
Applied P & Ch Laboratory
Analysis Run Log

Client Name: GEOFON, Inc.
Project Name: JPL
Batch No.(s): 03M1360

Project No: 04-4428.10
Service ID: 032809
Instrument: GFAA-E
Start Date: 04/23/03

Lab Code: APCL
Sequence No.: 03M1360E
Method: 200.9
End Date: 04/23/03

#	APCL Sample No.	D/F	Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Mo	Sr	Ti	Sn	Li	B	Si
41	CCV A1271	1.00	16:50			✓																											
42	CCB	1.00	16:56			✓																											
43	2767-6 F=1	1.00	17:02			✓																											
44	CCV A1271	1.00	17:09			✓																											
45	CCB	1.00	17:15			✓																											

FORM-14 Metal
Applied P & Ch Laboratory
Analysis Run Log

Client Name: GEOFON, Inc.
Project Name: JPL
Batch No.(s): 03M1359

Project No: 04-4428.10
Service ID: 032809
Instrument: ICP -M
Start Date: 04/23/03

Lab Code: APCL
Sequence No.: 03M1359M
Method: 200.9
End Date: 04/23/03

#	APCL Sample No.	D/F	Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Mo	Sr	Ti	Sn	Li	B	Si
1	Calib Blank	1.00	11:09	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	STD1 1423A	1.00	11:13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	STD2 1423B	1.00	11:17	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	STD3 1423C	1.00	11:20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	ICV 1447A	1.00	11:24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	ICB	1.00	11:31	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	CRI A1432	1.00	11:34	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	ICSA 1441	1.00	11:37	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	ICSAB 1443	1.00	11:40	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	CCV 1447B	1.00	11:43	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	CCB	1.00	11:49	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	Calib Blank	1.00	11:51	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	CCV 1447B	1.00	11:54	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	CCB	1.00	11:57	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	M-BL 03M1359 W	1.00	12:00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	LCS-03M1359	1.00	12:04	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	LCSD-03M1359	1.00	12:08	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18	2809-4 S F=1	1.00	12:11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
19	2809-4 D F=1	1.00	12:15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20	2809-4 1/5 F=5	5.00	12:18	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	2809-4 MS F=1	1.00	12:22	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
22	2809-4 MSD F=1	1.00	12:25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
23	2809-4 PS F=1	1.00	12:29	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
24	CCV 1447B	1.00	12:33	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25	CCB	1.00	12:36	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
26	2809-1 F=1	1.00	12:40	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
27	2809-2 F=1	1.00	12:43	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
28	2809-3 F=1	1.00	12:46	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
29	2809-5 F=1	1.00	12:50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
30	2809-6 F=1	1.00	12:53	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
31	2809-7 F=1	1.00	12:57	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
32	2809-8 F=1	1.00	13:00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
33	2822-1 F=1	1.00	13:03	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
34	2820-5 F=1	1.00	13:07	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
35	CCV 1447B	1.00	13:11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
36	CCB	1.00	13:14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
37	2820-6 F=1	1.00	13:18	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
38	2820-9 F=1	1.00	13:21	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
39	2820-9 F=10	10.00	13:27	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
40	2805-19 F=1	1.00	13:30	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

FORM-14 Metal
Applied P & Ch Laboratory
Analysis Run Log

Client Name: GEOFON, Inc.
Project Name: JPL

Project No: 04-4428.10
Service ID: 032809
Instrument: ICP -M
Start Date: 04/23/03

Lab Code: APCL
Sequence No.: 03M1359M
Method: 200.9
End Date: 04/23/03

Batch No.(s): 03M1359

#	APCL Sample No.	D/F	Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Mo	Sr	Ti	Sn	Li	B	Si
41	2805-19 F=10	10.00	13:34	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
42	2815-1 F=1	1.00	13:37	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
43	CCV 1447B	1.00	13:41	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
44	CCB	1.00	13:44	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
45	M-BL 03M1363S	1.00	13:48	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
46	LCS-03M1363	1.00	13:52	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
47	LCSD-03M1363	1.00	13:55	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
48	2805-14 S F=50	1.00	13:58	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
49	2805-14 D F=50	1.00	14:00	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
50	2805-14 1/5 F=2	5.00	14:04	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
51	2805-14 MS F=50	1.00	14:07	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
52	2805-14 MSD F=5	1.00	14:10	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
53	2805-14 PS F=50	1.00	14:12	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
54	2805-1 F=50	1.00	14:15	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
55	CCV 1447B	1.00	14:19	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
56	CCB	1.00	14:22	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
57	2805-2 F=50	1.00	14:25	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
58	2805-5 F=50	1.00	14:28	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
59	2805-6 F=50	1.00	14:30	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
60	2805-7 F=200	4.00	14:38	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
61	2805-8 F=200	4.00	14:44	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
62	2805-9 F=200	4.00	14:51	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
63	2805-10 F=200	4.00	14:57	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
64	2805-11 F=50	1.00	15:01	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
65	2805-12 F=200	4.00	15:09	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
66	2805-14 F=200	4.00	15:12	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
67	CCV 1447B	1.00	15:16	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
68	CCB	1.00	15:19	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
69	2805-15 F=200	4.00	15:25	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
70	2805-17 F=200	4.00	15:32	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
71	2805-18 F=200	4.00	15:38	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
72	2805-20 F=200	4.00	15:45	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
73	2805-21 F=200	4.00	15:51	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
74	2805-1 F=200	4.00	15:55	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
75	2805-2 F=200	4.00	15:59	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
76	2805-5 F=200	4.00	16:02	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
77	2805-6 F=200	4.00	16:06	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
78	CCV 1447B	1.00	16:10	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
79	CCB	1.00	16:13	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
80	2820-1 F=200	4.00	16:20	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

FORM-14 Metal
Applied P & Ch Laboratory
Analysis Run Log

Client Name: GEOFON, Inc.
Project Name: JPL

Project No: 04-4428.10
Service ID: 032809
Instrument: ICP -M
Start Date: 04/23/03

Lab Code: APCL
Sequence No.: 03M1359M
Method: 200.9
End Date: 04/23/03

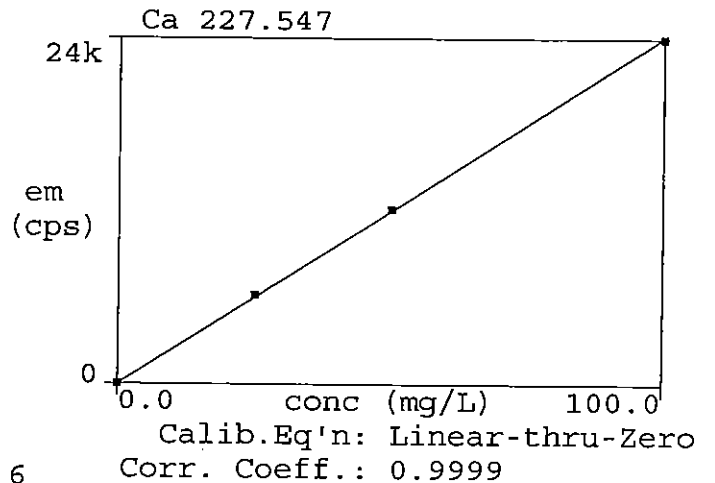
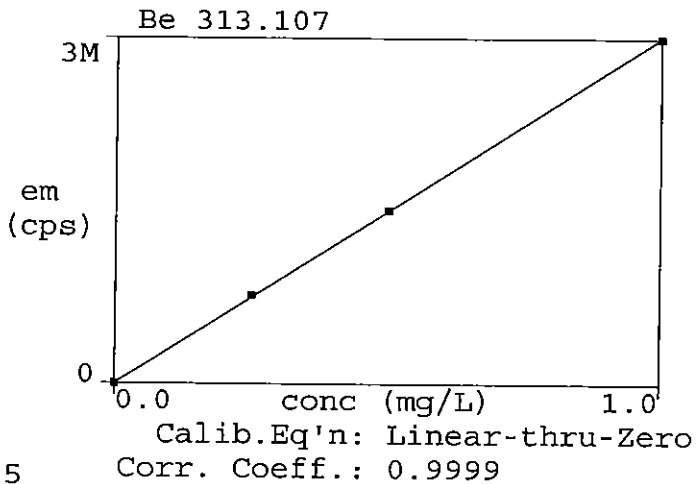
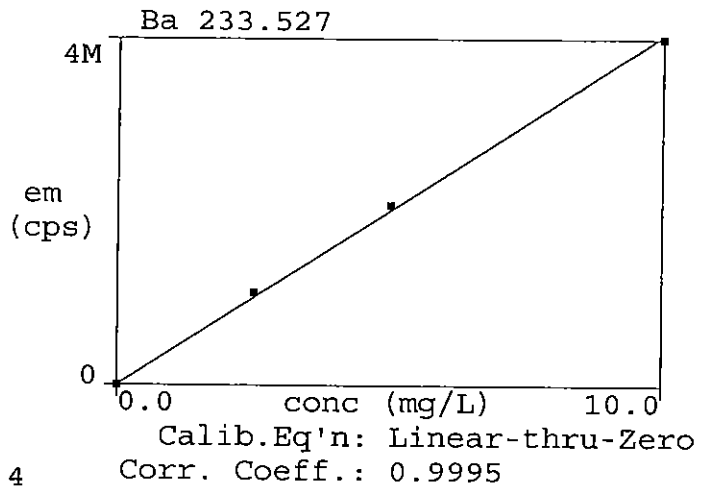
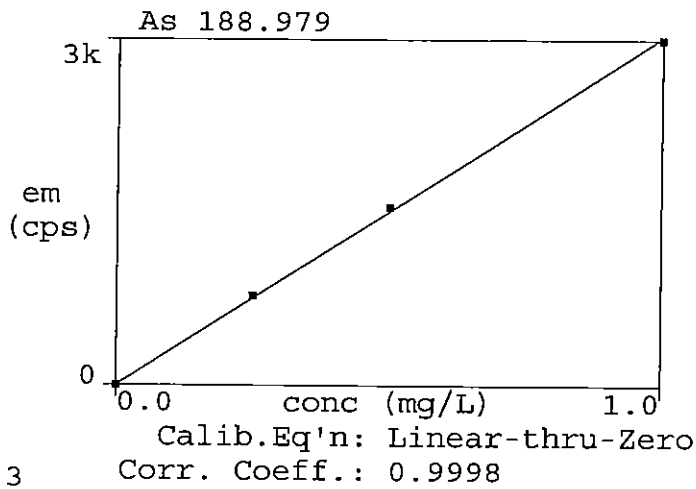
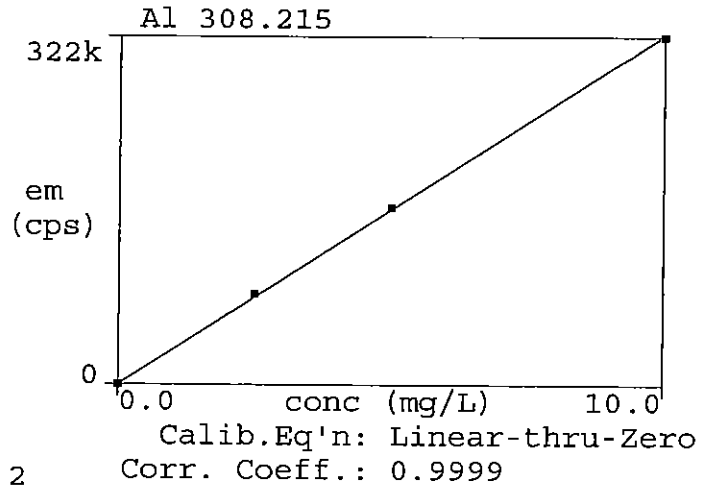
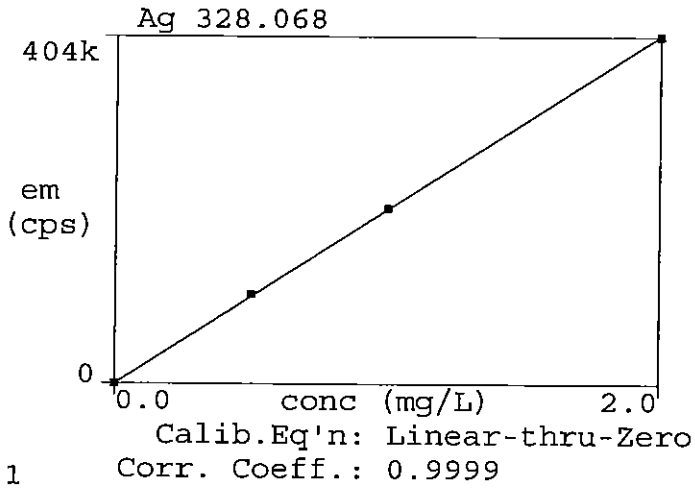
Batch No.(s): 03M1359

#	APCL Sample No.	D/F	Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Mo	Sr	Ti	Sn	Li	B	Si
81	2820-2 F=200	4.00	16:26	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
82	CCV 1447B	1.00	16:30	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
83	CCB	1.00	16:33	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
84	M-BL 03M1364S	1.00	16:38	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
85	LCS-03M1364	1.00	16:41	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
86	LCSD-03M1364	1.00	16:45	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
87	2822-4 S F=50	1.00	16:48	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
88	2822-4 D F=50	1.00	16:50	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
89	2822-4 1/5 F=25	5.00	16:54	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
90	2822-4 MS F=50	1.00	16:57	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
91	2822-4 MSD F=50	1.00	17:00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
92	2822-4 PS F=50	1.00	17:02	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
93	2822-2 F=200	4.00	17:08	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
94	CCV 1447B	1.00	17:12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
95	CCB	1.00	17:16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
96	2822-3 F=200	4.00	17:22	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
97	2822-5 F=200	4.00	17:28	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
98	2822-6 F=200	4.00	17:34	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
99	2822-7 F=200	4.00	17:41	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
100	Calib Blank	1.00	18:04	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
101	STD1 1423A	1.00	18:08	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
102	STD2 1423B	1.00	18:11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
103	STD3 1423C	1.00	18:15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
104	CCV 1447B	1.00	18:19	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
105	CCB	1.00	18:22	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
106	2822-4 F=200	4.00	18:26	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
107	2822-3 F=200	4.00	18:29	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
108	2822-5 F=200	4.00	18:33	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
109	2822-6 F=200	4.00	18:37	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
110	2822-7 F=200	4.00	18:41	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
111	2822-8 F=200	4.00	18:44	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
112	2822-9 F=200	4.00	18:48	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
113	2822-9 F=250	5.00	18:55	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
114	ICSA 1441	1.00	18:58	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
115	ICSAB 1443	1.00	19:00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
116	CCV 1447B	1.00	19:04	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
117	CCB	1.00	19:07	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
118	DLC A1427	1.00	19:11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Calibration

Method: 23ME ICP-M

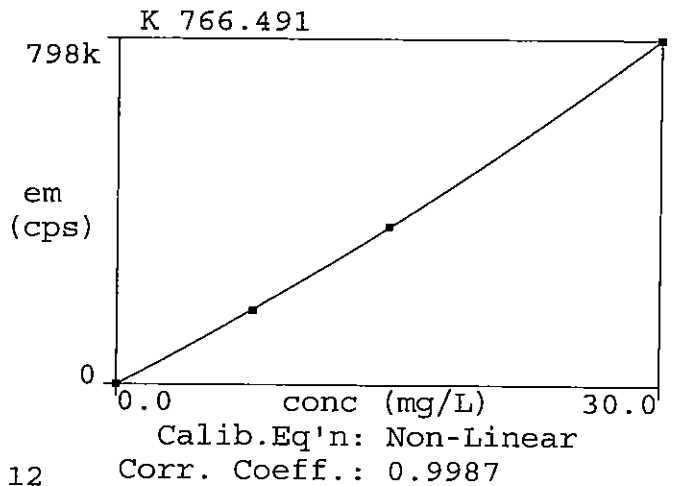
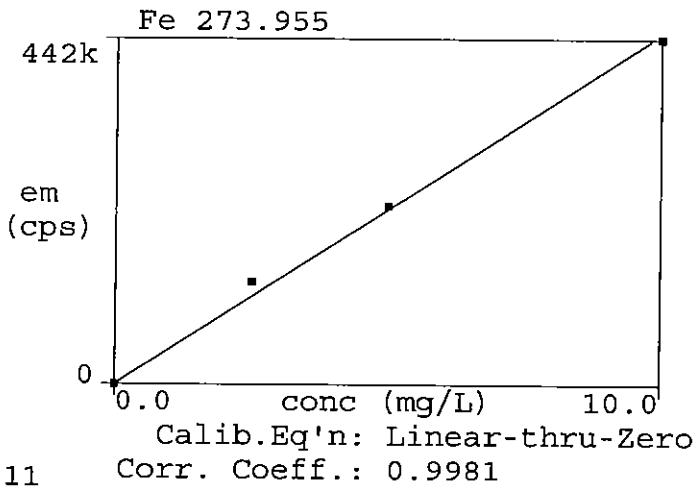
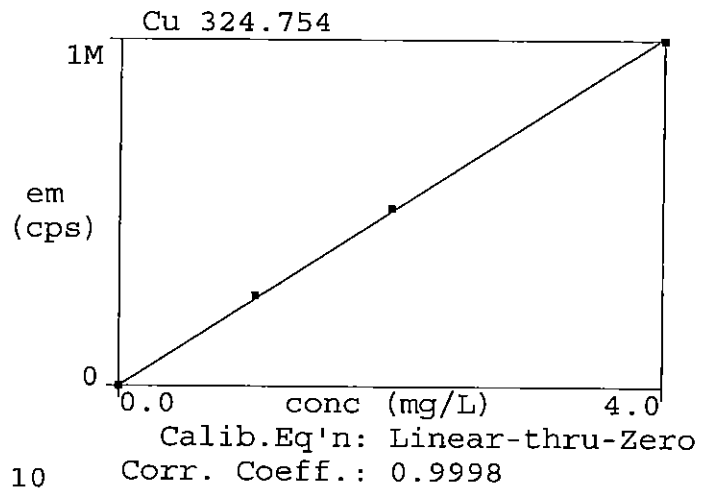
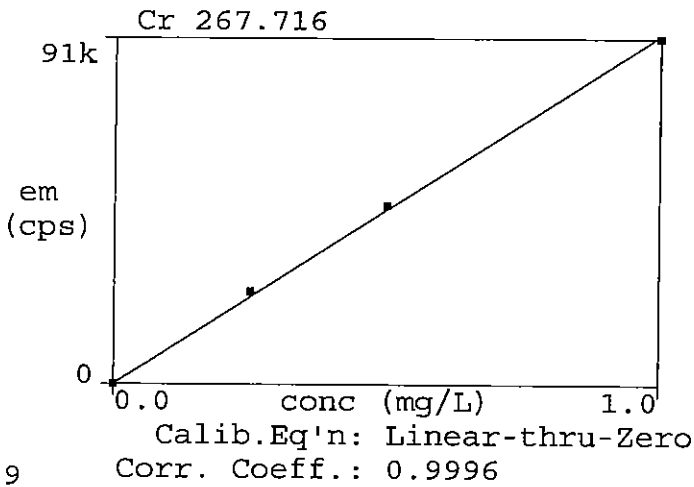
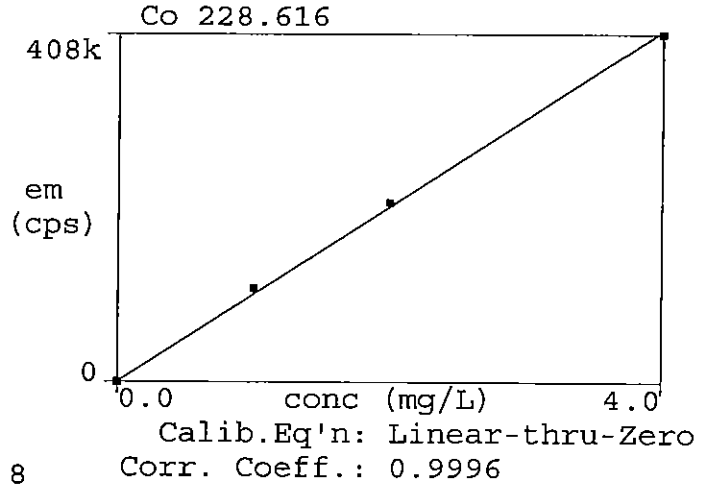
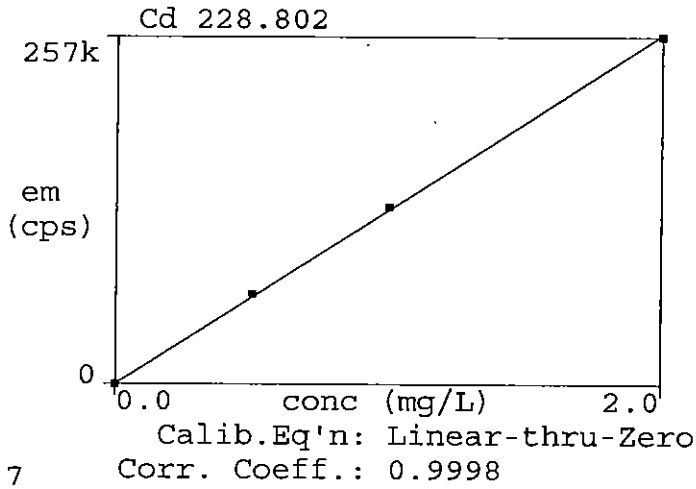
Result: 03M1359M



Calibration

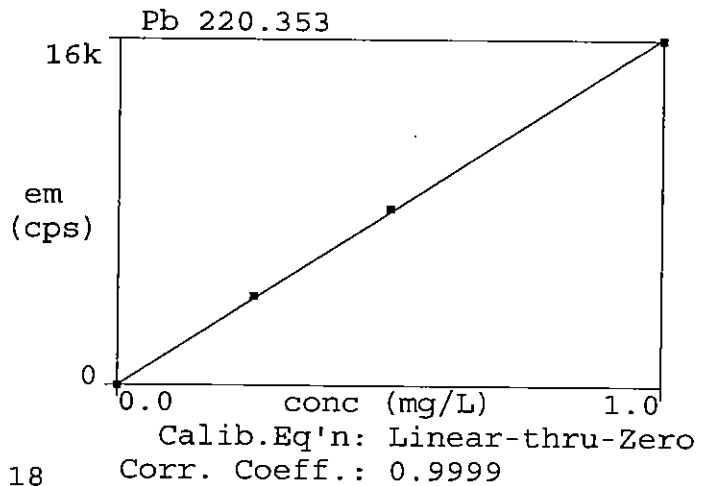
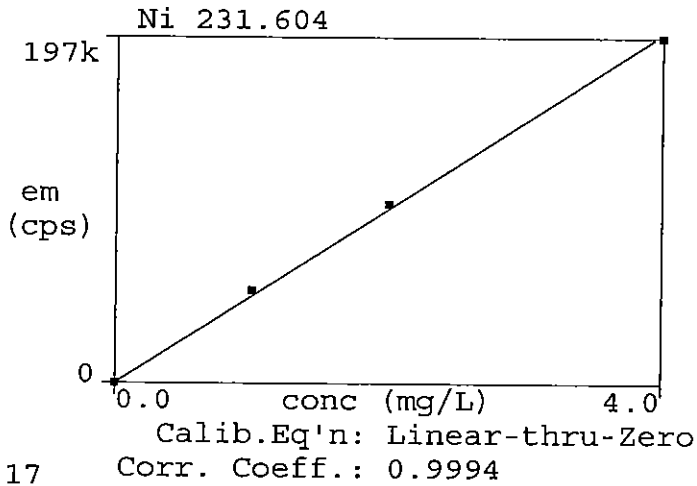
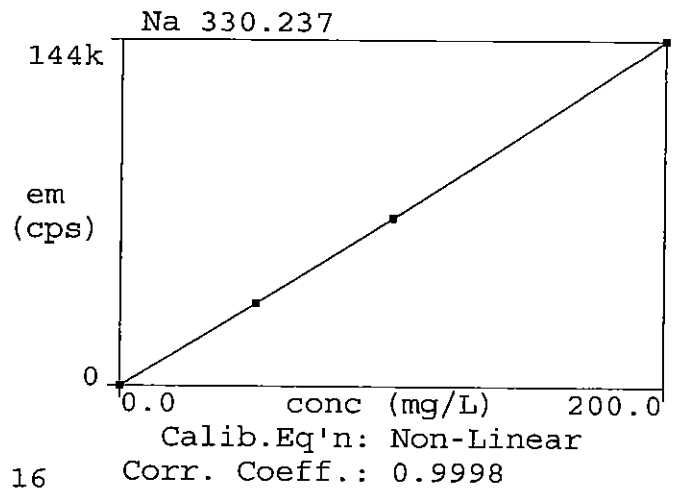
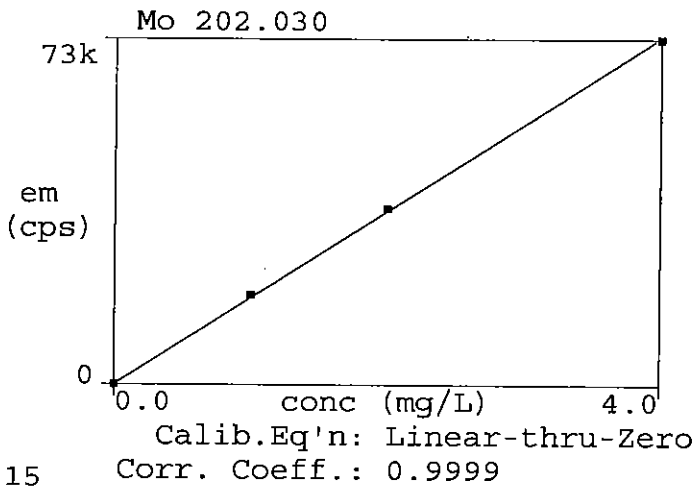
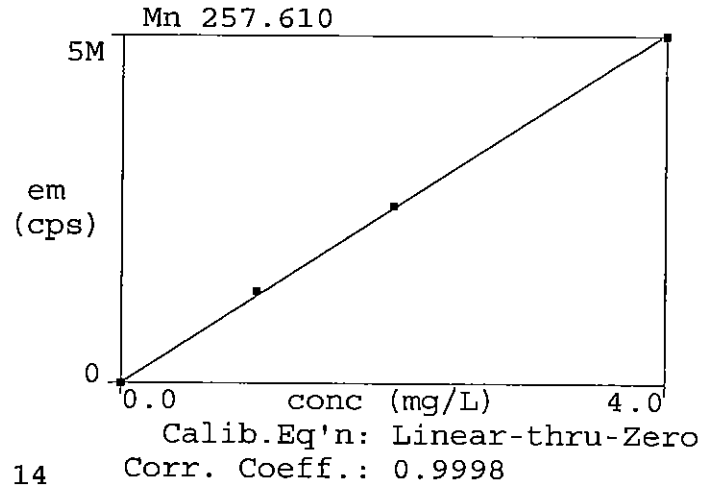
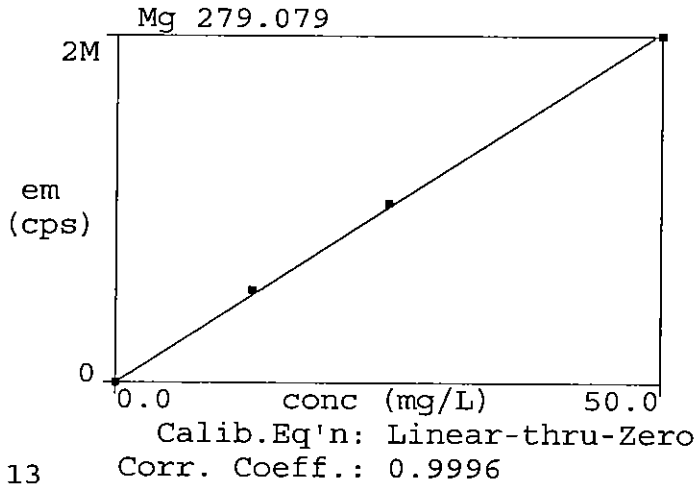
Method: 23ME ICP-M

