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U.S. Army Corps of Engineers
Omaha District

ADMINISTRATIVE
RECORD

Vasquez and I-70 Site
Denver, Colorado

Draft Report for
Rapid Response
Sampling and Analysis
Residential Area

Volume IV

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Prepared for:

U.S. ARMY CORPS. OF ENGINEERS, OMAHA DISTRICT
Fort Crook Area, Rapid Response Resident Office

Prepared by
WESTON® MANAGERS DESIGNERS/CONSULTANTS
Roy F. Weston, Inc.
Denver, Colorado

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA8

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 10:38:47
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA8.026
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 36
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65106.053	~~ug/L~~ ug/kg	67025.892
⌜	Be	9	288.7013	2.63	226.337	ug/L	6.667
|	Al	27	4926630.4959	0.86	99983869.570	ug/L	1632.443
|>	Sc	45			320548.265	ug/L	235949.974
|	V •	51	8904.4398	1.55	462142.076	ug/L	2246.782
|	Cr	52	19375.4884	2.73	900519.725	ug/L	10715.459
|	Mn	55	179143.9883	3.93	13016579.492	ug/L	1746.124
|	Fe	57	6113531.8294	2.19	9177266.327	ug/L	24224.333
|	Co	59	12373.0625	1.88	750857.891	ug/L	102.335
|	Ni	60	4356.0309	3.52	57502.262	ug/L	188.420
⌊	Cu	65	11161.5949	2.50	161775.415	ug/L	219.011
⌜>	Ge	72			473772.816	ug/L	468461.737
|	Zn	68	87615.7855	1.27	345162.241	ug/L	175.670
|	As	75	185208.6603	0.80	1453212.608	ug/L	-28.758
⌊	Se	82	501.6862	11.86	357.559	ug/L	1.696
	Y	89			1337965.253	ug/L	311135.844
⌜	Mo	97	1001.9600	2.78	8895.859	ug/L	55.667
|	Ag	107	495.5724	0.70	15081.443	ug/L	43.334
|>	In	115			375110.892	ug/L	374857.936
|	Cd	111	3166.2001	1.50	23762.231	ug/L	15.889
|	Sn	117	251.0076	1.97	1831.802	ug/L	107.001
|	Sb	121	316.5323	1.53	8072.695	ug/L	51.001
⌊	Ba	135	98577.3771	1.92	520228.363	ug/L	20.000
	Tb	159			249363.707	ug/L	234770.291
⌜>	Ho	165			221825.208	ug/L	212339.863
|	Tl	205	232.3087	1.40	7356.634	ug/L	152.002
|	Pb	208	97192.1035	3.85	3936332.313	ug/L	171.002
⌊	U	238	2026.0617	2.52	59619.777	ug/L	17.000

	Bi	209			124827.578	ug/L	125979.854
⌈>	Sc	45			320548.265	ug/L	235949.974
|	Cr	50	61869.5304	13.68	122785.525	ug/L	379.885
L	Cr	53	19482.8210	4.51	111142.910	ug/L	3000.678
⌈	Ni	61	9757.0048	3.80	5176.323	ug/L	1041.715
|	Cu	63	16615.6562	3.30	350167.901	ug/L	414.343
|	Br	79			10979.001	ug/L	505.681
L>	Ge	74			639122.983	ug/L	652160.165
⌈	Ag	109	506.0985	2.06	14514.516	ug/L	41.000
L>	In	115			375110.892	ug/L	374857.936
⌈	Pb	206	105205.3858	0.87	1026132.906	ug/L	42.000
|	Pb	207	104151.1604	0.82	858977.317	ug/L	38.000
L>	Bi	209			124827.578	ug/L	125979.854
	Hg	200			10248.112	ug/L	17.667
	Pd	106			5074.393	ug/L	195.774
	Kr	83			359.341	ug/L	150.002
	Ti	48			7355750.064	ug/L	-2528.765
	Ca	44			3025185.608	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		135.854		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		101.134		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		100.067		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		104.467		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		135.854		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		98.001		
⌈	Ag	109				
⌊>	In	115		100.067		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		99.085		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range – NR

Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)
As 75 Upper	As	75	As above linear range
Pb 208 Upper	Pb	208	Pb above linear range
Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)

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Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA9

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 10:43:18
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA9.027
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 37
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65005.895	~~ug/L~~ ug/kg	67025.892
⌜	Be	9	302.5834	2.46	243.671	ug/L	6.667
|	Al	27	5849901.6596	0.59	122162009.284	ug/L	1632.443
|>	Sc	45			329769.694	ug/L	235949.974
|	V	51	10393.9662	0.83	554461.263	ug/L	2246.782
|	Cr	52	17685.5474	0.90	846843.799	ug/L	10715.459
|	Mn	55	176443.5295	2.31	13192984.671	ug/L	1746.124
|	Fe	57	6967802.7458	2.41	10755590.856	ug/L	24224.333
|	Co	59	6452.8932	2.70	402866.786	ug/L	102.335
|	Ni	60	4765.0980	3.07	64690.837	ug/L	188.420
⌊	Cu	65	11245.4343	3.37	167640.808	ug/L	219.011
⌜>	Ge	72			469849.183	ug/L	468461.737
|	Zn	68	129378.0472	2.69	505313.577	ug/L	175.670
|	As	75	207855.8410	4.71	1617070.599	ug/L	-28.758
⌊	Se	82	631.3180	6.92	445.688	ug/L	1.696
	Y	89			1518075.196	ug/L	311135.844
⌜	Mo	97	901.6415	4.11	8099.045	ug/L	55.667
|	Ag	107	863.4261	2.57	26524.875	ug/L	43.334
|>	In	115			379127.732	ug/L	374857.936
|	Cd	111	5728.2521	1.81	43439.578	ug/L	15.889
|	Sn	117	585.0678	0.89	4172.318	ug/L	107.001
|	Sb	121	247.1943	2.27	6384.824	ug/L	51.001
⌊	Ba	135	113128.9120	1.29	603603.845	ug/L	20.000
	Tb	159			253501.003	ug/L	234770.291
⌜>	Ho	165			222187.030	ug/L	212339.863
|	Tl	205	251.3562	2.41	7958.296	ug/L	152.002
|	Pb	208	123149.0134	1.80	4995542.108	ug/L	171.002
⌊	U	238	1891.3065	2.12	55738.417	ug/L	17.000

	Bi	209			135312.497	ug/L	125979.854
┌>	Sc	45			329769.694	ug/L	235949.974
┌	Cr	50	59503.0423	10.84	121317.418	ug/L	379.885
└	Cr	53	17749.6397	1.67	104604.091	ug/L	3000.678
┌	Ni	61	11048.3716	3.63	5700.194	ug/L	1041.715
┌	Cu	63	17011.4259	1.98	356958.663	ug/L	414.343
┌	Br	79			10573.021	ug/L	505.681
└>	Ge	74			636326.726	ug/L	652160.165
┌	Ag	109	872.0864	1.91	25252.889	ug/L	41.000
└>	In	115			379127.732	ug/L	374857.936
┌	Pb	206	118832.3405	0.76	1256407.447	ug/L	42.000
┌	Pb	207	117711.5487	0.36	1052369.375	ug/L	38.000
└>	Bi	209			135312.497	ug/L	125979.854
	Hg	200			5417.748	ug/L	17.667
	Pd	106			6056.101	ug/L	195.774
	Kr	83			422.010	ug/L	150.002
	Ti	48			8004783.517	ug/L	-2528.765
	Ca	44			3174374.439	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		139.763		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		100.296		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		101.139		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		104.637		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		139.763		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		97.572		
⌈	Ag	109				
⌊>	In	115		101.139		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		107.408		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range – NR

Sc 45 Int Std for sampl	Sc	45	QC Int Std out of limits (30-120%)
As 75 Upper	As	75	As above linear range
Pb 208 Upper	Pb	208	Pb above linear range
Sc 45 Int Std for sampl	Sc	45	QC Int Std out of limits (30-120%)

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Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAA

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 10:47:48
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAA.028
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 38
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65879.897	~~ug/L~~ ug/kg	67025.892
⌜	Be	9	325.7925	5.41	260.672	ug/L	6.667
|	Al	27	5799442.5803	1.48	120641426.601	ug/L	1632.443
|>	Sc	45			328500.973	ug/L	235949.974
|	V	51	10640.1775	0.38	565390.350	ug/L	2246.782
|	Cr	52	12288.3579	2.54	590764.681	ug/L	10715.459
|	Mn	55	190139.6197	4.59	14166525.306	ug/L	1746.124
|	Fe	57	7032483.4011	3.11	10817514.780	ug/L	24224.333
|	Co	59	6832.2282	2.53	425075.302	ug/L	102.335
|	Ni	60	5200.5387	2.62	70343.644	ug/L	188.420
⌞	Cu	65	12941.9296	3.28	192261.929	ug/L	219.011
⌜>	Ge	72			470056.373	ug/L	468461.737
|	Zn	68	136145.3916	1.58	532110.461	ug/L	175.670
|	As	75	167789.8497	1.50	1306121.859	ug/L	-28.758
⌞	Se	82	566.0492	2.89	399.668	ug/L	1.696
	Y	89			1491935.767	ug/L	311135.844
⌜	Mo	97	800.8552	2.24	7257.249	ug/L	55.667
|	Ag	107	711.1019	0.72	22032.866	ug/L	43.334
|>	In	115			382250.448	ug/L	374857.936
|	Cd	111	6013.9198	0.39	45982.901	ug/L	15.889
|	Sn	117	377.2668	3.45	2752.293	ug/L	107.001
|	Sb	121	277.1182	1.12	7209.558	ug/L	51.001
⌞	Ba	135	113347.0624	0.30	609720.421	ug/L	20.000
	Tb	159			255299.353	ug/L	234770.291
⌜>	Ho	165			222853.771	ug/L	212339.863
|	Tl	205	258.2044	0.31	8197.100	ug/L	152.002
|	Pb	208	123343.7267	0.80	5019186.262	ug/L	171.002
⌞	U	238	1781.0586	1.84	52653.719	ug/L	17.000

	Bi	209			126277.263	ug/L	125979.854
⌈>	Sc	45			328500.973	ug/L	235949.974
|	Cr	50	60871.9291	7.63	123865.052	ug/L	379.885
L	Cr	53	12097.6992	4.80	72358.737	ug/L	3000.678
⌈	Ni	61	11884.6534	4.00	6014.661	ug/L	1041.715
|	Cu	63	19856.6350	1.35	413726.417	ug/L	414.343
|	Br	79			14970.671	ug/L	505.681
L>	Ge	74			631692.170	ug/L	652160.165
⌈	Ag	109	715.9569	0.76	20910.504	ug/L	41.000
L>	In	115			382250.448	ug/L	374857.936
⌈	Pb	206	128270.7922	0.64	1265617.554	ug/L	42.000
|	Pb	207	126916.4281	0.55	1058877.461	ug/L	38.000
L>	Bi	209			126277.263	ug/L	125979.854
	Hg	200			3892.570	ug/L	17.667
	Pd	106			6015.047	ug/L	195.774
	Kr	83			424.011	ug/L	150.002
	Ti	48			8548348.924	ug/L	-2528.765
	Ca	44			3523022.879	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		139.225		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		100.340		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		101.972		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		104.951		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		139.225		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		96.862		
⌈	Ag	109				
⌊>	In	115		101.972		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		100.236		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

Sc 45 Int Std for sampl	Sc	45	QC Int Std out of limits (30-120%)
As 75 Upper	As	75	As above linear range
Pb 208 Upper	Pb	208	Pb above linear range
Sc 45 Int Std for sampl	Sc	45	QC Int Std out of limits (30-120%)

> dilute

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAC

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 10:52:19
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAC.029
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 39
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			64835.441	~~ug/L~~ ug/kg	67025.892
⌜	Be	9	300.8407	8.05	250.005	ug/L	6.667
|	Al	27	4803384.7211	0.60	103473282.319	ug/L	1632.443
|>	Sc	45			340191.452	ug/L	235949.974
|	V •	51	9259.7194	1.38	509944.785	ug/L	2246.782
|	Cr	52	20331.1271	1.47	1002065.337	ug/L	10715.459
|	Mn	55	172367.7272	0.66	13301193.956	ug/L	1746.124
|	Fe	57	6506611.9596	3.05	10368072.663	ug/L	24224.333
|	Co	59	5947.7808	3.00	383207.060	ug/L	102.335
|	Ni	60	4954.2846	3.23	69404.759	ug/L	188.420
⌊	Cu	65	13494.2135	1.82	207571.012	ug/L	219.011
⌜>	Ge	72			481437.156	ug/L	468461.737
|	Zn	68	162639.6921	1.47	651090.800	ug/L	175.670
|	As	75	357406.4350	2.37	2849148.753	ug/L	-28.758
⌊	Se	82	733.1690	5.41	529.478	ug/L	1.696
	Y	89			1287628.966	ug/L	311135.844
⌜	Mo	97	1624.2563	1.56	14820.166	ug/L	55.667
|	Ag	107	1040.2698	0.47	32561.403	ug/L	43.334
|>	In	115			386373.949	ug/L	374857.936
|	Cd	111	6736.3088	0.77	52054.340	ug/L	15.889
|	Sn	117	453.1810	2.74	3317.085	ug/L	107.001
|	Sb	121	897.2698	0.85	23476.845	ug/L	51.001
⌊	Ba	135	104485.9996	1.82	567989.673	ug/L	20.000
	Tb	159			243253.970	ug/L	234770.291
⌜>	Ho	165			216802.300	ug/L	212339.863
|	Tl	205	316.6802	0.80	9745.421	ug/L	152.002
|	Pb	208	184482.7573	0.48	7303496.679	ug/L	171.002
⌊	U	238	2181.0285	1.12	62728.721	ug/L	17.000

	Bi	209			129781.168	ug/L	125979.854
⌈>	Sc	45			340191.452	ug/L	235949.974
|	Cr	50	70175.4178	3.85	147776.265	ug/L	379.885
L	Cr	53	20407.1109	0.78	123440.636	ug/L	3000.678
⌈	Ni	61	12430.6464	3.43	6386.158	ug/L	1041.715
|	Cu	63	21083.6306	3.62	449181.830	ug/L	414.343
|	Br	79			17419.806	ug/L	505.681
L>	Ge	74			646506.897	ug/L	652160.165
⌈	Ag	109	1043.9186	0.94	30801.828	ug/L	41.000
L>	In	115			386373.949	ug/L	374857.936
⌈	Pb	206	180784.4207	1.28	1833163.289	ug/L	42.000
|	Pb	207	177812.4011	0.70	1524632.617	ug/L	38.000
L>	Bi	209			129781.168	ug/L	125979.854
	Hg	200			3632.498	ug/L	17.667
	Pd	106			5772.258	ug/L	195.774
	Kr	83			370.008	ug/L	150.002
	Ti	48			9324850.099	ug/L	-2528.765
	Ca	44			4145006.142	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		144.179		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		102.770		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		103.072		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		102.102		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		144.179		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		99.133		
⌈	Ag	109				
⌊>	In	115		103.072		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		103.017		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range – NR

Sc 45 Int Std for sampSc		45	QC Int Std out of limits (30-120%)
As 75 Upper	As	75	As above linear range
Pb 208 Upper	Pb	208	Pb above linear range
Sc 45 Int Std for sampSc		45	QC Int Std out of limits (30-120%)

dilute

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAD

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 10:56:47
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAD.030
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 40
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66088.890	~~ug/L~~ ug/kg	67025.892
⌈	Be	9	481.4561	5.98	423.344	ug/L	6.667
|	Al	27	7376910.9509	0.52	170773719.409	ug/L	1632.443
|>	Sc	45			365621.812	ug/L	235949.974
|	V	51	12212.5535	1.49	721614.406	ug/L	2246.782
|	Cr	52	6001.3862	2.72	329504.904	ug/L	10715.459
|	Mn	55	252655.4545	3.40	20939293.179	ug/L	1746.124
|	Fe	57	7165302.6612	3.73	12258836.784	ug/L	24224.333
|	Co	59	3584.3411	4.27	248090.106	ug/L	102.335
|	Ni	60	6976.5438	2.33	104888.886	ug/L	188.420
⌊	Cu	65	46279.8266	2.31	764013.816	ug/L	219.011
⌈>	Ge	72			437345.985	ug/L	468461.737
|	Zn	68	211836.5485	1.49	770203.323	ug/L	175.670
|	As	75	69263.6659	0.97	501565.322	ug/L	-28.758
⌊	Se	82	1228.3772	1.67	805.034	ug/L	1.696
	Y	89			1702742.062	ug/L	311135.844
⌈	Mo	97	527.9943	4.38	5181.993	ug/L	55.667
|	Ag	107	2845.4467	1.01	94924.001	ug/L	43.334
|>	In	115			412125.911	ug/L	374857.936
|	Cd	111	28859.6977	1.06	237847.580	ug/L	15.889
|	Sn	117	98.9298	2.92	864.701	ug/L	107.001
|	Sb	121	697.6844	0.22	19486.477	ug/L	51.001
⌊	Ba	135	126334.8523	1.30	732669.143	ug/L	20.000
	Tb	159			246224.920	ug/L	234770.291
⌈>	Ho	165			221762.531	ug/L	212339.863
|	Tl	205	964.1561	1.22	30025.156	ug/L	152.002
|	Pb	208	807074.8147	0.68	32682098.067	ug/L	171.002
⌊	U	238	646.3075	0.78	19026.853	ug/L	17.000

	Bi	209			163949.718	ug/L	125979.854
⌈>	Sc	45			365621.812	ug/L	235949.974
⌈	Cr	50	35204.1836	1.76	80001.727	ug/L	379.885
⌊	Cr	53	5574.8182	2.48	39604.888	ug/L	3000.678
⌈	Ni	61	30858.1874	1.86	13235.263	ug/L	1041.715
⌈	Cu	63	83237.4852	1.45	1637663.030	ug/L	414.343
⌈	Br	79			8457.921	ug/L	505.681
⌊>	Ge	74			597056.931	ug/L	652160.165
⌈	Ag	109	2901.0346	0.24	91216.539	ug/L	41.000
⌊>	In	115			412125.911	ug/L	374857.936
⌈	Pb	206	648651.3173	0.45	8309528.059	ug/L	42.000
⌈	Pb	207	677194.7539	1.13	7335562.140	ug/L	38.000
⌊>	Bi	209			163949.718	ug/L	125979.854
	Hg	200			10933.962	ug/L	17.667
	Pd	106			5246.413	ug/L	195.774
	Kr	83			424.011	ug/L	150.002
	Ti	48			8634050.336	ug/L	-2528.765
	Ca	44			17444681.184	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		154.957		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
L	Cu	65				
⌈>	Ge	72		93.358		
|	Zn	68				
|	As	75				
L	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		109.942		
|	Cd	111				
|	Sn	117				
|	Sb	121				
L	Ba	135				
	Tb*	159				
⌈>	Ho	165		104.438		
|	Tl	205				
|	Pb	208				
L	U	238				
	Bi	209				
⌈>	Sc	45		154.957		
|	Cr	50				
L	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
L>	Ge	74		91.551		
⌈	Ag	109				
L>	In	115		109.942		
⌈	Pb	206				
|	Pb	207				
L>	Bi	209		130.140		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range — NR

Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)
Zn 68 Upper	Zn	68	Zn above linear range - NR
Pb 208 Upper	Pb	208	Pb above linear range
Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)
Bi 209 Int Std for sampl	Bi	209	QC I(nt Std out of limits (30-120%) - NR

pilot

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 3

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 11:01:30
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 3.031
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			67266.398	ug/L	67025.892
⌈	Be	9	104.1614	4.59	5795.901	ug/L	6.667
|	Al	27	117.2148	3.45	177284.520	ug/L	1632.443
|>	Sc	45			236698.633	ug/L	235949.974
|	V	51	96.8236	1.42	370884.689	ug/L	2246.782
|	Cr	52	96.5089	1.37	336634.548	ug/L	10715.459
|	Mn	55	97.1066	1.25	523065.776	ug/L	1746.124
|	Fe	57	4836.8385	1.87	558824.916	ug/L	24224.333
|	Co	59	94.7905	0.69	424932.397	ug/L	102.335
|	Ni	60	94.6151	1.24	92066.811	ug/L	188.420
⌊	Cu	65	90.4707	2.71	96892.516	ug/L	219.011
⌈>	Ge	72			439157.767	ug/L	468461.737
|	Zn	68	99.0063	0.86	36307.113	ug/L	175.670
|	As	75	104.8762	2.03	76248.725	ug/L	-28.758
⌊	Se	82	103.6621	1.29	6810.175	ug/L	1.696
	Y	89			298263.561	ug/L	311135.844
⌈	Mo	97	103.3552	1.88	87623.150	ug/L	55.667
|	Ag	107	101.7011	1.22	296398.871	ug/L	43.334
|>	In	115			360153.666	ug/L	374857.936
|	Cd	111	99.9161	1.81	71965.552	ug/L	15.889
|	Sn	117	98.2107	0.75	64904.766	ug/L	107.001
|	Sb	121	101.5247	0.60	247143.058	ug/L	51.001
⌊	Ba	135	99.6287	1.64	50508.313	ug/L	20.000
	Tb	159			221964.976	ug/L	234770.291
⌈>	Ho	165			199564.639	ug/L	212339.863
|	Tl	205	94.5709	1.72	263742.399	ug/L	152.002
|	Pb	208	94.9550	1.98	346141.975	ug/L	171.002
⌊	U	238	97.5012	1.18	258063.262	ug/L	17.000

	Bi	209			114681.082	ug/L	125979.854
⌈>	Sc	45			236698.633	ug/L	235949.974
|	Cr	50	98.0738	1.19	14701.044	ug/L	379.885
L	Cr	53	96.3432	3.80	42144.238	ug/L	3000.678
⌈	Ni	61	106.6771	0.87	5314.375	ug/L	1041.715
|	Cu	63	102.7573	1.08	207013.231	ug/L	414.343
|	Br	79			1879.477	ug/L	505.681
L>	Ge	74			610232.727	ug/L	652160.165
⌈	Ag	109	101.4780	0.83	278718.501	ug/L	41.000
L>	In	115			360153.666	ug/L	374857.936
⌈	Pb	206	101.0971	2.42	90597.950	ug/L	42.000
|	Pb	207	100.9961	1.65	76541.611	ug/L	38.000
L>	Bi	209			114681.082	ug/L	125979.854
	Hg	200			238.004	ug/L	17.667
	Pd	106			270.965	ug/L	195.774
	Kr	83			144.002	ug/L	150.002
	Ti	48			726.575	ug/L	-2528.765
	Ca	44			29087.208	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9	104.161			
|	Al	27	117.215			
|>	Sc	45		100.317		
|	V	51	96.824			
|	Cr	52	96.509			
|	Mn	55	97.107			
|	Fe	57	96.737			
|	Co	59	94.791			
|	Ni	60	94.615			
⌊	Cu	65	90.471			
⌈>	Ge	72		93.745		
|	Zn	68	99.006			
|	As	75	104.876			
⌊	Se	82	103.662			
	Y	89				
⌈	Mo	97	103.355			
|	Ag	107	101.701			
|>	In	115		96.077		
|	Cd	111	99.916			
|	Sn	117	98.211			
|	Sb	121	101.525			
⌊	Ba	135	99.629			
	Tb	159				
⌈>	Ho	165		93.984		
|	Tl	205	94.571			
|	Pb	208	94.955			
⌊	U	238	97.501			
	Bi	209				
⌈>	Sc	45		100.317		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		93.571		
⌈	Ag	109				
⌊>	In	115		96.077		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		91.031		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Al	27	CCV is out of limits (+/- 10%) - NR

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 4

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 11:07:02
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 4.032
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			64275.259	ug/L	67025.892
⌈	Be	9	-0.0204	109.77	5.333	ug/L	6.667
|	Al	27	2.0521	17.49	4534.438	ug/L	1632.443
|>	Sc	45			227709.192	ug/L	235949.974
|	V	51	0.2225	54.22	2980.164	ug/L	2246.782
|	Cr	52	0.4690	45.88	11860.047	ug/L	10715.459
|	Mn	55	0.0498	28.75	1941.818	ug/L	1746.124
|	Fe	57	66.2445	9.20	30418.831	ug/L	24224.333
|	Co	59	0.0106	21.69	144.336	ug/L	102.335
|	Ni	60	-0.0125	168.95	170.093	ug/L	188.420
⌊	Cu	65	-0.0079	147.99	203.141	ug/L	219.011
⌈>	Ge	72			428679.312	ug/L	468461.737
|	Zn	68	-0.1152	15.03	119.668	ug/L	175.670
|	As	75	-0.0594	155.25	-69.775	ug/L	-28.758
⌊	Se	82	0.3896	16.82	26.572	ug/L	1.696
	Y	89			291002.766	ug/L	311135.844
⌈	Mo	97	0.0643	31.11	107.335	ug/L	55.667
|	Ag	107	0.0439	20.19	168.669	ug/L	43.334
|>	In	115			358393.421	ug/L	374857.936
|	Cd	111	0.0050	223.08	18.786	ug/L	15.889
|	Sn	117	0.2025	9.96	235.338	ug/L	107.001
|	Sb	121	0.9489	24.18	2344.222	ug/L	51.001
⌊	Ba	135	0.0229	22.18	30.667	ug/L	20.000
	Tb	159			219320.953	ug/L	234770.291
⌈>	Ho	165			197431.847	ug/L	212339.863
|	Tl	205	-0.0215	24.70	81.668	ug/L	152.002
|	Pb	208	0.0588	43.87	368.672	ug/L	171.002
⌊	U	238	0.0168	38.40	59.334	ug/L	17.000

	Bi	209			112493.657	ug/L	125979.854
⌈>	Sc	45			227709.192	ug/L	235949.974
|	Cr	50	-0.5532	21.60	288.818	ug/L	379.885
L	Cr	53	-3.2978	4.97	1607.773	ug/L	3000.678
⌈	Ni	61	5.4030	12.11	1191.062	ug/L	1041.715
|	Cu	63	-0.0368	35.41	312.340	ug/L	414.343
|	Br	79			1057.383	ug/L	505.681
L>	Ge	74			608106.140	ug/L	652160.165
⌈	Ag	109	0.0401	28.62	148.669	ug/L	41.000
L>	In	115			358393.421	ug/L	374857.936
⌈	Pb	206	0.0575	28.47	88.001	ug/L	42.000
|	Pb	207	0.0787	34.69	92.335	ug/L	38.000
L>	Bi	209			112493.657	ug/L	125979.854
	Hg	200			94.668	ug/L	17.667
	Pd	106			238.482	ug/L	195.774
	Kr	83			126.002	ug/L	150.002
	Ti	48			-1270.423	ug/L	-2528.765
	Ca	44			28941.910	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		96.507		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		91.508		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		95.608		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		92.979		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		96.507		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		93.245		
⌈	Ag	109				
⌊>	In	115		95.608		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		89.295		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Fe	57	CCB is out of limits (+/- RL) – NR

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAE

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 11:11:35
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAE.033
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 41
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			61141.191	~~ug/L~~ ug/kg	67025.892
⌜	Be	9	324.9196	10.96	273.672	ug/L	6.667
|	Al	27	5549017.7387	2.63	121345462.446	ug/L	1632.443
|>	Sc	45			345481.651	ug/L	235949.974
|	V	51	9092.8295	4.44	508406.322	ug/L	2246.782
|	Cr	52	44596.2373	3.58	2212338.394	ug/L	10715.459
|	Mn	55	270951.5913	3.19	21219788.372	ug/L	1746.124
|	Fe	57	16283557.3823	2.72	26284628.591	ug/L	24224.333
|	Co	59	5931.5939	4.65	387831.139	ug/L	102.335
|	Ni	60	17997.1952	4.42	255156.723	ug/L	188.420
⌊	Cu	65	44128.5607	3.30	688286.100	ug/L	219.011
⌈>	Ge	72			479707.986	ug/L	468461.737
|	Zn	68	285886.6242	0.74	1140187.406	ug/L	175.670
|	As	75	12880.5573	0.82	102292.377	ug/L	-28.758
⌊	Se	82	722.4226	10.61	520.182	ug/L	1.696
	Y	89			1137360.558	ug/L	311135.844
⌈	Mo	97	2339.0402	0.30	19159.365	ug/L	55.667
|	Ag	107	263.2795	3.34	7435.677	ug/L	43.334
|>	In	115			347213.779	ug/L	374857.936
|	Cd	111	2886.9434	1.69	20058.346	ug/L	15.889
|	Sn	117	307.9804	4.20	2057.836	ug/L	107.001
|	Sb	121	246.3401	1.10	5826.913	ug/L	51.001
⌊	Ba	135	61995.9738	2.52	302888.444	ug/L	20.000
	Tb	159			229546.130	ug/L	234770.291
⌈>	Ho	165			206392.341	ug/L	212339.863
|	Tl	205	371.4907	1.51	10858.235	ug/L	152.002
|	Pb	208	113396.8210	1.16	4273722.571	ug/L	171.002
⌊	U	238	479.0029	0.90	13128.161	ug/L	17.000

	Bi	209			124583.527	ug/L	125979.854
⌈>	Sc	45			345481.651	ug/L	235949.974
|	Cr	50	51583.3344	9.20	110315.449	ug/L	379.885
L	Cr	53	43324.2660	1.93	261119.231	ug/L	3000.678
⌈	Ni	61	46927.4239	3.38	20609.064	ug/L	1041.715
|	Cu	63	72171.5760	2.80	1490994.696	ug/L	414.343
|	Br	79			5487.114	ug/L	505.681
L>	Ge	74			627025.443	ug/L	652160.165
⌈	Ag	109	238.1362	0.98	6342.805	ug/L	41.000
L>	In	115			347213.779	ug/L	374857.936
⌈	Pb	206	111363.2701	0.73	1084052.837	ug/L	42.000
|	Pb	207	108535.5410	0.51	893395.846	ug/L	38.000
L>	Bi	209			124583.527	ug/L	125979.854
	Hg	200			1942.485	ug/L	17.667
	Pd	106			4400.921	ug/L	195.774
	Kr	83			442.678	ug/L	150.002
	Ti	48			2332788.965	ug/L	-2528.765
	Ca	44			19263587.923	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		146.422		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		102.401		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		92.625		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		97.199		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		146.422		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		96.146		
⌈	Ag	109				
⌊>	In	115		92.625		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		98.892		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range – NR

Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)
Fe 57 Upper	Fe	57	Fe over linear range > NR
Zn 68 Upper	Zn	68	Zn above linear range > Dilute
Pb 208 Upper	Pb	208	Pb above linear range
Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAF

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 11:15:59
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAF.034
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 42
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 5e+002
Sample Prep Volume (mL): 5e+001
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			63295.570	~~ug/L~~ mg/kg	67025.892
[	Be	9	320.3513	4.19	333.674	ug/L	6.667
|	Al	27	8480509.8773	3.28	228958745.025	ug/L	1632.443
|>	Sc	45			453737.373	ug/L	235949.974
|	V •	51	22858.2116	2.81	1572374.727	ug/L	2246.782
|	Cr	52	23587.1933	2.29	1455483.310	ug/L	10715.459
|	Mn	55	214614.5696	2.23	20758848.186	ug/L	1746.124
|	Fe	57	11464585.4001	3.79	22864389.429	ug/L	24224.333
|	Co	59	4920.7545	3.94	397435.755	ug/L	102.335
|	Ni	60	29734.5585	2.79	520542.722	ug/L	188.420
L	Cu	65	11286.2219	2.59	217732.320	ug/L	219.011
[>	Ge	72			469697.362	ug/L	468461.737
|	Zn	68	75274.4723	1.44	276429.439	ug/L	175.670
|	As	75	8824.7492	1.96	64492.753	ug/L	-28.758
L	Se	82	993.4103	4.26	657.766	ug/L	1.696
	Y	89			1194504.923	ug/L	311135.844
[	Mo	97	746.1279	2.29	5837.918	ug/L	55.667
|	Ag	107	259.9755	0.19	6973.439	ug/L	43.334
|>	In	115			350663.103	ug/L	374857.936
|	Cd	111	298.1145	4.43	1980.150	ug/L	15.889
|	Sn	117	53.5553	5.87	423.344	ug/L	107.001
|	Sb	121	97.3817	7.46	2217.862	ug/L	51.001
L	Ba	135	324910.1712	0.83	1507121.116	ug/L	20.000
	Tb	159			233947.520	ug/L	234770.291
[>	Ho	165			212299.467	ug/L	212339.863
|	Tl	205	193.0844	2.80	5532.126	ug/L	152.002
|	Pb	208	8734.6757	1.44	318405.923	ug/L	171.002
L	U	238	1126.0627	3.04	29807.698	ug/L	17.000

	Bi	209			114430.294	ug/L	125979.854
[>	Sc	45			453737.373	ug/L	235949.974
[	Cr	50	54844.4292	10.35	145018.186	ug/L	379.885
[	Cr	53	23743.6545	2.41	179480.244	ug/L	3000.678
[	Ni	61	73747.3784	0.55	30095.308	ug/L	1041.715
[	Cu	63	24075.7281	0.36	469818.066	ug/L	414.343
[	Br	79			9011.268	ug/L	505.681
[>	Ge	74			629543.370	ug/L	652160.165
[	Ag	109	258.5470	0.89	6536.894	ug/L	41.000
[>	In	115			350663.103	ug/L	374857.936
[	Pb	206	10116.6115	1.35	85067.094	ug/L	42.000
[	Pb	207	9639.9360	0.95	68543.414	ug/L	38.000
[>	Bi	209			114430.294	ug/L	125979.854
	Hg	200			2404.227	ug/L	17.667
	Pd	106			2380.077	ug/L	195.774
	Kr	83			415.010	ug/L	150.002
	Ti	48			7769779.061	ug/L	-2528.765
	Ca	44			12402725.737	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		192.302		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		100.264		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		93.546		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		99.981		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		192.302		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		96.532		
⌈	Ag	109				
⌊>	In	115		93.546		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		90.832		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range

Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)	Dilute
Fe 57 Upper	Fe	57	Fe over linear range - NR	
Ba 135 Upper -	Ba	135	Ba above linear range	
Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)	

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAG

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 11:20:25
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAG.035
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 43
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			47784.684	~~ug/L~~ mg/kg	67025.892
⌈	Be	9	139.0417	4.15	74.001	ug/L	6.667
|	Al	27	964636.3481	4.27	12729742.865	ug/L	1632.443
|>	Sc	45			208364.100	ug/L	235949.974
|	V	51	3156.7168	4.06	107742.932	ug/L	2246.782
|	Cr	52	7905.0259	2.74	244335.341	ug/L	10715.459
|	Mn	55	954695.7087	5.02	45063372.740	ug/L	1746.124
|	Fe	57	157164705.2269	3.37	152778129.741	ug/L	24224.333
|	Co	59	3395.8414	3.30	133967.955	ug/L	102.335
|	Ni	60	10726.6347	2.43	91821.718	ug/L	188.420
⌊	Cu	65	890602.0628	2.22	8374872.937	ug/L	219.011
⌈>	Ge	72			532845.995	ug/L	468461.737
|	Zn	68	2270890.9247	1.57	10056030.550	ug/L	175.670
|	As	75	300137.6603	2.35	2647296.138	ug/L	-28.758
⌊	Se	82	6439.2966	1.29	5133.785	ug/L	1.696
	Y	89			480564.364	ug/L	311135.844
⌈	Mo	97	2282.3115	2.23	19795.576	ug/L	55.667
|	Ag	107	14007.0733	0.78	416652.240	ug/L	43.334
|>	In	115			367623.556	ug/L	374857.936
|	Cd	111	14648.1222	0.43	107686.475	ug/L	15.889
|	Sn	117	1566.1045	0.64	10653.077	ug/L	107.001
|	Sb	121	4704.4939	1.65	116911.651	ug/L	51.001
⌊	Ba	135	273.6153	4.12	1435.087	ug/L	20.000
	Tb	159			185376.610	ug/L	234770.291
⌈>	Ho	165			168371.336	ug/L	212339.863
|	Tl	205	5415.9942	1.44	127474.162	ug/L	152.002
|	Pb	208	2369598.4050	1.03	72843662.852	ug/L	171.002
⌊	U	238	2140.3941	2.04	47799.318	ug/L	17.000

	Bi	209			412212.608	ug/L	125979.854
⌈>	Sc	45			208364.100	ug/L	235949.974
|	Cr	50	47108.9097	6.19	60824.028	ug/L	379.885
L	Cr	53	7764.7142	2.35	30394.943	ug/L	3000.678
⌈	Ni	61	36588.7223	1.26	13836.170	ug/L	1041.715
|	Cu	63	1026506.6250	0.61	18008885.306	ug/L	414.343
|	Br	79			1572.103	ug/L	505.681
L>	Ge	74			532475.869	ug/L	652160.165
⌈	Ag	109	13836.4542	0.27	387924.456	ug/L	41.000
L>	In	115			367623.556	ug/L	374857.936
⌈	Pb	206	573335.4938	0.51	18466198.138	ug/L	42.000
|	Pb	207	587816.1087	0.07	16008984.338	ug/L	38.000
L>	Bi	209			412212.608	ug/L	125979.854
	Hg	200			847.034	ug/L	17.667
	Pd	106			1804.345	ug/L	195.774
	Kr	83			262.672	ug/L	150.002
	Ti	48			2347415.232	ug/L	-2528.765
	Ca	44			19213536.954	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		88.309		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		113.744		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		98.070		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		79.293		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		88.309		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		81.648		
⌈	Ag	109				
⌊>	In	115		98.070		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		327.205		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range – NR

Fe 57 Upper	Fe	57	Fe over linear range
Cu 65 Upper	Cu	65	Cu above linear range
Zn 68 Upper	Zn	68	Zn above linear range
As 75 Upper	As	75	As above linear range
Pb 208 Upper	Pb	208	Pb above linear range
Bi 209 Int Std for samp	Bi	209	QC I(nt Std out of limits (30-120%)

NR

Dilute

NR

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAH

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 11:24:50
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAH.036
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 44
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			55191.698	~~ug/L~~ ug/kg	67025.892
⌜	Be	9	191.1661	2.62	157.669	ug/L	6.667
|	Al	27	12756033.3555	2.76	266809149.350	ug/L	1632.443
|>	Sc	45			330388.450	ug/L	235949.974
|	V	51	14176.6755	3.00	756785.749	ug/L	2246.782
|	Cr	52	20389.7975	2.43	976192.142	ug/L	10715.459
|	Mn	55	223501.8093	2.38	16750931.031	ug/L	1746.124
|	Fe	57	4311437.5094	1.46	6684240.672	ug/L	24224.333
|	Co	59	9840.5382	1.47	615774.590	ug/L	102.335
|	Ni	60	8991.8910	1.57	122152.483	ug/L	188.420
L	Cu	65	111207.9663	1.74	1659396.183	ug/L	219.011
⌜>	Ge	72			434885.388	ug/L	468461.737
|	Zn	68	15399608.6551	0.49	55670399.225	ug/L	175.670
|	As	75	64320.5901	2.46	463117.202	ug/L	-28.758
L	Se	82	5059.3013	1.94	3291.924	ug/L	1.696
	Y	89			1900507.955	ug/L	311135.844
⌜	Mo	97	15171.7261	1.20	117517.713	ug/L	55.667
|	Ag	107	1857.3023	0.97	49478.699	ug/L	43.334
|>	In	115			329063.310	ug/L	374857.936
|	Cd	111	302113.7048	1.04	1987639.212	ug/L	15.889
|	Sn	117	121952.9753	1.02	735369.402	ug/L	107.001
|	Sb	121	53034.5140	1.75	1179219.279	ug/L	51.001
L	Ba	135	48424.0262	2.48	224207.101	ug/L	20.000
	Tb	159			208689.773	ug/L	234770.291
⌜>	Ho	165			178063.032	ug/L	212339.863
|	Tl	205	532.1237	1.22	13361.713	ug/L	152.002
|	Pb	208	2702869.0011	1.34	87875283.543	ug/L	171.002
L	U	238	748.2143	2.36	17681.447	ug/L	17.000