Result: 03M1359M



Calibration

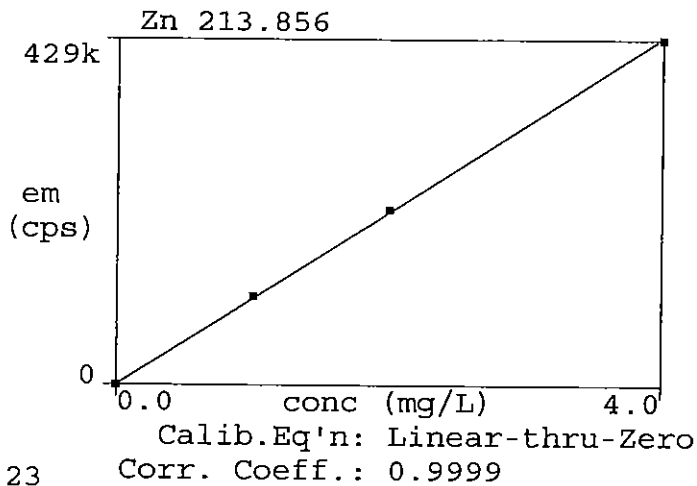
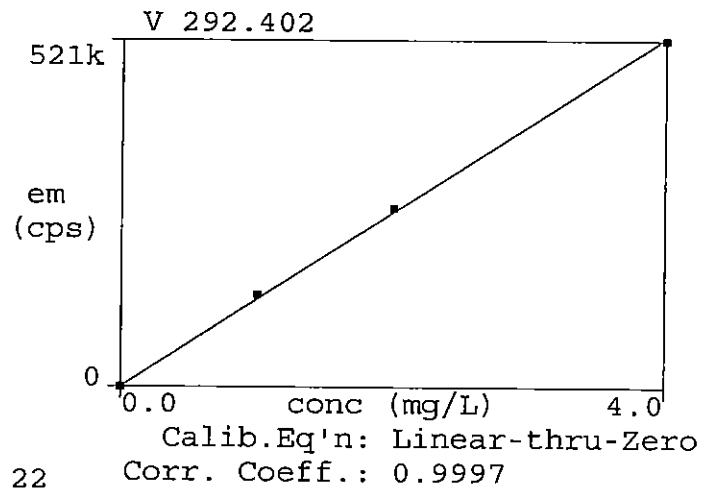
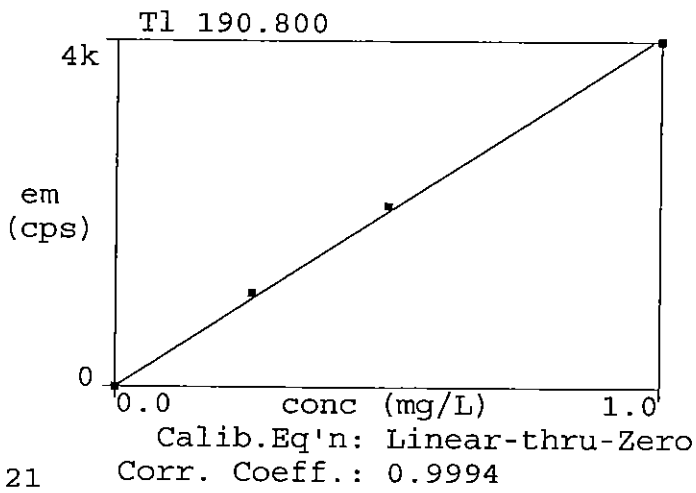
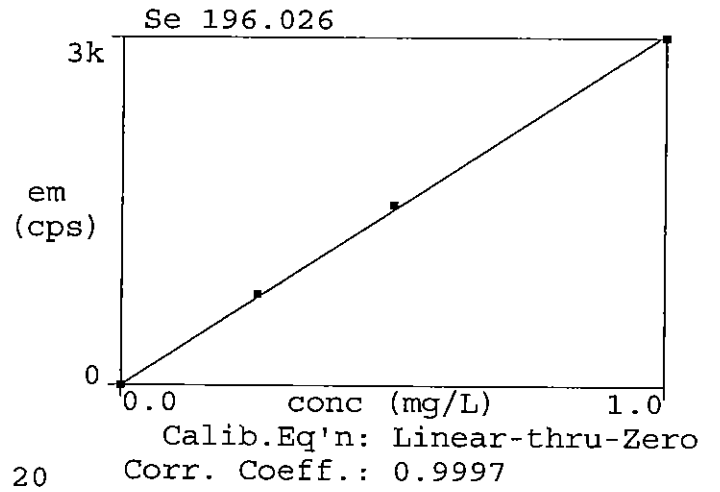
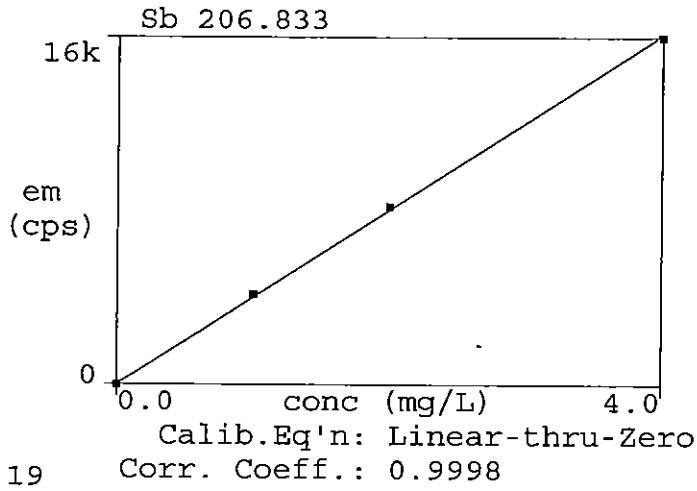
Method: 23ME ICP-M
Result: 03M1359M



Calibration

Method: 23ME ICP-M

Result: 03M1359M



```

=====
Method: 23ME ICP-M          IEC: 03miecm.iec          MSF:
Results: 03M1359M          Spectra Stored: Yes      Method Stored: Yes
Sample Info: 03m1359m      User: User1             Date: 4/23/03 11:07:30 AM
Method Description: 6010B/200.7--23ME 4/16/03
=====
    
```

```

Duplicate Data -----
D: Calib Blank                                           Date: 4/23/03 11:08:52 AM
-----
    
```

epl#	Element	Net Intensity	Corrected Intensity	Calib Conc. Units
1	Ag 328.068	-67.1	-67.1	0 mg/L
1	Al 308.215	4003.1	4003.1	0 mg/L
1	As 188.979	119.9	119.9	0 mg/L
1	Ba 233.527	-432.7	-432.7	0 mg/L
1	Be 313.107	-882.4	-882.4	0 mg/L
1	Ca 227.547	569.2	569.2	0 mg/L
1	Cd 228.802	240.0	240.0	0 mg/L
1	Co 228.616	-337.3	-337.3	0 mg/L
1	Cr 267.716	-260.9	-260.9	0 mg/L
1	Cu 324.754	4129.0	4129.0	0 mg/L
1	Fe 273.955	503.2	503.2	0 mg/L
1	K 766.491	-1915.3	-1915.3	0 mg/L
1	Mg 279.079	1064.4	1064.4	0 mg/L
1	Mn 257.610	894.3	894.3	0 mg/L
1	Mo 202.030	-58.2	-58.2	0 mg/L
1	Na 330.237	6502.7	6502.7	0 mg/L
1	Ni 231.604	-88.1	-88.1	0 mg/L
1	Pb 220.353	-151.4	-151.4	0 mg/L
1	Sb 206.833	-25.3	-25.3	0 mg/L
1	Se 196.026	65.3	65.3	0 mg/L
1	Tl 190.800	197.0	197.0	0 mg/L
1	V 292.402	149.3	149.3	0 mg/L
1	Zn 213.856	-64.0	-64.0	0 mg/L
2	Ag 328.068	24.6	24.6	0 mg/L
2	Al 308.215	4000.2	4000.2	0 mg/L
2	As 188.979	124.2	124.2	0 mg/L
2	Ba 233.527	-424.9	-424.9	0 mg/L
2	Be 313.107	-863.6	-863.6	0 mg/L
2	Ca 227.547	587.6	587.6	0 mg/L
2	Cd 228.802	211.2	211.2	0 mg/L
2	Co 228.616	-347.8	-347.8	0 mg/L
2	Cr 267.716	-264.0	-264.0	0 mg/L
2	Cu 324.754	3794.5	3794.5	0 mg/L
2	Fe 273.955	350.1	350.1	0 mg/L
2	K 766.491	-2752.0	-2752.0	0 mg/L
2	Mg 279.079	1175.8	1175.8	0 mg/L
2	Mn 257.610	679.5	679.5	0 mg/L
2	Mo 202.030	-62.1	-62.1	0 mg/L
2	Na 330.237	6700.5	6700.5	0 mg/L
2	Ni 231.604	-96.4	-96.4	0 mg/L
2	Pb 220.353	-167.4	-167.4	0 mg/L
2	Sb 206.833	-13.0	-13.0	0 mg/L
2	Se 196.026	50.6	50.6	0 mg/L
2	Tl 190.800	195.0	195.0	0 mg/L
2	V 292.402	132.4	132.4	0 mg/L
2	Zn 213.856	-142.0	-142.0	0 mg/L
3	Ag 328.068	108.2	108.2	0 mg/L
3	Al 308.215	3847.1	3847.1	0 mg/L
3	As 188.979	128.0	128.0	0 mg/L
3	Ba 233.527	-426.2	-426.2	0 mg/L
3	Be 313.107	-756.8	-756.8	0 mg/L
3	Ca 227.547	588.6	588.6	0 mg/L
3	Cd 228.802	218.0	218.0	0 mg/L
3	Co 228.616	-356.4	-356.4	0 mg/L
3	Cr 267.716	-285.9	-285.9	0 mg/L
3	Cu 324.754	3501.7	3501.7	0 mg/L
3	Fe 273.955	250.6	250.6	0 mg/L

3 K 766.491	-2774.1	-2774.1	0 mg/L
3 Mg 279.079	1102.6	1102.6	0 mg/L
3 Mn 257.610	694.6	694.6	0 mg/L
3 Mo 202.030	-58.1	-58.1	0 mg/L
3 Na 330.237	6674.3	6674.3	0 mg/L
3 Ni 231.604	-113.5	-113.5	0 mg/L
3 Pb 220.353	-166.5	-166.5	0 mg/L
3 Sb 206.833	-14.1	-14.1	0 mg/L
3 Se 196.026	48.8	48.8	0 mg/L
3 Tl 190.800	196.4	196.4	0 mg/L
3 V 292.402	124.9	124.9	0 mg/L
3 Zn 213.856	-179.6	-179.6	0 mg/L

Mean Data

D: Calib Blank

Seq. No.: 1
Data: Original

A/S Pos: 1
Date: 4/23/03 11:08:52 AM

Element	Mean Corr. Intensity	Std.Dev.	RSD	Conc.	Calib Units
g 328.068	21.9	87.70	400.35%	0	mg/L
l 308.215	3950.1	89.24	2.26%	0	mg/L
s 188.979	124.0	4.07	3.28%	0	mg/L
a 233.527	-427.9	4.17	0.97%	0	mg/L
e 313.107	-834.3	67.77	8.12%	0	mg/L
a 227.547	581.8	10.92	1.88%	0	mg/L
d 228.802	223.1	15.04	6.74%	0	mg/L
o 228.616	-347.2	9.59	2.76%	0	mg/L
r 267.716	-270.3	13.63	5.04%	0	mg/L
u 324.754	3808.4	313.84	8.24%	0	mg/L
e 273.955	368.0	127.25	34.58%	0	mg/L
766.491	-2480.5	489.55	19.74%	0	mg/L
g 279.079	1114.3	56.61	5.08%	0	mg/L
n 257.610	756.1	119.90	15.86%	0	mg/L
o 202.030	-59.5	2.29	3.85%	0	mg/L
a 330.237	6625.8	107.48	1.62%	0	mg/L
i 231.604	-99.3	12.95	13.04%	0	mg/L
o 220.353	-161.8	9.00	5.56%	0	mg/L
o 206.833	-17.5	6.79	38.82%	0	mg/L
e 196.026	54.9	9.09	16.56%	0	mg/L
l 190.800	196.1	1.00	0.51%	0	mg/L
292.402	135.6	12.48	9.21%	0	mg/L
1 213.856	-128.6	58.96	45.86%	0	mg/L

Replicate Data

D: STD1 1423A

Date: 4/23/03 11:12:30 AM

Element	Net Intensity	Corrected Intensity	Conc.	Calib Units
1 Ag 328.068	405907.7	405885.7	2.0000	mg/L
1 Al 308.215	327025.0	323074.9	10.00	mg/L
1 As 188.979	3000.0	2875.9	1.000	mg/L
1 Ba 233.527	4121287.8	4121715.8	10.0000	mg/L
1 Be 313.107	2633995.9	2634830.1	1.00000	mg/L
1 Ca 227.547	25215.0	24633.2	100.0	mg/L
1 Cd 228.802	258430.3	258207.2	2.000	mg/L
1 Co 228.616	410407.9	410755.1	4.0000	mg/L
1 Cr 267.716	90906.4	91176.7	1.0000	mg/L
1 Cu 324.754	1174456.0	1170647.6	4.0000	mg/L
1 Fe 273.955	431110.8	430742.8	10.00	mg/L
1 K 766.491	795002.4	797482.9	30.00	mg/L
1 Mg 279.079	2050418.9	2049304.6	50.00	mg/L
1 Mn 257.610	5274449.0	5273692.9	4.0000	mg/L
1 Mo 202.030	73383.6	73443.1	4.000	mg/L
1 Na 330.237	151384.1	144758.3	200.00	mg/L
1 Ni 231.604	198464.8	198564.1	4.0000	mg/L
1 Pb 220.353	15710.0	15871.8	1.000	mg/L
1 Sb 206.833	15840.5	15857.9	4.000	mg/L
1 Se 196.026	3191.4	3136.5	1.000	mg/L
1 Tl 190.800	3860.8	3664.6	1.000	mg/L
1 V 292.402	512696.3	512560.7	4.0000	mg/L
1 Zn 213.856	431538.8	431667.4	4.000	mg/L

2	Ag	328.068	402395.9	402374.0	2.0000	mg/L
2	Al	308.215	324415.3	320465.2	10.00	mg/L
2	As	188.979	2974.6	2850.6	1.000	mg/L
2	Ba	233.527	4268336.3	4268764.2	10.0000	mg/L
2	Be	313.107	2720720.7	2721555.0	1.00000	mg/L
2	Ca	227.547	24815.9	24234.1	100.0	mg/L
2	Cd	228.802	255170.7	254947.6	2.000	mg/L
2	Co	228.616	404630.2	404977.4	4.0000	mg/L
2	Cr	267.716	90151.7	90422.0	1.0000	mg/L
2	Cu	324.754	1218301.6	1214493.2	4.0000	mg/L
2	Fe	273.955	451648.6	451280.6	10.00	mg/L
2	K	766.491	793114.5	795595.0	30.00	mg/L
2	Mg	279.079	2123770.0	2122655.7	50.00	mg/L
2	Mn	257.610	5277460.3	5276704.2	4.0000	mg/L
2	Mo	202.030	72874.2	72933.6	4.000	mg/L
2	Na	330.237	149830.1	143204.3	200.00	mg/L
2	Ni	231.604	195415.3	195514.6	4.0000	mg/L
2	Pb	220.353	15454.0	15615.8	1.000	mg/L
2	Sb	206.833	15629.8	15647.3	4.000	mg/L
2	Se	196.026	3145.2	3090.4	1.000	mg/L
2	Tl	190.800	3823.0	3626.9	1.000	mg/L
2	V	292.402	532532.1	532396.5	4.0000	mg/L
2	Zn	213.856	424635.8	424764.4	4.000	mg/L

3	Ag	328.068	404478.3	404456.4	2.0000	mg/L
3	Al	308.215	325859.4	321909.3	10.00	mg/L
3	As	188.979	2993.7	2869.6	1.000	mg/L
3	Ba	233.527	4179710.9	4180138.8	10.0000	mg/L
3	Be	313.107	2677660.7	2678495.0	1.00000	mg/L
3	Ca	227.547	25058.9	24477.1	100.0	mg/L
3	Cd	228.802	256897.8	256674.7	2.000	mg/L
3	Co	228.616	407443.0	407790.2	4.0000	mg/L
3	Cr	267.716	90457.8	90728.1	1.0000	mg/L
3	Cu	324.754	1196924.2	1193115.9	4.0000	mg/L
3	Fe	273.955	445499.5	445131.5	10.00	mg/L
3	K	766.491	799850.2	802330.7	30.00	mg/L
3	Mg	279.079	2082069.8	2080955.5	50.00	mg/L
3	Mn	257.610	5321676.8	5320920.7	4.0000	mg/L
3	Mo	202.030	73507.0	73566.5	4.000	mg/L
3	Na	330.237	151104.5	144478.6	200.00	mg/L
3	Ni	231.604	197822.2	197921.5	4.0000	mg/L
3	Pb	220.353	15772.6	15934.4	1.000	mg/L
3	Sb	206.833	15771.2	15788.7	4.000	mg/L
3	Se	196.026	3173.0	3118.2	1.000	mg/L
3	Tl	190.800	3870.6	3674.4	1.000	mg/L
3	V	292.402	519244.4	519108.8	4.0000	mg/L
3	Zn	213.856	429499.9	429628.5	4.000	mg/L

Mean Data
 ID: STD1 1423A

Seq. No.: 2
 Data: Original

A/S Pos: 2
 Date: 4/23/03 11:12:30 AM

Element	Mean	Corr.	Std.Dev.	RSD	Conc.	Calib
	Intensity				Units	
Ag	328.068	404238.7	1765.94	0.44%	2.0000	mg/L
Al	308.215	321816.5	1307.30	0.41%	10.00	mg/L
As	188.979	2865.4	13.22	0.46%	1.000	mg/L
Ba	233.527	4190206.2	74039.34	1.77%	10.0000	mg/L
Be	313.107	2678293.4	43362.79	1.62%	1.00000	mg/L
Ca	227.547	24448.2	201.13	0.82%	100.0	mg/L
Cd	228.802	256609.8	1630.79	0.64%	2.000	mg/L
Co	228.616	407840.9	2889.18	0.71%	4.0000	mg/L
Cr	267.716	90775.6	379.56	0.42%	1.0000	mg/L
Cu	324.754	1192752.2	21925.05	1.84%	4.0000	mg/L
Fe	273.955	442385.0	10540.74	2.38%	10.00	mg/L
K	766.491	798469.5	3474.52	0.44%	30.00	mg/L
Mg	279.079	2084305.3	36790.08	1.77%	50.00	mg/L
Mn	257.610	5290439.3	26440.61	0.50%	4.0000	mg/L
Mo	202.030	73314.4	335.46	0.46%	4.000	mg/L
Na	330.237	144147.1	828.36	0.57%	200.00	mg/L
Ni	231.604	197333.4	1607.57	0.81%	4.0000	mg/L

b 220.353	15807.3	168.82	1.07%	1.000 mg/L
b 206.833	15764.6	107.34	0.68%	4.000 mg/L
e 196.026	3115.0	23.23	0.75%	1.000 mg/L
l 190.800	3655.3	25.11	0.69%	1.000 mg/L
' 292.402	521355.4	10106.93	1.94%	4.0000 mg/L
n 213.856	428686.7	3546.55	0.83%	4.000 mg/L

uplicate Data
D: STD2 1423B

Date: 4/23/03 11:16:15 AM

epl# Element	Net Intensity	Corrected Intensity	Calib Conc. Units
1 Ag 328.068	197240.1	197218.2	1.0000 mg/L
1 Al 308.215	161007.6	157057.5	5.000 mg/L
1 As 188.979	1598.7	1474.6	0.500 mg/L
1 Ba 233.527	2111423.6	2111851.5	5.0000 mg/L
1 Be 313.107	1349482.6	1350316.9	0.50000 mg/L
1 Ca 227.547	12638.4	12056.6	50.00 mg/L
1 Cd 228.802	127104.1	126881.0	1.000 mg/L
1 Co 228.616	204022.1	204369.3	2.0000 mg/L
1 Cr 267.716	44965.1	45235.4	0.5000 mg/L
1 Cu 324.754	594934.1	591125.7	2.0000 mg/L
1 Fe 273.955	222636.0	222268.0	5.000 mg/L
1 K 766.491	362452.1	364932.6	15.00 mg/L
1 Mg 279.079	1043129.3	1042015.0	25.000 mg/L
1 Mn 257.610	2704926.9	2704170.8	2.0000 mg/L
1 Mo 202.030	35948.2	36007.7	2.000 mg/L
1 Na 330.237	74030.8	67405.0	100.00 mg/L
1 Ni 231.604	99332.8	99432.1	2.0000 mg/L
1 Pb 220.353	7868.3	8030.1	0.500 mg/L
1 Sb 206.833	8000.1	8017.6	2.000 mg/L
1 Se 196.026	1661.6	1606.7	0.5000 mg/L
1 Tl 190.800	2082.1	1885.9	0.500 mg/L
1 V 292.402	259651.8	259516.2	2.0000 mg/L
1 Zn 213.856	211566.5	211695.1	2.000 mg/L
2 Ag 328.068	209044.8	209022.9	1.0000 mg/L
2 Al 308.215	171705.5	167755.4	5.000 mg/L
2 As 188.979	1618.4	1494.3	0.500 mg/L
2 Ba 233.527	2235746.7	2236174.7	5.0000 mg/L
2 Be 313.107	1387402.6	1388236.9	0.50000 mg/L
2 Ca 227.547	13289.3	12707.5	50.00 mg/L
2 Cd 228.802	134579.7	134356.6	1.000 mg/L
2 Co 228.616	215394.0	215741.2	2.0000 mg/L
2 Cr 267.716	47677.6	47947.9	0.5000 mg/L
2 Cu 324.754	629919.5	626111.1	2.0000 mg/L
2 Fe 273.955	235445.7	235077.8	5.000 mg/L
2 K 766.491	380373.5	382854.0	15.00 mg/L
2 Mg 279.079	1108106.6	1106992.4	25.000 mg/L
2 Mn 257.610	2771144.3	2770388.1	2.0000 mg/L
2 Mo 202.030	38260.1	38319.6	2.000 mg/L
2 Na 330.237	78582.9	71957.1	100.00 mg/L
2 Ni 231.604	104971.2	105070.5	2.0000 mg/L
2 Pb 220.353	7935.7	8097.5	0.500 mg/L
2 Sb 206.833	8088.6	8106.1	2.000 mg/L
2 Se 196.026	1669.9	1615.1	0.5000 mg/L
2 Tl 190.800	2115.3	1919.2	0.500 mg/L
2 V 292.402	275269.9	275134.4	2.0000 mg/L
2 Zn 213.856	224237.2	224365.8	2.000 mg/L
3 Ag 328.068	205718.7	205696.8	1.0000 mg/L
3 Al 308.215	168565.0	164614.9	5.000 mg/L
3 As 188.979	1597.0	1472.9	0.500 mg/L
3 Ba 233.527	2198489.5	2198917.4	5.0000 mg/L
3 Be 313.107	1303916.9	1304751.2	0.50000 mg/L
3 Ca 227.547	13047.5	12465.7	50.00 mg/L
3 Cd 228.802	132605.5	132382.4	1.000 mg/L
3 Co 228.616	212005.4	212352.6	2.0000 mg/L
3 Cr 267.716	46776.6	47046.9	0.5000 mg/L
3 Cu 324.754	619770.7	615962.3	2.0000 mg/L
3 Fe 273.955	230631.8	230263.8	5.000 mg/L

3 K 766.491	348526.7	351007.2	15.00 mg/L
3 Mg 279.079	1087082.9	1085968.6	25.000 mg/L
3 Mn 257.610	2604754.6	2603998.5	2.0000 mg/L
3 Mo 202.030	37708.8	37768.3	2.000 mg/L
3 Na 330.237	77109.9	70484.1	100.00 mg/L
3 Ni 231.604	103507.5	103606.8	2.0000 mg/L
3 Pb 220.353	7981.7	8143.5	0.500 mg/L
3 Sb 206.833	8108.8	8126.2	2.000 mg/L
3 Se 196.026	1678.4	1623.5	0.5000 mg/L
3 Tl 190.800	2121.5	1925.4	0.500 mg/L
3 V 292.402	270276.8	270141.3	2.0000 mg/L
3 Zn 213.856	220412.3	220540.9	2.000 mg/L

Mean Data

D: STD2 1423B

Seq. No.: 3
Data: Original

A/S Pos: 3
Date: 4/23/03 11:16:15 AM

Element	Mean Corr. Intensity	Std.Dev.	RSD	Conc.	Calib Units
g 328.068	203979.3	6086.91	2.98%	1.0000	mg/L
l 308.215	163142.6	5498.85	3.37%	5.000	mg/L
s 188.979	1480.6	11.91	0.80%	0.500	mg/L
a 233.527	2182314.5	63802.84	2.92%	5.0000	mg/L
e 313.107	1347768.3	41801.14	3.10%	0.50000	mg/L
a 227.547	12409.9	329.01	2.65%	50.00	mg/L
d 228.802	131206.7	3874.00	2.95%	1.000	mg/L
o 228.616	210821.0	5838.60	2.77%	2.0000	mg/L
r 267.716	46743.4	1381.47	2.96%	0.5000	mg/L
u 324.754	611066.4	17999.23	2.95%	2.0000	mg/L
e 273.955	229203.2	6470.39	2.82%	5.000	mg/L
766.491	366264.6	15965.14	4.36%	15.00	mg/L
g 279.079	1078325.3	33156.12	3.07%	25.000	mg/L
n 257.610	2692852.5	83770.26	3.11%	2.0000	mg/L
o 202.030	37365.2	1207.51	3.23%	2.000	mg/L
a 330.237	69948.7	2322.78	3.32%	100.00	mg/L
i 231.604	102703.2	2925.81	2.85%	2.0000	mg/L
o 220.353	8090.3	57.04	0.71%	0.500	mg/L
o 206.833	8083.3	57.80	0.72%	2.000	mg/L
e 196.026	1615.1	8.39	0.52%	0.5000	mg/L
l 190.800	1910.2	21.21	1.11%	0.500	mg/L
292.402	268264.0	7976.52	2.97%	2.0000	mg/L
a 213.856	218867.3	6499.03	2.97%	2.000	mg/L

uplicate Data

D: STD3 1423C

Date: 4/23/03 11:19:52 AM

apl# Element	Net Intensity	Corrected Intensity	Conc.	Calib Units
1 Ag 328.068	105426.3	105404.4	0.5000	mg/L
1 Al 308.215	89084.2	85134.0	2.500	mg/L
1 As 188.979	862.6	738.6	0.250	mg/L
1 Ba 233.527	1134287.5	1134715.4	2.5000	mg/L
1 Be 313.107	695082.8	695917.1	0.25000	mg/L
1 Ca 227.547	6889.8	6308.0	25.00	mg/L
1 Cd 228.802	67964.2	67741.2	0.500	mg/L
1 Co 228.616	110661.8	111009.0	1.0000	mg/L
1 Cr 267.716	24385.3	24655.6	0.2500	mg/L
1 Cu 324.754	320461.9	316653.5	1.0000	mg/L
1 Fe 273.955	133272.1	132904.1	2.500	mg/L
1 K 766.491	168571.5	171052.0	7.500	mg/L
1 Mg 279.079	561991.3	560877.0	12.500	mg/L
1 Mn 257.610	1418986.0	1418229.8	1.0000	mg/L
1 Mo 202.030	19114.4	19173.9	1.000	mg/L
1 Na 330.237	41468.5	34842.7	50.00	mg/L
1 Ni 231.604	53826.5	53925.9	1.0000	mg/L
1 Pb 220.353	3914.2	4076.0	0.250	mg/L
1 Sb 206.833	4093.9	4111.4	1.000	mg/L
1 Se 196.026	883.0	828.1	0.250	mg/L
1 Tl 190.800	1184.0	987.9	0.250	mg/L
1 V 292.402	140433.7	140298.2	1.0000	mg/L
1 Zn 213.856	111676.8	111805.4	1.000	mg/L

2	Ag	328.068	105101.7	105079.8	0.5000	mg/L
2	Al	308.215	89188.4	85238.2	2.500	mg/L
2	As	188.979	865.1	741.1	0.250	mg/L
2	Ba	233.527	1126675.6	1127103.6	2.5000	mg/L
2	Be	313.107	692153.1	692987.4	0.25000	mg/L
2	Ca	227.547	6868.9	6287.2	25.00	mg/L
2	Cd	228.802	67677.1	67454.0	0.500	mg/L
2	Co	228.616	110011.6	110358.8	1.0000	mg/L
2	Cr	267.716	24098.5	24368.8	0.2500	mg/L
2	Cu	324.754	320223.5	316415.2	1.0000	mg/L
2	Fe	273.955	132613.1	132245.2	2.500	mg/L
2	K	766.491	169028.2	171508.7	7.500	mg/L
2	Mg	279.079	558839.2	557724.9	12.500	mg/L
2	Mn	257.610	1408915.5	1408159.3	1.0000	mg/L
2	Mo	202.030	19037.9	19097.4	1.000	mg/L
2	Na	330.237	41397.5	34771.6	50.00	mg/L
2	Ni	231.604	53952.9	54052.2	1.0000	mg/L
2	Pb	220.353	3938.0	4099.8	0.250	mg/L
2	Sb	206.833	4082.2	4099.6	1.000	mg/L
2	Se	196.026	866.2	811.3	0.250	mg/L
2	Tl	190.800	1183.3	987.2	0.250	mg/L
2	V	292.402	139191.1	139055.6	1.0000	mg/L
2	Zn	213.856	111774.1	111902.7	1.000	mg/L

3	Ag	328.068	101787.9	101766.0	0.5000	mg/L
3	Al	308.215	86152.0	82201.9	2.500	mg/L
3	As	188.979	867.9	743.8	0.250	mg/L
3	Ba	233.527	1107379.2	1107807.1	2.5000	mg/L
3	Be	313.107	678076.8	678911.1	0.25000	mg/L
3	Ca	227.547	6855.3	6273.5	25.00	mg/L
3	Cd	228.802	65758.7	65535.6	0.500	mg/L
3	Co	228.616	106879.8	107227.0	1.0000	mg/L
3	Cr	267.716	23525.2	23795.5	0.2500	mg/L
3	Cu	324.754	309934.6	306126.2	1.0000	mg/L
3	Fe	273.955	128263.7	127895.7	2.500	mg/L
3	K	766.491	165642.4	168122.9	7.500	mg/L
3	Mg	279.079	549431.2	548316.9	12.500	mg/L
3	Mn	257.610	1387336.0	1386579.8	1.0000	mg/L
3	Mo	202.030	18997.6	19057.1	1.000	mg/L
3	Na	330.237	40415.2	33789.4	50.00	mg/L
3	Ni	231.604	52209.6	52309.0	1.0000	mg/L
3	Pb	220.353	3908.4	4070.2	0.250	mg/L
3	Sb	206.833	4063.5	4081.0	1.000	mg/L
3	Se	196.026	864.0	809.2	0.250	mg/L
3	Tl	190.800	1177.2	981.1	0.250	mg/L
3	V	292.402	135044.9	134909.4	1.0000	mg/L
3	Zn	213.856	108250.8	108379.4	1.000	mg/L

ean Data
): STD3 1423C

Seq. No.: 4
Data: Original

A/S Pos: 4
Date: 4/23/03 11:19:52 AM

Element	Mean	Corr.	Std.Dev.	RSD	Conc.	Calib
	Intensity				Units	
y	328.068	104083.4	2013.48	1.93%	0.5000	mg/L
l	308.215	84191.4	1723.73	2.05%	2.500	mg/L
s	188.979	741.2	2.63	0.35%	0.250	mg/L
a	233.527	1123208.7	13870.55	1.23%	2.5000	mg/L
e	313.107	689271.9	9091.46	1.32%	0.25000	mg/L
a	227.547	6289.5	17.36	0.28%	25.00	mg/L
l	228.802	66910.3	1199.11	1.79%	0.500	mg/L
y	228.616	109531.6	2022.13	1.85%	1.0000	mg/L
r	267.716	24273.3	437.94	1.80%	0.2500	mg/L
i	324.754	313064.9	6010.34	1.92%	1.0000	mg/L
e	273.955	131015.0	2721.38	2.08%	2.500	mg/L
766.491	170227.9	1837.20	1.08%	7.500	mg/L	
y	279.079	555639.6	6534.56	1.18%	12.500	mg/L
i	257.610	1404323.0	16169.99	1.15%	1.0000	mg/L
y	202.030	19109.4	59.32	0.31%	1.000	mg/L
i	330.237	34467.9	588.69	1.71%	50.00	mg/L
.	231.604	53429.0	972.04	1.82%	1.0000	mg/L

b 220.353	4082.0	15.67	0.38%	0.250 mg/L
b 206.833	4097.3	15.34	0.37%	1.000 mg/L
e 196.026	816.2	10.39	1.27%	0.250 mg/L
l 190.800	985.4	3.74	0.38%	0.250 mg/L
292.402	138087.7	2821.76	2.04%	1.0000 mg/L
n 213.856	110695.8	2006.66	1.81%	1.000 mg/L

alibration Summary

ethod: 23ME ICP-M

Date: 4/23/03

11:20:56 AM

Element	Stds	Equation	Intercept	Slope	Curvature	Corr. Coeff.
g 328.068	3	Linear-thru-Zero	0.0	202761.6	0.00000	0.999942
l 308.215	3	Linear-thru-Zero	0.0	32338.0	0.00000	0.999862
s 188.979	3	Linear-thru-Zero	0.0	2888.4	0.00000	0.999757
a 233.527	3	Linear-thru-Zero	0.0	423784.1	0.00000	0.999473
e 313.107	3	Linear-thru-Zero	0.0	2685329.9	0.00000	0.999950
a 227.547	3	Linear-thru-Zero	0.0	245.5	0.00000	0.999922
d 228.802	3	Linear-thru-Zero	0.0	129120.3	0.00000	0.999828
o 228.616	3	Linear-thru-Zero	0.0	102978.0	0.00000	0.999552
r 267.716	3	Linear-thru-Zero	0.0	91592.9	0.00000	0.999623
u 324.754	3	Linear-thru-Zero	0.0	300295.6	0.00000	0.999782
e 273.955	3	Linear-thru-Zero	0.0	44932.6	0.00000	0.998106
766.491	3	Non-Linear	-1017.1	22038.8	154.06843	0.998652
g 279.079	3	Linear-thru-Zero	0.0	42093.4	0.00000	0.999596
n 257.610	3	Linear-thru-Zero	0.0	1331037.4	0.00000	0.999760
o 202.030	3	Linear-thru-Zero	0.0	18433.2	0.00000	0.999852
a 330.237	3	Non-Linear	5.4	678.4	0.21158	0.999846
i 231.604	3	Linear-thru-Zero	0.0	49912.8	0.00000	0.999403
o 220.353	3	Linear-thru-Zero	0.0	15903.3	0.00000	0.999856
o 206.833	3	Linear-thru-Zero	0.0	3967.7	0.00000	0.999819
e 196.026	3	Linear-thru-Zero	0.0	3144.1	0.00000	0.999666
l 190.800	3	Linear-thru-Zero	0.0	3700.4	0.00000	0.999381
292.402	3	Linear-thru-Zero	0.0	131430.3	0.00000	0.999694
n 213.856	3	Linear-thru-Zero	0.0	107770.3	0.00000	0.999875

uplicate Data

D: ICV 1447A

Date: 4/23/03

11:23:40 AM

Sp#	Element	Net Intensity	Corrected Intensity	Calib Conc.	Units	Sample Conc.	Units
1	Ag 328.068	394135.9	394114.0	1.944	mg/L		
1	Al 308.215	316966.3	313016.2	9.680	mg/L		
1	As 188.979	2920.0	2796.0	0.9787	mg/L		
1	Ba 233.527	4216575.0	4217002.9	9.951	mg/L		
1	Be 313.107	2606363.4	2607197.7	0.9709	mg/L		
1	Ca 227.547	24198.0	23616.2	96.19	mg/L		
1	Cd 228.802	248719.3	248496.2	1.925	mg/L		
1	Co 228.616	395472.6	395819.8	3.844	mg/L		
1	Cr 267.716	88596.7	88867.0	0.9702	mg/L		
1	Cu 324.754	1191828.5	1188020.2	3.956	mg/L		
1	Fe 273.955	434060.2	433692.2	9.652	mg/L		
1	K 766.491	788457.0	790937.5	29.75	mg/L		
1	Mg 279.079	2090605.6	2089491.3	49.64	mg/L		
1	Mn 257.610	5148659.0	5147902.9	3.868	mg/L		
1	Mo 202.030	71093.8	71153.3	3.860	mg/L		
1	Na 330.237	148127.7	141501.8	196.5	mg/L		
1	Ni 231.604	190144.1	190243.4	3.812	mg/L		
1	Pb 220.353	15113.8	15275.6	0.9605	mg/L		
1	Sb 206.833	15484.7	15502.2	3.879	mg/L		
1	Se 196.026	3095.1	3040.2	0.9694	mg/L		
1	Tl 190.800	3812.6	3616.4	0.9733	mg/L		
1	V 292.402	525933.5	525798.0	4.001	mg/L		
1	Zn 213.856	413738.2	413866.8	3.840	mg/L		
2	Ag 328.068	392257.8	392235.9	1.934	mg/L		
2	Al 308.215	315294.4	311344.2	9.628	mg/L		
2	As 188.979	2941.9	2817.8	0.9862	mg/L		
2	Ba 233.527	4151021.1	4151449.0	9.796	mg/L		
2	Be 313.107	2647164.2	2647998.5	0.9861	mg/L		

n 213.856 418380.8 3.882 0.0762 mg/L 1.96%

uplicate Data

D: ICB

Date: 4/23/03 11:30:36 AM

epl#	Element	Net Intensity	Corrected Intensity	Conc.	Calib Units	Sample Conc.	Units
1	Ag 328.068	102.3	80.4	0.0004	mg/L		
1	Al 308.215	3868.7	-81.5	-0.0025	mg/L		
1	As 188.979	121.4	-2.6	-0.0009	mg/L		
1	Ba 233.527	50.3	478.3	0.0011	mg/L		
1	Be 313.107	-160.1	674.2	0.0003	mg/L		
1	Ca 227.547	626.2	44.4	0.1807	mg/L		
1	Cd 228.802	241.5	18.4	0.0001	mg/L		
1	Co 228.616	-232.3	114.9	0.0011	mg/L		
1	Cr 267.716	-313.9	-43.6	-0.0005	mg/L		
1	Cu 324.754	3465.5	-342.9	-0.0011	mg/L		
1	Fe 273.955	906.4	538.4	0.0120	mg/L		
1	K 766.491	-2697.8	-217.3	0.0363	mg/L		
1	Mg 279.079	1553.4	439.1	0.0104	mg/L		
1	Mn 257.610	1259.2	503.1	0.0004	mg/L		
1	Mo 202.030	-53.3	6.1	0.0003	mg/L		
1	Na 330.237	6658.3	32.5	0.0399	mg/L		
1	Ni 231.604	-70.3	29.0	0.0006	mg/L		
1	Pb 220.353	-171.6	-9.8	-0.0006	mg/L		
1	Sb 206.833	-1.8	15.7	0.0040	mg/L		
1	Se 196.026	51.4	-3.5	-0.0011	mg/L		
1	Tl 190.800	206.2	10.1	0.0027	mg/L		
1	V 292.402	73.2	-62.3	-0.0005	mg/L		
1	Zn 213.856	-465.5	-336.9	-0.0031	mg/L		
2	Ag 328.068	-66.9	-88.8	-0.0004	mg/L		
2	Al 308.215	3841.7	-108.4	-0.0034	mg/L		
2	As 188.979	128.3	4.2	0.0015	mg/L		
2	Ba 233.527	26.3	454.2	0.0011	mg/L		
2	Be 313.107	-108.5	725.8	0.0003	mg/L		
2	Ca 227.547	578.1	-3.7	-0.0149	mg/L		
2	Cd 228.802	234.7	11.7	0.0001	mg/L		
2	Co 228.616	-247.2	100.0	0.0010	mg/L		
2	Cr 267.716	-300.5	-30.2	-0.0003	mg/L		
2	Cu 324.754	3464.9	-343.5	-0.0011	mg/L		
2	Fe 273.955	843.1	475.1	0.0106	mg/L		
2	K 766.491	-2827.8	-347.3	0.0304	mg/L		
2	Mg 279.079	1461.6	347.4	0.0083	mg/L		
2	Mn 257.610	1194.2	438.1	0.0003	mg/L		
2	Mo 202.030	-58.1	1.4	0.0001	mg/L		
2	Na 330.237	6670.4	44.6	0.0577	mg/L		
2	Ni 231.604	-57.4	41.9	0.0008	mg/L		
2	Pb 220.353	-167.1	-5.3	-0.0003	mg/L		
2	Sb 206.833	0.9	18.4	0.0046	mg/L		
2	Se 196.026	58.5	3.6	0.0011	mg/L		
2	Tl 190.800	196.9	0.7	0.0002	mg/L		
2	V 292.402	150.7	15.1	0.0001	mg/L		
2	Zn 213.856	-477.3	-348.7	-0.0032	mg/L		
3	Ag 328.068	160.2	138.3	0.0007	mg/L		
3	Al 308.215	3863.0	-87.1	-0.0027	mg/L		
3	As 188.979	133.3	9.2	0.0032	mg/L		
3	Ba 233.527	-23.6	404.4	0.0010	mg/L		
3	Be 313.107	-259.0	575.3	0.0002	mg/L		
3	Ca 227.547	608.7	27.0	0.1098	mg/L		
3	Cd 228.802	251.8	28.7	0.0002	mg/L		
3	Co 228.616	-226.7	120.5	0.0012	mg/L		
3	Cr 267.716	-299.0	-28.7	-0.0003	mg/L		
3	Cu 324.754	3511.6	-296.8	-0.0010	mg/L		
3	Fe 273.955	742.1	374.1	0.0083	mg/L		
3	K 766.491	-2104.8	375.7	0.0632	mg/L		
3	Mg 279.079	1364.6	250.3	0.0059	mg/L		
3	Mn 257.610	1120.2	364.0	0.0003	mg/L		
3	Mo 202.030	-53.2	6.2	0.0003	mg/L		
3	Na 330.237	6729.5	103.7	0.1449	mg/L		

3 Ni 231.604	-77.1	22.3	0.0004 mg/L
3 Pb 220.353	-147.2	14.6	0.0009 mg/L
3 Sb 206.833	-5.1	12.4	0.0031 mg/L
3 Se 196.026	59.2	4.4	0.0014 mg/L
3 Tl 190.800	210.6	14.5	0.0039 mg/L
3 V 292.402	202.6	67.1	0.0005 mg/L
3 Zn 213.856	-491.6	-363.0	-0.0034 mg/L

Mean Data

D: ICB
 Sample Qty: 1.0000 g
 Seq. No.: 6
 Prep. Vol.:
 Data: Original
 Sample No.: 2
 1.0 L
 A/S Pos: 1
 Dilution: 1.0: 1.0
 Date: 4/23/03 11:30:36 AM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
g 328.068	43.3	0.0002	0.00058	mg/L				272.53%
l 308.215	-92.3	-0.0029	0.00044	mg/L				15.37%
s 188.979	3.6	0.0012	0.00206	mg/L				165.45%
a 233.527	445.6	0.0011	0.00009	mg/L				8.46%
e 313.107	658.4	0.0002	0.00003	mg/L				11.61%
a 227.547	22.6	0.0919	0.09904	mg/L				107.80%
d 228.802	19.6	0.0002	0.00007	mg/L				43.74%
o 228.616	111.8	0.0011	0.00010	mg/L				9.48%
r 267.716	-34.1	-0.0004	0.00009	mg/L				24.03%
u 324.754	-327.7	-0.0011	0.00009	mg/L				8.18%
e 273.955	462.6	0.0103	0.00184	mg/L				17.92%
766.491	-63.0	0.0433	0.01748	mg/L				40.38%
g 279.079	345.6	0.0082	0.00224	mg/L				27.31%
n 257.610	435.1	0.0003	0.00005	mg/L				15.99%
o 202.030	4.6	0.0002	0.00015	mg/L				60.75%
a 330.237	60.2	0.0808	0.05615	mg/L				69.45%
i 231.604	31.1	0.0006	0.00020	mg/L				32.16%
b 220.353	-0.1	0.0000	0.00082	mg/L				>999.9%
b 206.833	15.5	0.0039	0.00076	mg/L				19.43%
e 196.026	1.5	0.0005	0.00138	mg/L				291.11%
l 190.800	8.4	0.0023	0.00190	mg/L				83.25%
292.402	6.6	0.0001	0.00050	mg/L				983.44%
n 213.856	-349.5	-0.0032	0.00012	mg/L				3.74%

Replicate Data

D: CRI A1432
 Date: 4/23/03 11:33:56 AM

Element	Net Intensity	Corrected Intensity	Calib Conc. Units	Sample Conc. Units
1 Ag 328.068	2098.7	2076.8	0.0102 mg/L	
1 Al 308.215	10024.3	6074.2	0.1878 mg/L	
1 As 188.979	179.4	55.4	0.0192 mg/L	
1 Ba 233.527	4319.7	4747.6	0.0112 mg/L	
1 Be 313.107	11231.7	12066.0	0.0045 mg/L	
1 Ca 227.547	885.2	303.4	1.236 mg/L	
1 Cd 228.802	895.3	672.2	0.0052 mg/L	
1 Co 228.616	2017.1	2364.3	0.0230 mg/L	
1 Cr 267.716	636.7	907.0	0.0099 mg/L	
1 Cu 324.754	5946.8	2138.4	0.0071 mg/L	
1 Fe 273.955	2405.2	2037.2	0.0453 mg/L	
1 K 766.491	-2736.8	-256.3	0.0345 mg/L	
1 Mg 279.079	1502.5	388.2	0.0092 mg/L	
1 Mn 257.610	14201.2	13445.1	0.0101 mg/L	
1 Mo 202.030	210.6	270.0	0.0146 mg/L	
1 Na 330.237	6943.1	317.2	0.4596 mg/L	
1 Ni 231.604	1004.7	1104.0	0.0221 mg/L	
1 Pb 220.353	-63.5	98.3	0.0062 mg/L	
1 Sb 206.833	72.5	89.9	0.0227 mg/L	
1 Se 196.026	81.2	26.3	0.0084 mg/L	
1 Tl 190.800	231.1	35.0	0.0095 mg/L	
1 V 292.402	1427.0	1291.5	0.0098 mg/L	
1 Zn 213.856	1504.0	1632.6	0.0151 mg/L	
2 Ag 328.068	2072.9	2051.0	0.0101 mg/L	
2 Al 308.215	10165.7	6215.5	0.1922 mg/L	
2 As 188.979	183.7	59.6	0.0206 mg/L	

l 190.800	40.6	0.0110	0.00149 mg/L	13.62%
292.402	1310.2	0.0100	0.00021 mg/L	2.08%
n 213.856	1651.3	0.0153	0.00015 mg/L	1.00%

uplicate Data

D: ICSA 1441

Date: 4/23/03

11:37:09 AM

epl#	Element	Net Intensity	Corrected Intensity	Calib Conc. Units	Sample Conc. Units
1	Ag 328.068	-909.1	-931.0	0.0004 mg/L	
1	Al 308.215	15886983.1	15883032.9	491.2 mg/L	
1	As 188.979	216.8	92.7	0.0102 mg/L	
1	Ba 233.527	1267.3	1695.2	0.0040 mg/L	
1	Be 313.107	-416.6	417.6	0.0002 mg/L	
1	Ca 227.547	125588.7	125007.0	512.8 mg/L	
1	Cd 228.802	4.6	-218.5	-0.0017 mg/L	
1	Co 228.616	46.2	393.4	0.0038 mg/L	
1	Cr 267.716	232.9	503.2	0.0055 mg/L	
1	Cu 324.754	1185.7	-2622.7	0.0003 mg/L	
1	Fe 273.955	8516077.6	8515709.6	189.5 mg/L	
1	K 766.491	-809.3	1671.2	0.1219 mg/L	
1	Mg 279.079	20830404.2	20829290.0	494.8 mg/L	
1	Mn 257.610	9193.0	8436.9	-0.0013 mg/L	
1	Mo 202.030	78.2	137.6	0.0013 mg/L	
1	Na 330.237	6414.6	-211.3	-0.3194 mg/L	
1	Ni 231.604	-215.2	-115.9	-0.0023 mg/L	
1	Pb 220.353	-1042.8	-881.0	-0.0071 mg/L	
1	Sb 206.833	-36.6	-19.1	0.0009 mg/L	
1	Se 196.026	-30.1	-85.0	0.0076 mg/L	
1	Tl 190.800	604.0	407.9	0.0142 mg/L	
1	V 292.402	-937.6	-1073.1	-0.0082 mg/L	
1	Zn 213.856	2328.9	2457.4	-0.0006 mg/L	
2	Ag 328.068	-774.0	-795.9	-0.0039 mg/L	
2	Al 308.215	15538013.7	15534063.5	480.4 mg/L	
2	As 188.979	146.3	22.3	-0.0136 mg/L	
2	Ba 233.527	1091.5	1519.4	0.0036 mg/L	
2	Be 313.107	-529.4	304.9	0.0001 mg/L	
2	Ca 227.547	123553.8	122972.0	504.5 mg/L	
2	Cd 228.802	109.3	-113.8	-0.0009 mg/L	
2	Co 228.616	-34.7	312.5	0.0030 mg/L	
2	Cr 267.716	177.8	448.1	0.0049 mg/L	
2	Cu 324.754	1097.2	-2711.2	-0.0002 mg/L	
2	Fe 273.955	8328663.5	8328295.5	185.4 mg/L	
2	K 766.491	-985.7	1494.8	0.1139 mg/L	
2	Mg 279.079	20365367.4	20364253.1	483.8 mg/L	
2	Mn 257.610	8961.5	8205.3	-0.0013 mg/L	
2	Mo 202.030	94.5	153.9	0.0023 mg/L	
2	Na 330.237	6697.5	71.7	0.0978 mg/L	
2	Ni 231.604	-181.1	-81.8	-0.0016 mg/L	
2	Pb 220.353	-1026.8	-865.0	-0.0072 mg/L	
2	Sb 206.833	25.2	42.7	0.0164 mg/L	
2	Se 196.026	33.4	-21.4	0.0270 mg/L	
2	Tl 190.800	588.5	392.3	0.0122 mg/L	
2	V 292.402	-893.6	-1029.2	-0.0078 mg/L	
2	Zn 213.856	2291.1	2419.7	-0.0005 mg/L	
3	Ag 328.068	-791.0	-812.9	-0.0040 mg/L	
3	Al 308.215	15792679.1	15788729.0	488.2 mg/L	
3	As 188.979	217.4	93.4	0.0109 mg/L	
3	Ba 233.527	1151.5	1579.4	0.0037 mg/L	
3	Be 313.107	-441.7	392.6	0.0001 mg/L	
3	Ca 227.547	127748.1	127166.3	521.6 mg/L	
3	Cd 228.802	202.9	-20.2	-0.0002 mg/L	
3	Co 228.616	11.1	358.3	0.0035 mg/L	
3	Cr 267.716	179.8	450.1	0.0049 mg/L	
3	Cu 324.754	1070.9	-2737.5	-0.0002 mg/L	
3	Fe 273.955	8437006.0	8436638.0	187.8 mg/L	
3	K 766.491	-562.6	1917.9	0.1331 mg/L	
3	Mg 279.079	20685130.3	20684016.0	491.4 mg/L	
3	Mn 257.610	8966.6	8210.5	-0.0014 mg/L	