	Bi	209			265367.992	ug/L	125979.854
⌈>	Sc	45			330388.450	ug/L	235949.974
|	Cr	50	331848.5137	8.79	676969.721	ug/L	379.885
L	Cr	53	20805.1642	2.81	122165.876	ug/L	3000.678
⌈	Ni	61	51336.2754	5.75	20958.936	ug/L	1041.715
|	Cu	63	206064.8183	2.66	3973518.642	ug/L	414.343
|	Br	79			53957.116	ug/L	505.681
L>	Ge	74			585175.565	ug/L	652160.165
⌈	Ag	109	1789.2657	0.64	44932.671	ug/L	41.000
L>	In	115			329063.310	ug/L	374857.936
⌈	Pb	206	1126248.1796	0.79	23352319.414	ug/L	42.000
|	Pb	207	1086200.6439	0.85	19043827.117	ug/L	38.000
L>	Bi	209			265367.992	ug/L	125979.854
	Hg	200			266.338	ug/L	17.667
	Pd	106			22555.969	ug/L	195.774
	Kr	83			806.031	ug/L	150.002
	Ti	48			49876117.064	ug/L	-2528.765
	Ca	44			36504698.677	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
	Be	9				
	Al	27				
>	Sc	45		140.025		
	V	51				
	Cr	52				
	Mn	55				
	Fe	57				
	Co	59				
	Ni	60				
	Cu	65				
>	Ge	72		92.833		
	Zn	68				
	As	75				
	Se	82				
	Y	89				
	Mo	97				
	Ag	107				
>	In	115		87.783		
	Cd	111				
	Sn	117				
	Sb	121				
	Ba	135				
	Tb	159				
>	Ho	165		83.858		
	Tl	205				
	Pb	208				
	U	238				
	Bi	209				
>	Sc	45		140.025		
	Cr	50				
	Cr	53				
	Ni	61				
	Cu	63				
	Br	79				
>	Ge	74		89.729		
	Ag	109				
>	In	115		87.783		
	Pb	206				
	Pb	207				
>	Bi	209		210.643		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)
Cu 65 Upper	Cu	65	Cu above linear range
Zn 68 Upper	Zn	68	Zn above linear range
Cd 111 Upper	Cd	111	Cd above linear range
Pb 208 Upper	Pb	208	Pb above linear range
Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)
Bi 209 Int Std for sampl	Bi	209	QC I(nt Std out of limits (30-120%)

NR

Dilute

NR

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAJ

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 11:29:16
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAJ.037
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 45
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			61133.149	~~ug/L~~ ug/kg	67025.892
⌜	Be	9	244.9425	5.17	166.003	ug/L	6.667
|	Al	27	2372883.6155	2.06	41307029.440	ug/L	1632.443
|>	Sc	45			274925.161	ug/L	235949.974
|	V	51	592.9531	39.79	28827.256	ug/L	2246.782
|	Cr	52	29290.7637	2.85	1161203.377	ug/L	10715.459
|	Mn	55	141025.3311	0.11	8794870.064	ug/L	1746.124
|	Fe	57	17364316.6478	1.77	22310980.722	ug/L	24224.333
|	Co	59	6480.0049	3.30	337362.545	ug/L	102.335
|	Ni	60	3643.1461	3.25	41299.434	ug/L	188.420
L	Cu	65	3753787.3263	0.72	46595583.892	ug/L	219.011
⌜>	Ge	72			485648.154	ug/L	468461.737
|	Zn	68	23236424.5600	1.03	93790126.413	ug/L	175.670
|	As	75	11183.3048	2.64	89885.064	ug/L	-28.758
L	Se	82	2243.9851	5.43	1631.242	ug/L	1.696
	Y	89			577282.639	ug/L	311135.844
⌜	Mo	97	2514.3716	1.09	20644.446	ug/L	55.667
|	Ag	107	9111.2552	1.10	256627.790	ug/L	43.334
|>	In	115			348125.470	ug/L	374857.936
|	Cd	111	24336.8131	1.46	169413.359	ug/L	15.889
|	Sn	117	2671.5970	8.29	17128.802	ug/L	107.001
|	Sb	121	422.6199	11.69	9980.611	ug/L	51.001
L	Ba	135	16696.6230	1.41	81804.366	ug/L	20.000
	Tb	159			203116.511	ug/L	234770.291
⌜>	Ho	165			185318.549	ug/L	212339.863
|	Tl	205	134.8832	2.20	3624.496	ug/L	152.002
|	Pb	208	2138465.6731	1.54	72357472.207	ug/L	171.002
L	U	238	21476.6575	1.38	527845.594	ug/L	17.000

	Bi	209			1341387.077	ug/L	125979.854
⌈>	Sc	45			274925.161	ug/L	235949.974
|	Cr	50	36115.7110	1.15	61684.196	ug/L	379.885
L	Cr	53	29472.9765	0.91	142530.083	ug/L	3000.678
⌈	Ni	61	16847.7556	4.16	8304.830	ug/L	1041.715
|	Cu	63	4752635.2461	1.17	101424274.875	ug/L	414.343
|	Br	79			4608.804	ug/L	505.681
L>	Ge	74			647735.309	ug/L	652160.165
⌈	Ag	109	8903.0294	0.62	236381.826	ug/L	41.000
L>	In	115			348125.470	ug/L	374857.936
⌈	Pb	206	177975.6001	1.15	18651851.880	ug/L	42.000
|	Pb	207	179192.8997	0.49	15880387.197	ug/L	38.000
L>	Bi	209			1341387.077	ug/L	125979.854
	Hg	200			224.004	ug/L	17.667
	Pd	106			6912.219	ug/L	195.774
	Kr	83			800.364	ug/L	150.002
	Ti	48			673952.941	ug/L	-2528.765
	Ca	44			12019158.465	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		116.518		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		103.669		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		92.869		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		87.274		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		116.518		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		99.322		
⌈	Ag	109				
⌊>	In	115		92.869		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		1064.763		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range ✓ NR

Fe 57 Upper	Fe	57	Fe over linear range
Cu 65 Upper	Cu	65	Cu above linear range
Zn 68 Upper	Zn	68	Zn above linear range
Pb 208 Upper	Pb	208	Pb above linear range — Dilute
U 238 Upper	U	238	U above linear range
Bi 209 Int Std for samp	Bi	209	QC I(nt Std out of limits (30-120%)

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 3

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 11:33:59
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 3.038
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			61689.615	ug/L	67025.892
⌜	Be	9	85.8652	3.38	5145.312	ug/L	6.667
|	Al	27	97.2835	1.78	158715.066	ug/L	1632.443
|>	Sc	45			254826.480	ug/L	235949.974
|	V	51	101.4267	1.69	418136.644	ug/L	2246.782
|	Cr	52	101.7590	2.55	381417.228	ug/L	10715.459
|	Mn	55	100.3327	2.83	581575.692	ug/L	1746.124
|	Fe	57	4864.0541	0.37	604767.392	ug/L	24224.333
|	Co	59	95.9255	1.65	463004.436	ug/L	102.335
|	Ni	60	94.2485	1.05	98734.495	ug/L	188.420
⌊	Cu	65	92.3893	0.91	106530.599	ug/L	219.011
⌜>	Ge	72			490742.293	ug/L	468461.737
|	Zn	68	108.9303	7.66	44563.299	ug/L	175.670
|	As	75	100.3338	1.71	81482.850	ug/L	-28.758
⌊	Se	82	100.6562	1.19	7388.143	ug/L	1.696
	Y	89			312474.419	ug/L	311135.844
⌜	Mo	97	108.0071	0.88	87563.083	ug/L	55.667
|	Ag	107	102.2215	1.28	284840.838	ug/L	43.334
|>	In	115			344380.942	ug/L	374857.936
|	Cd	111	100.7766	1.04	69409.310	ug/L	15.889
|	Sn	117	100.4589	1.21	63485.404	ug/L	107.001
|	Sb	121	99.3668	1.75	231284.460	ug/L	51.001
⌊	Ba	135	96.9236	1.20	46989.629	ug/L	20.000
	Tb	159			202786.354	ug/L	234770.291
⌜>	Ho	165			182955.594	ug/L	212339.863
|	Tl	205	97.0656	1.16	248198.639	ug/L	152.002
|	Pb	208	98.6742	0.93	329803.208	ug/L	171.002
⌊	U	238	103.6738	1.14	251589.258	ug/L	17.000

	Bi	209			109502.234	ug/L	125979.854
⌈>	Sc	45			254826.480	ug/L	235949.974
|	Cr	50	102.5236	2.21	16523.633	ug/L	379.885
L	Cr	53	97.1669	1.90	45717.496	ug/L	3000.678
⌈	Ni	61	102.6172	3.85	5740.878	ug/L	1041.715
|	Cu	63	102.0346	1.94	229260.647	ug/L	414.343
|	Br	79			2042.500	ug/L	505.681
⌊>	Ge	74			680551.229	ug/L	652160.165
⌈	Ag	109	101.8247	0.33	267445.256	ug/L	41.000
⌊>	In	115			344380.942	ug/L	374857.936
⌈	Pb	206	100.0841	1.14	85658.230	ug/L	42.000
|	Pb	207	100.2621	0.21	72571.293	ug/L	38.000
⌊>	Bi	209			109502.234	ug/L	125979.854
	Hg	200			37.000	ug/L	17.667
	Pd	106			258.475	ug/L	195.774
	Kr	83			143.669	ug/L	150.002
	Ti	48			3684.783	ug/L	-2528.765
	Ca	44			30030.174	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9	85.865			
|	Al	27	97.284			
|>	Sc	45		108.000		
|	V	51	101.427			
|	Cr	52	101.759			
|	Mn	55	100.333			
|	Fe	57	97.281			
|	Co	59	95.925			
|	Ni	60	94.249			
⌊	Cu	65	92.389			
⌈>	Ge	72		104.756		
|	Zn	68	108.930			
|	As	75	100.334			
⌊	Se	82	100.656			
	Y	89				
⌈	Mo	97	108.007			
|	Ag	107	102.222			
|>	In	115		91.870		
|	Cd	111	100.777			
|	Sn	117	100.459			
|	Sb	121	99.367			
⌊	Ba	135	96.924			
	Tb	159				
⌈>	Ho	165		86.162		
|	Tl	205	97.066			
|	Pb	208	98.674			
⌊	U	238	103.674			
	Bi	209				
⌈>	Sc	45		108.000		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		104.353		
⌈	Ag	109				
⌊>	In	115		91.870		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		86.920		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Be	9	CCV is out of limits (+/- 10%) ~ NR

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 4

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 11:39:32
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 4.039
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

not used
2-4-99
DBR

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			61588.105	ug/L	67025.892
⌈	Be	9	-0.0390	28.34	4.667	ug/L	6.667
|	Al	27	1.7239	19.83	4359.714	ug/L	1632.443
|>	Sc	45			244724.041	ug/L	235949.974
|	V	51	0.2104	12.61	3158.456	ug/L	2246.782
|	Cr	52	0.3438	24.45	12311.760	ug/L	10715.459
|	Mn	55	0.0696	41.63	2195.858	ug/L	1746.124
|	Fe	57	91.3973	12.95	35554.703	ug/L	24224.333
|	Co	59	0.0196	13.11	197.003	ug/L	102.335
|	Ni	60	-0.0024	573.31	192.973	ug/L	188.420
⌊	Cu	65	0.7005	20.39	1000.007	ug/L	219.011
⌈>	Ge	72			483010.803	ug/L	468461.737
|	Zn	68	3.0151	23.80	1388.750	ug/L	175.670
|	As	75	-0.2073	51.45	-195.463	ug/L	-28.758
⌊	Se	82	0.0483	356.57	5.026	ug/L	1.696
	Y	89			314614.220	ug/L	311135.844
⌈	Mo	97	0.1368	8.96	165.336	ug/L	55.667
|	Ag	107	0.0715	22.31	243.671	ug/L	43.334
|>	In	115			351676.994	ug/L	374857.936
|	Cd	111	0.0206	49.10	29.336	ug/L	15.889
|	Sn	117	0.6558	17.76	522.348	ug/L	107.001
|	Sb	121	1.1674	21.25	2816.980	ug/L	51.001
⌊	Ba	135	0.0133	76.90	25.334	ug/L	20.000
	Tb	159			206656.711	ug/L	234770.291
⌈>	Ho	165			187929.102	ug/L	212339.863
|	Tl	205	-0.0188	36.26	85.001	ug/L	152.002
|	Pb	208	0.2606	32.25	1043.026	ug/L	171.002
⌊	U	238	0.0248	42.32	76.668	ug/L	17.000

	Bi	209			108401.916	ug/L	125979.854
⌈>	Sc	45			244724.041	ug/L	235949.974
|	Cr	50	-0.0077	396.34	392.881	ug/L	379.885
L	Cr	53	-3.9746	2.38	1443.087	ug/L	3000.678
⌈	Ni	61	4.8289	20.88	1282.404	ug/L	1041.715
|	Cu	63	0.6338	19.14	1817.468	ug/L	414.343
|	Br	79			1275.736	ug/L	505.681
L>	Ge	74			668466.554	ug/L	652160.165
⌈	Ag	109	0.0673	20.54	218.671	ug/L	41.000
L>	In	115			351676.994	ug/L	374857.936
⌈	Pb	206	0.2930	40.07	283.006	ug/L	42.000
|	Pb	207	0.2793	27.67	232.004	ug/L	38.000
L>	Bi	209			108401.916	ug/L	125979.854
	Hg	200			27.000	ug/L	17.667
	Pd	106			221.774	ug/L	195.774
	Kr	83			150.336	ug/L	150.002
	Ti	48			882.736	ug/L	-2528.765
	Ca	44			28408.841	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
	Be	9				
	Al	27				
>	Sc	45		103.719		
	V	51				
	Cr	52				
	Mn	55				
	Fe	57				
	Co	59				
	Ni	60				
	Cu	65				
>	Ge	72		103.106		
	Zn	68				
	As	75				
	Se	82				
	Y	89				
	Mo	97				
	Ag	107				
>	In	115		93.816		
	Cd	111				
	Sn	117				
	Sb	121				
	Ba	135				
	Tb	159				
>	Ho	165		88.504		
	Tl	205				
	Pb	208				
	U	238				
	Bi	209				
>	Sc	45		103.719		
	Cr	50				
	Cr	53				
	Ni	61				
	Cu	63				
	Br	79				
>	Ge	74		102.500		
	Ag	109				
>	In	115		93.816		
	Pb	206				
	Pb	207				
>	Bi	209		86.047		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Fe	57	CCB is out of limits (+/- RL)

QC Std 4	Sb	121	CCB is out of limits (+/- RL)

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 4

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 11:44:13
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 4.040
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			62765.590	ug/L	67025.892
⌈	Be	9	-0.0009	5816.15	7.000	ug/L	6.667
|	Al	27	0.8432	16.22	3021.350	ug/L	1632.443
|>	Sc	45			246917.766	ug/L	235949.974
|	V	51	0.1939	15.03	3118.493	ug/L	2246.782
|	Cr	52	0.3752	30.39	12524.280	ug/L	10715.459
|	Mn	55	-0.0020	372.76	1816.134	ug/L	1746.124
|	Fe	57	81.2988	16.94	34679.205	ug/L	24224.333
|	Co	59	0.0127	22.28	166.336	ug/L	102.335
|	Ni	60	-0.0264	40.80	170.149	ug/L	188.420
⌊	Cu	65	0.3471	16.15	614.938	ug/L	219.011
⌈>	Ge	72			492848.313	ug/L	468461.737
|	Zn	68	1.1520	9.05	656.688	ug/L	175.670
|	As	75	-0.3126	7.55	-285.312	ug/L	-28.758
⌊	Se	82	-0.2283	97.20	-15.006	ug/L	1.696
	Y	89			321100.543	ug/L	311135.844
⌈	Mo	97	0.0724	21.60	114.002	ug/L	55.667
|	Ag	107	0.0331	16.51	137.002	ug/L	43.334
|>	In	115			357316.068	ug/L	374857.936
|	Cd	111	0.0177	21.63	27.772	ug/L	15.889
|	Sn	117	0.3180	13.51	310.006	ug/L	107.001
|	Sb	121	0.5407	6.81	1353.744	ug/L	51.001
⌊	Ba	135	0.0025	172.44	20.334	ug/L	20.000
	Tb	159			208835.433	ug/L	234770.291
⌈>	Ho	165			189261.325	ug/L	212339.863
|	Tl	205	-0.0293	15.69	58.001	ug/L	152.002
|	Pb	208	0.0710	23.74	397.673	ug/L	171.002
⌊	U	238	0.0096	36.14	39.334	ug/L	17.000

	Bi	209			110332.910	ug/L	125979.854
⌈>	Sc	45			246917.766	ug/L	235949.974
|	Cr	50	-0.0392	392.93	390.996	ug/L	379.885
L	Cr	53	-4.0718	4.56	1413.417	ug/L	3000.678
⌈	Ni	61	3.5927	44.75	1266.402	ug/L	1041.715
|	Cu	63	0.2678	4.64	1047.049	ug/L	414.343
|	Br	79			1039.382	ug/L	505.681
L>	Ge	74			690036.705	ug/L	652160.165
⌈	Ag	109	0.0320	4.58	126.335	ug/L	41.000
L>	In	115			357316.068	ug/L	374857.936
⌈	Pb	206	0.0711	17.36	98.001	ug/L	42.000
|	Pb	207	0.0715	32.34	85.334	ug/L	38.000
L>	Bi	209			110332.910	ug/L	125979.854
	Hg	200			26.667	ug/L	17.667
	Pd	106			225.936	ug/L	195.774
	Kr	83			154.002	ug/L	150.002
	Ti	48			197.428	ug/L	-2528.765
	Ca	44			27967.963	ug/L	37292.986

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		104.648		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		105.206		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		95.320		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		89.131		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		104.648		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		105.808		
⌈	Ag	109				
⌊>	In	115		95.320		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		87.580		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Fe	57	CCB is out of limits (+/- RL) - NR

Reslope before continuing analytical run

Corrective action was taken as stated in method 6020 section 7.8

..."During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: DRoberts

Date: 2-4-99

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: Blank

Sample Description: Reslope before continuing run
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 11:54:50
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\Blank.041
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			63856.071	ug/L	
⌜	Be	9			4.667	ug/L	
|	Al	27			2373.555	ug/L	
|>	Sc	45			256004.117	ug/L	
|	V	51			3104.630	ug/L	
|	Cr	52			12446.881	ug/L	
|	Mn	55			1827.802	ug/L	
|	Fe	57			34554.064	ug/L	
|	Co	59			153.669	ug/L	
|	Ni	60			181.178	ug/L	
⌞	Cu	65			537.104	ug/L	
⌜>	Ge	72			487677.767	ug/L	
|	Zn	68			598.019	ug/L	
|	As	75			-199.313	ug/L	
⌞	Se	82			14.139	ug/L	
	Y	89			323983.364	ug/L	
⌜	Mo	97			51.001	ug/L	
|	Ag	107			85.001	ug/L	
|>	In	115			366655.658	ug/L	
|	Cd	111			19.565	ug/L	
|	Sn	117			231.004	ug/L	
|	Sb	121			443.011	ug/L	
⌞	Ba	135			19.667	ug/L	
	Tb	159			211603.416	ug/L	
⌜>	Ho	165			189623.197	ug/L	
|	Tl	205			38.334	ug/L	
|	Pb	208			505.675	ug/L	
⌞	U	238			92.335	ug/L	

	Bi	209	110790.527	ug/L
⌈>	Sc	45	256004.117	ug/L
|	Cr	50	366.029	ug/L
L	Cr	53	1331.409	ug/L
⌈	Ni	61	1279.070	ug/L
|	Cu	63	940.707	ug/L
|	Br	79	770.695	ug/L
L>	Ge	74	675373.098	ug/L
⌈	Ag	109	64.667	ug/L
L>	In	115	366655.658	ug/L
⌈	Pb	206	128.669	ug/L
|	Pb	207	114.335	ug/L
L>	Bi	209	110790.527	ug/L
	Hg	200	32.000	ug/L
	Pd	106	233.417	ug/L
	Kr	83	137.335	ug/L
	Ti	48	-148.271	ug/L
	Ca	44	27063.882	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45				
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72				
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115				
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165				
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45				
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74				
⌈	Ag	109				
⌊>	In	115				
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209				
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: Standard 1

Sample Description: Reslope before continuing run
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 11:59:19
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\Standard 1.042
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 2
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			64759.096	ug/L	63856.071
⌜	Be	9	88.5070	1.92	5383.401	ug/L	4.667
|	Al	27	98.8179	1.07	164326.962	ug/L	2373.555
|>	Sc	45			258768.072	ug/L	256004.117
|	V •	51	102.2103	2.03	428546.576	ug/L	3104.630
|	Cr	52	100.4758	2.12	383440.082	ug/L	12446.881
|	Mn	55	100.4215	2.15	591185.355	ug/L	1827.802
|	Fe	57	4926.8253	2.66	630047.283	ug/L	34554.064
|	Co	59	95.5198	3.39	468027.398	ug/L	153.669
|	Ni	60	94.5358	4.65	100508.285	ug/L	181.178
⌊	Cu	65	91.2910	2.90	107181.457	ug/L	537.104
⌜>	Ge	72			500653.897	ug/L	487677.767
|	Zn	68	94.8791	1.61	40093.920	ug/L	598.019
|	As	75	101.2254	0.49	83718.025	ug/L	-199.313
⌊	Se	82	102.8338	2.04	7713.929	ug/L	14.139
	Y	89			331667.369	ug/L	323983.364
⌜	Mo	97	105.0604	3.75	93317.107	ug/L	51.001
|	Ag	107	100.9533	1.66	308340.532	ug/L	85.001
|>	In	115			377519.885	ug/L	366655.658
|	Cd	111	98.6459	1.41	74467.679	ug/L	19.565
|	Sn	117	95.9449	0.80	66603.637	ug/L	231.004
|	Sb	121	96.2245	1.49	245975.360	ug/L	443.011
⌊	Ba	135	95.1224	1.56	50555.181	ug/L	19.667
	Tb	159			219229.200	ug/L	211603.416
⌜>	Ho	165			197503.465	ug/L	189623.197
|	Tl	205	95.3747	2.61	263042.914	ug/L	38.334
|	Pb	208	95.3384	1.84	344249.255	ug/L	505.675
⌊	U	238	99.0912	2.10	259568.222	ug/L	92.335

	Bi	209			114627.949	ug/L	110790.527
⌈>	Sc	45			258768.072	ug/L	256004.117
|	Cr	50	103.8921	1.20	16951.287	ug/L	366.029
L	Cr	53	101.3272	1.82	46329.477	ug/L	1331.409
⌈	Ni	61	95.7701	2.16	5711.866	ug/L	1279.070
|	Cu	63	101.0948	0.86	230757.764	ug/L	940.707
|	Br	79			731.693	ug/L	770.695
L>	Ge	74			689920.673	ug/L	675373.098
⌈	Ag	109	99.4464	2.05	286268.978	ug/L	64.667
L>	In	115			377519.885	ug/L	366655.658
⌈	Pb	206	100.5415	1.30	90171.941	ug/L	128.669
|	Pb	207	100.2071	2.18	75991.349	ug/L	114.335
L>	Bi	209			114627.949	ug/L	110790.527
	Hg	200			25.000	ug/L	32.000
	Pd	106			204.933	ug/L	233.417
	Kr	83			151.002	ug/L	137.335
	Ti	48			-158.753	ug/L	-148.271
	Ca	44			27753.544	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45				
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72				
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115				
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165				
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45				
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74				
⌈	Ag	109				
⌊>	In	115				
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209				
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 3

Sample Description: Reslope before continuing run
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 12:04:02
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 3.043
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65782.114	ug/L	63856.071
⌜	Be	9	101.4465	3.06	5420.083	ug/L	4.667
|	Al	27	101.3753	2.72	165241.167	ug/L	2373.555
|>	Sc	45			256879.184	ug/L	256004.117
|	V	51	97.5935	2.17	415241.959	ug/L	3104.630
|	Cr	52	99.0026	3.15	376843.742	ug/L	12446.881
|	Mn	55	100.3297	4.70	588243.205	ug/L	1827.802
|	Fe	57	4950.1017	5.56	618942.529	ug/L	34554.064
|	Co	59	102.3040	2.95	475210.103	ug/L	153.669
|	Ni	60	101.1701	4.71	100880.119	ug/L	181.178
⌊	Cu	65	100.0745	5.21	106411.005	ug/L	537.104
⌈>	Ge	72			504146.293	ug/L	487677.767
|	Zn	68	100.8078	1.12	40697.300	ug/L	598.019
|	As	75	99.7200	2.07	84045.914	ug/L	-199.313
⌊	Se	82	98.9045	2.46	7681.612	ug/L	14.139
	Y	89			328424.545	ug/L	323983.364
⌈	Mo	97	102.4169	1.29	93518.460	ug/L	51.001
|	Ag	107	100.8483	1.41	304134.358	ug/L	85.001
|>	In	115			369197.544	ug/L	366655.658
|	Cd	111	101.1733	2.34	73681.885	ug/L	19.565
|	Sn	117	103.2086	1.39	67212.445	ug/L	231.004
|	Sb	121	103.9780	0.94	250038.727	ug/L	443.011
⌊	Ba	135	102.3165	3.21	50569.874	ug/L	19.667
	Tb	159			216818.827	ug/L	211603.416
⌈>	Ho	165			196178.476	ug/L	189623.197
|	Tl	205	100.2232	0.23	261980.033	ug/L	38.334
|	Pb	208	100.5814	0.66	344024.441	ug/L	505.675
⌊	U	238	100.9803	1.93	260425.141	ug/L	92.335

	Bi	209			114716.234	ug/L	110790.527	
⌈>	Sc	45			256879.184	ug/L	256004.117	
⌈	Cr	50	97.0522	0.52	16342.690	ug/L	366.029	
⌊	Cr	53	98.7693	5.29	45400.507	ug/L	1331.409	
⌈	Ni	61	99.3622	7.29	5845.922	ug/L	1279.070	
⌈	Cu	63	96.4627	3.78	229074.784	ug/L	940.707	
⌈	Br	79			685.357	ug/L	770.695	
⌊>	Ge	74			710064.939	ug/L	675373.098	
⌈	Ag	109	101.9618	1.54	285496.465	ug/L	64.667	
⌊>	In	115			369197.544	ug/L	366655.658	
⌈	Pb	206	98.9317	0.77	89288.057	ug/L	128.669	=
⌈	Pb	207	99.0466	0.86	75341.909	ug/L	114.335	
⌊>	Bi	209			114716.234	ug/L	110790.527	
	Hg	200			25.334	ug/L	32.000	
	Pd	106			357.339	ug/L	233.417	
	Kr	83			146.669	ug/L	137.335	
	Ti	48			-373.031	ug/L	-148.271	
	Ca	44			27451.292	ug/L	27063.882	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9	101.446			
|	Al	27	101.375			
|>	Sc	45		100.342		
|	V	51	97.594			
|	Cr	52	99.003			
|	Mn	55	100.330			
|	Fe	57	99.002			
|	Co	59	102.304			
|	Ni	60	101.170			
⌊	Cu	65	100.075			
⌈>	Ge	72		103.377		
|	Zn	68	100.808			
|	As	75	99.720			
⌊	Se	82	98.904			
	Y	89				
⌈	Mo	97	102.417			
|	Ag	107	100.848			
|>	In	115		100.693		
|	Cd	111	101.173			
|	Sn	117	103.209			
|	Sb	121	103.978			
⌊	Ba	135	102.316			
	Tb	159				
⌈>	Ho	165		103.457		
|	Tl	205	100.223			
|	Pb	208	100.581			
⌊	U	238	100.980			
	Bi	209				
⌈>	Sc	45		100.342		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		105.137		
⌈	Ag	109				
⌊>	In	115		100.693		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		103.543		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 4

Sample Description: Reslope before continuing run
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 12:11:12
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 4.044
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL):
Diluted To Volume (mL):

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65106.014	ug/L	63856.071
⌜	Be	9	0.0530	79.91	7.333	ug/L	4.667
|	Al	27	-0.3232	23.35	1821.134	ug/L	2373.555
|>	Sc	45			251635.968	ug/L	256004.117
|	V	51	0.0428	153.69	3221.729	ug/L	3104.630
|	Cr	52	0.1413	191.14	12718.458	ug/L	12446.881
|	Mn	55	-0.0150	119.72	1708.119	ug/L	1827.802
|	Fe	57	19.5456	90.55	36172.791	ug/L	34554.064
|	Co	59	0.0001	1241.77	151.336	ug/L	153.669
|	Ni	60	-0.0062	617.70	171.108	ug/L	181.178
⌞	Cu	65	-0.0925	32.40	431.358	ug/L	537.104
⌜>	Ge	72			494259.273	ug/L	487677.767
|	Zn	68	-0.6074	14.63	369.008	ug/L	598.019
|	As	75	-0.0592	105.99	-251.251	ug/L	-199.313
⌞	Se	82	-0.0038	12567.29	14.157	ug/L	14.139
	Y	89			325362.487	ug/L	323983.364
⌜	Mo	97	0.0202	48.88	70.334	ug/L	51.001
|	Ag	107	0.0421	15.02	214.337	ug/L	85.001
|>	In	115			372079.959	ug/L	366655.658
|	Cd	111	-0.0064	107.37	15.193	ug/L	19.565
|	Sn	117	0.0898	47.44	293.006	ug/L	231.004
|	Sb	121	0.5451	20.43	1768.129	ug/L	443.011
⌞	Ba	135	-0.0006	1208.48	19.667	ug/L	19.667
	Tb	159			215249.404	ug/L	211603.416
⌜>	Ho	165			192984.350	ug/L	189623.197
|	Tl	205	0.0067	65.32	56.334	ug/L	38.334
|	Pb	208	-0.0738	18.29	266.670	ug/L	505.675
⌞	U	238	-0.0183	31.20	47.667	ug/L	92.335

	Bi	209			113246.913	ug/L	110790.527
⌈>	Sc	45			251635.968	ug/L	256004.117
|	Cr	50	-0.0145	1212.14	358.156	ug/L	366.029
L	Cr	53	0.1097	181.09	1354.411	ug/L	1331.409
⌈	Ni	61	1.3446	109.62	1352.411	ug/L	1279.070
|	Cu	63	-0.0822	36.56	764.028	ug/L	940.707
|	Br	79			610.019	ug/L	770.695
L>	Ge	74			683655.208	ug/L	675373.098
⌈	Ag	109	0.0404	16.84	179.670	ug/L	64.667
L>	In	115			372079.959	ug/L	366655.658
⌈	Pb	206	-0.0695	8.07	69.668	ug/L	128.669
|	Pb	207	-0.0762	13.02	59.667	ug/L	114.335
L>	Bi	209			113246.913	ug/L	110790.527
	Hg	200			24.000	ug/L	32.000
	Pd	106			233.507	ug/L	233.417
	Kr	83			135.335	ug/L	137.335
	Ti	48			-735.482	ug/L	-148.271
	Ca	44			26403.310	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
	Be	9				
	Al	27				
>	Sc	45		98.294		
	V	51				
	Cr	52				
	Mn	55				
	Fe	57				
	Co	59				
	Ni	60				
	Cu	65				
>	Ge	72		101.350		
	Zn	68				
	As	75				
	Se	82				
	Y	89				
	Mo	97				
	Ag	107				
>	In	115		101.479		
	Cd	111				
	Sn	117				
	Sb	121				
	Ba	135				
	Tb	159				
>	Ho	165		101.773		
	Tl	205				
	Pb	208				
	U	238				
	Bi	209				
>	Sc	45		98.294		
	Cr	50				
	Cr	53				
	Ni	61				
	Cu	63				
	Br	79				
>	Ge	74		101.226		
	Ag	109				
>	In	115		101.479		
	Pb	206				
	Pb	207				
>	Bi	209		102.217		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA1

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 12:21:13
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA1.045
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 55
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001 5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66521.867	~~ug/L~~ ug/kg	63856.071
⌜	Be	9	306.5236	21.97	41.334	ug/L	4.667
|	Al	27	5445812.8085	1.25	19305628.549	ug/L	2373.555
|>	Sc	45			283281.080	ug/L	256004.117
|	V	51	12392.1310	2.51	118840.223	ug/L	3104.630
|	Cr	52	10359.9693	3.23	97876.529	ug/L	12446.881
|	Mn	55	215640.7395	3.09	2783226.432	ug/L	1827.802
|	Fe	57	7330028.3405	2.60	1947849.684	ug/L	34554.064
|	Co	59	7748.9026	2.15	79546.648	ug/L	153.669
|	Ni	60	6394.3800	3.77	14243.282	ug/L	181.178
⌊	Cu	65	19382.9249	1.77	45849.065	ug/L	537.104
⌈>	Ge	72			512600.719	ug/L	487677.767
|	Zn	68	253969.1712	2.49	205894.533	ug/L	598.019
|	As	75	12186.3094	2.35	20727.420	ug/L	-199.313
⌊	Se	82	527.0838	13.84	97.782	ug/L	14.139
	Y	89			549663.096	ug/L	323983.364
⌈	Mo	97	1322.9066	1.62	2549.586	ug/L	51.001
|	Ag	107	312.9790	1.22	2039.833	ug/L	85.001
|>	In	115			381696.181	ug/L	366655.658
|	Cd	111	2932.6862	1.38	4436.636	ug/L	19.565
|	Sn	117	298.4394	4.99	641.021	ug/L	231.004
|	Sb	121	185.3007	8.31	1381.414	ug/L	443.011
⌊	Ba	135	127073.2693	0.92	129870.665	ug/L	19.667
	Tb	159			226190.245	ug/L	211603.416
⌈>	Ho	165			204490.379	ug/L	189623.197
|	Tl	205	204.4814	4.85	1155.058	ug/L	38.334
|	Pb	208	136494.9715	1.61	972387.059	ug/L	505.675
⌊	U	238	1025.0472	1.12	5609.157	ug/L	92.335

	Bi	209			115445.552	ug/L	110790.527
⌈>	Sc	45			283281.080	ug/L	256004.117
|	Cr	50	56426.0168	1.57	20889.554	ug/L	366.029
L	Cr	53	10275.9073	4.24	11589.149	ug/L	1331.409
⌈	Ni	61	11870.2844	6.35	2400.559	ug/L	1279.070
|	Cu	63	21133.9460	2.24	100090.072	ug/L	940.707
|	Br	79			1986.492	ug/L	770.695
L>	Ge	74			704143.140	ug/L	675373.098
⌈	Ag	109	355.2911	1.35	2124.179	ug/L	64.667
L>	In	115			381696.181	ug/L	366655.658
⌈	Pb	206	142041.2305	1.46	257729.182	ug/L	128.669
|	Pb	207	139359.5749	0.70	213165.838	ug/L	114.335
L>	Bi	209			115445.552	ug/L	110790.527
	Hg	200			864.035	ug/L	32.000
	Pd	106			1266.023	ug/L	233.417
	Kr	83			178.670	ug/L	137.335
	Ti	48			1791852.941	ug/L	-148.271
	Ca	44			916662.407	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		110.655		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		105.111		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		104.102		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		107.840		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		110.655		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		104.260		
⌈	Ag	109				
⌊>	In	115		104.102		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		104.202		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

Zn 68 Upper	Zn	68	Zn above linear range - NR
Pb 208 Upper	Pb	208	Pb above linear range - OK

Table does not account for DF
2-4-99
DBR

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA3

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 12:25:39
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA3.046
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 56
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2 5x
Diluted To Volume (mL): 1e+001

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66968.983	~~ug/L~~ ug/kg	63856.071
⌈	Be	9	370.8752	17.84	48.667	ug/L	4.667
|	Al	27	6238018.7090	2.50	22050582.342	ug/L	2373.555
|>	Sc	45			282366.732	ug/L	256004.117
|	V	51	12107.3979	0.72	115842.236	ug/L	3104.630
|	Cr	52	13875.2664	2.00	126059.632	ug/L	12446.881
|	Mn	55	216168.1597	3.59	2782114.019	ug/L	1827.802
|	Fe	57	7788228.6415	9.68	2061334.750	ug/L	34554.064
|	Co	59	10579.8293	2.33	108225.995	ug/L	153.669
|	Ni	60	5922.6572	1.97	13170.433	ug/L	181.178
L	Cu	65	18246.7845	1.83	43060.894	ug/L	537.104
⌈>	Ge	72			503868.870	ug/L	487677.767
|	Zn	68	164785.2406	2.59	131535.484	ug/L	598.019
|	As	75	248098.3168	0.80	418840.418	ug/L	-199.313
L	Se	82	644.4507	23.00	114.519	ug/L	14.139
	Y	89			569227.918	ug/L	323983.364
⌈	Mo	97	835.7120	3.54	1631.110	ug/L	51.001
|	Ag	107	1015.4937	0.30	6423.842	ug/L	85.001
|>	In	115			381923.425	ug/L	366655.658
|	Cd	111	5993.0543	1.28	9050.364	ug/L	19.565
|	Sn	117	616.2597	1.55	1068.051	ug/L	231.004
|	Sb	121	405.4183	3.08	2474.906	ug/L	443.011
L	Ba	135	130666.3624	0.37	133625.758	ug/L	19.667
	Tb	159			227959.685	ug/L	211603.416
⌈>	Ho	165			203088.527	ug/L	189623.197
|	Tl	205	272.5175	0.94	1515.762	ug/L	38.334
|	Pb	208	176448.8929	1.32	1248121.166	ug/L	505.675
L	U	238	1935.4297	3.15	10429.913	ug/L	92.335