b 206.833	3697.2	0.9215	0.03950 mg/L	4.29%
e 196.026	2821.4	0.9295	0.04126 mg/L	4.44%
l 190.800	3549.2	0.8701	0.04489 mg/L	5.16%
292.402	59099.2	0.4497	0.00786 mg/L	1.75%
n 213.856	100695.0	0.9129	0.01765 mg/L	1.93%

eplicate Data

D: CCV 1447B

Date: 4/23/03 11:43:03 AM

epl#	Element	Net Intensity	Corrected Intensity	Calib Conc. Units	Sample Conc. Units
1	Ag 328.068	211572.1	211550.2	1.043 mg/L	
1	Al 308.215	176922.9	172972.8	5.349 mg/L	
1	As 188.979	1579.3	1455.2	0.5097 mg/L	
1	Ba 233.527	2273339.7	2273767.6	5.365 mg/L	
1	Be 313.107	1404266.4	1405100.7	0.5233 mg/L	
1	Ca 227.547	13439.6	12857.8	52.37 mg/L	
1	Cd 228.802	135319.9	135096.8	1.046 mg/L	
1	Co 228.616	217497.0	217844.2	2.115 mg/L	
1	Cr 267.716	48274.4	48544.7	0.5300 mg/L	
1	Cu 324.754	634537.8	630729.4	2.100 mg/L	
1	Fe 273.955	242167.4	241799.4	5.381 mg/L	
1	K 766.491	377260.1	379740.6	15.58 mg/L	
1	Mg 279.079	1127582.1	1126467.9	26.76 mg/L	
1	Mn 257.610	2772954.2	2772198.1	2.083 mg/L	
1	Mo 202.030	38595.1	38654.6	2.097 mg/L	
1	Na 330.237	80348.0	73722.2	105.2 mg/L	
1	Ni 231.604	105653.1	105752.4	2.119 mg/L	
1	Pb 220.353	7954.9	8116.7	0.5104 mg/L	
1	Sb 206.833	7996.1	8013.6	2.004 mg/L	
1	Se 196.026	1683.5	1628.6	0.5193 mg/L	
1	Tl 190.800	2103.3	1907.2	0.5154 mg/L	
1	V 292.402	278619.3	278483.7	2.119 mg/L	
1	Zn 213.856	226457.2	226585.8	2.102 mg/L	
2	Ag 328.068	202207.8	202185.9	0.9972 mg/L	
2	Al 308.215	168423.0	164472.8	5.086 mg/L	
2	As 188.979	1573.6	1449.5	0.5074 mg/L	
2	Ba 233.527	2173242.5	2173670.5	5.129 mg/L	
2	Be 313.107	1333494.6	1334328.8	0.4969 mg/L	
2	Ca 227.547	12855.8	12274.0	49.99 mg/L	
2	Cd 228.802	129136.7	128913.7	0.9984 mg/L	
2	Co 228.616	206785.1	207132.3	2.011 mg/L	
2	Cr 267.716	46225.2	46495.5	0.5076 mg/L	
2	Cu 324.754	605035.3	601226.9	2.002 mg/L	
2	Fe 273.955	231026.2	230658.2	5.133 mg/L	
2	K 766.491	373470.9	375951.4	15.44 mg/L	
2	Mg 279.079	1076033.4	1074919.1	25.54 mg/L	
2	Mn 257.610	2752575.7	2751819.6	2.067 mg/L	
2	Mo 202.030	37100.6	37160.0	2.016 mg/L	
2	Na 330.237	76986.5	70360.7	100.6 mg/L	
2	Ni 231.604	100775.2	100874.5	2.021 mg/L	
2	Pb 220.353	7985.7	8147.5	0.5123 mg/L	
2	Sb 206.833	8030.1	8047.6	2.013 mg/L	
2	Se 196.026	1691.8	1636.9	0.5219 mg/L	
2	Tl 190.800	2097.1	1901.0	0.5137 mg/L	
2	V 292.402	267547.0	267411.4	2.035 mg/L	
2	Zn 213.856	215059.1	215187.6	1.997 mg/L	
3	Ag 328.068	206770.9	206749.0	1.020 mg/L	
3	Al 308.215	173271.6	169321.4	5.236 mg/L	
3	As 188.979	1588.8	1464.8	0.5129 mg/L	
3	Ba 233.527	2227132.0	2227559.9	5.256 mg/L	
3	Be 313.107	1363960.5	1364794.8	0.5082 mg/L	
3	Ca 227.547	13197.7	12615.9	51.38 mg/L	
3	Cd 228.802	131985.8	131762.8	1.020 mg/L	
3	Co 228.616	212233.4	212580.6	2.064 mg/L	
3	Cr 267.716	47595.4	47865.7	0.5226 mg/L	
3	Cu 324.754	618399.9	614591.5	2.047 mg/L	
3	Fe 273.955	236188.0	235820.1	5.248 mg/L	
3	K 766.491	369238.0	371718.5	15.28 mg/L	

3 Mg 279.079	1103233.9	1102119.6	26.18 mg/L
3 Mn 257.610	2704271.9	2703515.8	2.031 mg/L
3 Mo 202.030	37966.1	38025.6	2.063 mg/L
3 Na 330.237	78893.4	72267.6	103.2 mg/L
3 Ni 231.604	102795.9	102895.2	2.061 mg/L
3 Pb 220.353	7984.1	8145.9	0.5122 mg/L
3 Sb 206.833	8026.8	8044.3	2.012 mg/L
3 Se 196.026	1684.8	1629.9	0.5197 mg/L
3 Tl 190.800	2100.8	1904.7	0.5147 mg/L
3 V 292.402	275267.5	275132.0	2.093 mg/L
3 Zn 213.856	220501.9	220630.5	2.047 mg/L

Mean Data

D: CCV 1447B	Seq. No.: 10	Sample No.: 5	A/S Pos: 6
Sample Qty: 1.0000 g	Prep. Vol.: 1.0 L	Dilution: 1.0:	1.0
	Data: Original	Date: 4/23/03	11:43:03 AM

Element	Mean Intensity	Corr. Conc.	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
g 328.068	206828.4	1.020	0.0231	0.0231	mg/L				2.26%
l 308.215	168922.3	5.224	0.1319	0.1319	mg/L				2.52%
s 188.979	1456.5	0.5100	0.00274	0.00274	mg/L				0.54%
a 233.527	2224999.3	5.250	0.1182	0.1182	mg/L				2.25%
e 313.107	1368074.8	0.5095	0.01322	0.01322	mg/L				2.59%
a 227.547	12582.6	51.25	1.195	1.195	mg/L				2.33%
d 228.802	131924.4	1.022	0.0240	0.0240	mg/L				2.35%
o 228.616	212519.0	2.064	0.0520	0.0520	mg/L				2.52%
r 267.716	47635.3	0.5201	0.01140	0.01140	mg/L				2.19%
u 324.754	615515.9	2.050	0.0492	0.0492	mg/L				2.40%
e 273.955	236092.6	5.254	0.1241	0.1241	mg/L				2.36%
766.491	375803.5	15.43	0.150	0.150	mg/L				0.97%
g 279.079	1101168.8	26.16	0.613	0.613	mg/L				2.34%
n 257.610	2742511.1	2.060	0.0265	0.0265	mg/L				1.29%
o 202.030	37946.7	2.059	0.0407	0.0407	mg/L				1.98%
a 330.237	72116.8	103.0	2.34	2.34	mg/L				2.27%
i 231.604	103174.1	2.067	0.0491	0.0491	mg/L				2.38%
b 220.353	8136.7	0.5116	0.00109	0.00109	mg/L				0.21%
b 206.833	8035.2	2.010	0.0050	0.0050	mg/L				0.25%
e 196.026	1631.8	0.5203	0.00140	0.00140	mg/L				0.27%
l 190.800	1904.3	0.5146	0.00084	0.00084	mg/L				0.16%
292.402	273675.7	2.082	0.0432	0.0432	mg/L				2.07%
n 213.856	220801.3	2.049	0.0529	0.0529	mg/L				2.58%

Replicate Data

D: CCB	Date: 4/23/03	11:48:21 AM
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Element	Net Intensity	Corrected Intensity	Calib Conc.	Sample Conc.
1 Ag 328.068	-158.6	-180.5	-0.0009 mg/L	
1 Al 308.215	3973.9	23.8	0.0007 mg/L	
1 As 188.979	130.8	6.7	0.0023 mg/L	
1 Ba 233.527	16.4	444.3	0.0010 mg/L	
1 Be 313.107	-321.3	513.0	0.0002 mg/L	
1 Ca 227.547	605.7	23.9	0.0973 mg/L	
1 Cd 228.802	238.0	14.9	0.0001 mg/L	
1 Co 228.616	-285.4	61.8	0.0006 mg/L	
1 Cr 267.716	-317.1	-46.8	-0.0005 mg/L	
1 Cu 324.754	3443.4	-365.0	-0.0012 mg/L	
1 Fe 273.955	697.1	329.1	0.0073 mg/L	
1 K 766.491	-2566.6	-86.2	0.0422 mg/L	
1 Mg 279.079	5218.5	4104.2	0.0975 mg/L	
1 Mn 257.610	1037.2	281.0	0.0002 mg/L	
1 Mo 202.030	-54.6	4.8	0.0003 mg/L	
1 Na 330.237	6871.5	245.7	0.3542 mg/L	
1 Ni 231.604	-76.3	23.0	0.0005 mg/L	
1 Pb 220.353	-160.4	1.4	0.0001 mg/L	
1 Sb 206.833	-14.9	2.5	0.0006 mg/L	
1 Se 196.026	66.4	11.6	0.0037 mg/L	
1 Tl 190.800	200.6	4.5	0.0012 mg/L	
1 V 292.402	149.2	13.6	0.0001 mg/L	
1 Zn 213.856	-610.7	-482.2	-0.0045 mg/L	

i 231.604	22.7	0.0005	0.00004 mg/L	9.13%
b 220.353	-13.8	-0.0009	0.00095 mg/L	109.45%
b 206.833	9.5	0.0024	0.00153 mg/L	63.93%
e 196.026	5.8	0.0018	0.00174 mg/L	94.62%
l 190.800	10.5	0.0028	0.00149 mg/L	52.32%
292.402	-18.1	-0.0001	0.00022 mg/L	156.69%
n 213.856	-481.9	-0.0045	0.00005 mg/L	1.08%

eplicate Data

D: Calib Blank

Date: 4/23/03

11:50:47 AM

epl#	Element	Net Intensity	Corrected Intensity	Calib Conc. Units
1	Ag 328.068	-32.3	-32.3	0 mg/L
1	Al 308.215	4087.8	4087.8	0 mg/L
1	As 188.979	119.6	119.6	0 mg/L
1	Ba 233.527	-32.8	-32.8	0 mg/L
1	Be 313.107	-250.4	-250.4	0 mg/L
1	Ca 227.547	630.4	630.4	0 mg/L
1	Cd 228.802	231.5	231.5	0 mg/L
1	Co 228.616	-307.8	-307.8	0 mg/L
1	Cr 267.716	-309.6	-309.6	0 mg/L
1	Cu 324.754	3246.0	3246.0	0 mg/L
1	Fe 273.955	644.2	644.2	0 mg/L
1	K 766.491	-2732.5	-2732.5	0 mg/L
1	Mg 279.079	5573.4	5573.4	0 mg/L
1	Mn 257.610	916.3	916.3	0 mg/L
1	Mo 202.030	-59.8	-59.8	0 mg/L
1	Na 330.237	6842.9	6842.9	0 mg/L
1	Ni 231.604	-75.4	-75.4	0 mg/L
1	Pb 220.353	-179.5	-179.5	0 mg/L
1	Sb 206.833	-20.1	-20.1	0 mg/L
1	Se 196.026	49.0	49.0	0 mg/L
1	Tl 190.800	203.4	203.4	0 mg/L
1	V 292.402	116.7	116.7	0 mg/L
1	Zn 213.856	-603.1	-603.1	0 mg/L
2	Ag 328.068	-136.6	-136.6	0 mg/L
2	Al 308.215	4204.1	4204.1	0 mg/L
2	As 188.979	130.8	130.8	0 mg/L
2	Ba 233.527	-44.3	-44.3	0 mg/L
2	Be 313.107	-178.8	-178.8	0 mg/L
2	Ca 227.547	604.1	604.1	0 mg/L
2	Cd 228.802	240.1	240.1	0 mg/L
2	Co 228.616	-306.5	-306.5	0 mg/L
2	Cr 267.716	-298.5	-298.5	0 mg/L
2	Cu 324.754	2982.7	2982.7	0 mg/L
2	Fe 273.955	650.2	650.2	0 mg/L
2	K 766.491	-2381.4	-2381.4	0 mg/L
2	Mg 279.079	5232.3	5232.3	0 mg/L
2	Mn 257.610	790.2	790.2	0 mg/L
2	Mo 202.030	-50.8	-50.8	0 mg/L
2	Na 330.237	6467.3	6467.3	0 mg/L
2	Ni 231.604	-90.1	-90.1	0 mg/L
2	Pb 220.353	-182.4	-182.4	0 mg/L
2	Sb 206.833	-5.5	-5.5	0 mg/L
2	Se 196.026	52.4	52.4	0 mg/L
2	Tl 190.800	208.9	208.9	0 mg/L
2	V 292.402	137.8	137.8	0 mg/L
2	Zn 213.856	-608.7	-608.7	0 mg/L
3	Ag 328.068	-44.8	-44.8	0 mg/L
3	Al 308.215	3849.7	3849.7	0 mg/L
3	As 188.979	134.2	134.2	0 mg/L
3	Ba 233.527	-75.1	-75.1	0 mg/L
3	Be 313.107	-225.9	-225.9	0 mg/L
3	Ca 227.547	599.3	599.3	0 mg/L
3	Cd 228.802	243.2	243.2	0 mg/L
3	Co 228.616	-296.7	-296.7	0 mg/L
3	Cr 267.716	-294.8	-294.8	0 mg/L
3	Cu 324.754	3192.4	3192.4	0 mg/L

3 Fe 273.955	648.9	648.9	0 mg/L
3 K 766.491	-2753.5	-2753.5	0 mg/L
3 Mg 279.079	5055.3	5055.3	0 mg/L
3 Mn 257.610	722.0	722.0	0 mg/L
3 Mo 202.030	-62.3	-62.3	0 mg/L
3 Na 330.237	6845.2	6845.2	0 mg/L
3 Ni 231.604	-75.6	-75.6	0 mg/L
3 Pb 220.353	-163.6	-163.6	0 mg/L
3 Sb 206.833	-8.1	-8.1	0 mg/L
3 Se 196.026	54.2	54.2	0 mg/L
3 Tl 190.800	205.2	205.2	0 mg/L
3 V 292.402	168.2	168.2	0 mg/L
3 Zn 213.856	-616.6	-616.6	0 mg/L

Mean Data

D: Calib Blank

Seq. No.: 1
Data: Original

A/S Pos: 1
Date: 4/23/03 11:50:47 AM

Element	Mean Corr. Intensity	Std.Dev.	RSD	Conc.	Calib Units
g 328.068	-71.2	56.93	79.91%	0	mg/L
l 308.215	4047.2	180.68	4.46%	0	mg/L
s 188.979	128.2	7.68	5.99%	0	mg/L
a 233.527	-50.8	21.87	43.08%	0	mg/L
e 313.107	-218.3	36.42	16.68%	0	mg/L
a 227.547	611.3	16.71	2.73%	0	mg/L
d 228.802	238.3	6.05	2.54%	0	mg/L
o 228.616	-303.7	6.07	2.00%	0	mg/L
r 267.716	-301.0	7.71	2.56%	0	mg/L
u 324.754	3140.4	139.14	4.43%	0	mg/L
e 273.955	647.8	3.18	0.49%	0	mg/L
766.491	-2622.5	209.03	7.97%	0	mg/L
g 279.079	5287.0	263.36	4.98%	0	mg/L
n 257.610	809.5	98.59	12.18%	0	mg/L
o 202.030	-57.6	6.02	10.44%	0	mg/L
a 330.237	6718.4	217.52	3.24%	0	mg/L
i 231.604	-80.4	8.44	10.50%	0	mg/L
o 220.353	-175.2	10.09	5.76%	0	mg/L
o 206.833	-11.2	7.79	69.55%	0	mg/L
e 196.026	51.9	2.63	5.08%	0	mg/L
l 190.800	205.9	2.81	1.36%	0	mg/L
292.402	140.9	25.86	18.35%	0	mg/L
1 213.856	-609.5	6.78	1.11%	0	mg/L

Calibration Summary

Method: 23ME ICP-M

Date: 4/23/03 11:51:45 AM

Element	Stds	Equation	Intercept	Slope	Curvature	Corr. Coeff.
g 328.068	3	Linear-thru-Zero	0.0	202761.6	0.00000	0.999942
l 308.215	3	Linear-thru-Zero	0.0	32338.0	0.00000	0.999862
s 188.979	3	Linear-thru-Zero	0.0	2888.4	0.00000	0.999757
a 233.527	3	Linear-thru-Zero	0.0	423784.1	0.00000	0.999473
e 313.107	3	Linear-thru-Zero	0.0	2685329.9	0.00000	0.999950
a 227.547	3	Linear-thru-Zero	0.0	245.5	0.00000	0.999922
d 228.802	3	Linear-thru-Zero	0.0	129120.3	0.00000	0.999828
o 228.616	3	Linear-thru-Zero	0.0	102978.0	0.00000	0.999552
r 267.716	3	Linear-thru-Zero	0.0	91592.9	0.00000	0.999623
u 324.754	3	Linear-thru-Zero	0.0	300295.6	0.00000	0.999782
e 273.955	3	Linear-thru-Zero	0.0	44932.6	0.00000	0.998106
766.491	3	Non-Linear	-1017.1	22038.8	154.06843	0.998652
g 279.079	3	Linear-thru-Zero	0.0	42093.4	0.00000	0.999596
n 257.610	3	Linear-thru-Zero	0.0	1331037.4	0.00000	0.999760
o 202.030	3	Linear-thru-Zero	0.0	18433.2	0.00000	0.999852
a 330.237	3	Non-Linear	5.4	678.4	0.21158	0.999846
i 231.604	3	Linear-thru-Zero	0.0	49912.8	0.00000	0.999403
o 220.353	3	Linear-thru-Zero	0.0	15903.3	0.00000	0.999856
o 206.833	3	Linear-thru-Zero	0.0	3967.7	0.00000	0.999819
e 196.026	3	Linear-thru-Zero	0.0	3144.1	0.00000	0.999666
l 190.800	3	Linear-thru-Zero	0.0	3700.4	0.00000	0.999381
292.402	3	Linear-thru-Zero	0.0	131430.3	0.00000	0.999694

n 213.856 3 Linear-thru-Zero 0.0 107770.3 0.00000 0.999875

alibration Summary

ethod: 23ME ICP-M

Date: 4/23/03 11:51:50 AM

Element	Stds	Equation	Intercept	Slope	Curvature	Corr. Coeff.
g 328.068	3	Linear-thru-Zero	0.0	202761.6	0.00000	0.999942
l 308.215	3	Linear-thru-Zero	0.0	32338.0	0.00000	0.999862
s 188.979	3	Linear-thru-Zero	0.0	2888.4	0.00000	0.999757
a 233.527	3	Linear-thru-Zero	0.0	423784.1	0.00000	0.999473
e 313.107	3	Linear-thru-Zero	0.0	2685329.9	0.00000	0.999950
a 227.547	3	Linear-thru-Zero	0.0	245.5	0.00000	0.999922
d 228.802	3	Linear-thru-Zero	0.0	129120.3	0.00000	0.999828
o 228.616	3	Linear-thru-Zero	0.0	102978.0	0.00000	0.999552
r 267.716	3	Linear-thru-Zero	0.0	91592.9	0.00000	0.999623
u 324.754	3	Linear-thru-Zero	0.0	300295.6	0.00000	0.999782
e 273.955	3	Linear-thru-Zero	0.0	44932.6	0.00000	0.998106
766.491	3	Non-Linear	-1017.1	22038.8	154.06843	0.998652
g 279.079	3	Linear-thru-Zero	0.0	42093.4	0.00000	0.999596
n 257.610	3	Linear-thru-Zero	0.0	1331037.4	0.00000	0.999760
o 202.030	3	Linear-thru-Zero	0.0	18433.2	0.00000	0.999852
a 330.237	3	Non-Linear	5.4	678.4	0.21158	0.999846
i 231.604	3	Linear-thru-Zero	0.0	49912.8	0.00000	0.999403
o 220.353	3	Linear-thru-Zero	0.0	15903.3	0.00000	0.999856
o 206.833	3	Linear-thru-Zero	0.0	3967.7	0.00000	0.999819
e 196.026	3	Linear-thru-Zero	0.0	3144.1	0.00000	0.999666
l 190.800	3	Linear-thru-Zero	0.0	3700.4	0.00000	0.999381
292.402	3	Linear-thru-Zero	0.0	131430.3	0.00000	0.999694
n 213.856	3	Linear-thru-Zero	0.0	107770.3	0.00000	0.999875

uplicate Data

CCV 1447B

Date: 4/23/03 11:53:18 AM

apl#	Element	Net Intensity	Corrected Intensity	Calib Conc.	Units	Sample Conc.	Units
1	Ag 328.068	204544.6	204615.8	1.009	mg/L		
1	Al 308.215	169382.9	165335.7	5.113	mg/L		
1	As 188.979	1563.7	1435.5	0.5026	mg/L		
1	Ba 233.527	2200338.6	2200389.3	5.192	mg/L		
1	Be 313.107	1338452.4	1338670.8	0.4985	mg/L		
1	Ca 227.547	13030.5	12419.2	50.58	mg/L		
1	Cd 228.802	130745.8	130507.5	1.011	mg/L		
1	Co 228.616	210005.3	210309.0	2.042	mg/L		
1	Cr 267.716	46846.5	47147.5	0.5148	mg/L		
1	Cu 324.754	611487.1	608346.7	2.026	mg/L		
1	Fe 273.955	231958.8	231311.1	5.148	mg/L		
1	K 766.491	367707.0	370329.4	15.23	mg/L		
1	Mg 279.079	1088748.6	1083461.7	25.74	mg/L		
1	Mn 257.610	2692443.7	2691634.2	2.022	mg/L		
1	Mo 202.030	37389.7	37447.4	2.032	mg/L		
1	Na 330.237	77874.1	71155.7	101.7	mg/L		
1	Ni 231.604	101950.6	102031.0	2.044	mg/L		
1	Pb 220.353	7943.2	8118.3	0.5105	mg/L		
1	Sb 206.833	7976.5	7987.7	1.998	mg/L		
1	Se 196.026	1690.1	1638.3	0.5223	mg/L		
1	Tl 190.800	2082.0	1876.1	0.5070	mg/L		
1	V 292.402	270756.7	270615.8	2.059	mg/L		
1	Zn 213.856	218086.7	218696.2	2.029	mg/L		
2	Ag 328.068	200203.4	200274.6	0.9877	mg/L		
2	Al 308.215	165887.4	161840.2	5.005	mg/L		
2	As 188.979	1563.7	1435.5	0.5025	mg/L		
2	Ba 233.527	2152267.0	2152317.7	5.079	mg/L		
2	Be 313.107	1369480.3	1369698.7	0.5101	mg/L		
2	Ca 227.547	12647.0	12035.8	49.02	mg/L		
2	Cd 228.802	127712.6	127474.3	0.9873	mg/L		
2	Co 228.616	204996.3	205300.0	1.994	mg/L		
2	Cr 267.716	45708.3	46009.3	0.5023	mg/L		
2	Cu 324.754	598459.3	595318.9	1.982	mg/L		

2 Fe 273.955	226751.8	226104.0	5.032 mg/L
2 K 766.491	377787.0	380409.5	15.60 mg/L
2 Mg 279.079	1066824.2	1061537.3	25.22 mg/L
2 Mn 257.610	2751056.7	2750247.2	2.066 mg/L
2 Mo 202.030	36755.0	36812.7	1.997 mg/L
2 Na 330.237	76061.0	69342.6	99.14 mg/L
2 Ni 231.604	99924.4	100004.7	2.004 mg/L
2 Pb 220.353	7906.9	8082.0	0.5082 mg/L
2 Sb 206.833	7953.4	7964.6	1.993 mg/L
2 Se 196.026	1682.2	1630.3	0.5198 mg/L
2 Tl 190.800	2078.4	1872.6	0.5060 mg/L
2 V 292.402	264535.9	264395.0	2.012 mg/L
2 Zn 213.856	214177.8	214787.2	1.993 mg/L