	Bi	209			118339.328	ug/L	110790.527
⌈>	Sc	45			282366.732	ug/L	256004.117
⌊	Cr	50	59596.3605	10.70	21989.611	ug/L	366.029
⌊	Cr	53	13694.7052	3.27	14914.937	ug/L	1331.409
⌈	Ni	61	10783.9447	7.98	2276.204	ug/L	1279.070
⌊	Cu	63	19834.7246	2.46	92934.590	ug/L	940.707
⌊	Br	79			2889.988	ug/L	770.695
⌊>	Ge	74			696128.766	ug/L	675373.098
⌈	Ag	109	1044.8905	0.97	6120.372	ug/L	64.667
⌊>	In	115			381923.425	ug/L	366655.658
⌈	Pb	206	174923.7532	0.22	325378.225	ug/L	128.669
⌊	Pb	207	175367.2809	0.46	274907.306	ug/L	114.335
⌊>	Bi	209			118339.328	ug/L	110790.527
	Hg	200			982.044	ug/L	32.000
	Pd	106			1338.054	ug/L	233.417
	Kr	83			209.004	ug/L	137.335
	Ti	48			1587077.934	ug/L	-148.271
	Ca	44			776818.329	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		110.298		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		103.320		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		104.164		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		107.101		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		110.298		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		103.073		
⌈	Ag	109				
⌊>	In	115		104.164		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		106.814		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

As 75 Upper	As	75	As above linear range > ok
Pb 208 Upper	Pb	208	Pb above linear range

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA3 L

Sample Description: Serial Dilution 5x
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 12:30:05
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA3 L.047
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 57
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 0.4
Diluted To Volume (mL): 1e+001 25x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66813.935	~~ug/L~~ ug/kg	63856.071
⌈	Be	9	441.9060	34.81	14.000	ug/L	4.667
|	Al	27	7021637.9875	2.41	4506243.468	ug/L	2373.555
|>	Sc	45			256353.672	ug/L	256004.117
|	V	51	13201.3388	3.57	25342.432	ug/L	3104.630
|	Cr	52	15692.2517	6.39	35485.377	ug/L	12446.881
|	Mn	55	226334.1588 105%	3.73	529806.821	ug/L	1827.802
|	Fe	57	8642939.5351	5.11	441637.912	ug/L	34554.064
|	Co	59	12272.3033	4.16	22885.213	ug/L	153.669
|	Ni	60	6985.6943	5.21	2955.095	ug/L	181.178
L	Cu	65	20714.8507	4.27	9282.045	ug/L	537.104
⌈>	Ge	72			496394.610	ug/L	487677.767
|	Zn	68	169426.6327	0.80	27138.692	ug/L	598.019
|	As	75	254395.4931 103%	0.90	84468.439	ug/L	-199.313
L	Se	82	753.8477	38.35	37.349	ug/L	14.139
	Y	89			374067.962	ug/L	323983.364
⌈	Mo	97	833.2010	3.43	364.342	ug/L	51.001
|	Ag	107	1010.3825	3.28	1336.409	ug/L	85.001
|>	In	115			378284.725	ug/L	366655.658
|	Cd	111	6123.0644	1.54	1847.409	ug/L	19.565
|	Sn	117	362.5197	16.42	334.674	ug/L	231.004
|	Sb	121	288.3441	10.72	740.693	ug/L	443.011
L	Ba	135	135820.1799	1.98	27525.769	ug/L	19.667
	Tb	159			222794.506	ug/L	211603.416
⌈>	Ho	165			199907.336	ug/L	189623.197
|	Tl	205	279.1232	8.01	337.674	ug/L	38.334
|	Pb	208	185049.3032 105%	1.04	258132.751	ug/L	505.675
L	U	238	1976.1193	3.52	2174.187	ug/L	92.335

Sample read < 100x RL
except Mn, As + Pb

	Bi	209			116257.039	ug/L	110790.527
⌈>	Sc	45			256353.672	ug/L	256004.117
|	Cr	50	77398.4265	22.79	5422.105	ug/L	366.029
⌊	Cr	53	15295.8106	9.72	4051.949	ug/L	1331.409
⌈	Ni	61	10890.8497	31.54	1501.761	ug/L	1279.070
|	Cu	63	20314.6849	2.66	19677.407	ug/L	940.707
|	Br	79			1135.056	ug/L	770.695
⌊>	Ge	74			691633.795	ug/L	675373.098
⌈	Ag	109	1031.0886	3.67	1250.067	ug/L	64.667
⌊>	In	115			378284.725	ug/L	366655.658
⌈	Pb	206	183562.1369	0.72	67191.671	ug/L	128.669
|	Pb	207	183956.7438	0.54	56752.750	ug/L	114.335
⌊>	Bi	209			116257.039	ug/L	110790.527
	Hg	200			209.670	ug/L	32.000
	Pd	106			460.872	ug/L	233.417
	Kr	83			151.669	ug/L	137.335
	Ti	48			321152.997	ug/L	-148.271
	Ca	44			177305.665	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		100.137		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		101.787		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		103.172		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		105.423		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		100.137		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		102.408		
⌈	Ag	109				
⌊>	In	115		103.172		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		104.934		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - VF

As 75 Upper	As	75	As above linear range > OK
Pb 208 Upper	Pb	208	Pb above linear range

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA3 PDS

Sample Description: Post Digestion Spike
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 12:34:34
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA3 PDS.048
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 58
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66466.283	~~ug/L~~ ug/kg	63856.071
Γ	Be	9	95250.8029	1.91	10993.338	ug/L	4.667
|	Al	27	6250088.8282	1.15	21706087.609	ug/L	2373.555
|>	Sc	45			277489.014	ug/L	256004.117
|	V	51	100591.9783	4.13	921045.313	ug/L	3104.630
|	Cr	52	102398.9629	1.52	828015.122	ug/L	12446.881
|	Mn	55	314491.7005	0.39	3977003.802	ug/L	1827.802
|	Fe	57	7517503.3271	1.10	1956701.342	ug/L	34554.064
|	Co	59	99208.2033	1.32	995921.915	ug/L	153.669
|	Ni	60	94276.3490	1.04	203110.745	ug/L	181.178
L	Cu	65	103746.0515	1.52	237905.101	ug/L	537.104
Γ>	Ge	72			502054.909	ug/L	487677.767
|	Zn	68	254749.3330	0.97	202345.210	ug/L	598.019
|	As	75	336996.5173	1.43	566925.605	ug/L	-199.313
L	Se	82	95205.6949	3.67	14712.122	ug/L	14.139
	Y	89			558797.413	ug/L	323983.364
Γ	Mo	97	96185.8491	1.45	179548.253	ug/L	51.001
|	Ag	107	94198.6317	0.68	580906.081	ug/L	85.001
|>	In	115			377471.526	ug/L	366655.658
|	Cd	111	101147.6204	1.03	150637.959	ug/L	19.565
|	Sn	117	647.2090	1.07	1096.720	ug/L	231.004
|	Sb	121	97483.0588	1.92	478985.526	ug/L	443.011
L	Ba	135	227634.3943	0.31	230058.597	ug/L	19.667
	Tb	159			226916.250	ug/L	211603.416
Γ>	Ho	165			201697.895	ug/L	189623.197
|	Tl	205	93575.3082	0.79	502929.229	ug/L	38.334
|	Pb	208	265177.3305	0.82	1862802.975	ug/L	505.675
L	U	238	95711.3011	1.58	507518.600	ug/L	92.335

Spike level = 100,000 ng/kg

	Bi	209			116345.059	ug/L	110790.527
⌈>	Sc	45			277489.014	ug/L	256004.117
|	Cr	50	149239.8062	6.61	53452.497	ug/L	366.029
L	Cr	53	103688.5966	0.25	101485.563	ug/L	1331.409
⌈	Ni	61	110866.3218	2.10	11039.044	ug/L	1279.070
|	Cu	63	112537.0201	0.76	516518.446	ug/L	940.707
|	Br	79			2816.973	ug/L	770.695
L>	Ge	74			687669.638	ug/L	675373.098
⌈	Ag	109	96347.0327	1.36	551670.402	ug/L	64.667
L>	In	115			377471.526	ug/L	366655.658
⌈	Pb	206	266846.0279	1.63	487879.386	ug/L	128.669
|	Pb	207	267028.6585	0.20	411485.365	ug/L	114.335
L>	Bi	209			116345.059	ug/L	110790.527
	Hg	200			997.378	ug/L	32.000
	Pd	106			1669.157	ug/L	233.417
	Kr	83			209.004	ug/L	137.335
	Ti	48			1577253.598	ug/L	-148.271
	Ca	44			756010.693	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		108.392		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		102.948		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		102.950		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		106.368		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		108.392		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		101.821		
⌈	Ag	109				
⌊>	In	115		102.950		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		105.014		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

V 51 Upper	V	51	V above linear range
Cr 52 Upper	Cr	52	
Ni 60 Upper	Ni	60	Ni above linear range
Cu 65 Upper	Cu	65	Cu above linear range
Zn 68 Upper	Zn	68	Zn above linear range
As 75 Upper	As	75	As above linear range
Cd 111 Upper	Cd	111	Cd above linear range
Ba 135 Upper	Ba	135	Ba above linear range
Pb 208 Upper	Pb	208	Pb above linear range
U 238 Upper	U	238	U above linear range

NR

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA3S

Sample Description: Matrix Spike
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 12:39:02
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA3S.049
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 59
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001

5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66734.514	~~ug/L~~ ug/kg	63856.071
⌜	Be	9	18497.3492	3.44	2144.849	ug/L	4.667
|	Al	27	6536351.3418	0.50	22754842.761	ug/L	2373.555
|>	Sc	45			278160.574	ug/L	256004.117
|	V	51	28317.5397	1.85	262323.096	ug/L	3104.630
|	Cr	52	30581.7170	2.11	257324.295	ug/L	12446.881
|	Mn	55	238440.2442	2.82	3021893.247	ug/L	1827.802
|	Fe	57	7884095.9915	11.44	2052019.073	ug/L	34554.064
|	Co	59	27903.4083	5.08	280706.324	ug/L	153.669
|	Ni	60	23004.0379	2.64	49810.509	ug/L	181.178
⌞	Cu	65	35328.1343	2.16	81572.435	ug/L	537.104
⌜>	Ge	72			509924.965	ug/L	487677.767
|	Zn	68	187397.0299	2.25	151305.890	ug/L	598.019
|	As	75	266400.2772	1.32	455158.456	ug/L	-199.313
⌞	Se	82	17751.1799	1.62	2798.509	ug/L	14.139
	Y	89			559149.598	ug/L	323983.364
⌜	Mo	97	16973.2580	1.39	31423.840	ug/L	51.001
|	Ag	107	12348.3534	0.92	75499.067	ug/L	85.001
|>	In	115			373886.806	ug/L	366655.658
|	Cd	111	23859.2087	0.35	35211.002	ug/L	19.565
|	Sn	117	593.2591	2.40	1015.380	ug/L	231.004
|	Sb	121	3457.4421	15.35	17253.395	ug/L	443.011
⌞	Ba	135	150130.3075	0.48	150295.320	ug/L	19.667
	Tb	159			222427.433	ug/L	211603.416
⌜>	Ho	165			198801.761	ug/L	189623.197
|	Tl	205	17361.4639	0.43	92001.889	ug/L	38.334
|	Pb	208	198332.2598	0.63	1373362.503	ug/L	505.675
⌞	U	238	19804.8394	1.11	103581.549	ug/L	92.335

	Bi	209			116607.881	ug/L	110790.527
⌈>	Sc	45			278160.574	ug/L	256004.117
|	Cr	50	73632.7684	15.31	26626.836	ug/L	366.029
L	Cr	53	30275.7828	3.06	30715.627	ug/L	1331.409
⌈	Ni	61	27486.1722	5.61	3817.882	ug/L	1279.070
|	Cu	63	36793.2337	3.01	174166.362	ug/L	940.707
|	Br	79			3093.700	ug/L	770.695
L>	Ge	74			706850.207	ug/L	675373.098
⌈	Ag	109	12528.9838	0.35	71114.614	ug/L	64.667
L>	In	115			373886.806	ug/L	366655.658
⌈	Pb	206	196135.1919	1.71	359423.477	ug/L	128.669
|	Pb	207	196179.3496	2.06	302968.129	ug/L	114.335
L>	Bi	209			116607.881	ug/L	110790.527
	Hg	200			1016.713	ug/L	32.000
	Pd	106			1331.477	ug/L	233.417
	Kr	83			211.004	ug/L	137.335
	Ti	48			1598121.373	ug/L	-148.271
	Ca	44			786110.683	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		108.655		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		104.562		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		101.972		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		104.840		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		108.655		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		104.661		
⌈	Ag	109				
⌊>	In	115		101.972		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		105.251		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - HR

As 75 Upper	As	75	As above linear range > OK
Pb 208 Upper	Pb	208	Pb above linear range

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA3X

Sample Description: Sample Duplicate
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 12:43:30
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA3X.050
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 60
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001 5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66917.370	~~ug/L~~ ug/kg	63856.071
⌜	Be	9	462.7478	18.93	57.667	ug/L	4.667
|	Al	27	6604048.7202	2.62	22629081.972	ug/L	2373.555
|>	Sc	45			273764.299	ug/L	256004.117
|	V	51	12670.5451	2.39	117389.069	ug/L	3104.630
|	Cr	52	14249.6648	1.62	125146.783	ug/L	12446.881
|	Mn	55	224253.2055	0.64	2798264.908	ug/L	1827.802
|	Fe	57	8567832.3903	8.38	2194658.749	ug/L	34554.064
|	Co	59	11156.4704	1.71	110638.614	ug/L	153.669
|	Ni	60	6268.1981	0.08	13504.050	ug/L	181.178
⌊	Cu	65	18911.8344	1.38	43255.808	ug/L	537.104
⌜>	Ge	72			499489.917	ug/L	487677.767
|	Zn	68	170493.9401	1.65	134931.311	ug/L	598.019
|	As	75	257812.9104	1.66	431474.036	ug/L	-199.313
⌊	Se	82	642.6987	13.18	113.232	ug/L	14.139
	Y	89			552946.152	ug/L	323983.364
⌜	Mo	97	869.5540	2.88	1638.777	ug/L	51.001
|	Ag	107	1096.7071	2.81	6700.972	ug/L	85.001
|>	In	115			369355.191	ug/L	366655.658
|	Cd	111	6127.1936	0.21	8947.282	ug/L	19.565
|	Sn	117	550.3028	3.82	947.374	ug/L	231.004
|	Sb	121	585.9911	6.89	3259.405	ug/L	443.011
⌊	Ba	135	134455.0872	2.97	132940.135	ug/L	19.667
	Tb	159			221624.454	ug/L	211603.416
⌜>	Ho	165			197543.232	ug/L	189623.197
|	Tl	205	294.9720	5.32	1591.771	ug/L	38.334
|	Pb	208	182085.8260	1.96	1252725.453	ug/L	505.675
⌊	U	238	2013.4453	4.10	10546.999	ug/L	92.335

	Bi	209			115375.526	ug/L	110790.527
⌐>	Sc	45			273764.299	ug/L	256004.117
⌐	Cr	50	61116.6495	8.83	21838.652	ug/L	366.029
⌊	Cr	53	14169.4586	0.16	14911.594	ug/L	1331.409
⌐	Ni	61	11108.8813	4.56	2307.543	ug/L	1279.070
⌊	Cu	63	20062.7997	1.50	94083.754	ug/L	940.707
⌐	Br	79			3024.351	ug/L	770.695
⌊>	Ge	74			696683.633	ug/L	675373.098
⌐	Ag	109	1097.3872	1.20	6212.746	ug/L	64.667
⌊>	In	115			369355.191	ug/L	366655.658
⌐	Pb	206	180320.2193	0.45	327010.844	ug/L	128.669
⌊	Pb	207	180967.1968	0.80	276585.435	ug/L	114.335
⌊>	Bi	209			115375.526	ug/L	110790.527
	Hg	200			1022.047	ug/L	32.000
	Pd	106			1362.122	ug/L	233.417
	Kr	83			203.670	ug/L	137.335
	Ti	48			1612827.712	ug/L	-148.271
	Ca	44			788590.584	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		106.937		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		102.422		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		100.736		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		104.177		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		106.937		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		103.155		
⌈	Ag	109				
⌊>	In	115		100.736		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		104.138		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

As 75 Upper	As	75	As above linear range > OK
Pb 208 Upper	Pb	208	Pb above linear range

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA5

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 12:48:01
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA5.051
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 61
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001

5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66060.058	~~ug/L~~ mg/kg	63856.071
[	Be	9	397.3218	23.52	52.001	ug/L	4.667
|	Al	27	7302620.7788	1.47	25815321.390	ug/L	2373.555
|>	Sc	45			282516.298	ug/L	256004.117
|	V	51	13534.7160	2.58	129163.683	ug/L	3104.630
|	Cr	52	15843.1662	2.09	141988.367	ug/L	12446.881
|	Mn	55	220224.4921	5.25	2832456.951	ug/L	1827.802
|	Fe	57	9239414.4500	4.10	2437215.817	ug/L	34554.064
|	Co	59	14535.6100	5.73	148506.604	ug/L	153.669
|	Ni	60	6549.8367	4.99	14535.879	ug/L	181.178
L	Cu	65	23545.2468	5.07	55364.974	ug/L	537.104
[>	Ge	72			498131.666	ug/L	487677.767
|	Zn	68	132261.7335	2.06	104518.717	ug/L	598.019
|	As	75	203730.6266	1.00	340000.768	ug/L	-199.313
L	Se	82	695.9290	16.49	121.029	ug/L	14.139
	Y	89			597313.937	ug/L	323983.364
[	Mo	97	927.4945	1.08	1766.794	ug/L	51.001
|	Ag	107	843.2204	1.49	5237.012	ug/L	85.001
|>	In	115			373982.228	ug/L	366655.658
|	Cd	111	6490.0749	2.45	9591.450	ug/L	19.565
|	Sn	117	373.8258	7.51	726.692	ug/L	231.004
|	Sb	121	407.8930	3.35	2434.899	ug/L	443.011
L	Ba	135	143974.5997	3.96	144087.251	ug/L	19.667
	Tb	159			224239.276	ug/L	211603.416
[>	Ho	165			198590.893	ug/L	189623.197
|	Tl	205	278.4487	1.04	1513.429	ug/L	38.334
|	Pb	208	183715.3433	1.13	1270752.632	ug/L	505.675
L	U	238	1780.1629	0.58	9388.845	ug/L	92.335

	Bi	209			114770.064	ug/L	110790.527
⌈>	Sc	45			282516.298	ug/L	256004.117
|	Cr	50	68188.3783	8.62	25053.460	ug/L	366.029
L	Cr	53	15776.1719	3.49	16953.891	ug/L	1331.409
⌈	Ni	61	11128.7245	4.99	2285.206	ug/L	1279.070
|	Cu	63	25885.2792	2.48	119849.265	ug/L	940.707
|	Br	79			3459.789	ug/L	770.695
L>	Ge	74			689597.711	ug/L	675373.098
⌈	Ag	109	815.9091	2.17	4693.485	ug/L	64.667
L>	In	115			373982.228	ug/L	366655.658
⌈	Pb	206	186213.5084	1.11	335882.795	ug/L	128.669
|	Pb	207	182777.0250	0.83	277860.055	ug/L	114.335
L>	Bi	209			114770.064	ug/L	110790.527
	Hg	200			1251.401	ug/L	32.000
	Pd	106			1458.217	ug/L	233.417
	Kr	83			188.670	ug/L	137.335
	Ti	48			1723177.326	ug/L	-148.271
	Ca	44			702373.882	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		110.356		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		102.144		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		101.998		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		104.729		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		110.356		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		102.106		
⌈	Ag	109				
⌊>	In	115		101.998		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		103.592		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

As 75 Upper	As	75	As above linear range
Pb 208 Upper	Pb	208	Pb above linear range