3 Ag 328.068	199345.6	199416.8	0.9835 mg/L
3 Al 308.215	165183.7	161136.5	4.983 mg/L
3 As 188.979	1556.9	1428.7	0.5002 mg/L
3 Ba 233.527	2145249.6	2145300.4	5.062 mg/L
3 Be 313.107	1333551.9	1333770.2	0.4967 mg/L
3 Ca 227.547	12714.1	12102.9	49.29 mg/L
3 Cd 228.802	127705.4	127467.1	0.9872 mg/L
3 Co 228.616	204734.1	205037.8	1.991 mg/L
3 Cr 267.716	45725.6	46026.6	0.5025 mg/L
3 Cu 324.754	598121.4	594981.0	1.981 mg/L
3 Fe 273.955	225660.9	225013.1	5.008 mg/L
3 K 766.491	367212.7	369835.2	15.21 mg/L
3 Mg 279.079	1062902.6	1057615.6	25.13 mg/L
3 Mn 257.610	2680864.6	2680055.2	2.014 mg/L
3 Mo 202.030	36561.5	36619.1	1.987 mg/L
3 Na 330.237	76042.7	69324.2	99.12 mg/L
3 Ni 231.604	99896.4	99976.8	2.003 mg/L
3 Pb 220.353	7897.7	8072.9	0.5076 mg/L
3 Sb 206.833	7947.2	7958.4	1.991 mg/L
3 Se 196.026	1685.1	1633.3	0.5207 mg/L
3 Tl 190.800	2086.7	1880.8	0.5083 mg/L
3 V 292.402	263184.7	263043.8	2.001 mg/L
3 Zn 213.856	213662.0	214271.5	1.988 mg/L

Mean Data

Sample ID: CCV 1447B
 Sample Qty: 1.0000 g
 Seq. No.: 10
 Prep. Vol.:
 Data: Original
 Sample No.: 5
 Dilution: 1.0: 1.0
 Date: 4/23/03 11:53:18 AM
 A/S Pos: 6

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Ag 328.068	201435.7	0.9935	0.01375	mg/L				1.38%
Al 308.215	162770.8	5.033	0.0695	mg/L				1.38%
As 188.979	1433.2	0.5018	0.00140	mg/L				0.28%
Ba 233.527	2166002.5	5.111	0.0708	mg/L				1.38%
Be 313.107	1347379.9	0.5018	0.00726	mg/L				1.45%
Ca 227.547	12185.9	49.63	0.834	mg/L				1.68%
Cd 228.802	128483.0	0.9951	0.01358	mg/L				1.36%
Co 228.616	206882.3	2.009	0.0288	mg/L				1.44%
Cr 267.716	46394.5	0.5065	0.00712	mg/L				1.41%
Cu 324.754	599548.9	1.997	0.0254	mg/L				1.27%
Fe 273.955	227476.1	5.063	0.0749	mg/L				1.48%
K 766.491	373524.7	15.35	0.223	mg/L				1.45%
Mg 279.079	1067538.2	25.36	0.331	mg/L				1.30%
Mn 257.610	2707312.2	2.034	0.0283	mg/L				1.39%
Mo 202.030	36959.7	2.005	0.0235	mg/L				1.17%
Na 330.237	69940.8	99.97	1.460	mg/L				1.46%
Ni 231.604	100670.9	2.017	0.0236	mg/L				1.17%
Pb 220.353	8091.1	0.5088	0.00151	mg/L				0.30%
Sb 206.833	7970.2	1.994	0.0037	mg/L				0.18%
Se 196.026	1634.0	0.5209	0.00129	mg/L				0.25%
Tl 190.800	1876.5	0.5071	0.00112	mg/L				0.22%
V 292.402	266018.2	2.024	0.0307	mg/L				1.52%
Zn 213.856	215918.3	2.004	0.0225	mg/L				1.12%

Replicate Data

Sample ID: CCB
 Date: 4/23/03 11:56:49 AM

epl#	Element	Net Intensity	Corrected Intensity	Calib Conc. Units	Sample Conc. Units
1	Ag 328.068	-111.2	-40.0	-0.0002 mg/L	
1	Al 308.215	3895.5	-151.7	-0.0047 mg/L	
1	As 188.979	121.7	-6.5	-0.0023 mg/L	
1	Ba 233.527	693.7	744.4	0.0018 mg/L	
1	Be 313.107	345.1	563.5	0.0002 mg/L	
1	Ca 227.547	615.4	4.1	0.0168 mg/L	
1	Cd 228.802	274.2	35.9	0.0003 mg/L	
1	Co 228.616	-209.1	94.6	0.0009 mg/L	
1	Cr 267.716	-307.2	-6.2	-0.0001 mg/L	
1	Cu 324.754	3820.9	680.5	0.0023 mg/L	
1	Fe 273.955	671.1	23.3	0.0005 mg/L	
1	K 766.491	-2734.4	-112.0	0.0411 mg/L	
1	Mg 279.079	4188.8	-1098.2	-0.0261 mg/L	
1	Mn 257.610	2179.9	1370.4	0.0010 mg/L	
1	Mo 202.030	-34.0	23.6	0.0013 mg/L	
1	Na 330.237	6812.3	93.9	0.1304 mg/L	
1	Ni 231.604	-45.7	34.7	0.0007 mg/L	
1	Pb 220.353	-173.4	1.8	0.0001 mg/L	
1	Sb 206.833	-21.5	-10.3	-0.0026 mg/L	
1	Se 196.026	61.5	9.6	0.0031 mg/L	
1	Tl 190.800	209.2	3.3	0.0009 mg/L	
1	V 292.402	287.7	146.8	0.0011 mg/L	
1	Zn 213.856	-541.6	67.9	0.0006 mg/L	
2	Ag 328.068	-68.0	3.2	0.0000 mg/L	
2	Al 308.215	3866.5	-180.8	-0.0056 mg/L	
2	As 188.979	127.7	-0.5	-0.0002 mg/L	
2	Ba 233.527	534.9	585.7	0.0014 mg/L	
2	Be 313.107	84.9	303.2	0.0001 mg/L	
2	Ca 227.547	624.1	12.8	0.0521 mg/L	
2	Cd 228.802	269.8	31.5	0.0002 mg/L	
2	Co 228.616	-231.4	72.3	0.0007 mg/L	
2	Cr 267.716	-315.7	-14.7	-0.0002 mg/L	
2	Cu 324.754	3676.8	536.4	0.0018 mg/L	
2	Fe 273.955	773.1	125.3	0.0028 mg/L	
2	K 766.491	-2795.7	-173.2	0.0383 mg/L	
2	Mg 279.079	3757.8	-1529.2	-0.0363 mg/L	
2	Mn 257.610	1788.3	978.8	0.0007 mg/L	
2	Mo 202.030	-24.1	33.5	0.0018 mg/L	
2	Na 330.237	6901.2	182.7	0.2614 mg/L	
2	Ni 231.604	-80.5	-0.1	0.0000 mg/L	
2	Pb 220.353	-167.3	7.9	0.0005 mg/L	
2	Sb 206.833	0.7	11.9	0.0030 mg/L	
2	Se 196.026	56.5	4.6	0.0015 mg/L	
2	Tl 190.800	210.2	4.3	0.0012 mg/L	
2	V 292.402	174.3	33.4	0.0003 mg/L	
2	Zn 213.856	-570.3	39.2	0.0004 mg/L	
3	Ag 328.068	56.5	127.8	0.0006 mg/L	
3	Al 308.215	3867.9	-179.3	-0.0055 mg/L	
3	As 188.979	123.9	-4.3	-0.0015 mg/L	
3	Ba 233.527	357.6	408.4	0.0010 mg/L	
3	Be 313.107	65.9	284.3	0.0001 mg/L	
3	Ca 227.547	603.1	-8.2	-0.0334 mg/L	
3	Cd 228.802	238.0	-0.3	0.0000 mg/L	
3	Co 228.616	-224.5	79.2	0.0008 mg/L	
3	Cr 267.716	-317.9	-16.9	-0.0002 mg/L	
3	Cu 324.754	3819.5	679.1	0.0023 mg/L	
3	Fe 273.955	610.9	-36.9	-0.0008 mg/L	
3	K 766.491	-2187.0	435.4	0.0659 mg/L	
3	Mg 279.079	3615.0	-1672.0	-0.0397 mg/L	
3	Mn 257.610	1368.6	559.1	0.0004 mg/L	
3	Mo 202.030	-41.3	16.4	0.0009 mg/L	
3	Na 330.237	6974.5	256.1	0.3695 mg/L	
3	Ni 231.604	-50.5	29.9	0.0006 mg/L	
3	Pb 220.353	-183.6	-8.5	-0.0005 mg/L	
3	Sb 206.833	-0.2	11.0	0.0028 mg/L	
3	Se 196.026	47.0	-4.8	-0.0015 mg/L	
3	Tl 190.800	209.8	3.9	0.0011 mg/L	

3 V 292.402 155.4 14.5 0.0001 mg/L
 3 Zn 213.856 -587.9 21.6 0.0002 mg/L

Mean Data

D: CCB Seq. No.: 11 Sample No.: 6 A/S Pos: 1
 Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
 Data: Original Date: 4/23/03 11:56:49 AM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
g 328.068	30.3	0.0001	0.00043	mg/L				287.29%
l 308.215	-170.6	-0.0053	0.00051	mg/L				9.59%
s 188.979	-3.8	-0.0013	0.00106	mg/L				80.88%
a 233.527	579.5	0.0014	0.00040	mg/L				29.01%
e 313.107	383.7	0.0001	0.00006	mg/L				40.66%
a 227.547	2.9	0.0118	0.04298	mg/L				363.76%
d 228.802	22.3	0.0002	0.00015	mg/L				88.43%
o 228.616	82.1	0.0008	0.00011	mg/L				13.90%
r 267.716	-12.6	-0.0001	0.00006	mg/L				44.63%
u 324.754	632.0	0.0021	0.00028	mg/L				13.10%
e 273.955	37.3	0.0008	0.00183	mg/L				220.11%
766.491	50.1	0.0484	0.01520	mg/L				31.39%
g 279.079	-1433.1	-0.0340	0.00710	mg/L				20.84%
n 257.610	969.4	0.0007	0.00030	mg/L				41.85%
o 202.030	24.5	0.0013	0.00047	mg/L				35.17%
a 330.237	177.6	0.2538	0.11971	mg/L				47.17%
i 231.604	21.5	0.0004	0.00038	mg/L				87.82%
b 220.353	0.4	0.0000	0.00052	mg/L				>999.9%
b 206.833	4.2	0.0011	0.00317	mg/L				300.78%
e 196.026	3.1	0.0010	0.00233	mg/L				233.61%
l 190.800	3.8	0.0010	0.00014	mg/L				13.16%
292.402	64.9	0.0005	0.00054	mg/L				110.26%
n 213.856	42.9	0.0004	0.00022	mg/L				54.43%

Replicate Data

D: M-BL 03M1359 Date: 4/23/03 12:00:10 PM

Element	Net Intensity	Corrected Intensity	Calib Conc. Units	Sample Conc. Units
1 Ag 328.068	-102.2	-31.0	-0.0002 mg/L	-0.0002 ppm
1 Al 308.215	3773.0	-274.3	-0.0085 mg/L	-0.0085 ppm
1 As 188.979	118.4	-9.8	-0.0034 mg/L	-0.0034 ppm
1 Ba 233.527	16.5	67.3	0.0002 mg/L	0.0002 ppm
1 Be 313.107	-241.0	-22.7	0.0000 mg/L	0.0000 ppm
1 Ca 227.547	621.7	10.4	0.0424 mg/L	0.0424 ppm
1 Cd 228.802	250.6	12.3	0.0001 mg/L	0.0001 ppm
1 Co 228.616	-286.4	17.3	0.0002 mg/L	0.0002 ppm
1 Cr 267.716	-303.0	-2.0	0.0000 mg/L	0.0000 ppm
1 Cu 324.754	3534.7	394.3	0.0013 mg/L	0.0013 ppm
1 Fe 273.955	434.9	-212.8	-0.0047 mg/L	-0.0047 ppm
1 K 766.491	-2696.3	-73.9	0.0428 mg/L	0.0428 ppm
1 Mg 279.079	3766.2	-1520.8	-0.0361 mg/L	-0.0361 ppm
1 Mn 257.610	891.0	81.5	0.0001 mg/L	0.0001 ppm
1 Mo 202.030	-59.7	-2.1	-0.0001 mg/L	-0.0001 ppm
1 Na 330.237	6889.3	170.9	0.2439 mg/L	0.2439 ppm
1 Ni 231.604	-85.1	-4.7	-0.0001 mg/L	-0.0001 ppm
1 Pb 220.353	-172.6	2.6	0.0002 mg/L	0.0002 ppm
1 Sb 206.833	-8.3	2.9	0.0007 mg/L	0.0007 ppm
1 Se 196.026	56.8	5.0	0.0016 mg/L	0.0016 ppm
1 Tl 190.800	209.5	3.6	0.0010 mg/L	0.0010 ppm
1 V 292.402	110.8	-30.1	-0.0002 mg/L	-0.0002 ppm
1 Zn 213.856	-618.6	-9.1	-0.0001 mg/L	-0.0001 ppm
2 Ag 328.068	-303.8	-232.6	-0.0011 mg/L	-0.0011 ppm
2 Al 308.215	3979.7	-67.6	-0.0021 mg/L	-0.0021 ppm
2 As 188.979	120.7	-7.5	-0.0026 mg/L	-0.0026 ppm
2 Ba 233.527	-38.9	11.9	0.0000 mg/L	0.0000 ppm
2 Be 313.107	-404.8	-186.5	-0.0001 mg/L	-0.0001 ppm
2 Ca 227.547	586.8	-24.4	-0.0995 mg/L	-0.0995 ppm
2 Cd 228.802	254.2	15.9	0.0001 mg/L	0.0001 ppm
2 Co 228.616	-298.1	5.6	0.0001 mg/L	0.0001 ppm

D: LCS-03M1359

Date: 4/23/03 12:03:42 PM

epl#	Element	Net Intensity	Corrected Intensity	Calib Conc. Units	Sample Conc. Units
1	Ag 328.068	201881.6	201952.9	0.9960 mg/L	0.9960 ppm
1	Al 308.215	70838.3	66791.0	2.065 mg/L	2.065 ppm
1	As 188.979	1575.5	1447.3	0.5093 mg/L	0.5093 ppm
1	Ba 233.527	1849800.2	1849851.0	4.365 mg/L	4.365 ppm
1	Be 313.107	522645.8	522864.1	0.1947 mg/L	0.1947 ppm
1	Ca 227.547	5539.8	4928.5	20.07 mg/L	20.07 ppm
1	Cd 228.802	33523.9	33285.6	0.2578 mg/L	0.2578 ppm
1	Co 228.616	105718.8	106022.5	1.030 mg/L	1.030 ppm
1	Cr 267.716	94767.6	95068.6	1.038 mg/L	1.038 ppm
1	Cu 324.754	308251.6	305111.2	1.016 mg/L	1.016 ppm
1	Fe 273.955	45998.3	45350.6	1.009 mg/L	1.009 ppm
1	K 766.491	123974.0	126596.5	5.573 mg/L	5.573 ppm
1	Mg 279.079	427418.5	422131.5	10.03 mg/L	10.03 ppm
1	Mn 257.610	1282386.2	1281576.7	0.9628 mg/L	0.9628 ppm
1	Mo 202.030	39271.0	39328.6	2.134 mg/L	2.134 ppm
1	Na 330.237	33117.9	26399.5	38.45 mg/L	38.45 ppm
1	Ni 231.604	50922.2	51002.6	1.022 mg/L	1.022 ppm
1	Pb 220.353	49412.1	49587.3	3.118 mg/L	3.118 ppm
1	Sb 206.833	2061.2	2072.4	0.4921 mg/L	0.4921 ppm
1	Se 196.026	1725.4	1673.6	0.5323 mg/L	0.5323 ppm
1	Tl 190.800	2160.5	1954.6	0.5282 mg/L	0.5282 ppm
1	V 292.402	262871.2	262730.3	1.999 mg/L	1.999 ppm
1	Zn 213.856	54162.1	54771.6	0.5082 mg/L	0.5082 ppm
2	Ag 328.068	205080.4	205151.6	1.012 mg/L	1.012 ppm
2	Al 308.215	72053.5	68006.3	2.103 mg/L	2.103 ppm
2	As 188.979	1557.2	1429.0	0.5031 mg/L	0.5031 ppm
2	Ba 233.527	1881231.2	1881282.0	4.439 mg/L	4.439 ppm
2	Be 313.107	530516.1	530734.4	0.1976 mg/L	0.1976 ppm
2	Ca 227.547	5473.7	4862.5	19.80 mg/L	19.80 ppm
2	Cd 228.802	33933.6	33695.3	0.2610 mg/L	0.2610 ppm
2	Co 228.616	107112.9	107416.6	1.043 mg/L	1.043 ppm
2	Cr 267.716	96197.3	96498.2	1.054 mg/L	1.054 ppm
2	Cu 324.754	312589.1	309448.7	1.030 mg/L	1.030 ppm
2	Fe 273.955	46250.3	45602.5	1.015 mg/L	1.015 ppm
2	K 766.491	129173.1	131795.6	5.792 mg/L	5.792 ppm
2	Mg 279.079	435080.8	429793.8	10.21 mg/L	10.21 ppm
2	Mn 257.610	1301406.9	1300597.4	0.9771 mg/L	0.9771 ppm
2	Mo 202.030	40137.4	40195.0	2.181 mg/L	2.181 ppm
2	Na 330.237	33755.5	27037.0	39.36 mg/L	39.36 ppm
2	Ni 231.604	51175.9	51256.3	1.027 mg/L	1.027 ppm
2	Pb 220.353	50077.7	50252.8	3.160 mg/L	3.160 ppm
2	Sb 206.833	2019.6	2030.8	0.4812 mg/L	0.4812 ppm
2	Se 196.026	1715.5	1663.6	0.5291 mg/L	0.5291 ppm
2	Tl 190.800	2134.5	1928.6	0.5212 mg/L	0.5212 ppm
2	V 292.402	267113.8	266972.9	2.031 mg/L	2.031 ppm
2	Zn 213.856	54997.6	55607.1	0.5160 mg/L	0.5160 ppm
3	Ag 328.068	203139.5	203210.7	1.002 mg/L	1.002 ppm
3	Al 308.215	71852.4	67805.2	2.097 mg/L	2.097 ppm
3	As 188.979	1579.2	1451.0	0.5106 mg/L	0.5106 ppm
3	Ba 233.527	1856402.0	1856452.8	4.381 mg/L	4.381 ppm
3	Be 313.107	523276.7	523495.0	0.1949 mg/L	0.1949 ppm
3	Ca 227.547	5537.8	4926.6	20.07 mg/L	20.07 ppm
3	Cd 228.802	33539.7	33301.4	0.2579 mg/L	0.2579 ppm
3	Co 228.616	106134.5	106438.2	1.034 mg/L	1.034 ppm
3	Cr 267.716	95362.1	95663.1	1.044 mg/L	1.044 ppm
3	Cu 324.754	309152.7	306012.3	1.019 mg/L	1.019 ppm
3	Fe 273.955	45786.7	45138.9	1.005 mg/L	1.005 ppm
3	K 766.491	125509.1	128131.6	5.638 mg/L	5.638 ppm
3	Mg 279.079	430011.9	424724.9	10.09 mg/L	10.09 ppm
3	Mn 257.610	1285280.8	1284471.3	0.9650 mg/L	0.9650 ppm
3	Mo 202.030	39627.5	39685.2	2.153 mg/L	2.153 ppm
3	Na 330.237	33448.3	26729.8	38.92 mg/L	38.92 ppm
3	Ni 231.604	50651.2	50731.6	1.016 mg/L	1.016 ppm
3	Pb 220.353	49815.8	49991.0	3.143 mg/L	3.143 ppm
3	Sb 206.833	2034.6	2045.8	0.4852 mg/L	0.4852 ppm

1	Al	308.215	74820.6	70773.4	2.189	mg/L	2.189	ppm
1	As	188.979	1562.8	1434.6	0.5054	mg/L	0.5054	ppm
1	Ba	233.527	1859319.1	1859369.9	4.388	mg/L	4.388	ppm
1	Be	313.107	522563.9	522782.2	0.1947	mg/L	0.1947	ppm
1	Ca	227.547	5537.9	4926.7	20.07	mg/L	20.07	ppm
1	Cd	228.802	35176.1	34937.8	0.2706	mg/L	0.2706	ppm
1	Co	228.616	111068.9	111372.5	1.082	mg/L	1.082	ppm
1	Cr	267.716	100138.5	100439.5	1.097	mg/L	1.097	ppm
1	Cu	324.754	324321.6	321181.2	1.070	mg/L	1.070	ppm
1	Fe	273.955	47923.8	47276.0	1.052	mg/L	1.052	ppm
1	K	766.491	125140.8	127763.3	5.622	mg/L	5.622	ppm
1	Mg	279.079	449854.9	444567.9	10.56	mg/L	10.56	ppm
1	Mn	257.610	1287262.3	1286452.8	0.9665	mg/L	0.9665	ppm
1	Mo	202.030	41338.8	41396.5	2.246	mg/L	2.246	ppm
1	Na	330.237	34634.6	27916.2	40.63	mg/L	40.63	ppm
1	Ni	231.604	53289.2	53369.6	1.069	mg/L	1.069	ppm
1	Pb	220.353	52076.4	52251.6	3.286	mg/L	3.286	ppm
1	Sb	206.833	2034.7	2045.9	0.4837	mg/L	0.4837	ppm
1	Se	196.026	1723.3	1671.4	0.5316	mg/L	0.5316	ppm
1	Tl	190.800	2137.2	1931.3	0.5219	mg/L	0.5219	ppm
1	V	292.402	277596.3	277455.4	2.111	mg/L	2.111	ppm
1	Zn	213.856	56537.8	57147.3	0.5303	mg/L	0.5303	ppm
2	Ag	328.068	194250.2	194321.4	0.9584	mg/L	0.9584	ppm
2	Al	308.215	68351.7	64304.5	1.989	mg/L	1.989	ppm
2	As	188.979	1576.2	1448.0	0.5092	mg/L	0.5092	ppm
2	Ba	233.527	1854967.3	1855018.1	4.377	mg/L	4.377	ppm
2	Be	313.107	523556.6	523775.0	0.1951	mg/L	0.1951	ppm
2	Ca	227.547	5574.1	4962.8	20.21	mg/L	20.21	ppm
2	Cd	228.802	32153.1	31914.8	0.2472	mg/L	0.2472	ppm
2	Co	228.616	101782.4	102086.1	0.9913	mg/L	0.9913	ppm
2	Cr	267.716	90834.3	91135.3	0.9950	mg/L	0.9950	ppm
2	Cu	324.754	296860.3	293719.9	0.9781	mg/L	0.9781	ppm
2	Fe	273.955	43974.9	43327.1	0.9643	mg/L	0.9643	ppm
2	K	766.491	124637.1	127259.6	5.601	mg/L	5.601	ppm
2	Mg	279.079	410715.5	405428.5	9.632	mg/L	9.632	ppm
2	Mn	257.610	1283477.8	1282668.3	0.9637	mg/L	0.9637	ppm
2	Mo	202.030	37857.8	37915.4	2.057	mg/L	2.057	ppm
2	Na	330.237	31921.8	25203.4	36.72	mg/L	36.72	ppm
2	Ni	231.604	49020.7	49101.1	0.9837	mg/L	0.9837	ppm
2	Pb	220.353	47569.1	47744.3	3.002	mg/L	3.002	ppm
2	Sb	206.833	2065.7	2076.9	0.4945	mg/L	0.4945	ppm
2	Se	196.026	1748.7	1696.8	0.5397	mg/L	0.5397	ppm
2	Tl	190.800	2185.2	1979.4	0.5349	mg/L	0.5349	ppm
2	V	292.402	252339.9	252199.0	1.919	mg/L	1.919	ppm
2	Zn	213.856	51867.2	52476.7	0.4869	mg/L	0.4869	ppm
3	Ag	328.068	208270.0	208341.2	1.028	mg/L	1.028	ppm
3	Al	308.215	73280.6	69233.4	2.141	mg/L	2.141	ppm
3	As	188.979	1558.6	1430.4	0.5037	mg/L	0.5037	ppm
3	Ba	233.527	1793345.6	1793396.3	4.232	mg/L	4.232	ppm
3	Be	313.107	506100.6	506318.9	0.1885	mg/L	0.1885	ppm
3	Ca	227.547	5529.1	4917.8	20.03	mg/L	20.03	ppm
3	Cd	228.802	34513.7	34275.4	0.2655	mg/L	0.2655	ppm
3	Co	228.616	108859.2	109162.8	1.060	mg/L	1.060	ppm
3	Cr	267.716	97481.0	97782.0	1.068	mg/L	1.068	ppm
3	Cu	324.754	318765.3	315624.9	1.051	mg/L	1.051	ppm
3	Fe	273.955	47042.6	46394.8	1.033	mg/L	1.033	ppm
3	K	766.491	119834.3	122456.7	5.399	mg/L	5.399	ppm
3	Mg	279.079	440669.3	435382.4	10.34	mg/L	10.34	ppm
3	Mn	257.610	1243030.1	1242220.6	0.9333	mg/L	0.9333	ppm
3	Mo	202.030	40612.8	40670.5	2.206	mg/L	2.206	ppm
3	Na	330.237	34125.4	27407.0	39.90	mg/L	39.90	ppm
3	Ni	231.604	52441.3	52521.7	1.052	mg/L	1.052	ppm
3	Pb	220.353	51214.5	51389.7	3.231	mg/L	3.231	ppm
3	Sb	206.833	2043.5	2054.7	0.4868	mg/L	0.4868	ppm
3	Se	196.026	1712.4	1660.5	0.5281	mg/L	0.5281	ppm
3	Tl	190.800	2144.3	1938.5	0.5239	mg/L	0.5239	ppm
3	V	292.402	270593.1	270452.2	2.058	mg/L	2.058	ppm
3	Zn	213.856	55998.5	56608.0	0.5253	mg/L	0.5253	ppm

D: LCSD-03M1359

Seq. No.: 14

Sample No.: 3

A/S Pos: 12

Sample Qty: 1.0000 mL

Prep. Vol.: 1.0 mL

1.0 mL

Dilution:

1.0:

1.0

Data: Original

Date: 4/23/03

12:07:21 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
g 328.068	205201.7	1.012	0.0478	mg/L	1.012	0.0478	ppm	4.73%
l 308.215	68103.8	2.106	0.1045	mg/L	2.106	0.1045	ppm	4.96%
s 188.979	1437.7	0.5061	0.00284	mg/L	0.5061	0.00284	ppm	0.56%
a 233.527	1835928.1	4.332	0.0871	mg/L	4.332	0.0871	ppm	2.01%
e 313.107	517625.4	0.1928	0.00365	mg/L	0.1928	0.00365	ppm	1.89%
a 227.547	4935.8	20.10	0.097	mg/L	20.10	0.097	ppm	0.48%
d 228.802	33709.3	0.2611	0.01231	mg/L	0.2611	0.01231	ppm	4.71%
o 228.616	107540.5	1.044	0.0471	mg/L	1.044	0.0471	ppm	4.51%
r 267.716	96452.3	1.053	0.0523	mg/L	1.053	0.0523	ppm	4.97%
u 324.754	310175.3	1.033	0.0483	mg/L	1.033	0.0483	ppm	4.68%
e 273.955	45666.0	1.016	0.0461	mg/L	1.016	0.0461	ppm	4.54%
. 766.491	125826.5	5.541	0.1234	mg/L	5.541	0.1234	ppm	2.23%
g 279.079	428459.6	10.18	0.486	mg/L	10.18	0.486	ppm	4.78%
n 257.610	1270447.2	0.9545	0.01842	mg/L	0.9545	0.01842	ppm	1.93%
o 202.030	39994.1	2.170	0.0996	mg/L	2.170	0.0996	ppm	4.59%
a 330.237	26842.2	39.08	2.076	mg/L	39.08	2.076	ppm	5.31%
i 231.604	51664.1	1.035	0.0453	mg/L	1.035	0.0453	ppm	4.37%
b 220.353	50461.8	3.173	0.1504	mg/L	3.173	0.1504	ppm	4.74%
b 206.833	2059.2	0.4883	0.00554	mg/L	0.4883	0.00554	ppm	1.14%
e 196.026	1676.3	0.5332	0.00592	mg/L	0.5332	0.00592	ppm	1.11%
l 190.800	1949.7	0.5269	0.00701	mg/L	0.5269	0.00701	ppm	1.33%
292.402	266702.2	2.029	0.0992	mg/L	2.029	0.0992	ppm	4.89%
n 213.856	55410.6	0.5142	0.02371	mg/L	0.5142	0.02371	ppm	4.61%

Matrix Check Sample: LCSD-03M1359

Element	Expected Conc.	Measured Conc.	Std.Dev.	Calib Units	% Recovery
g 328.068	0.9996	1.012	0.048	mg/L	101.243
l 308.215	1.993	2.106	0.104	mg/L	105.652
s 188.979	0.4976	0.5061	0.003	mg/L	101.699
a 233.527	4.000	4.332	0.087	mg/L	108.305
e 313.107	0.2000	0.1928	0.004	mg/L	96.398
a 227.547	19.96	20.10	0.097	mg/L	100.736
d 228.802	0.2501	0.2611	0.012	mg/L	104.384
o 228.616	1.000	1.044	0.047	mg/L	104.419
r 267.716	0.9999	1.053	0.052	mg/L	105.315
u 324.754	1.001	1.033	0.048	mg/L	103.219
e 273.955	0.9946	1.016	0.046	mg/L	102.176
. 766.491	5.049	5.541	0.123	mg/L	109.831
g 279.079	9.963	10.18	0.486	mg/L	102.161
n 257.610	1.0000	0.9545	0.018	mg/L	95.449
o 202.030	2.000	2.170	0.100	mg/L	108.490
a 330.237	40.30	39.08	2.076	mg/L	96.945
i 231.604	0.9997	1.035	0.045	mg/L	103.534
o 220.353	3.000	3.173	0.150	mg/L	105.779
o 206.833	0.5004	0.4883	0.006	mg/L	97.589
e 196.026	0.5030	0.5332	0.006	mg/L	106.021
l 190.800	0.4995	0.5269	0.007	mg/L	105.483
292.402	2.000	2.029	0.099	mg/L	101.479
r 213.856	0.4998	0.5142	0.024	mg/L	102.876

Replicate Data

D: 2809-4 S F=1

Date: 4/23/03 12:10:53 PM

Element	Net Intensity	Corrected Intensity	Calib Conc.	Calib Units	Sample Conc.	Sample Units
1 Ag 328.068	213.7	285.0	0.0014	mg/L	0.0014	ppm
1 Al 308.215	4267.1	219.9	0.0068	mg/L	0.0068	ppm
1 As 188.979	123.5	-4.7	0.0020	mg/L	0.0020	ppm
1 Ba 233.527	57295.6	57346.3	0.1353	mg/L	0.1353	ppm
1 Be 313.107	-140.4	78.0	0.0000	mg/L	0.0000	ppm
1 Ca 227.547	28709.3	28098.0	114.4	mg/L	114.4	ppm
1 Cd 228.802	248.0	9.7	0.0001	mg/L	0.0001	ppm

g 328.068	189.9	0.0009	0.00080	mg/L	0.0009	0.00080	ppm	84.95%
l 308.215	208.4	0.0064	0.00270	mg/L	0.0064	0.00270	ppm	41.86%
s 188.979	-7.4	0.0010	0.00106	mg/L	0.0010	0.00106	ppm	101.76%
a 233.527	57233.8	0.1351	0.00084	mg/L	0.1351	0.00084	ppm	0.62%
e 313.107	80.4	0.0000	0.00001	mg/L	0.0000	0.00001	ppm	17.89%
a 227.547	28220.6	114.9	0.70	mg/L	114.9	0.70	ppm	0.61%
d 228.802	7.5	0.0001	0.00005	mg/L	0.0001	0.00005	ppm	84.77%
o 228.616	20.7	0.0002	0.00010	mg/L	0.0002	0.00010	ppm	49.02%
r 267.716	597.2	0.0065	0.00014	mg/L	0.0065	0.00014	ppm	2.20%
u 324.754	1059.0	0.0035	0.00031	mg/L	0.0035	0.00031	ppm	8.88%
e 273.955	26598.5	0.5920	0.03507	mg/L	0.5920	0.03507	ppm	5.92%
766.491	66284.0	2.991	0.0387	mg/L	2.991	0.0387	ppm	1.30%
g 279.079	1652729.7	39.26	0.312	mg/L	39.26	0.312	ppm	0.79%
n 257.610	11735.0	0.0088	0.00014	mg/L	0.0088	0.00014	ppm	1.59%
o 202.030	54.4	0.0029	0.00004	mg/L	0.0029	0.00004	ppm	1.40%
a 330.237	22252.9	32.47	0.245	mg/L	32.47	0.245	ppm	0.75%
i 231.604	153.7	0.0031	0.00008	mg/L	0.0031	0.00008	ppm	2.70%
b 220.353	38.4	0.0024	0.00049	mg/L	0.0024	0.00049	ppm	20.31%
b 206.833	3.8	0.0010	0.00206	mg/L	0.0010	0.00206	ppm	214.66%
e 196.026	9.7	0.0031	0.00334	mg/L	0.0031	0.00334	ppm	108.14%
l 190.800	14.2	0.0038	0.00039	mg/L	0.0038	0.00039	ppm	10.03%
292.402	641.6	0.0049	0.00096	mg/L	0.0049	0.00096	ppm	19.65%
n 213.856	497.7	0.0046	0.00012	mg/L	0.0046	0.00012	ppm	2.62%

uplicate Data

D: 2809-4 D F=1

Date: 4/23/03

12:14:21 PM

epl#	Element	Net Intensity	Corrected Intensity	Conc.	Calib Units	Conc.	Sample Units
1	Ag 328.068	-120.1	-48.9	-0.0002	mg/L	-0.0002	ppm
1	Al 308.215	4187.1	139.9	0.0043	mg/L	0.0043	ppm
1	As 188.979	130.7	2.5	0.0046	mg/L	0.0046	ppm
1	Ba 233.527	58228.8	58279.6	0.1375	mg/L	0.1375	ppm
1	Be 313.107	-305.9	-87.6	0.0000	mg/L	0.0000	ppm
1	Ca 227.547	29770.1	29158.9	118.8	mg/L	118.8	ppm
1	Cd 228.802	269.8	31.5	0.0002	mg/L	0.0002	ppm
1	Co 228.616	-307.6	-3.9	0.0000	mg/L	0.0000	ppm
1	Cr 267.716	260.4	561.4	0.0061	mg/L	0.0061	ppm
1	Cu 324.754	3896.0	755.6	0.0025	mg/L	0.0025	ppm
1	Fe 273.955	27047.7	26399.9	0.5875	mg/L	0.5875	ppm
1	K 766.491	64981.2	67603.6	3.049	mg/L	3.049	ppm
1	Mg 279.079	1697812.4	1692525.4	40.21	mg/L	40.21	ppm
1	Mn 257.610	12239.5	11430.0	0.0086	mg/L	0.0086	ppm
1	Mo 202.030	-42.8	14.8	0.0008	mg/L	0.0008	ppm
1	Na 330.237	29612.9	22894.5	33.39	mg/L	33.39	ppm
1	Ni 231.604	59.4	139.8	0.0028	mg/L	0.0028	ppm
1	Pb 220.353	-152.1	23.1	0.0014	mg/L	0.0014	ppm
1	Sb 206.833	-9.3	1.9	0.0005	mg/L	0.0005	ppm
1	Se 196.026	63.8	11.9	0.0038	mg/L	0.0038	ppm
1	Tl 190.800	221.5	15.6	0.0042	mg/L	0.0042	ppm
1	V 292.402	625.5	484.6	0.0037	mg/L	0.0037	ppm
1	Zn 213.856	-174.0	435.5	0.0040	mg/L	0.0040	ppm
2	Ag 328.068	177.1	248.3	0.0012	mg/L	0.0012	ppm
2	Al 308.215	4031.5	-15.7	-0.0005	mg/L	-0.0005	ppm
2	As 188.979	119.9	-8.3	0.0006	mg/L	0.0006	ppm
2	Ba 233.527	54121.2	54171.9	0.1278	mg/L	0.1278	ppm
2	Be 313.107	-442.6	-224.3	-0.0001	mg/L	-0.0001	ppm
2	Ca 227.547	27648.3	27037.0	110.1	mg/L	110.1	ppm
2	Cd 228.802	229.6	-8.7	-0.0001	mg/L	-0.0001	ppm
2	Co 228.616	-332.8	-29.1	-0.0003	mg/L	-0.0003	ppm
2	Cr 267.716	243.1	544.1	0.0059	mg/L	0.0059	ppm
2	Cu 324.754	3861.1	720.7	0.0024	mg/L	0.0024	ppm
2	Fe 273.955	25343.6	24695.8	0.5496	mg/L	0.5496	ppm
2	K 766.491	59685.0	62307.5	2.818	mg/L	2.818	ppm
2	Mg 279.079	1591088.3	1585801.3	37.67	mg/L	37.67	ppm
2	Mn 257.610	11306.0	10496.5	0.0079	mg/L	0.0079	ppm
2	Mo 202.030	-37.9	19.8	0.0011	mg/L	0.0011	ppm
2	Na 330.237	27877.4	21159.0	30.88	mg/L	30.88	ppm
2	Ni 231.604	65.6	146.0	0.0029	mg/L	0.0029	ppm
2	Pb 220.353	-155.8	19.4	0.0012	mg/L	0.0012	ppm

2	Sb	206.833	-21.7	-10.5	-0.0027	mg/L	-0.0027	ppm
2	Se	196.026	50.8	-1.1	-0.0003	mg/L	-0.0003	ppm
2	Tl	190.800	231.3	25.4	0.0069	mg/L	0.0069	ppm
2	V	292.402	535.7	394.8	0.0030	mg/L	0.0030	ppm
2	Zn	213.856	-165.5	444.0	0.0041	mg/L	0.0041	ppm
3	Ag	328.068	-145.4	-74.2	-0.0004	mg/L	-0.0004	ppm
3	Al	308.215	4441.1	393.9	0.0122	mg/L	0.0122	ppm
3	As	188.979	124.9	-3.3	0.0026	mg/L	0.0026	ppm
3	Ba	233.527	58375.4	58426.2	0.1379	mg/L	0.1379	ppm
3	Be	313.107	-492.7	-274.4	-0.0001	mg/L	-0.0001	ppm
3	Ca	227.547	29811.4	29200.2	118.9	mg/L	118.9	ppm
3	Cd	228.802	226.0	-12.3	-0.0001	mg/L	-0.0001	ppm
3	Co	228.616	-313.6	-10.0	-0.0001	mg/L	-0.0001	ppm
3	Cr	267.716	232.5	533.5	0.0058	mg/L	0.0058	ppm
3	Cu	324.754	3791.0	650.6	0.0022	mg/L	0.0022	ppm
3	Fe	273.955	27326.6	26678.8	0.5938	mg/L	0.5938	ppm
3	K	766.491	65884.2	68506.7	3.088	mg/L	3.088	ppm
3	Mg	279.079	1715246.6	1709959.6	40.62	mg/L	40.62	ppm
3	Mn	257.610	12135.1	11325.6	0.0085	mg/L	0.0085	ppm
3	Mo	202.030	-35.9	21.7	0.0012	mg/L	0.0012	ppm
3	Na	330.237	29945.7	23227.3	33.87	mg/L	33.87	ppm
3	Ni	231.604	69.5	149.9	0.0030	mg/L	0.0030	ppm
3	Pb	220.353	-158.0	17.2	0.0011	mg/L	0.0011	ppm
3	Sb	206.833	-18.6	-7.4	-0.0019	mg/L	-0.0019	ppm
3	Se	196.026	57.9	6.0	0.0019	mg/L	0.0019	ppm
3	Tl	190.800	231.9	26.1	0.0070	mg/L	0.0070	ppm
3	V	292.402	722.8	581.9	0.0044	mg/L	0.0044	ppm
3	Zn	213.856	-161.5	448.0	0.0042	mg/L	0.0042	ppm

ean Data

D: 2809-4 D F=1	Seq. No.: 16	Sample No.: 5	A/S Pos: 14
ample Qty: 1.0000 mL	Prep. Vol.: 1.0 mL	Dilution: 1.0:	1.0
	Data: Original	Date: 4/23/03	12:14:21 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
y 328.068	41.8	0.0002	0.00088	mg/L	0.0002	0.00088	ppm	429.42%
l 308.215	172.7	0.0053	0.00639	mg/L	0.0053	0.00639	ppm	119.74%
s 188.979	-3.0	0.0026	0.00201	mg/L	0.0026	0.00201	ppm	78.08%
a 233.527	56959.2	0.1344	0.00570	mg/L	0.1344	0.00570	ppm	4.24%
e 313.107	-195.4	-0.0001	0.00004	mg/L	-0.0001	0.00004	ppm	49.49%
a 227.547	28465.4	115.9	5.04	mg/L	115.9	5.04	ppm	4.35%
d 228.802	3.5	0.0000	0.00019	mg/L	0.0000	0.00019	ppm	693.52%
j 228.616	-14.3	-0.0001	0.00013	mg/L	-0.0001	0.00013	ppm	91.72%
r 267.716	546.3	0.0060	0.00015	mg/L	0.0060	0.00015	ppm	2.58%
i 324.754	709.0	0.0024	0.00018	mg/L	0.0024	0.00018	ppm	7.54%
e 273.955	25924.9	0.5770	0.02389	mg/L	0.5770	0.02389	ppm	4.14%
766.491	66139.3	2.985	0.1459	mg/L	2.985	0.1459	ppm	4.89%
y 279.079	1662762.1	39.50	1.597	mg/L	39.50	1.597	ppm	4.04%
n 257.610	11084.1	0.0083	0.00038	mg/L	0.0083	0.00038	ppm	4.61%
o 202.030	18.8	0.0010	0.00019	mg/L	0.0010	0.00019	ppm	18.92%
a 330.237	22426.9	32.72	1.605	mg/L	32.72	1.605	ppm	4.91%
i 231.604	145.2	0.0029	0.00010	mg/L	0.0029	0.00010	ppm	3.52%
o 220.353	19.9	0.0012	0.00019	mg/L	0.0012	0.00019	ppm	14.92%
o 206.833	-5.4	-0.0013	0.00164	mg/L	-0.0013	0.00164	ppm	121.31%
e 196.026	5.6	0.0018	0.00207	mg/L	0.0018	0.00207	ppm	115.94%
l 190.800	22.4	0.0060	0.00158	mg/L	0.0060	0.00158	ppm	26.19%
292.402	487.1	0.0037	0.00071	mg/L	0.0037	0.00071	ppm	19.21%
n 213.856	442.5	0.0041	0.00006	mg/L	0.0041	0.00006	ppm	1.44%

atrix Check Sample: 2809-4 D F=1

Element	Expected Conc.	Measured Conc.	Std.Dev.	Calib Units	Relative % Diff.
y 328.068	0.0009	0.0002	0.001	mg/L	127.883
l 308.215	0.0064	0.0053	0.006	mg/L	18.750
s 188.979	0.0010	0.0026	0.002	mg/L	84.819
a 233.527	0.1351	0.1344	0.006	mg/L	0.481
e 313.107	0.0000	-0.0001	0.000	mg/L	-479.585
a 227.547	114.9	115.9	5.039	mg/L	0.864

id 228.802	0.0001	0.0000	0.000	mg/L	72.671
o 228.616	0.0002	-0.0001	0.000	mg/L	1103.193
r 267.716	0.0065	0.0060	0.000	mg/L	8.900
u 324.754	0.0035	0.0024	0.000	mg/L	39.598
e 273.955	0.5920	0.5770	0.024	mg/L	2.565
766.491	2.991	2.985	0.146	mg/L	0.214
g 279.079	39.26	39.50	1.597	mg/L	0.605
n 257.610	0.0088	0.0083	0.000	mg/L	5.705
o 202.030	0.0029	0.0010	0.000	mg/L	97.334
a 330.237	32.47	32.72	1.605	mg/L	0.770
i 231.604	0.0031	0.0029	0.000	mg/L	5.680
b 220.353	0.0024	0.0012	0.000	mg/L	63.514
b 206.833	0.0010	-0.0013	0.002	mg/L	-1180.627
e 196.026	0.0031	0.0018	0.002	mg/L	53.167
l 190.800	0.0038	0.0060	0.002	mg/L	44.635
292.402	0.0049	0.0037	0.001	mg/L	27.378
n 213.856	0.0046	0.0041	0.000	mg/L	11.752

uplicate Data

D: 2809-4 1/5 F=5

Date: 4/23/03

12:17:51 PM

epl#	Element	Net Intensity	Corrected Intensity	Conc.	Calib Units	Conc.	Sample Units
1	Ag 328.068	-43.7	27.5	0.0001	mg/L	0.0007	ppm
1	Al 308.215	3820.8	-226.5	-0.0070	mg/L	-0.0350	ppm
1	As 188.979	122.8	-5.4	-0.0019	mg/L	-0.0093	ppm
1	Ba 233.527	11441.4	11492.2	0.0271	mg/L	0.1356	ppm
1	Be 313.107	-501.9	-283.6	-0.0001	mg/L	-0.0005	ppm
1	Ca 227.547	6378.8	5767.5	23.49	mg/L	117.5	ppm
1	Cd 228.802	217.0	-21.3	-0.0002	mg/L	-0.0008	ppm
1	Co 228.616	-338.2	-34.5	-0.0003	mg/L	-0.0017	ppm
1	Cr 267.716	-207.2	93.7	0.0010	mg/L	0.0051	ppm
1	Cu 324.754	3122.2	-18.2	-0.0001	mg/L	-0.0003	ppm
1	Fe 273.955	5765.3	5117.6	0.1139	mg/L	0.5695	ppm
1	K 766.491	7100.3	9722.7	0.4857	mg/L	2.428	ppm
1	Mg 279.079	349834.2	344547.2	8.185	mg/L	40.93	ppm
1	Mn 257.610	2484.4	1675.0	0.0013	mg/L	0.0063	ppm
1	Mo 202.030	-54.6	3.1	0.0002	mg/L	0.0008	ppm
1	Na 330.237	10946.2	4227.8	6.212	mg/L	31.06	ppm
1	Ni 231.604	-70.1	10.3	0.0002	mg/L	0.0010	ppm
1	Pb 220.353	-167.9	7.2	0.0005	mg/L	0.0023	ppm
1	Sb 206.833	-13.2	-2.0	-0.0005	mg/L	-0.0026	ppm
1	Se 196.026	50.8	-1.0	-0.0003	mg/L	-0.0017	ppm
1	Tl 190.800	209.4	3.6	0.0010	mg/L	0.0048	ppm
1	V 292.402	215.8	74.9	0.0006	mg/L	0.0028	ppm
1	Zn 213.856	-614.7	-5.2	0.0000	mg/L	-0.0002	ppm
2	Ag 328.068	-103.0	-31.8	-0.0002	mg/L	-0.0008	ppm
2	Al 308.215	3941.4	-105.8	-0.0033	mg/L	-0.0164	ppm
2	As 188.979	121.2	-7.0	-0.0024	mg/L	-0.0122	ppm
2	Ba 233.527	11517.0	11567.7	0.0273	mg/L	0.1365	ppm
2	Be 313.107	-477.6	-259.3	-0.0001	mg/L	-0.0005	ppm
2	Ca 227.547	6408.8	5797.5	23.61	mg/L	118.1	ppm
2	Cd 228.802	209.1	-29.2	-0.0002	mg/L	-0.0011	ppm
2	Co 228.616	-302.2	1.4	0.0000	mg/L	0.0001	ppm
2	Cr 267.716	-182.9	118.1	0.0013	mg/L	0.0064	ppm
2	Cu 324.754	3188.2	47.8	0.0002	mg/L	0.0008	ppm
2	Fe 273.955	5811.6	5163.8	0.1149	mg/L	0.5746	ppm
2	K 766.491	7580.8	10203.3	0.5073	mg/L	2.537	ppm
2	Mg 279.079	354898.3	349611.3	8.306	mg/L	41.53	ppm
2	Mn 257.610	2599.0	1789.6	0.0013	mg/L	0.0067	ppm
2	Mo 202.030	-54.7	2.9	0.0002	mg/L	0.0008	ppm
2	Na 330.237	11067.0	4348.6	6.390	mg/L	31.95	ppm
2	Ni 231.604	-79.8	0.6	0.0000	mg/L	0.0001	ppm
2	Pb 220.353	-168.9	6.2	0.0004	mg/L	0.0020	ppm
2	Sb 206.833	-4.5	6.7	0.0017	mg/L	0.0085	ppm
2	Se 196.026	57.5	5.7	0.0018	mg/L	0.0090	ppm
2	Tl 190.800	212.0	6.2	0.0017	mg/L	0.0083	ppm
2	V 292.402	190.6	49.7	0.0004	mg/L	0.0019	ppm
2	Zn 213.856	-610.0	-0.5	0.0000	mg/L	0.0000	ppm

3 Ag 328.068	-121.6	-50.4	-0.0002 mg/L	-0.0012 ppm
3 Al 308.215	4046.8	-0.4	0.0000 mg/L	-0.0001 ppm
3 As 188.979	119.9	-8.3	-0.0029 mg/L	-0.0144 ppm
3 Ba 233.527	11129.7	11180.5	0.0264 mg/L	0.1319 ppm
3 Be 313.107	-499.9	-281.5	-0.0001 mg/L	-0.0005 ppm
3 Ca 227.547	6383.3	5772.0	23.51 mg/L	117.5 ppm
3 Cd 228.802	244.5	6.2	0.0000 mg/L	0.0002 ppm
3 Co 228.616	-314.1	-10.4	-0.0001 mg/L	-0.0005 ppm
3 Cr 267.716	-201.7	99.3	0.0011 mg/L	0.0054 ppm
3 Cu 324.754	3213.4	73.0	0.0002 mg/L	0.0012 ppm
3 Fe 273.955	5580.4	4932.7	0.1098 mg/L	0.5489 ppm
3 K 766.491	7624.8	10247.3	0.5093 mg/L	2.547 ppm
3 Mg 279.079	345478.3	340191.3	8.082 mg/L	40.41 ppm
3 Mn 257.610	2482.6	1673.1	0.0013 mg/L	0.0063 ppm
3 Mo 202.030	-58.2	-0.6	0.0000 mg/L	-0.0002 ppm
3 Na 330.237	11047.9	4329.4	6.361 mg/L	31.81 ppm
3 Ni 231.604	-86.1	-5.7	-0.0001 mg/L	-0.0006 ppm
3 Pb 220.353	-193.7	-18.5	-0.0012 mg/L	-0.0058 ppm
3 Sb 206.833	-12.8	-1.6	-0.0004 mg/L	-0.0021 ppm
3 Se 196.026	67.6	15.7	0.0050 mg/L	0.0250 ppm
3 Tl 190.800	216.8	10.9	0.0030 mg/L	0.0148 ppm
3 V 292.402	185.5	44.6	0.0003 mg/L	0.0017 ppm
3 Zn 213.856	-610.8	-1.3	0.0000 mg/L	-0.0001 ppm