> OK

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA6

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 12:52:33
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA6.052
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 62
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001 5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65536.681	~~ug/L~~ ug/kg	63856.071
⌜	Be	9	427.5772	2.62	52.667	ug/L	4.667
|	Al	27	6448688.0834	1.36	21685876.054	ug/L	2373.555
|>	Sc	45			268683.642	ug/L	256004.117
|	V	51	14726.8585	3.38	133350.827	ug/L	3104.630
|	Cr	52	19683.6133	2.62	164649.485	ug/L	12446.881
|	Mn	55	227096.6140	1.59	2780855.237	ug/L	1827.802
|	Fe	57	9591472.3012	2.94	2406811.657	ug/L	34554.064
|	Co	59	13884.2224	3.93	135061.485	ug/L	153.669
|	Ni	60	6455.4844	4.51	13639.606	ug/L	181.178
⌞	Cu	65	18149.8179	1.51	40763.693	ug/L	537.104
⌜>	Ge	72			499747.486	ug/L	487677.767
|	Zn	68	153661.2532	1.75	121720.266	ug/L	598.019
|	As	75	157265.4036	2.35	263206.596	ug/L	-199.313
⌞	Se	82	675.6306	33.44	118.360	ug/L	14.139
	Y	89			566620.291	ug/L	323983.364
⌜	Mo	97	939.2820	2.15	1811.466	ug/L	51.001
|	Ag	107	1018.7503	3.13	6387.158	ug/L	85.001
|>	In	115			378683.167	ug/L	366655.658
|	Cd	111	5832.6371	2.47	8731.134	ug/L	19.565
|	Sn	117	623.1098	6.51	1068.717	ug/L	231.004
|	Sb	121	345.1185	3.79	2157.518	ug/L	443.011
⌞	Ba	135	133161.6859	2.28	134991.199	ug/L	19.667
	Tb	159			222977.069	ug/L	211603.416
⌜>	Ho	165			199691.749	ug/L	189623.197
|	Tl	205	265.9900	3.06	1455.422	ug/L	38.334
|	Pb	208	150048.5406	2.32	1043522.527	ug/L	505.675
⌞	U	238	2025.7540	2.50	10728.135	ug/L	92.335

	Bi	209			113998.530	ug/L	110790.527
⌈>	Sc	45			268683.642	ug/L	256004.117
|	Cr	50	66281.3598	11.62	23191.848	ug/L	366.029
⌊	Cr	53	19341.2593	2.94	19463.113	ug/L	1331.409
⌈	Ni	61	11767.8477	3.02	2355.218	ug/L	1279.070
|	Cu	63	18902.8758	0.49	88300.964	ug/L	940.707
|	Br	79			3159.381	ug/L	770.695
⌊>	Ge	74			693498.398	ug/L	675373.098
⌈	Ag	109	1041.8345	3.77	6048.007	ug/L	64.667
⌊>	In	115			378683.167	ug/L	366655.658
⌈	Pb	206	153658.7604	0.76	275357.467	ug/L	128.669
|	Pb	207	150904.7736	0.62	227910.779	ug/L	114.335
⌊>	Bi	209			113998.530	ug/L	110790.527
	Hg	200			1680.782	ug/L	32.000
	Pd	106			1340.189	ug/L	233.417
	Kr	83			189.003	ug/L	137.335
	Ti	48			1524115.890	ug/L	-148.271
	Ca	44			910998.535	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		104.953		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		102.475		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		103.280		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		105.310		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		104.953		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		102.684		
⌈	Ag	109				
⌊>	In	115		103.280		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		102.896		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

As 75 Upper	As	75	As above linear range	> OK
Pb 208 Upper	Pb	208	Pb above linear range	

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA7

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 12:57:08
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA7.053
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 63
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001 5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65844.061	~~ug/L~~ ug/kg	63856.071
⌜	Be	9	414.4691	15.46	54.001	ug/L	4.667
|	Al	27	6176799.6382	1.75	21920779.242	ug/L	2373.555
|>	Sc	45			283586.520	ug/L	256004.117
|	V	51	11675.6398	2.45	112296.714	ug/L	3104.630
|	Cr	52	25032.4455	1.83	217263.836	ug/L	12446.881
|	Mn	55	232875.5248	3.47	3009790.535	ug/L	1827.802
|	Fe	57	8039389.4027	11.82	2135069.039	ug/L	34554.064
|	Co	59	15342.9869	3.33	157538.667	ug/L	153.669
|	Ni	60	6451.7502	1.38	14390.656	ug/L	181.178
L	Cu	65	15268.5078	0.16	36290.545	ug/L	537.104
⌜>	Ge	72			503062.260	ug/L	487677.767
|	Zn	68	115057.6542	0.99	91910.003	ug/L	598.019
|	As	75	206179.7323	1.64	347452.600	ug/L	-199.313
L	Se	82	734.0361	8.00	128.108	ug/L	14.139
	Y	89			566725.067	ug/L	323983.364
⌜	Mo	97	1032.7464	3.97	1957.487	ug/L	51.001
|	Ag	107	806.8201	1.23	5005.927	ug/L	85.001
|>	In	115			373311.942	ug/L	366655.658
|	Cd	111	5252.1323	0.32	7754.269	ug/L	19.565
|	Sn	117	272.8337	2.45	593.352	ug/L	231.004
|	Sb	121	374.2359	0.59	2267.869	ug/L	443.011
L	Ba	135	117368.2823	1.80	117305.578	ug/L	19.667
	Tb	159			223621.678	ug/L	211603.416
⌜>	Ho	165			199666.428	ug/L	189623.197
|	Tl	205	278.1681	1.80	1520.429	ug/L	38.334
|	Pb	208	134039.0671	0.78	932358.109	ug/L	505.675
L	U	238	2235.4807	2.20	11831.353	ug/L	92.335

	Bi	209			113178.042	ug/L	110790.527
⌈>	Sc	45			283586.520	ug/L	256004.117
|	Cr	50	84646.3279	5.86	31157.063	ug/L	366.029
L	Cr	53	24394.5272	3.65	25521.706	ug/L	1331.409
⌈	Ni	61	11971.4518	0.58	2398.225	ug/L	1279.070
|	Cu	63	16395.2367	0.95	77509.820	ug/L	940.707
|	Br	79			2991.010	ug/L	770.695
L>	Ge	74			700734.973	ug/L	675373.098
⌈	Ag	109	836.3247	0.99	4800.855	ug/L	64.667
L>	In	115			373311.942	ug/L	366655.658
⌈	Pb	206	137565.8624	0.80	244752.085	ug/L	128.669
|	Pb	207	136337.7063	0.58	204437.964	ug/L	114.335
L>	Bi	209			113178.042	ug/L	110790.527
	Hg	200			1759.793	ug/L	32.000
	Pd	106			1318.538	ug/L	233.417
	Kr	83			179.670	ug/L	137.335
	Ti	48			1885985.560	ug/L	-148.271
	Ca	44			747598.034	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		110.774		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		103.155		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		101.815		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		105.296		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		110.774		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		103.755		
⌈	Ag	109				
⌊>	In	115		101.815		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		102.155		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

As 75 Upper	As	75	As above linear range > ok
Pb 208 Upper	Pb	208	Pb above linear range

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 3

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 13:01:59
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 3.054
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			63447.559	ug/L	63856.071
⌜	Be	9	103.1081	2.32	5424.084	ug/L	4.667
|	Al	27	102.1508	1.44	163987.119	ug/L	2373.555
|>	Sc	45			252900.054	ug/L	256004.117
|	V*	51	100.9718	1.50	422910.844	ug/L	3104.630
|	Cr	52	102.4170	2.52	383432.136	ug/L	12446.881
|	Mn	55	103.5569	3.99	597941.653	ug/L	1827.802
|	Fe	57	5175.0596	5.17	635727.539	ug/L	34554.064
|	Co	59	103.0786	5.23	471278.072	ug/L	153.669
|	Ni	60	101.9991	4.82	100163.312	ug/L	181.178
⌊	Cu	65	101.2993	4.81	106062.161	ug/L	537.104
⌜>	Ge	72			500338.216	ug/L	487677.767
|	Zn	68	99.6671	0.96	39946.527	ug/L	598.019
|	As	75	100.3329	0.80	83938.248	ug/L	-199.313
⌊	Se	82	98.2308	2.64	7571.685	ug/L	14.139
	Y	89			326619.613	ug/L	323983.364
⌜	Mo	97	100.9317	0.88	91311.138	ug/L	51.001
|	Ag	107	100.1300	1.19	299224.723	ug/L	85.001
|>	In	115			365802.216	ug/L	366655.658
|	Cd	111	101.1521	0.81	73001.425	ug/L	19.565
|	Sn	117	101.3884	1.40	65425.479	ug/L	231.004
|	Sb	121	102.1691	1.26	243472.431	ug/L	443.011
⌊	Ba	135	102.2577	1.63	50094.539	ug/L	19.667
	Tb	159			215222.196	ug/L	211603.416
⌜>	Ho	165			194507.537	ug/L	189623.197
|	Tl	205	100.2321	0.21	259768.494	ug/L	38.334
|	Pb	208	98.5914	0.18	334365.399	ug/L	505.675
⌊	U	238	100.1351	1.54	256049.618	ug/L	92.335

	Bi	209			110962.050	ug/L	110790.527
⌈>	Sc	45			252900.054	ug/L	256004.117
|	Cr	50	99.7881	1.12	16532.210	ug/L	366.029
L	Cr	53	102.3980	3.54	46321.135	ug/L	1331.409
⌈	Ni	61	102.2038	6.45	5812.243	ug/L	1279.070
|	Cu	63	99.7457	0.93	230254.745	ug/L	940.707
|	Br	79			711.358	ug/L	770.695
L>	Ge	74			690127.966	ug/L	675373.098
⌈	Ag	109	100.7088	1.87	279419.286	ug/L	64.667
L>	In	115			365802.216	ug/L	366655.658
⌈	Pb	206	99.8015	0.42	87127.097	ug/L	128.669
|	Pb	207	99.6168	0.60	73297.636	ug/L	114.335
L>	Bi	209			110962.050	ug/L	110790.527
	Hg	200			28.667	ug/L	32.000
	Pd	106			214.442	ug/L	233.417
	Kr	83			130.335	ug/L	137.335
	Ti	48			-650.075	ug/L	-148.271
	Ca	44			27310.019	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9	103.108			
|	Al	27	102.151			
|>	Sc	45		98.787		
|	V	51	100.972			
|	Cr	52	102.417			
|	Mn	55	103.557			
|	Fe	57	103.501			
|	Co	59	103.079			
|	Ni	60	101.999			
⌊	Cu	65	101.299			
⌈>	Ge	72		102.596		
|	Zn	68	99.667			
|	As	75	100.333			
⌊	Se	82	98.231			
	Y	89				
⌈	Mo	97	100.932			
|	Ag	107	100.130			
|>	In	115		99.767		
|	Cd	111	101.152			
|	Sn	117	101.388			
|	Sb	121	102.169			
⌊	Ba	135	102.258			
	Tb	159				
⌈>	Ho	165		102.576		
|	Tl	205	100.232			
|	Pb	208	98.591			
⌊	U	238	100.135			
	Bi	209				
⌈>	Sc	45		98.787		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		102.185		
⌈	Ag	109				
⌊>	In	115		99.767		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		100.155		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 4

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 13:06:49
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 4.055
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			64327.153	ug/L	63856.071
⌈	Be	9	0.0750	38.10	8.667	ug/L	4.667
|	Al	27	-0.3335	17.24	1840.804	ug/L	2373.555
|>	Sc	45			256228.356	ug/L	256004.117
|	V	51	0.1306	18.79	3657.109	ug/L	3104.630
|	Cr	52	0.3004	14.80	13560.569	ug/L	12446.881
|	Mn	55	-0.0112	124.23	1763.460	ug/L	1827.802
|	Fe	57	34.7106	4.96	38675.373	ug/L	34554.064
|	Co	59	0.0063	25.50	183.003	ug/L	153.669
|	Ni	60	0.0020	125.23	183.354	ug/L	181.178
L	Cu	65	-0.2068	10.96	319.213	ug/L	537.104
⌈>	Ge	72			488890.037	ug/L	487677.767
|	Zn	68	-0.9480	5.84	233.671	ug/L	598.019
|	As	75	-0.1765	56.60	-344.041	ug/L	-199.313
L	Se	82	-0.0926	123.72	7.142	ug/L	14.139
	Y	89			330949.989	ug/L	323983.364
⌈	Mo	97	0.0475	26.75	94.001	ug/L	51.001
|	Ag	107	0.0374	38.17	197.003	ug/L	85.001
|>	In	115			366588.689	ug/L	366655.658
|	Cd	111	-0.0065	132.13	14.812	ug/L	19.565
|	Sn	117	0.1618	54.18	335.341	ug/L	231.004
|	Sb	121	0.9064	41.73	2605.616	ug/L	443.011
L	Ba	135	0.0007	1698.77	20.000	ug/L	19.667
	Tb	159			212055.952	ug/L	211603.416
⌈>	Ho	165			190691.287	ug/L	189623.197
|	Tl	205	0.0087	64.48	60.667	ug/L	38.334
|	Pb	208	-0.0982	13.78	182.002	ug/L	505.675
L	U	238	-0.0098	113.36	68.001	ug/L	92.335

	Bi	209			110564.678	ug/L	110790.527
⌈>	Sc	45			256228.356	ug/L	256004.117
|	Cr	50	-0.1185	25.81	346.896	ug/L	366.029
⌊	Cr	53	-0.1551	62.75	1263.402	ug/L	1331.409
⌈	Ni	61	-0.3719	376.23	1288.738	ug/L	1279.070
|	Cu	63	-0.1792	5.64	548.016	ug/L	940.707
|	Br	79			537.015	ug/L	770.695
⌊>	Ge	74			688902.529	ug/L	675373.098
⌈	Ag	109	0.0439	40.94	186.670	ug/L	64.667
⌊>	In	115			366588.689	ug/L	366655.658
⌈	Pb	206	-0.0938	17.03	47.001	ug/L	128.669
|	Pb	207	-0.0935	14.83	45.667	ug/L	114.335
⌊>	Bi	209			110564.678	ug/L	110790.527
	Hg	200			22.334	ug/L	32.000
	Pd	106			218.206	ug/L	233.417
	Kr	83			137.002	ug/L	137.335
	Ti	48			-1235.959	ug/L	-148.271
	Ca	44			26623.720	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		100.088		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		100.249		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		99.982		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		100.563		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		100.088		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		102.003		
⌈	Ag	109				
⌊>	In	115		99.982		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		99.796		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA8

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:11:23
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA8.056
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 64
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001 5×

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66343.716	~~ug/L~~ ug/kg	63856.071
⌜	Be	9	334.8994	22.80	43.667	ug/L	4.667
|	Al	27	5934213.9936	2.33	20561215.284	ug/L	2373.555
|>	Sc	45			276885.760	ug/L	256004.117
|	V	51	11224.6136	0.54	105561.666	ug/L	3104.630
|	Cr	52	25602.4716	3.04	216597.872	ug/L	12446.881
|	Mn	55	232485.1081	3.24	2932804.073	ug/L	1827.802
|	Fe	57	7139196.8643	3.51	1855136.317	ug/L	34554.064
|	Co	59	16372.3074	3.39	164067.889	ug/L	153.669
|	Ni	60	5713.8639	3.40	12463.224	ug/L	181.178
⌊	Cu	65	15401.0088	0.55	35733.279	ug/L	537.104
⌜>	Ge	72			505808.776	ug/L	487677.767
|	Zn	68	90719.7376	1.97	72981.695	ug/L	598.019
|	As	75	186104.4073	0.94	315366.650	ug/L	-199.313
⌊	Se	82	406.4796	47.53	77.596	ug/L	14.139
	Y	89			544220.660	ug/L	323983.364
⌜	Mo	97	958.0134	2.82	1819.801	ug/L	51.001
|	Ag	107	487.7019	2.30	3060.358	ug/L	85.001
|>	In	115			373291.020	ug/L	366655.658
|	Cd	111	3203.0164	1.65	4736.528	ug/L	19.565
|	Sn	117	219.5513	6.40	523.348	ug/L	231.004
|	Sb	121	356.7541	2.19	2182.855	ug/L	443.011
⌊	Ba	135	102039.7987	1.48	101993.858	ug/L	19.667
	Tb	159			224754.513	ug/L	211603.416
⌜>	Ho	165			200010.475	ug/L	189623.197
|	Tl	205	255.2824	2.02	1400.749	ug/L	38.334
|	Pb	208	107081.2819	0.23	746249.972	ug/L	505.675
⌊	U	238	2177.2935	1.62	11544.446	ug/L	92.335

	Bi	209			114293.902	ug/L	110790.527
⌈>	Sc	45			276885.760	ug/L	256004.117
|	Cr	50	74408.8258	7.21	26776.707	ug/L	366.029
L	Cr	53	25347.4394	2.19	25835.599	ug/L	1331.409
⌈	Ni	61	10364.1496	7.85	2269.536	ug/L	1279.070
|	Cu	63	16227.6991	1.95	77278.700	ug/L	940.707
|	Br	79			2510.580	ug/L	770.695
L>	Ge	74			705626.143	ug/L	675373.098
⌈	Ag	109	519.8887	2.02	3009.347	ug/L	64.667
L>	In	115			373291.020	ug/L	366655.658
⌈	Pb	206	109508.2428	0.70	196787.302	ug/L	128.669
|	Pb	207	108125.6191	0.82	163750.199	ug/L	114.335
L>	Bi	209			114293.902	ug/L	110790.527
	Hg	200			1883.810	ug/L	32.000
	Pd	106			1255.882	ug/L	233.417
	Kr	83			200.003	ug/L	137.335
	Ti	48			1496341.236	ug/L	-148.271
	Ca	44			643916.560	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		108.157		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		103.718		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		101.810		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		105.478		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		108.157		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		104.479		
⌈	Ag	109				
⌊>	In	115		101.810		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		103.162		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range – NR

As 75 Upper	As	75	As above linear range	> o K
Pb 208 Upper	Pb	208	Pb above linear range	

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXA9

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:16:00
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXA9.057
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 65
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001 5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66884.879	~~ug/L~~ mg/kg	63856.071
[	Be	9	395.9089	18.27	51.667	ug/L	4.667
|	Al	27	7176145.6792	3.76	25362357.977	ug/L	2373.555
|>	Sc	45			282421.526	ug/L	256004.117
|	V	51	13747.4784	4.14	131109.315	ug/L	3104.630
|	Cr	52	23683.4876	3.04	205499.604	ug/L	12446.881
|	Mn	55	233317.1679	2.54	3003425.529	ug/L	1827.802
|	Fe	57	9449010.6934	2.47	2493284.122	ug/L	34554.064
|	Co	59	8594.0393	1.55	87967.630	ug/L	153.669
|	Ni	60	6404.4095	2.33	14228.781	ug/L	181.178
L	Cu	65	14742.4329	0.28	34916.667	ug/L	537.104
[>	Ge	72			509222.684	ug/L	487677.767
|	Zn	68	132251.4330	0.71	106851.867	ug/L	598.019
|	As	75	203606.1834	1.08	347371.091	ug/L	-199.313
L	Se	82	516.1675	7.68	95.594	ug/L	14.139
	Y	89			597720.488	ug/L	323983.364
[	Mo	97	917.1235	2.46	1763.126	ug/L	51.001
|	Ag	107	884.0424	1.19	5536.461	ug/L	85.001
|>	In	115			377348.609	ug/L	366655.658
|	Cd	111	5801.7946	0.84	8656.184	ug/L	19.565
|	Sn	117	541.3602	7.78	956.042	ug/L	231.004
|	Sb	121	231.3938	2.42	1591.438	ug/L	443.011
L	Ba	135	120565.1212	1.38	121818.834	ug/L	19.667
	Tb	159			225583.072	ug/L	211603.416
[>	Ho	165			201079.752	ug/L	189623.197
|	Tl	205	275.2630	4.22	1516.096	ug/L	38.334
|	Pb	208	132164.6613	1.74	925597.372	ug/L	505.675
L	U	238	2011.3789	2.38	10724.798	ug/L	92.335