Mean Data

D: 2809-4 1/5 F=5
 Sample Qty: 1.0000 mL
 Seq. No.: 17
 Prep. Vol.:
 Data: Original
 Sample No.: 6
 1.0 mL
 A/S Pos: 15
 Dilution: 1.0: 5.0
 Date: 4/23/03 12:17:51 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Ag 328.068	-18.2	-0.0001	0.00020	mg/L	-0.0004	0.00100	ppm	223.34%
Al 308.215	-110.9	-0.0034	0.00350	mg/L	-0.0171	0.01749	ppm	101.99%
As 188.979	-6.9	-0.0024	0.00051	mg/L	-0.0119	0.00256	ppm	21.45%
Ba 233.527	11413.5	0.0269	0.00048	mg/L	0.1347	0.00242	ppm	1.80%
Be 313.107	-274.8	-0.0001	0.00001	mg/L	-0.0005	0.00003	ppm	4.90%
Ca 227.547	5779.0	23.54	0.066	mg/L	117.7	0.33	ppm	0.28%
Cd 228.802	-14.8	-0.0001	0.00014	mg/L	-0.0006	0.00072	ppm	126.02%
Co 228.616	-14.5	-0.0001	0.00018	mg/L	-0.0007	0.00089	ppm	126.49%
Cr 267.716	103.7	0.0011	0.00014	mg/L	0.0057	0.00070	ppm	12.31%
Cu 324.754	34.2	0.0001	0.00016	mg/L	0.0006	0.00078	ppm	137.65%
Fe 273.955	5071.4	0.1129	0.00272	mg/L	0.5643	0.01361	ppm	2.41%
K 766.491	10057.7	0.5008	0.01311	mg/L	2.504	0.0656	ppm	2.62%
Mg 279.079	344783.3	8.191	0.1120	mg/L	40.95	0.560	ppm	1.37%
Mn 257.610	1712.5	0.0013	0.00005	mg/L	0.0064	0.00025	ppm	3.89%
Mo 202.030	1.8	0.0001	0.00011	mg/L	0.0005	0.00056	ppm	113.96%
Na 330.237	4301.9	6.321	0.0953	mg/L	31.61	0.477	ppm	1.51%
Ni 231.604	1.7	0.0000	0.00016	mg/L	0.0002	0.00081	ppm	474.66%
Pb 220.353	-1.7	-0.0001	0.00092	mg/L	-0.0005	0.00458	ppm	854.65%
Sb 206.833	1.0	0.0003	0.00125	mg/L	0.0013	0.00623	ppm	488.81%
Se 196.026	6.8	0.0022	0.00269	mg/L	0.0108	0.01344	ppm	124.37%
Tl 190.800	6.9	0.0019	0.00101	mg/L	0.0093	0.00506	ppm	54.34%
V 292.402	56.4	0.0004	0.00012	mg/L	0.0021	0.00062	ppm	28.70%
Zn 213.856	-2.4	0.0000	0.00002	mg/L	-0.0001	0.00012	ppm	107.26%

Replicate Data

D: 2809-4 MS F=1
 Date: 4/23/03 12:21:27 PM

Sample#	Element	Net Intensity	Corrected Intensity	Calib Conc.	Units	Sample Conc.	Units
1	Ag 328.068	206951.3	207022.5	1.021	mg/L	1.021	ppm
1	Al 308.215	74486.3	70439.0	2.178	mg/L	2.178	ppm
1	As 188.979	1600.4	1472.2	0.5225	mg/L	0.5225	ppm
1	Ba 233.527	1899673.8	1899724.5	4.483	mg/L	4.483	ppm
1	Be 313.107	521443.3	521661.6	0.1943	mg/L	0.1943	ppm
1	Ca 227.547	34663.8	34052.6	138.7	mg/L	138.7	ppm
1	Cd 228.802	33593.9	33355.6	0.2583	mg/L	0.2583	ppm
1	Co 228.616	103025.5	103329.2	1.003	mg/L	1.003	ppm
1	Cr 267.716	97753.7	98054.7	1.071	mg/L	1.071	ppm
1	Cu 324.754	283392.6	280252.2	0.9333	mg/L	0.9333	ppm
1	Fe 273.955	72631.6	71983.9	1.602	mg/L	1.602	ppm

Element	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
Ag 313.107	528271.3	0.1967	0.00309 mg/L	0.1967	0.00309 ppm	1.57%	
Al 227.547	33911.3	138.1	0.54 mg/L	138.1	0.54 ppm	0.39%	
Cd 228.802	33432.2	0.2589	0.00126 mg/L	0.2589	0.00126 ppm	0.49%	
Co 228.616	103611.3	1.006	0.0028 mg/L	1.006	0.0028 ppm	0.28%	
Cr 267.716	98014.1	1.070	0.0041 mg/L	1.070	0.0041 ppm	0.38%	
Cu 324.754	283992.0	0.9457	0.01210 mg/L	0.9457	0.01210 ppm	1.28%	
Fe 273.955	71988.5	1.602	0.0052 mg/L	1.602	0.0052 ppm	0.33%	
K 766.491	203989.0	8.765	0.2212 mg/L	8.765	0.2212 ppm	2.52%	
Mg 279.079	2053101.2	48.77	0.816 mg/L	48.77	0.816 ppm	1.67%	
Mn 257.610	1305697.9	0.9810	0.01487 mg/L	0.9810	0.01487 ppm	1.52%	
Ni 202.030	40844.9	2.216	0.0056 mg/L	2.216	0.0056 ppm	0.25%	
Na 330.237	52098.5	75.03	0.024 mg/L	75.03	0.024 ppm	0.03%	
Ni 231.604	48324.2	0.9682	0.00396 mg/L	0.9682	0.00396 ppm	0.41%	
Pb 220.353	49743.2	3.128	0.0158 mg/L	3.128	0.0158 ppm	0.51%	
Pb 206.833	2142.0	0.5087	0.00442 mg/L	0.5087	0.00442 ppm	0.87%	
Se 196.026	1687.9	0.5369	0.00605 mg/L	0.5369	0.00605 ppm	1.13%	
Si 190.800	1953.1	0.5277	0.00398 mg/L	0.5277	0.00398 ppm	0.76%	
Si 292.402	273100.9	2.078	0.0093 mg/L	2.078	0.0093 ppm	0.45%	
Sn 213.856	55316.6	0.5133	0.00402 mg/L	0.5133	0.00402 ppm	0.78%	

Matrix Check Sample: 2809-4 MS F=1

Element	Expected Conc.	Measured Conc.	Std.Dev.	Calib Units	% Recovery
Ag 328.068	1.001	1.023	0.004	mg/L	102.216
Al 308.215	2.006	2.184	0.010	mg/L	108.880
As 188.979	0.5010	0.5278	0.005	mg/L	105.348
Ba 233.527	4.135	4.543	0.070	mg/L	110.203
Be 313.107	0.2000	0.1967	0.003	mg/L	98.347
Ca 227.547	134.9	138.1	0.540	mg/L	115.888
Cd 228.802	0.2501	0.2589	0.001	mg/L	103.546
Co 228.616	1.000	1.006	0.003	mg/L	100.595
Cr 267.716	1.007	1.070	0.004	mg/L	106.359
Cu 324.754	1.004	0.9457	0.012	mg/L	94.218
Fe 273.955	1.592	1.602	0.005	mg/L	101.018
K 766.491	7.991	8.765	0.221	mg/L	115.472
Mg 279.079	49.26	48.77	0.816	mg/L	95.115
Mn 257.610	1.009	0.9810	0.015	mg/L	97.215
Ni 202.030	2.003	2.216	0.006	mg/L	110.644
Na 330.237	72.47	75.03	0.024	mg/L	106.420
Ni 231.604	1.003	0.9682	0.004	mg/L	96.509
Pb 220.353	3.002	3.128	0.016	mg/L	104.182
Pb 206.833	0.5010	0.5087	0.004	mg/L	101.552
Se 196.026	0.5031	0.5369	0.006	mg/L	106.754
Si 190.800	0.5038	0.5277	0.004	mg/L	104.779
Si 292.402	2.005	2.078	0.009	mg/L	103.652
Sn 213.856	0.5046	0.5133	0.004	mg/L	101.733

Replicate Data

D: 2809-4 MSD F=1

Date: 4/23/03

12:25:06 PM

Sample#	Element	Net Intensity	Corrected Intensity	Calib Conc.	Calib Units	Sample Conc.	Sample Units
1	Ag 328.068	209269.6	209340.9	1.032	mg/L	1.032	ppm
1	Al 308.215	74990.4	70943.2	2.194	mg/L	2.194	ppm
1	As 188.979	1604.5	1476.3	0.5240	mg/L	0.5240	ppm
1	Ba 233.527	1973803.6	1973854.4	4.658	mg/L	4.658	ppm
1	Be 313.107	542883.6	543102.0	0.2022	mg/L	0.2022	ppm
1	Ca 227.547	34868.8	34257.6	139.5	mg/L	139.5	ppm
1	Cd 228.802	34022.9	33784.6	0.2617	mg/L	0.2617	ppm
1	Co 228.616	104505.7	104809.4	1.018	mg/L	1.018	ppm
1	Cr 267.716	98662.7	98963.7	1.080	mg/L	1.080	ppm
1	Cu 324.754	290690.7	287550.3	0.9576	mg/L	0.9576	ppm
1	Fe 273.955	72912.5	72264.7	1.608	mg/L	1.608	ppm
1	K 766.491	205734.5	208357.0	8.941	mg/L	8.941	ppm
1	Mg 279.079	2110059.2	2104772.2	50.00	mg/L	50.00	ppm
1	Mn 257.610	1341204.2	1340394.7	1.007	mg/L	1.007	ppm
1	Mo 202.030	41100.6	41158.2	2.233	mg/L	2.233	ppm
1	Na 330.237	59155.0	52436.6	75.51	mg/L	75.51	ppm
1	Ni 231.604	48694.2	48774.6	0.9772	mg/L	0.9772	ppm

e 273.955	71611.1	1.594	0.0165 mg/L	1.594	0.0165 ppm	1.03%
766.491	208160.4	8.933	0.0208 mg/L	8.933	0.0208 ppm	0.23%
g 279.079	2095140.9	49.77	0.198 mg/L	49.77	0.198 ppm	0.40%
n 257.610	1332373.7	1.001	0.0054 mg/L	1.001	0.0054 ppm	0.54%
o 202.030	40797.1	2.213	0.0215 mg/L	2.213	0.0215 ppm	0.97%
a 330.237	51937.6	74.81	0.712 mg/L	74.81	0.712 ppm	0.95%
i 231.604	48313.0	0.9679	0.00861 mg/L	0.9679	0.00861 ppm	0.89%
b 220.353	49804.9	3.132	0.0325 mg/L	3.132	0.0325 ppm	1.04%
b 206.833	2138.4	0.5079	0.00386 mg/L	0.5079	0.00386 ppm	0.76%
e 196.026	1668.1	0.5305	0.00324 mg/L	0.5305	0.00324 ppm	0.61%
l 190.800	1934.9	0.5228	0.00628 mg/L	0.5228	0.00628 ppm	1.20%
292.402	272046.7	2.070	0.0230 mg/L	2.070	0.0230 ppm	1.11%
n 213.856	55401.2	0.5141	0.00469 mg/L	0.5141	0.00469 ppm	0.91%

atrix Check Sample: 2809-4 MSD F=1

Element	Expected Conc.	Measured Conc.	Std.Dev.	Calib Units	% Recovery
g 328.068	1.001	1.022	0.011	mg/L	102.061
l 308.215	2.006	2.172	0.023	mg/L	108.273
s 188.979	0.5010	0.5263	0.005	mg/L	105.044
a 233.527	4.135	4.632	0.023	mg/L	112.426
e 313.107	0.2000	0.2009	0.001	mg/L	100.460
a 227.547	134.9	138.2	1.313	mg/L	116.281
d 228.802	0.2501	0.2598	0.002	mg/L	103.905
o 228.616	1.000	1.008	0.009	mg/L	100.746
r 267.716	1.007	1.069	0.012	mg/L	106.203
u 324.754	1.004	0.9569	0.008	mg/L	95.334
e 273.955	1.592	1.594	0.016	mg/L	100.178
766.491	7.991	8.933	0.021	mg/L	118.844
g 279.079	49.26	49.77	0.198	mg/L	105.102
n 257.610	1.009	1.001	0.005	mg/L	99.219
o 202.030	2.003	2.213	0.022	mg/L	110.515
a 330.237	72.47	74.81	0.712	mg/L	105.853
i 231.604	1.003	0.9679	0.009	mg/L	96.487
o 220.353	3.002	3.132	0.032	mg/L	104.311
o 206.833	0.5010	0.5079	0.004	mg/L	101.379
e 196.026	0.5031	0.5305	0.003	mg/L	105.493
l 190.800	0.5038	0.5228	0.006	mg/L	103.787
292.402	2.005	2.070	0.023	mg/L	103.251
n 213.856	0.5046	0.5141	0.005	mg/L	101.890

uplicate Data -----
 J: 2809-4 PS F=1

Date: 4/23/03 12:28:41 PM

apl#	Element	Net Intensity	Corrected Intensity	Conc.	Calib Units	Conc.	Sample Units
1	Ag 328.068	202299.5	202370.7	0.9981	mg/L	0.9981	ppm
1	Al 308.215	72867.2	68820.0	2.128	mg/L	2.128	ppm
1	As 188.979	1631.2	1503.0	0.5329	mg/L	0.5329	ppm
1	Ba 233.527	1930812.2	1930862.9	4.556	mg/L	4.556	ppm
1	Be 313.107	531182.9	531401.2	0.1979	mg/L	0.1979	ppm
1	Ca 227.547	33861.2	33250.0	135.4	mg/L	135.4	ppm
1	Cd 228.802	33302.8	33064.5	0.2561	mg/L	0.2561	ppm
1	Co 228.616	101962.2	102265.9	0.9931	mg/L	0.9931	ppm
1	Cr 267.716	95522.1	95823.1	1.046	mg/L	1.046	ppm
1	Cu 324.754	282036.5	278896.1	0.9287	mg/L	0.9287	ppm
1	Fe 273.955	70975.3	70327.5	1.565	mg/L	1.565	ppm
1	K 766.491	198405.6	201028.0	8.645	mg/L	8.645	ppm
1	Mg 279.079	2059765.7	2054478.7	48.81	mg/L	48.81	ppm
1	Mn 257.610	1314036.2	1313226.7	0.9866	mg/L	0.9866	ppm
1	Mo 202.030	40007.1	40064.8	2.174	mg/L	2.174	ppm
1	Na 330.237	57549.5	50831.1	73.25	mg/L	73.25	ppm
1	Ni 231.604	47131.7	47212.1	0.9459	mg/L	0.9459	ppm
1	Pb 220.353	48695.1	48870.2	3.073	mg/L	3.073	ppm
1	Sb 206.833	2139.1	2150.3	0.5115	mg/L	0.5115	ppm
1	Se 196.026	1741.9	1690.0	0.5375	mg/L	0.5375	ppm
1	Tl 190.800	2159.4	1953.5	0.5268	mg/L	0.5268	ppm
1	V 292.402	266911.3	266770.4	2.030	mg/L	2.030	ppm
1	Zn 213.856	53660.0	54269.4	0.5036	mg/L	0.5036	ppm

i	231.604	47966.3	0.9610	0.01435 mg/L	0.9610	0.01435 ppm	1.49%
b	220.353	49398.3	3.106	0.0385 mg/L	3.106	0.0385 ppm	1.24%
b	206.833	2150.0	0.5110	0.00233 mg/L	0.5110	0.00233 ppm	0.46%
e	196.026	1678.0	0.5337	0.00451 mg/L	0.5337	0.00451 ppm	0.84%
l	190.800	1949.8	0.5265	0.00067 mg/L	0.5265	0.00067 ppm	0.13%
	292.402	269636.9	2.052	0.0247 mg/L	2.052	0.0247 ppm	1.20%
n	213.856	54962.3	0.5100	0.00674 mg/L	0.5100	0.00674 ppm	1.32%

Matrix Check Sample: 2809-4 PS F=1

Element	Expected Conc.	Measured Conc.	Std.Dev.	Calib Units	% Recovery
g	1.001	1.010	0.013	mg/L	100.938
l	2.006	2.153	0.026	mg/L	107.310
s	0.5010	0.5276	0.005	mg/L	105.307
a	4.135	4.608	0.071	mg/L	111.827
e	0.2000	0.2000	0.003	mg/L	99.963
a	134.9	136.9	1.718	mg/L	110.019
d	0.2501	0.2583	0.003	mg/L	103.312
o	1.000	1.002	0.010	mg/L	100.152
r	1.007	1.060	0.015	mg/L	105.329
u	1.004	0.9483	0.017	mg/L	94.473
e	1.592	1.581	0.021	mg/L	98.933
	766.491	8.807	0.195	mg/L	116.323
g	49.26	49.45	0.837	mg/L	101.819
n	1.009	0.9967	0.015	mg/L	98.785
o	2.003	2.197	0.027	mg/L	109.705
a	72.47	74.08	0.900	mg/L	104.023
i	1.003	0.9610	0.014	mg/L	95.792
b	3.002	3.106	0.038	mg/L	103.459
b	0.5010	0.5110	0.002	mg/L	102.014
e	0.5031	0.5337	0.005	mg/L	106.122
l	0.5038	0.5265	0.001	mg/L	104.527
	292.402	2.005	0.025	mg/L	102.334
n	0.5046	0.5100	0.007	mg/L	101.075

Replicate Data

J: CCV 1447B

Date: 4/23/03

12:32:20 PM

Sample#	Element	Net Intensity	Corrected Intensity	Calib Conc.	Calib Units	Sample Conc.	Sample Units
1	Ag 328.068	200600.9	200672.2	0.9897	mg/L		
1	Al 308.215	166230.4	162183.2	5.015	mg/L		
1	As 188.979	1557.5	1429.3	0.5004	mg/L		
1	Ba 233.527	2171973.8	2172024.6	5.125	mg/L		
1	Be 313.107	1332206.0	1332424.3	0.4962	mg/L		
1	Ca 227.547	12989.0	12377.7	50.41	mg/L		
1	Cd 228.802	129932.6	129694.4	1.004	mg/L		
1	Co 228.616	208559.2	208862.8	2.028	mg/L		
1	Cr 267.716	45839.8	46140.8	0.5038	mg/L		
1	Cu 324.754	609930.2	606789.8	2.021	mg/L		
1	Fe 273.955	227135.6	226487.9	5.041	mg/L		
1	K 766.491	359390.5	362013.0	14.92	mg/L		
1	Mg 279.079	1074922.6	1069635.6	25.41	mg/L		
1	Mn 257.610	2685196.1	2684386.6	2.017	mg/L		
1	Mo 202.030	37018.0	37075.6	2.011	mg/L		
1	Na 330.237	76011.2	69292.8	99.07	mg/L		
1	Ni 231.604	101467.6	101548.0	2.035	mg/L		
1	Pb 220.353	8126.4	8301.6	0.5220	mg/L		
1	Sb 206.833	7995.0	8006.2	2.003	mg/L		
1	Se 196.026	1672.6	1620.7	0.5167	mg/L		
1	Tl 190.800	2076.9	1871.0	0.5056	mg/L		
1	V 292.402	264378.1	264237.2	2.010	mg/L		
1	Zn 213.856	215653.4	216262.9	2.007	mg/L		
2	Ag 328.068	199372.8	199444.0	0.9836	mg/L		
2	Al 308.215	164629.5	160582.3	4.966	mg/L		
2	As 188.979	1535.5	1407.3	0.4927	mg/L		
2	Ba 233.527	2149596.6	2149647.4	5.073	mg/L		
2	Be 313.107	1326457.9	1326676.2	0.4940	mg/L		

2	Ca	227.547	12705.7	12094.4	49.26 mg/L
2	Cd	228.802	129093.3	128855.0	0.9979 mg/L
2	Co	228.616	206652.5	206956.2	2.010 mg/L
2	Cr	267.716	45312.7	45613.7	0.4980 mg/L
2	Cu	324.754	606339.6	603199.2	2.009 mg/L
2	Fe	273.955	224904.7	224257.0	4.991 mg/L
2	K	766.491	360509.9	363132.3	14.96 mg/L
2	Mg	279.079	1063845.7	1058558.7	25.15 mg/L
2	Mn	257.610	2680537.7	2679728.2	2.013 mg/L
2	Mo	202.030	36801.7	36859.3	2.000 mg/L
2	Na	330.237	75816.4	69098.0	98.80 mg/L
2	Ni	231.604	100602.0	100682.4	2.017 mg/L
2	Pb	220.353	7977.7	8152.8	0.5127 mg/L
2	Sb	206.833	7901.8	7913.0	1.980 mg/L
2	Se	196.026	1649.3	1597.5	0.5093 mg/L
2	Tl	190.800	2057.5	1851.7	0.5004 mg/L
2	V	292.402	262882.3	262741.4	1.999 mg/L
2	Zn	213.856	214617.0	215226.5	1.997 mg/L

3	Ag	328.068	194800.6	194871.9	0.9611 mg/L
3	Al	308.215	161544.0	157496.8	4.870 mg/L
3	As	188.979	1566.0	1437.8	0.5032 mg/L
3	Ba	233.527	2108364.8	2108415.6	4.975 mg/L
3	Be	313.107	1309031.6	1309249.9	0.4876 mg/L
3	Ca	227.547	12438.2	11827.0	48.17 mg/L
3	Cd	228.802	126583.4	126345.1	0.9785 mg/L
3	Co	228.616	202638.5	202942.2	1.971 mg/L
3	Cr	267.716	44488.9	44789.9	0.4890 mg/L
3	Cu	324.754	593156.5	590016.1	1.965 mg/L
3	Fe	273.955	220709.2	220061.4	4.898 mg/L
3	K	766.491	355355.2	357977.7	14.77 mg/L
3	Mg	279.079	1044640.9	1039353.9	24.69 mg/L
3	Mn	257.610	2643948.0	2643138.5	1.986 mg/L
3	Mo	202.030	35956.0	36013.7	1.954 mg/L
3	Na	330.237	74280.1	67561.6	96.67 mg/L
3	Ni	231.604	98372.0	98452.3	1.972 mg/L
3	Pb	220.353	8036.9	8212.1	0.5164 mg/L
3	Sb	206.833	8000.9	8012.1	2.005 mg/L
3	Se	196.026	1689.3	1637.4	0.5220 mg/L
3	Tl	190.800	2083.1	1877.2	0.5073 mg/L
3	V	292.402	257037.3	256896.4	1.955 mg/L
3	Zn	213.856	210389.2	210998.7	1.958 mg/L

ean Data

J: CCV 1447B

ample Qty: 1.0000 g

Seq. No.: 21
Prep. Vol.:
Data: Original

Sample No.: 5
1.0 L

A/S Pos: 6
Dilution: 1.0: 1.0
Date: 4/23/03 12:32:20 PM

Element	Mean Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
y	328.068	198329.4	0.9781	0.01507	mg/L			1.54%
l	308.215	160087.4	4.950	0.0737	mg/L			1.49%
s	188.979	1424.8	0.4988	0.00542	mg/L			1.09%
a	233.527	2143362.5	5.058	0.0761	mg/L			1.51%
e	313.107	1322783.5	0.4926	0.00449	mg/L			0.91%
a	227.547	12099.7	49.28	1.122	mg/L			2.28%
l	228.802	128298.2	0.9936	0.01350	mg/L			1.36%
o	228.616	206253.7	2.003	0.0293	mg/L			1.47%
r	267.716	45514.8	0.4969	0.00743	mg/L			1.50%
i	324.754	600001.7	1.998	0.0294	mg/L			1.47%
e	273.955	223602.1	4.976	0.0726	mg/L			1.46%
	766.491	361041.0	14.88	0.102	mg/L			0.68%
y	279.079	1055849.4	25.08	0.364	mg/L			1.45%
i	257.610	2669084.4	2.005	0.0170	mg/L			0.85%
o	202.030	36649.5	1.988	0.0304	mg/L			1.53%
a	330.237	68650.8	98.18	1.317	mg/L			1.34%
i	231.604	100227.6	2.008	0.0320	mg/L			1.59%
o	220.353	8222.1	0.5170	0.00471	mg/L			0.91%
o	206.833	7977.1	1.996	0.0140	mg/L			0.70%
e	196.026	1618.5	0.5160	0.00637	mg/L			1.23%
l	190.800	1866.6	0.5044	0.00360	mg/L			0.71%
	292.402	261291.7	1.988	0.0295	mg/L			1.48%

in 213.856 214162.7 1.987 0.0259 mg/L 1.30%

Duplicate Data

D: CCB

Date: 4/23/03 12:35:50 PM

epl#	Element	Net Intensity	Corrected Intensity	Conc. Units	Calib Units	Sample Conc. Units
1	Ag 328.068	151.9	223.2	0.0011	mg/L	
1	Al 308.215	3913.3	-133.9	-0.0041	mg/L	
1	As 188.979	116.8	-11.3	-0.0039	mg/L	
1	Ba 233.527	709.3	760.1	0.0018	mg/L	
1	Be 313.107	238.2	456.5	0.0002	mg/L	
1	Ca 227.547	614.3	3.0	0.0124	mg/L	
1	Cd 228.802	246.3	8.0	0.0001	mg/L	
1	Co 228.616	-217.2	86.4	0.0008	mg/L	
1	Cr 267.716	-287.1	13.9	0.0002	mg/L	
1	Cu 324.754	5134.2	1993.8	0.0066	mg/L	
1	Fe 273.955	645.5	-2.2	0.0000	mg/L	
1	K 766.491	-2317.5	304.9	0.0600	mg/L	
1	Mg 279.079	3362.0	-1925.0	-0.0457	mg/L	
1	Mn 257.610	1759.1	949.6	0.0007	mg/L	
1	Mo 202.030	-24.2	33.5	0.0018	mg/L	
1	Na 330.237	6962.8	244.4	0.3523	mg/L	
1	Ni 231.604	-25.6	54.8	0.0011	mg/L	
1	Pb 220.353	-154.5	20.7	0.0013	mg/L	
1	Sb 206.833	-20.6	-9.4	-0.0024	mg/L	
1	Se 196.026	60.1	8.3	0.0026	mg/L	
1	Tl 190.800	201.9	-4.0	-0.0011	mg/L	
1	V 292.402	170.2	29.3	0.0002	mg/L	
1	Zn 213.856	-578.9	30.6	0.0003	mg/L	
2	Ag 328.068	39.3	110.6	0.0005	mg/L	
2	Al 308.215	3759.4	-287.8	-0.0089	mg/L	
2	As 188.979	125.8	-2.4	-0.0008	mg/L	
2	Ba 233.527	461.8	512.6	0.0012	mg/L	
2	Be 313.107	78.4	296.8	0.0001	mg/L	
2	Ca 227.547	615.8	4.5	0.0185	mg/L	
2	Cd 228.802	247.8	9.5	0.0001	mg/L	
2	Co 228.616	-248.6	55.1	0.0005	mg/L	
2	Cr 267.716	-304.6	-3.6	0.0000	mg/L	
2	Cu 324.754	4857.7	1717.3	0.0057	mg/L	
2	Fe 273.955	490.8	-157.0	-0.0035	mg/L	
2	K 766.491	-2603.2	19.3	0.0470	mg/L	
2	Mg 279.079	3294.0	-1992.9	-0.0473	mg/L	
2	Mn 257.610	1340.6	531.1	0.0004	mg/L	
2	Mo 202.030	-29.5	28.2	0.0015	mg/L	
2	Na 330.237	6968.1	249.7	0.3601	mg/L	
2	Ni 231.604	-68.3	12.1	0.0002	mg/L	
2	Pb 220.353	-153.2	22.0	0.0014	mg/L	
2	Sb 206.833	-6.4	4.8	0.0012	mg/L	
2	Se 196.026	67.4	15.6	0.0050	mg/L	
2	Tl 190.800	210.8	5.0	0.0013	mg/L	
2	V 292.402	111.1	-29.8	-0.0002	mg/L	
2	Zn 213.856	-585.3	24.1	0.0002	mg/L	
3	Ag 328.068	-92.7	-21.5	-0.0001	mg/L	
3	Al 308.215	3941.9	-105.4	-0.0033	mg/L	
3	As 188.979	122.1	-6.1	-0.0021	mg/L	
3	Ba 233.527	295.8	346.6	0.0008	mg/L	
3	Be 313.107	-53.4	165.0	0.0001	mg/L	
3	Ca 227.547	602.3	-8.9	-0.0364	mg/L	
3	Cd 228.802	233.4	-4.9	0.0000	mg/L	
3	Co 228.616	-255.1	48.6	0.0005	mg/L	
3	Cr 267.716	-313.9	-12.9	-0.0001	mg/L	
3	Cu 324.754	4417.3	1276.9	0.0043	mg/L	
3	Fe 273.955	290.9	-356.8	-0.0079	mg/L	
3	K 766.491	-2722.8	-100.3	0.0416	mg/L	
3	Mg 279.079	3271.7	-2015.3	-0.0479	mg/L	
3	Mn 257.610	1244.8	435.3	0.0003	mg/L	
3	Mo 202.030	-40.2	17.5	0.0009	mg/L	
3	Na 330.237	6932.8	214.3	0.3079	mg/L	

3 Ni 231.604	-73.5	6.9	0.0001 mg/L
3 Pb 220.353	-132.8	42.3	0.0027 mg/L
3 Sb 206.833	-12.0	-0.8	-0.0002 mg/L
3 Se 196.026	56.9	5.1	0.0016 mg/L
3 Tl 190.800	205.4	-0.4	-0.0001 mg/L
3 V 292.402	195.1	54.2	0.0004 mg/L
3 Zn 213.856	-609.5	-0.0	0.0000 mg/L

ean Data

D: CCB
 ample Qty: 1.0000 g
 Seq. No.: 22
 Prep. Vol.:
 Data: Original
 Sample No.: 6
 1.0 L
 A/S Pos: 1
 Dilution: 1.0: 1.0
 Date: 4/23/03 12:35:50 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
g 328.068	104.1	0.0005	0.00060	mg/L				117.64%
l 308.215	-175.7	-0.0054	0.00303	mg/L				55.85%
s 188.979	-6.6	-0.0023	0.00156	mg/L				68.06%
a 233.527	539.8	0.0013	0.00049	mg/L				38.55%
e 313.107	306.1	0.0001	0.00005	mg/L				47.70%
a 227.547	-0.5	-0.0019	0.03010	mg/L				>999.9%
d 228.802	4.2	0.0000	0.00006	mg/L				187.78%
o 228.616	63.4	0.0006	0.00020	mg/L				31.91%
r 267.716	-0.9	0.0000	0.00015	mg/L				>999.9%
u 324.754	1662.7	0.0055	0.00120	mg/L				21.74%
e 273.955	-172.0	-0.0038	0.00396	mg/L				103.35%
766.491	74.6	0.0495	0.00944	mg/L				19.07%
g 279.079	-1977.7	-0.0470	0.00112	mg/L				2.38%
n 257.610	638.7	0.0005	0.00021	mg/L				42.83%
o 202.030	26.4	0.0014	0.00044	mg/L				30.84%
a 330.237	236.1	0.3401	0.02811	mg/L				8.26%
i 231.604	24.6	0.0005	0.00053	mg/L				106.79%
b 220.353	28.3	0.0018	0.00076	mg/L				42.93%
b 206.833	-1.8	-0.0005	0.00181	mg/L				394.81%
e 196.026	9.6	0.0031	0.00171	mg/L				55.78%
l 190.800	0.2	0.0001	0.00122	mg/L				>999.9%
292.402	17.9	0.0001	0.00033	mg/L				241.42%
n 213.856	18.2	0.0002	0.00015	mg/L				88.61%

uplicate Data

D: 2809-1 F=1
 Date: 4/23/03 12:39:13 PM

Element	Net Intensity	Corrected Intensity	Calib Conc.	Units	Sample Conc.	Units
1 Ag 328.068	1025.3	1096.5	0.0054	mg/L	0.0054	ppm
1 Al 308.215	4254.2	207.0	0.0064	mg/L	0.0064	ppm
1 As 188.979	132.1	3.9	0.0014	mg/L	0.0014	ppm
1 Ba 233.527	10623.4	10674.1	0.0252	mg/L	0.0252	ppm
1 Be 313.107	-457.3	-238.9	-0.0001	mg/L	-0.0001	ppm
1 Ca 227.547	6613.5	6002.3	24.45	mg/L	24.45	ppm
1 Cd 228.802	226.9	-11.4	-0.0001	mg/L	-0.0001	ppm
1 Co 228.616	-279.5	24.2	0.0002	mg/L	0.0002	ppm
1 Cr 267.716	-128.2	172.8	0.0019	mg/L	0.0019	ppm
1 Cu 324.754	4606.4	1466.0	0.0049	mg/L	0.0049	ppm
1 Fe 273.955	11244.7	10597.0	0.2358	mg/L	0.2358	ppm
1 K 766.491	38950.9	41573.4	1.907	mg/L	1.907	ppm
1 Mg 279.079	505932.9	500646.0	11.89	mg/L	11.89	ppm
1 Mn 257.610	90953.7	90144.2	0.0677	mg/L	0.0677	ppm
1 Mo 202.030	108.7	166.3	0.0090	mg/L	0.0090	ppm
1 Na 330.237	32696.8	25978.4	37.84	mg/L	37.84	ppm
1 Ni 231.604	-6.5	73.9	0.0015	mg/L	0.0015	ppm
1 Pb 220.353	-157.4	17.7	0.0011	mg/L	0.0011	ppm
1 Sb 206.833	1.6	12.8	0.0032	mg/L	0.0032	ppm
1 Se 196.026	55.3	3.5	0.0011	mg/L	0.0011	ppm
1 Tl 190.800	220.3	14.5	0.0039	mg/L	0.0039	ppm
1 V 292.402	479.3	338.4	0.0026	mg/L	0.0026	ppm
1 Zn 213.856	-374.1	235.4	0.0022	mg/L	0.0022	ppm
2 Ag 328.068	985.5	1056.7	0.0052	mg/L	0.0052	ppm
2 Al 308.215	4206.5	159.3	0.0049	mg/L	0.0049	ppm
2 As 188.979	128.9	0.7	0.0002	mg/L	0.0002	ppm

2	Ba	233.527	10606.6	10657.3	0.0251 mg/L	0.0251 ppm
2	Be	313.107	-412.7	-194.4	-0.0001 mg/L	-0.0001 ppm
2	Ca	227.547	6610.7	5999.5	24.43 mg/L	24.43 ppm
2	Cd	228.802	227.0	-11.3	-0.0001 mg/L	-0.0001 ppm
2	Co	228.616	-289.3	14.4	0.0001 mg/L	0.0001 ppm
2	Cr	267.716	-133.5	167.4	0.0018 mg/L	0.0018 ppm
2	Cu	324.754	4263.7	1123.3	0.0037 mg/L	0.0037 ppm
2	Fe	273.955	10921.6	10273.9	0.2287 mg/L	0.2287 ppm
2	K	766.491	39909.4	42531.8	1.949 mg/L	1.949 ppm
2	Mg	279.079	507018.5	501731.5	11.92 mg/L	11.92 ppm
2	Mn	257.610	91258.8	90449.3	0.0680 mg/L	0.0680 ppm
2	Mo	202.030	95.1	152.7	0.0083 mg/L	0.0083 ppm
2	Na	330.237	32704.1	25985.7	37.85 mg/L	37.85 ppm
2	Ni	231.604	15.6	96.0	0.0019 mg/L	0.0019 ppm
2	Pb	220.353	-148.8	26.4	0.0017 mg/L	0.0017 ppm
2	Sb	206.833	4.0	15.2	0.0038 mg/L	0.0038 ppm
2	Se	196.026	71.9	20.0	0.0064 mg/L	0.0064 ppm
2	Tl	190.800	211.8	6.0	0.0016 mg/L	0.0016 ppm
2	V	292.402	354.0	213.1	0.0016 mg/L	0.0016 ppm
2	Zn	213.856	-383.7	225.8	0.0021 mg/L	0.0021 ppm

3	Ag	328.068	747.5	818.7	0.0040 mg/L	0.0040 ppm
3	Al	308.215	4303.8	256.6	0.0079 mg/L	0.0079 ppm
3	As	188.979	134.8	6.6	0.0023 mg/L	0.0023 ppm
3	Ba	233.527	10531.2	10581.9	0.0250 mg/L	0.0250 ppm
3	Be	313.107	-418.8	-200.4	-0.0001 mg/L	-0.0001 ppm
3	Ca	227.547	6626.3	6015.1	24.50 mg/L	24.50 ppm
3	Cd	228.802	224.9	-13.4	-0.0001 mg/L	-0.0001 ppm
3	Co	228.616	-288.0	15.7	0.0002 mg/L	0.0002 ppm
3	Cr	267.716	-153.9	147.1	0.0016 mg/L	0.0016 ppm
3	Cu	324.754	4370.1	1229.7	0.0041 mg/L	0.0041 ppm
3	Fe	273.955	10878.3	10230.6	0.2277 mg/L	0.2277 ppm
3	K	766.491	39818.8	42441.3	1.945 mg/L	1.945 ppm
3	Mg	279.079	500210.0	494923.1	11.76 mg/L	11.76 ppm
3	Mn	257.610	89688.9	88879.4	0.0668 mg/L	0.0668 ppm
3	Mo	202.030	103.7	161.3	0.0088 mg/L	0.0088 ppm
3	Na	330.237	31993.2	25274.7	36.83 mg/L	36.83 ppm
3	Ni	231.604	-2.9	77.4	0.0016 mg/L	0.0016 ppm
3	Pb	220.353	-166.0	9.2	0.0006 mg/L	0.0006 ppm
3	Sb	206.833	-4.7	6.5	0.0016 mg/L	0.0016 ppm
3	Se	196.026	57.3	5.4	0.0017 mg/L	0.0017 ppm
3	Tl	190.800	210.1	4.3	0.0012 mg/L	0.0012 ppm
3	V	292.402	560.5	419.6	0.0032 mg/L	0.0032 ppm
3	Zn	213.856	-380.9	228.6	0.0021 mg/L	0.0021 ppm

ean Data

D: 2809-1 F=1 Seq. No.: 23 Sample No.: 10 A/S Pos: 19
 ample Qty: 1.0000 mL Prep. Vol.: 1.0 mL Dilution: 1.0: 1.0
 Data: Original Date: 4/23/03 12:39:13 PM

Element	Mean Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
g 328.068	990.6	0.0049	0.00074	mg/L	0.0049	0.00074	ppm	15.16%
l 308.215	207.6	0.0064	0.00150	mg/L	0.0064	0.00150	ppm	23.43%
s 188.979	3.7	0.0013	0.00103	mg/L	0.0013	0.00103	ppm	79.27%
a 233.527	10637.8	0.0251	0.00012	mg/L	0.0251	0.00012	ppm	0.46%
e 313.107	-211.2	-0.0001	0.00001	mg/L	-0.0001	0.00001	ppm	11.43%
a 227.547	6005.6	24.46	0.034	mg/L	24.46	0.034	ppm	0.14%
d 228.802	-12.0	-0.0001	0.00001	mg/L	-0.0001	0.00001	ppm	9.82%
o 228.616	18.1	0.0002	0.00005	mg/L	0.0002	0.00005	ppm	29.59%
r 267.716	162.4	0.0018	0.00015	mg/L	0.0018	0.00015	ppm	8.33%
u 324.754	1273.0	0.0042	0.00058	mg/L	0.0042	0.00058	ppm	13.78%
e 273.955	10367.1	0.2307	0.00446	mg/L	0.2307	0.00446	ppm	1.93%
766.491	42182.2	1.934	0.0234	mg/L	1.934	0.0234	ppm	1.21%
g 279.079	499100.2	11.86	0.087	mg/L	11.86	0.087	ppm	0.73%
n 257.610	89824.3	0.0675	0.00063	mg/L	0.0675	0.00063	ppm	0.93%
o 202.030	160.1	0.0087	0.00037	mg/L	0.0087	0.00037	ppm	4.29%
a 330.237	25746.3	37.51	0.588	mg/L	37.51	0.588	ppm	1.57%
i 231.604	82.4	0.0017	0.00024	mg/L	0.0017	0.00024	ppm	14.36%
b 220.353	17.8	0.0011	0.00054	mg/L	0.0011	0.00054	ppm	48.55%
b 206.833	11.5	0.0029	0.00113	mg/L	0.0029	0.00113	ppm	38.89%
e 196.026	9.6	0.0031	0.00288	mg/L	0.0031	0.00288	ppm	94.00%

l 190.800	8.2	0.0022	0.00148 mg/L	0.0022	0.00148 ppm	66.41%
292.402	323.7	0.0025	0.00079 mg/L	0.0025	0.00079 ppm	32.14%
n 213.856	229.9	0.0021	0.00005 mg/L	0.0021	0.00005 ppm	2.16%

uplicate Data

D: 2809-2 F=1

Date: 4/23/03 12:42:36 PM

epl#	Element	Net Intensity	Corrected Intensity	Conc. Units	Calib Units	Sample Conc. Units
1	Ag 328.068	-54.8	16.4	0.0001 mg/L		0.0001 ppm
1	Al 308.215	4265.0	217.8	0.0067 mg/L		0.0067 ppm
1	As 188.979	130.4	2.2	0.0008 mg/L		0.0008 ppm
1	Ba 233.527	434.3	485.1	0.0011 mg/L		0.0011 ppm
1	Be 313.107	-392.5	-174.1	-0.0001 mg/L		-0.0001 ppm
1	Ca 227.547	638.1	26.8	0.1092 mg/L		0.1092 ppm
1	Cd 228.802	251.1	12.8	0.0001 mg/L		0.0001 ppm
1	Co 228.616	-303.4	0.3	0.0000 mg/L		0.0000 ppm
1	Cr 267.716	-87.7	213.3	0.0023 mg/L		0.0023 ppm
1	Cu 324.754	4066.0	925.6	0.0031 mg/L		0.0031 ppm
1	Fe 273.955	1362.9	715.2	0.0159 mg/L		0.0159 ppm
1	K 766.491	-1762.5	859.9	0.0851 mg/L		0.0851 ppm
1	Mg 279.079	3546.8	-1740.2	-0.0413 mg/L		-0.0413 ppm
1	Mn 257.610	1584.9	775.4	0.0006 mg/L		0.0006 ppm
1	Mo 202.030	-53.7	3.9	0.0002 mg/L		0.0002 ppm
1	Na 330.237	7093.9	375.5	0.5454 mg/L		0.5454 ppm
1	Ni 231.604	157.9	238.3	0.0048 mg/L		0.0048 ppm
1	Pb 220.353	-165.5	9.7	0.0006 mg/L		0.0006 ppm
1	Sb 206.833	-19.7	-8.5	-0.0022 mg/L		-0.0022 ppm
1	Se 196.026	52.5	0.6	0.0002 mg/L		0.0002 ppm
1	Tl 190.800	203.9	-2.0	-0.0005 mg/L		-0.0005 ppm
1	V 292.402	175.3	34.4	0.0003 mg/L		0.0003 ppm
1	Zn 213.856	-165.2	444.2	0.0041 mg/L		0.0041 ppm
2	Ag 328.068	-144.8	-73.6	-0.0004 mg/L		-0.0004 ppm
2	Al 308.215	4209.3	162.1	0.0050 mg/L		0.0050 ppm
2	As 188.979	126.2	-2.0	-0.0007 mg/L		-0.0007 ppm
2	Ba 233.527	379.4	430.2	0.0010 mg/L		0.0010 ppm
2	Be 313.107	-485.3	-266.9	-0.0001 mg/L		-0.0001 ppm
2	Ca 227.547	619.6	8.4	0.0341 mg/L		0.0341 ppm
2	Cd 228.802	221.0	-17.3	-0.0001 mg/L		-0.0001 ppm
2	Co 228.616	-303.1	0.6	0.0000 mg/L		0.0000 ppm
2	Cr 267.716	-91.7	209.3	0.0023 mg/L		0.0023 ppm
2	Cu 324.754	3929.6	789.2	0.0026 mg/L		0.0026 ppm
2	Fe 273.955	1263.2	615.5	0.0137 mg/L		0.0137 ppm
2	K 766.491	-1701.7	920.8	0.0879 mg/L		0.0879 ppm
2	Mg 279.079	3402.4	-1884.6	-0.0448 mg/L		-0.0448 ppm
2	Mn 257.610	1519.3	709.8	0.0005 mg/L		0.0005 ppm
2	Mo 202.030	-51.5	6.1	0.0003 mg/L		0.0003 ppm
2	Na 330.237	6977.4	258.9	0.3737 mg/L		0.3737 ppm
2	Ni 231.604	154.8	235.2	0.0047 mg/L		0.0047 ppm
2	Pb 220.353	-139.1	36.0	0.0023 mg/L		0.0023 ppm
2	Sb 206.833	-12.7	-1.5	-0.0004 mg/L		-0.0004 ppm
2	Se 196.026	69.8	17.9	0.0057 mg/L		0.0057 ppm
2	Tl 190.800	206.8	0.9	0.0003 mg/L		0.0003 ppm
2	V 292.402	154.7	13.8	0.0001 mg/L		0.0001 ppm
2	Zn 213.856	-170.1	439.3	0.0041 mg/L		0.0041 ppm
3	Ag 328.068	40.4	111.6	0.0006 mg/L		0.0006 ppm
3	Al 308.215	4388.6	341.4	0.0106 mg/L		0.0106 ppm
3	As 188.979	117.6	-10.6	-0.0037 mg/L		-0.0037 ppm
3	Ba 233.527	330.5	381.3	0.0009 mg/L		0.0009 ppm
3	Be 313.107	-419.1	-200.7	-0.0001 mg/L		-0.0001 ppm
3	Ca 227.547	641.9	30.6	0.1248 mg/L		0.1248 ppm
3	Cd 228.802	243.3	5.0	0.0000 mg/L		0.0000 ppm
3	Co 228.616	-288.1	15.6	0.0002 mg/L		0.0002 ppm
3	Cr 267.716	-125.9	175.1	0.0019 mg/L		0.0019 ppm
3	Cu 324.754	3898.0	757.6	0.0025 mg/L		0.0025 ppm
3	Fe 273.955	1247.6	599.8	0.0133 mg/L		0.0133 ppm
3	K 766.491	-2116.3	506.2	0.0691 mg/L		0.0691 ppm
3	Mg 279.079	3417.3	-1869.7	-0.0444 mg/L		-0.0444 ppm
3	Mn 257.610	1595.1	785.6	0.0006 mg/L		0.0006 ppm

3 Mo 202.030	-53.2	4.4	0.0002 mg/L	0.0002 ppm
3 Na 330.237	6910.9	192.5	0.2757 mg/L	0.2757 ppm
3 Ni 231.604	129.4	209.8	0.0042 mg/L	0.0042 ppm
3 Pb 220.353	-155.2	19.9	0.0013 mg/L	0.0013 ppm
3 Sb 206.833	-4.9	6.3	0.0016 mg/L	0.0016 ppm
3 Se 196.026	55.1	3.2	0.0010 mg/L	0.0010 ppm
3 Tl 190.800	201.6	-4.3	-0.0012 mg/L	-0.0012 ppm
3 V 292.402	102.0	-38.9	-0.0003 mg/L	-0.0003 ppm
3 Zn 213.856	-182.1	427.4	0.0040 mg/L	0.0040 ppm

Mean Data

D: 2809-2 F=1
 Sample Qty: 1.0000 mL
 Seq. No.: 24
 Prep. Vol.:
 Data: Original
 Sample No.: 11
 1.0 mL
 A/S Pos: 20
 Dilution: 1.0: 1.0
 Date: 4/23/03 12:42:36 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
g 328.068	18.2	0.0001	0.00046	mg/L	0.0001	0.00046	ppm	509.73%
l 308.215	240.4	0.0074	0.00284	mg/L	0.0074	0.00284	ppm	38.16%
s 188.979	-3.5	-0.0012	0.00225	mg/L	-0.0012	0.00225	ppm	187.99%
a 233.527	432.2	0.0010	0.00012	mg/L	0.0010	0.00012	ppm	12.01%
e 313.107	-213.9	-0.0001	0.00002	mg/L	-0.0001	0.00002	ppm	22.35%
a 227.547	21.9	0.0894	0.04850	mg/L	0.0894	0.04850	ppm	54.26%
d 228.802	0.2	0.0000	0.00012	mg/L	0.0000	0.00012	ppm	>999.9%
o 228.616	5.5	0.0001	0.00008	mg/L	0.0001	0.00008	ppm	158.41%
r 267.716	199.2	0.0022	0.00023	mg/L	0.0022	0.00023	ppm	10.54%
u 324.754	824.1	0.0027	0.00030	mg/L	0.0027	0.00030	ppm	10.83%
e 273.955	643.5	0.0143	0.00139	mg/L	0.0143	0.00139	ppm	9.72%
766.491	762.3	0.0807	0.01015	mg/L	0.0807	0.01015	ppm	12.57%
g 279.079	-1831.5	-0.0435	0.00189	mg/L	-0.0435	0.00189	ppm	4.34%
n 257.610	756.9	0.0006	0.00003	mg/L	0.0006	0.00003	ppm	5.43%
c 202.030	4.8	0.0003	0.00006	mg/L	0.0003	0.00006	ppm	23.52%
a 330.237	275.6	0.3983	0.13650	mg/L	0.3983	0.13650	ppm	34.27%
i 231.604	227.8	0.0046	0.00031	mg/L	0.0046	0.00031	ppm	6.88%
b 220.353	21.9	0.0014	0.00083	mg/L	0.0014	0.00083	ppm	60.65%
b 206.833	-1.3	-0.0003	0.00186	mg/L	-0.0003	0.00186	ppm	587.89%
e 196.026	7.2	0.0023	0.00297	mg/L	0.0023	0.00297	ppm	128.79%
l 190.800	-1.8	-0.0005	0.00071	mg/L	-0.0005	0.00071	ppm	147.39%
292.402	3.1	0.0000	0.00029	mg/L	0.0000	0.00029	ppm	>999.9%
n 213.856	437.0	0.0041	0.00008	mg/L	0.0041	0.00008	ppm	1.98%

Replicate Data

D: 2809-3 F=1
 Date: 4/23/03 12:45:59 PM

Sample#	Element	Net Intensity	Corrected Intensity	Calib Conc. Units	Sample Conc. Units
1	Ag 328.068	158.6	229.9	0.0011 mg/L	0.0011 ppm
1	Al 308.215	4351.8	304.6	0.0094 mg/L	0.0094 ppm
1	As 188.979	129.9	1.7	0.0023 mg/L	0.0023 ppm
1	Ba 233.527	23006.1	23056.9	0.0544 mg/L	0.0544 ppm
1	Be 313.107	-546.8	-328.5	-0.0001 mg/L	-0.0001 ppm
1	Ca 227.547	13806.9	13195.6	53.74 mg/L	53.74 ppm
1	Cd 228.802	234.7	-3.6	0.0000 mg/L	0.0000 ppm
1	Co 228.616	-309.5	-5.8	-0.0001 mg/L	-0.0001 ppm
1	Cr 267.716	-179.2	121.8	0.0013 mg/L	0.0013 ppm
1	Cu 324.754	4111.0	970.6	0.0032 mg/L	0.0032 ppm
1	Fe 273.955	12842.9	12195.2	0.2714 mg/L	0.2714 ppm
1	K 766.491	51231.6	53854.0	2.448 mg/L	2.448 ppm
1	Mg 279.079	739830.6	734543.6	17.45 mg/L	17.45 ppm
1	Mn 257.610	2167.3	1357.8	0.0010 mg/L	0.0010 ppm
1	Mo 202.030	2.9	60.6	0.0033 mg/L	0.0033 ppm
1	Na 330.237	19634.1	12915.6	18.92 mg/L	18.92 ppm
1	Ni 231.604	-35.0	45.4	0.0009 mg/L	0.0009 ppm
1	Pb 220.353	-152.5	22.6	0.0014 mg/L	0.0014 ppm
1	Sb 206.833	-6.4	4.8	0.0012 mg/L	0.0012 ppm
1	Se 196.026	56.3	4.5	0.0014 mg/L	0.0014 ppm
1	Tl 190.800	213.7	7.8	0.0021 mg/L	0.0021 ppm
1	V 292.402	306.8	165.9	0.0013 mg/L	0.0013 ppm
1	Zn 213.856	-169.6	439.9	0.0041 mg/L	0.0041 ppm
2	Ag 328.068	39.6	110.8	0.0005 mg/L	0.0005 ppm