	Bi	209			114977.668	ug/L	110790.527	
⌈>	Sc	45			282421.526	ug/L	256004.117	
|	Cr	50	78319.2652	5.33	28756.955	ug/L	366.029	
L	Cr	53	23437.8795	1.78	24484.881	ug/L	1331.409	
⌈	Ni	61	10657.5020	7.82	2294.207	ug/L	1279.070	
|	Cu	63	16136.9746	1.01	76766.824	ug/L	940.707	
|	Br	79			2472.906	ug/L	770.695	
L>	Ge	74			704939.018	ug/L	675373.098	
⌈	Ag	109	911.5325	1.35	5283.363	ug/L	64.667	
L>	In	115			377348.609	ug/L	366655.658	
⌈	Pb	206	134410.9691	1.52	242929.952	ug/L	128.669	==
|	Pb	207	133773.7033	1.53	203766.356	ug/L	114.335	
L>	Bi	209			114977.668	ug/L	110790.527	
	Hg	200			967.376	ug/L	32.000	
	Pd	106			1479.540	ug/L	233.417	
	Kr	83			200.337	ug/L	137.335	
	Ti	48			1608548.981	ug/L	-148.271	
	Ca	44			693485.594	ug/L	27063.882	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		110.319		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		104.418		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		102.916		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		106.042		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		110.319		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		104.378		
⌈	Ag	109				
⌊>	In	115		102.916		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		103.779		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range – NR

As 75 Upper	As	75	As above linear range > OK
Pb 208 Upper	Pb	208	Pb above linear range

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAA

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:20:32
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAA.058
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 66
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2 5x
Diluted To Volume (mL): 1e+001

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66520.218	~~ug/L~~ ug/kg	63856.071
⌜	Be	9	482.7993	19.54	62.667	ug/L	4.667
|	Al	27	6947095.8263	3.04	24937017.023	ug/L	2373.555
|>	Sc	45			286905.160	ug/L	256004.117
|	V	51	13206.6691	0.74	128065.642	ug/L	3104.630
|	Cr	52	15645.3909	2.35	142585.121	ug/L	12446.881
|	Mn	55	242060.4112	1.87	3164478.582	ug/L	1827.802
|	Fe	57	9249555.9280	2.35	2479436.759	ug/L	34554.064
|	Co	59	8926.1362	2.43	92771.849	ug/L	153.669
|	Ni	60	6785.4031	3.49	15301.100	ug/L	181.178
⌊	Cu	65	17840.9713	3.58	42777.925	ug/L	537.104
⌈>	Ge	72			514217.813	ug/L	487677.767
|	Zn	68	141214.6140	2.37	115147.402	ug/L	598.019
|	As	75	166353.7818	2.67	286576.512	ug/L	-199.313
⌊	Se	82	720.8244	19.37	128.943	ug/L	14.139
	Y	89			594187.011	ug/L	323983.364
⌈	Mo	97	778.4866	1.53	1502.094	ug/L	51.001
|	Ag	107	735.8702	3.48	4614.792	ug/L	85.001
|>	In	115			376717.450	ug/L	366655.658
|	Cd	111	6161.4480	0.39	9176.369	ug/L	19.565
|	Sn	117	308.1256	6.04	645.354	ug/L	231.004
|	Sb	121	235.8569	2.78	1610.774	ug/L	443.011
⌊	Ba	135	121120.5239	1.12	122167.027	ug/L	19.667
	Tb	159			223687.269	ug/L	211603.416
⌈>	Ho	165			199868.873	ug/L	189623.197
|	Tl	205	297.7412	2.26	1625.775	ug/L	38.334
|	Pb	208	135499.6072	0.52	943466.259	ug/L	505.675
⌊	U	238	1945.1860	1.43	10316.828	ug/L	92.335

	Bi	209			115594.989	ug/L	110790.527
⌐>	Sc	45			286905.160	ug/L	256004.117
⌐	Cr	50	70512.9610	12.96	26308.013	ug/L	366.029
L	Cr	53	15049.1694	2.07	16504.699	ug/L	1331.409
⌐	Ni	61	11628.0794	6.77	2394.891	ug/L	1279.070
⌐	Cu	63	19175.5485	2.29	91553.361	ug/L	940.707
⌐	Br	79			3480.793	ug/L	770.695
L>	Ge	74			709159.861	ug/L	675373.098
⌐	Ag	109	747.4826	0.99	4337.035	ug/L	64.667
L>	In	115			376717.450	ug/L	366655.658
⌐	Pb	206	135796.7866	1.05	246746.811	ug/L	128.669
⌐	Pb	207	134653.3668	1.41	206208.811	ug/L	114.335
L>	Bi	209			115594.989	ug/L	110790.527
	Hg	200			719.359	ug/L	32.000
	Pd	106			1388.451	ug/L	233.417
	Kr	83			198.670	ug/L	137.335
	Ti	48			1696178.433	ug/L	-148.271
	Ca	44			756450.989	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		112.071		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		105.442		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		102.744		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		105.403		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		112.071		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		105.003		
⌈	Ag	109				
⌊>	In	115		102.744		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		104.337		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

As 75 Upper	As	75	As above linear range
Pb 208 Upper	Pb	208	Pb above linear range

OK

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAC

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:25:08
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAC.059
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 67
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001 5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66722.461	~~ug/L~~ µg/Kg	63856.071
⌜	Be	9	418.4581	6.70	55.334	ug/L	4.667
|	Al	27	5992704.0809	2.10	21601885.813	ug/L	2373.555
|>	Sc	45			288058.114	ug/L	256004.117
|	V	51	12459.9170	1.58	121528.473	ug/L	3104.630
|	Cr	52	27907.1769	2.62	244438.926	ug/L	12446.881
|	Mn	55	229877.9140	2.64	3017569.058	ug/L	1827.802
|	Fe	57	8761419.0161	4.08	2359949.310	ug/L	34554.064
|	Co	59	7886.3298	4.35	82308.398	ug/L	153.669
|	Ni	60	6612.9112	5.49	14969.174	ug/L	181.178
⌊	Cu	65	18410.2539	3.16	44306.636	ug/L	537.104
⌜>	Ge	72			511083.944	ug/L	487677.767
|	Zn	68	168540.2749	3.11	136452.485	ug/L	598.019
|	As	75	333245.3971	2.35	570571.145	ug/L	-199.313
⌊	Se	82	759.7081	5.69	134.343	ug/L	14.139
	Y	89			550726.084	ug/L	323983.364
⌜	Mo	97	1622.6004	1.43	3079.029	ug/L	51.001
|	Ag	107	1058.0353	1.12	6607.594	ug/L	85.001
|>	In	115			377283.346	ug/L	366655.658
|	Cd	111	6925.9406	0.51	10328.349	ug/L	19.565
|	Sn	117	448.8579	2.92	833.033	ug/L	231.004
|	Sb	121	879.7997	2.77	4772.178	ug/L	443.011
⌊	Ba	135	112674.8475	1.50	113822.136	ug/L	19.667
	Tb	159			221465.996	ug/L	211603.416
⌜>	Ho	165			197997.316	ug/L	189623.197
|	Tl	205	348.3568	2.20	1877.809	ug/L	38.334
|	Pb	208	198122.5530	0.63	1366332.296	ug/L	505.675
⌊	U	238	2290.2436	0.34	12015.504	ug/L	92.335

	Bi	209			114786.488	ug/L	110790.527
⌈>	Sc	45			288058.114	ug/L	256004.117
|	Cr	50	90493.7680	16.22	33793.217	ug/L	366.029
⌊	Cr	53	27260.0664	2.98	28799.640	ug/L	1331.409
⌈	Ni	61	11991.7577	1.76	2393.891	ug/L	1279.070
|	Cu	63	20256.8467	0.97	95315.691	ug/L	940.707
|	Br	79			3958.921	ug/L	770.695
⌊>	Ge	74			699010.152	ug/L	675373.098
⌈	Ag	109	1076.7052	1.94	6228.087	ug/L	64.667
⌊>	In	115			377283.346	ug/L	366655.658
⌈	Pb	206	199487.1898	1.22	359878.141	ug/L	128.669
|	Pb	207	196994.8407	1.05	299515.658	ug/L	114.335
⌊>	Bi	209			114786.488	ug/L	110790.527
	Hg	200			650.355	ug/L	32.000
	Pd	106			1383.998	ug/L	233.417
	Kr	83			191.003	ug/L	137.335
	Ti	48			1864662.005	ug/L	-148.271
	Ca	44			901349.555	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		112.521		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		104.800		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		102.899		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		104.416		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		112.521		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		103.500		
⌈	Ag	109				
⌊>	In	115		102.899		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		103.607		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range – NR

As 75 Upper	As	75	As above linear range > ok
Pb 208 Upper	Pb	208	Pb above linear range

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAD

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:29:42
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAD.060
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 68
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 0.5
Diluted To Volume (mL): 1e+001

20x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66626.036	~~ug/L~~ µg/kg	63856.071
⌈	Be	9	895.7240	11.89	30.334	ug/L	4.667
|	Al	27	10340497.0763	1.10	8814276.844	ug/L	2373.555
|>	Sc	45			272348.228	ug/L	256004.117
|	V	51	19360.2525	0.75	46647.158	ug/L	3104.630
|	Cr	52	10382.8702	1.81	33510.272	ug/L	12446.881
|	Mn	55	384522.3326	1.39	1194301.760	ug/L	1827.802
|	Fe	57	11060274.8411	1.87	729557.343	ug/L	34554.064
|	Co	59	5939.3784	1.00	14791.804	ug/L	153.669
|	Ni	60	12027.4088	1.97	6543.544	ug/L	181.178
L	Cu	65	82172.3314	1.66	46690.588	ug/L	537.104
⌈>	Ge	72			505480.011	ug/L	487677.767
|	Zn	68	234904.8089	0.80	47437.784	ug/L	598.019
|	As	75	69659.9337	1.51	29298.555	ug/L	-199.313
L	Se	82	1034.3466	7.12	54.903	ug/L	14.139
	Y	89			415189.461	ug/L	323983.364
⌈	Mo	97	617.4486	7.65	337.341	ug/L	51.001
|	Ag	107	3619.7122	1.46	5614.826	ug/L	85.001
|>	In	115			374012.601	ug/L	366655.658
|	Cd	111	34259.5182	1.54	12657.392	ug/L	19.565
|	Sn	117	-269.7176	11.84	147.002	ug/L	231.004
|	Sb	121	625.5983	3.13	1212.730	ug/L	443.011
L	Ba	135	155997.5792	2.77	39067.089	ug/L	19.667
	Tb	159			217089.655	ug/L	211603.416
⌈>	Ho	165			195593.259	ug/L	189623.197
|	Tl	205	1177.5129	0.66	1573.769	ug/L	38.334
|	Pb	208	930971.9376	1.12	1585414.334	ug/L	505.675
L	U	238	658.3634	1.39	941.374	ug/L	92.335

	Bi	209			114291.545	ug/L	110790.527
⌈>	Sc	45			272348.228	ug/L	256004.117
|	Cr	50	72996.8190	7.82	6763.061	ug/L	366.029
L	Cr	53	8966.9569	2.47	3538.807	ug/L	1331.409
⌈	Ni	61	34758.7687	8.08	2122.512	ug/L	1279.070
|	Cu	63	85075.3998	1.40	101143.929	ug/L	940.707
|	Br	79			1158.392	ug/L	770.695
L>	Ge	74			706812.601	ug/L	675373.098
⌈	Ag	109	3722.6094	0.94	5345.053	ug/L	64.667
L>	In	115			374012.601	ug/L	366655.658
⌈	Pb	206	906404.1462	1.75	406991.577	ug/L	128.669
|	Pb	207	945261.8841	1.35	357711.007	ug/L	114.335
L>	Bi	209			114291.545	ug/L	110790.527
	Hg	200			586.351	ug/L	32.000
	Pd	106			444.313	ug/L	233.417
	Kr	83			164.669	ug/L	137.335
	Ti	48			497236.024	ug/L	-148.271
	Ca	44			1002198.291	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		106.384		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		103.650		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		102.006		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		103.148		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		106.384		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		104.655		
⌈	Ag	109				
⌊>	In	115		102.006		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		103.160		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range ~ NR

Fe 57 Upper		Fe	57	Fe over linear range > NR
Zn 68 Upper		Zn	68	Zn above linear range
Pb 208 Upper	-	Pb	208	Pb above linear range – OK

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAE

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:34:17
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAE.061
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 69
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001

5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			64674.730	~~ug/L~~ ug/kg	63856.071
⌜	Be	9	418.0229	5.36	54.001	ug/L	4.667
|	Al	27	7778531.0229	0.95	27385310.097	ug/L	2373.555
|>	Sc	45			281306.702	ug/L	256004.117
|	V	51	12118.7029	3.84	115512.505	ug/L	3104.630
|	Cr	52	59694.0379	1.90	495022.059	ug/L	12446.881
|	Mn	55	376163.3097	2.97	4820776.935	ug/L	1827.802
|	Fe	57	23384810.7712	2.34	6088824.705	ug/L	34554.064
|	Co	59	8637.9279	2.80	88045.763	ug/L	153.669
|	Ni	60	26719.0269	0.68	58500.543	ug/L	181.178
⌊	Cu	65	68802.0183	3.25	160116.061	ug/L	537.104
⌈>	Ge	72			523342.213	ug/L	487677.767
|	Zn	68	310923.7775	2.40	257225.182	ug/L	598.019
|	As	75	12998.6865	1.48	22586.230	ug/L	-199.313
⌊	Se	82	865.1239	18.29	154.048	ug/L	14.139
	Y	89			524759.258	ug/L	323983.364
⌈	Mo	97	2272.6898	2.61	4201.660	ug/L	51.001
|	Ag	107	258.4893	2.28	1645.778	ug/L	85.001
|>	In	115			369457.180	ug/L	366655.658
|	Cd	111	2868.9600	1.53	4201.593	ug/L	19.565
|	Sn	117	231.2197	6.58	533.015	ug/L	231.004
|	Sb	121	180.3335	3.82	1312.740	ug/L	443.011
⌊	Ba	135	64285.3482	0.82	63600.901	ug/L	19.667
	Tb	159			221004.503	ug/L	211603.416
⌈>	Ho	165			195688.562	ug/L	189623.197
|	Tl	205	410.7907	0.45	2181.522	ug/L	38.334
|	Pb	208	122004.1208	0.29	831791.418	ug/L	505.675
⌊	U	238	477.5875	3.00	2552.254	ug/L	92.335

	Bi	209			115303.015	ug/L	110790.527
⌈>	Sc	45			281306.702	ug/L	256004.117
|	Cr	50	70424.1003	1.88	25789.684	ug/L	366.029
L	Cr	53	60241.5446	1.81	60378.937	ug/L	1331.409
⌈	Ni	61	50309.0888	3.47	5950.632	ug/L	1279.070
|	Cu	63	72486.4448	2.54	346529.381	ug/L	940.707
|	Br	79			1639.777	ug/L	770.695
L>	Ge	74			715608.694	ug/L	675373.098
⌈	Ag	109	241.3329	4.65	1417.085	ug/L	64.667
L>	In	115			369457.180	ug/L	366655.658
⌈	Pb	206	122112.4262	1.02	221328.933	ug/L	128.669
|	Pb	207	118176.0461	1.46	180519.590	ug/L	114.335
L>	Bi	209			115303.015	ug/L	110790.527
	Hg	200			387.342	ug/L	32.000
	Pd	106			1194.975	ug/L	233.417
	Kr	83			186.670	ug/L	137.335
	Ti	48			506766.342	ug/L	-148.271
	Ca	44			4419856.493	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		109.884		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		107.313		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		100.764		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		103.199		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		109.884		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		105.958		
⌈	Ag	109				
⌊>	In	115		100.764		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		104.073		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range ~ NR

Fe 57 Upper	Fe	57	Fe over linear range	> NR
Zn 68 Upper	Zn	68	Zn above linear range	
Pb 208 Upper	Pb	208	Pb above linear range	- OK

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAF

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:38:53
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAF.062
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 70
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 5e+002
Sample Prep Volume (mL): 5e+001
Aliquot Volume (mL): 2
Diluted To Volume (mL): 1e+001 5x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65008.230	~~ug/L~~ ug/kg	63856.071
⌜	Be	9	508.4961	33.13	66.667	ug/L	4.667
|	Al	27	13179782.6355	2.20	47780566.054	ug/L	2373.555
|>	Sc	45			308264.665	ug/L	256004.117
|	V	51	37122.8575	1.59	357383.044	ug/L	3104.630
|	Cr	52	39670.1051	2.15	344406.398	ug/L	12446.881
|	Mn	55	366081.2146	5.90	4828902.564	ug/L	1827.802
|	Fe	57	19735365.0420	4.53	5298946.154	ug/L	34554.064
|	Co	59	8495.2987	4.19	89161.642	ug/L	153.669
|	Ni	60	52458.0603	3.10	118058.792	ug/L	181.178
⌞	Cu	65	20378.7785	3.67	49297.754	ug/L	537.104
⌜>	Ge	72			511872.382	ug/L	487677.767
|	Zn	68	82278.5611	0.46	63076.274	ug/L	598.019
|	As	75	8798.9716	1.44	13983.262	ug/L	-199.313
⌞	Se	82	852.3282	12.50	141.146	ug/L	14.139
	Y	89			536208.449	ug/L	323983.364
⌜	Mo	97	707.7832	4.42	1261.735	ug/L	51.001
|	Ag	107	275.3348	1.83	1641.777	ug/L	85.001
|>	In	115			368246.704	ug/L	366655.658
|	Cd	111	297.1895	4.50	425.487	ug/L	19.565
|	Sn	117	-35.7788	40.14	188.670	ug/L	231.004
|	Sb	121	18.6676	24.93	528.682	ug/L	443.011
⌞	Ba	135	334724.6939	1.57	310158.252	ug/L	19.667
	Tb	159			217271.632	ug/L	211603.416
⌜>	Ho	165			195914.240	ug/L	189623.197
|	Tl	205	207.7163	2.43	1058.716	ug/L	38.334
|	Pb	208	9704.8914	1.22	62746.471	ug/L	505.675
⌞	U	238	1195.0917	0.47	5880.269	ug/L	92.335

	Bi	209			110897.893	ug/L	110790.527
⌈>	Sc	45			308264.665	ug/L	256004.117
|	Cr	50	90617.5650	11.61	34030.563	ug/L	366.029
⌊	Cr	53	39437.3419	3.77	41311.730	ug/L	1331.409
⌈	Ni	61	78541.3457	2.08	7935.283	ug/L	1279.070
|	Cu	63	24213.1682	2.50	107264.417	ug/L	940.707
|	Br	79			2280.872	ug/L	770.695
⌊>	Ge	74			700977.251	ug/L	675373.098
⌈	Ag	109	277.5017	0.46	1521.763	ug/L	64.667
⌊>	In	115			368246.704	ug/L	366655.658
⌈	Pb	206	10070.8615	1.41	16623.167	ug/L	128.669
|	Pb	207	9739.4832	1.72	13557.233	ug/L	114.335
⌊>	Bi	209			110897.893	ug/L	110790.527
	Hg	200			438.344	ug/L	32.000
	Pd	106			698.229	ug/L	233.417
	Kr	83			213.670	ug/L	137.335
	Ti	48			1555163.411	ug/L	-148.271
	Ca	44			2726376.040	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		120.414		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		104.961		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		100.434		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		103.318		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		120.414		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		103.791		
⌈	Ag	109				
⌊>	In	115		100.434		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		100.097		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range – NR

Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)
Fe 57 Upper	Fe	57	Fe over linear range
Ni 60 Upper	Ni	60	Ni above linear range
Ba 135 Upper	Ba	135	Ba above linear range
Sc 45 Int Std for sampl	Sc	45	QC I(nt Std out of limits (30-120%)

OK
Rec = 120%
2-4-99
DBR

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAG

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:43:23
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAG.063
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 71
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 0.1
Diluted To Volume (mL): 1e+001 100 ×

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			63056.179	~~ug/L~~ ng/kg	63856.071
⌈	Be	9	69.4754	445.72	5.000	ug/L	4.667
|	Al	27	1267327.7834	2.07	203117.737	ug/L	2373.555
|>	Sc	45			253251.600	ug/L	256004.117
|	V	51	4703.8397	5.84	5028.797	ug/L	3104.630
|	Cr	52	12233.6621	6.68	16750.986	ug/L	12446.881
|	Mn	55	1010447.6293	5.52	584083.262	ug/L	1827.802
|	Fe	57	160681840.9760	2.91	1905070.008	ug/L	34554.064
|	Co	59	3982.0984	2.36	1975.156	ug/L	153.669
|	Ni	60	12135.4511	5.32	1370.256	ug/L	181.178
⌊	Cu	65	993072.6796	1.66	104168.427	ug/L	537.104
⌈>	Ge	72			497459.418	ug/L	487677.767
|	Zn	68	3147807.6988	1.60	124094.608	ug/L	598.019
|	As	75	353118.9398	2.22	29234.948	ug/L	-199.313
⌊	Se	82	8926.8739	33.11	82.500	ug/L	14.139
	Y	89			323936.877	ug/L	323983.364
⌈	Mo	97	2417.1903	10.65	264.672	ug/L	51.001
|	Ag	107	17143.2289	2.57	5120.970	ug/L	85.001
|>	In	115			359690.147	ug/L	366655.658
|	Cd	111	19926.3170	0.61	1432.890	ug/L	19.565
|	Sn	117	-48.5037	440.29	223.671	ug/L	231.004
|	Sb	121	4852.7195	2.73	1569.769	ug/L	443.011
⌊	Ba	135	715.4639	17.56	53.667	ug/L	19.667
	Tb	159			206144.784	ug/L	211603.416
⌈>	Ho	165			185018.938	ug/L	189623.197
|	Tl	205	5582.2434	1.24	1413.417	ug/L	38.334
|	Pb	208	2380304.4002	0.99	767175.651	ug/L	505.675
⌊	U	238	1767.2934	11.51	519.681	ug/L	92.335

	Bi	209			112939.828	ug/L	110790.527
⌈>	Sc	45			253251.600	ug/L	256004.117
|	Cr	50	55053.1513	7.85	1254.435	ug/L	366.029
L	Cr	53	6143.5922	12.33	1587.437	ug/L	1331.409
⌈	Ni	61	51254.7934	24.54	1542.099	ug/L	1279.070
|	Cu	63	967426.3604	2.57	224666.329	ug/L	940.707
|	Br	79			634.354	ug/L	770.695
L>	Ge	74			694303.820	ug/L	675373.098
⌈	Ag	109	17160.0372	2.32	4745.503	ug/L	64.667
L>	In	115			359690.147	ug/L	366655.658
⌈	Pb	206	2218238.4119	1.73	196927.443	ug/L	128.669
|	Pb	207	2285437.9335	1.26	170995.022	ug/L	114.335
L>	Bi	209			112939.828	ug/L	110790.527
	Hg	200			44.334	ug/L	32.000
	Pd	106			243.360	ug/L	233.417
	Kr	83			134.335	ug/L	137.335
	Ti	48			29870.129	ug/L	-148.271
	Ca	44			286256.706	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		98.925		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		102.006		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		98.100		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		97.572		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		98.925		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		102.803		
⌈	Ag	109				
⌊>	In	115		98.100		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		101.940		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NL

Mn 55 Upper	Mn	55	Mn above linear range – ok
Fe 57 Upper	Fe	57	Fe over linear range
Cu 65 Upper	Cu	65	Cu above linear range } NR
Zn 68 Upper	Zn	68	Zn above linear range
As 75 Upper	As	75	As above linear range } ok
Pb 208 Upper	Pb	208	Pb above linear range

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAH

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:47:51
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAH.064
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 72
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 0.1
Diluted To Volume (mL): 1e+001 100×

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			63961.870	~~ug/L~~ µg/kg	63856.071
⌜	Be	9	424.1306	230.23	7.000	ug/L	4.667
|	Al	27	22097147.8395	1.83	3563374.410	ug/L	2373.555
|>	Sc	45			257607.768	ug/L	256004.117
|	V	51	24503.0633	0.94	13501.213	ug/L	3104.630
|	Cr	52	39000.1484	0.51	26925.292	ug/L	12446.881
|	Mn	55	340911.9547	0.49	201855.649	ug/L	1827.802
|	Fe	57	6585340.2941	2.51	112790.648	ug/L	34554.064
|	Co	59	17239.1004	0.97	8187.429	ug/L	153.669
|	Ni	60	16987.8915	3.64	1878.751	ug/L	181.178
⌞	Cu	65	221067.9733	1.22	24011.108	ug/L	537.104
⌜>	Ge	72			503277.477	ug/L	487677.767
|	Zn	68	16420944.3237	1.69	652312.527	ug/L	598.019
|	As	75	63423.0142	3.29	5143.515	ug/L	-199.313
⌞	Se	82	4445.7215	41.18	49.071	ug/L	14.139
	Y	89			346722.869	ug/L	323983.364
⌜	Mo	97	15547.4871	3.10	1452.088	ug/L	51.001
|	Ag	107	1572.0723	3.38	553.016	ug/L	85.001
|>	In	115			364722.095	ug/L	366655.658
|	Cd	111	370352.1170	0.50	26660.559	ug/L	19.565
|	Sn	117	140970.7035	1.31	9266.430	ug/L	231.004
|	Sb	121	61029.2247	1.08	14913.932	ug/L	443.011
⌞	Ba	135	58800.5210	0.85	2890.321	ug/L	19.667
	Tb	159			212025.417	ug/L	211603.416
⌜>	Ho	165			191322.962	ug/L	189623.197
|	Tl	205	559.8572	4.16	181.336	ug/L	38.334
|	Pb	208	2901066.0602	0.83	966727.164	ug/L	505.675
⌞	U	238	399.7009	8.17	193.670	ug/L	92.335

	Bi	209			111441.478	ug/L	110790.527
⌈>	Sc	45			257607.768	ug/L	256004.117
|	Cr	50	503995.0980	2.65	8687.745	ug/L	366.029
L	Cr	53	32232.1808	6.26	2782.632	ug/L	1331.409
⌈	Ni	61	61592.7229	2.83	1603.439	ug/L	1279.070
|	Cu	63	218462.2898	2.01	51988.958	ug/L	940.707
|	Br	79			1102.720	ug/L	770.695
L>	Ge	74			701092.496	ug/L	675373.098
⌈	Ag	109	1548.6607	6.24	493.013	ug/L	64.667
L>	In	115			364722.095	ug/L	366655.658
⌈	Pb	206	2954480.3022	1.93	258743.501	ug/L	128.669
|	Pb	207	2826777.6620	1.83	208645.064	ug/L	114.335
L>	Bi	209			111441.478	ug/L	110790.527
	Hg	200			36.334	ug/L	32.000
	Pd	106			421.837	ug/L	233.417
	Kr	83			145.336	ug/L	137.335
	Ti	48			574234.526	ug/L	-148.271
	Ca	44			456046.553	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		100.626		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		103.199		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		99.473		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		100.896		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		100.626		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		103.808		
⌈	Ag	109				
⌊>	In	115		99.473		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		100.588		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NF

Cu 65 Upper	Cu	65	Cu above linear range
Zn 68 Upper	Zn	68	Zn above linear range
Cd 111 Upper	Cd	111	Cd above linear range
Pb 208 Upper	Pb	208	Pb above linear range

NR

OK

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: CPXAJ

Sample Description: D9A130190 Soils
Batch ID: 9019177
Sample Date/Time: Thursday, February 04, 1999 13:52:21
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\CPXAJ.065
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 73
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 0.1
Diluted To Volume (mL): 1e+001 100x

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65161.266	~~ug/L~~ ug/kg	63856.071
⌈	Be	9	616.7447	146.62	8.000	ug/L	4.667
|	Al	27	2954693.0939	1.53	474202.189	ug/L	2373.555
|>	Sc	45			255261.426	ug/L	256004.117
|	V	51	2419.6697	32.82	4106.972	ug/L	3104.630
|	Cr	52	39566.5923	5.59	26874.524	ug/L	12446.881
|	Mn	55	159331.7994	3.01	94408.914	ug/L	1827.802
|	Fe	57	19774348.0676	4.22	266482.025	ug/L	34554.064
|	Co	59	8013.8430	5.62	3849.891	ug/L	153.669
|	Ni	60	5043.0729	10.76	679.030	ug/L	181.178
⌊	Cu	65	4713150.9334	2.80	496247.790	ug/L	537.104
⌈>	Ge	72			493712.119	ug/L	487677.767
|	Zn	68	23453329.2580	1.03	913649.448	ug/L	598.019
|	As	75	10027.2147	2.88	627.659	ug/L	-199.313
⌊	Se	82	554.2199	271.17	18.334	ug/L	14.139
	Y	89			324469.749	ug/L	323983.364
⌈	Mo	97	2418.4027	6.61	270.339	ug/L	51.001
|	Ag	107	8637.2673	1.49	2673.610	ug/L	85.001
|>	In	115			366907.339	ug/L	366655.658
|	Cd	111	25848.2152	4.18	1889.603	ug/L	19.565
|	Sn	117	934.5278	28.65	291.339	ug/L	231.004
|	Sb	121	-879.5468	20.40	233.338	ug/L	443.011
⌊	Ba	135	18422.7414	1.81	924.372	ug/L	19.667
	Tb	159			213791.662	ug/L	211603.416
⌈>	Ho	165			192607.005	ug/L	189623.197
|	Tl	205	77.9907	18.98	59.001	ug/L	38.334
|	Pb	208	2149500.5135	1.86	721096.010	ug/L	505.675
⌊	U	238	20249.4010	1.80	5219.339	ug/L	92.335

	Bi	209			123187.760	ug/L	110790.527
┌>	Sc	45			255261.426	ug/L	256004.117
|	Cr	50	39384.7831	3.75	1008.841	ug/L	366.029
└	Cr	53	33143.7029	3.21	2797.969	ug/L	1331.409
┌	Ni	61	24938.6168	41.40	1408.417	ug/L	1279.070
|	Cu	63	4649885.0711	3.50	1063418.405	ug/L	940.707
|	Br	79			457.012	ug/L	770.695
└>	Ge	74			686391.757	ug/L	675373.098
┌	Ag	109	8701.1202	3.68	2486.241	ug/L	64.667
└>	In	115			366907.339	ug/L	366655.658
┌	Pb	206	1944531.7043	1.05	188329.991	ug/L	128.669
|	Pb	207	1940547.0942	0.19	158392.843	ug/L	114.335
└>	Bi	209			123187.760	ug/L	110790.527
	Hg	200			21.000	ug/L	32.000
	Pd	106			366.099	ug/L	233.417
	Kr	83			153.336	ug/L	137.335
	Ti	48			7142.109	ug/L	-148.271
	Ca	44			154157.735	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		99.710		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		101.237		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		100.069		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		101.574		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		99.710		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		101.631		
⌈	Ag	109				
⌊>	In	115		100.069		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		111.190		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Al 27 Upper	Al	27	Al above linear range - NR

Fe 57 Upper	Fe	57	Fe over linear range
Cu 65 Upper	Cu	65	Cu above linear range
Zn 68 Upper	Zn	68	Zn above linear range
Sb 121 Lower	Sb	121	
Pb 208 Upper	Pb	208	Pb above linear range — OK
U 238 Upper	U	238	U above linear range

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 3

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 13:57:07
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 3.066
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 0.1
Diluted To Volume (mL): 1e+001

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65114.417	ug/L	63856.071
⌜	Be	9	103.7544	0.91	5589.816	ug/L	4.667
|	Al	27	102.5587	0.57	168564.077	ug/L	2373.555
|>	Sc	45			258944.072	ug/L	256004.117
|	V	51	96.8213	3.51	415255.105	ug/L	3104.630
|	Cr	52	97.9450	3.37	376037.179	ug/L	12446.881
|	Mn	55	98.4049	2.42	582015.954	ug/L	1827.802
|	Fe	57	4959.2933	3.05	625465.004	ug/L	34554.064
|	Co	59	98.8924	3.38	463153.954	ug/L	153.669
|	Ni	60	99.0953	3.61	99668.244	ug/L	181.178
⌊	Cu	65	97.9504	2.89	105058.466	ug/L	537.104
⌜>	Ge	72			480892.162	ug/L	487677.767
|	Zn	68	101.9564	1.05	39259.604	ug/L	598.019
|	As	75	102.4399	1.04	82381.023	ug/L	-199.313
⌊	Se	82	102.8184	1.25	7618.596	ug/L	14.139
	Y	89			328040.787	ug/L	323983.364
⌜	Mo	97	102.3539	1.32	93526.130	ug/L	51.001
|	Ag	107	100.3964	0.26	303042.854	ug/L	85.001
|>	In	115			369469.887	ug/L	366655.658
|	Cd	111	99.8888	0.52	72812.390	ug/L	19.565
|	Sn	117	101.0815	0.89	65884.259	ug/L	231.004
|	Sb	121	100.8768	1.71	242808.905	ug/L	443.011
⌊	Ba	135	101.7348	0.90	50334.700	ug/L	19.667
	Tb	159			213127.344	ug/L	211603.416
⌜>	Ho	165			191962.764	ug/L	189623.197
|	Tl	205	99.1613	1.02	253647.665	ug/L	38.334
|	Pb	208	99.6183	0.50	333425.454	ug/L	505.675
⌊	U	238	100.0334	0.77	252455.397	ug/L	92.335

	Bi	209			110660.426	ug/L	110790.527
I>	Sc	45			258944.072	ug/L	256004.117
I	Cr	50	96.2458	1.30	16339.168	ug/L	366.029
I	Cr	53	96.9402	3.80	44970.812	ug/L	1331.409
I	Ni	61	101.7121	1.47	5685.855	ug/L	1279.070
I	Cu	63	101.1405	1.27	229332.150	ug/L	940.707
I	Br	79			435.678	ug/L	770.695
I>	Ge	74			677929.429	ug/L	675373.098
I	Ag	109	100.5600	0.31	281818.243	ug/L	64.667
I>	In	115			369469.887	ug/L	366655.658
I	Pb	206	100.0736	1.74	87113.338	ug/L	128.669
I	Pb	207	100.7361	1.41	73911.797	ug/L	114.335
I>	Bi	209			110660.426	ug/L	110790.527
	Hg	200			29.334	ug/L	32.000
	Pd	106			333.190	ug/L	233.417
	Kr	83			144.336	ug/L	137.335
	Ti	48			-1060.325	ug/L	-148.271
	Ca	44			26085.055	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9	103.754			
|	Al	27	102.559			
|>	Sc	45		101.148		
|	V	51	96.821			
|	Cr	52	97.945			
|	Mn	55	98.405			
|	Fe	57	99.186			
|	Co	59	98.892			
|	Ni	60	99.095			
⌊	Cu	65	97.950			
⌈>	Ge	72		98.609		
|	Zn	68	101.956			
|	As	75	102.440			
⌊	Se	82	102.818			
	Y	89				
⌈	Mo	97	102.354			
|	Ag	107	100.396			
|>	In	115		100.768		
|	Cd	111	99.889			
|	Sn	117	101.081			
|	Sb	121	100.877			
⌊	Ba	135	101.735			
	Tb	159				
⌈>	Ho	165		101.234		
|	Tl	205	99.161			
|	Pb	208	99.618			
⌊	U	238	100.033			
	Bi	209				
⌈>	Sc	45		101.148		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		100.379		
⌈	Ag	109				
⌊>	In	115		100.768		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		99.883		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 5

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 14:01:58
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 5.067
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 0.1
Diluted To Volume (mL): 1e+001

not used
2-4-99
DBR

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			65399.374	ug/L	63856.071
⌜	Be	9	0.0523	56.12	7.333	ug/L	4.667
|	Al	27	-0.2829	14.01	1890.811	ug/L	2373.555
|>	Sc	45			252059.421	ug/L	256004.117
|	V	51	0.1595	17.44	3717.866	ug/L	3104.630
|	Cr	52	0.3495	25.93	13518.198	ug/L	12446.881
|	Mn	55	-0.0141	72.29	1718.454	ug/L	1827.802
|	Fe	57	29.9933	20.87	37499.209	ug/L	34554.064
|	Co	59	0.0024	288.11	162.003	ug/L	153.669
|	Ni	60	0.0074	93.08	185.659	ug/L	181.178
⌊	Cu	65	-0.2151	8.04	305.294	ug/L	537.104
⌜>	Ge	72			486950.801	ug/L	487677.767
|	Zn	68	-1.0155	2.16	207.004	ug/L	598.019
|	As	75	-0.1459	78.82	-316.837	ug/L	-199.313
⌊	Se	82	0.0249	1318.86	15.786	ug/L	14.139
	Y	89			321362.779	ug/L	323983.364
⌜	Mo	97	0.0580	30.79	103.668	ug/L	51.001
|	Ag	107	0.0450	30.12	220.004	ug/L	85.001
|>	In	115			367007.162	ug/L	366655.658
|	Cd	111	-0.0015	507.42	18.460	ug/L	19.565
|	Sn	117	0.1584	78.29	333.341	ug/L	231.004
|	Sb	121	1.0092	38.12	2850.999	ug/L	443.011
⌊	Ba	135	0.0020	885.69	20.667	ug/L	19.667
	Tb	159			214055.899	ug/L	211603.416
⌜>	Ho	165			191655.316	ug/L	189623.197
|	Tl	205	0.0086	38.49	60.667	ug/L	38.334
|	Pb	208	-0.1005	5.27	175.669	ug/L	505.675
⌊	U	238	-0.0108	65.63	66.001	ug/L	92.335

	Bi	209			110887.831	ug/L	110790.527
⌈>	Sc	45			252059.421	ug/L	256004.117
|	Cr	50	-0.2084	48.60	326.764	ug/L	366.029
L	Cr	53	-0.2028	15.06	1222.064	ug/L	1331.409
⌈	Ni	61	0.0846	1842.02	1298.405	ug/L	1279.070
|	Cu	63	-0.2060	7.88	483.013	ug/L	940.707
|	Br	79			389.343	ug/L	770.695
⌊>	Ge	74			683899.113	ug/L	675373.098
⌈	Ag	109	0.0477	30.32	197.337	ug/L	64.667
⌊>	In	115			367007.162	ug/L	366655.658
⌈	Pb	206	-0.0969	15.97	44.334	ug/L	128.669
|	Pb	207	-0.1014	3.52	40.000	ug/L	114.335
⌊>	Bi	209			110887.831	ug/L	110790.527
	Hg	200			23.334	ug/L	32.000
	Pd	106			222.848	ug/L	233.417
	Kr	83			139.669	ug/L	137.335
	Ti	48			-1371.177	ug/L	-148.271
	Ca	44			25859.978	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		98.459		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		99.851		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		100.096		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb	159				
⌈>	Ho	165		101.072		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		98.459		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		101.262		
⌈	Ag	109				
⌊>	In	115		100.096		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		100.088		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Sb	121	CCB is out of limits (+/- RL)

Quanterra - Denver Elan 6000 ICPMS 1 Quantitative analysis Report

Sample ID: QC Std 5

Sample Description:
Batch ID:
Sample Date/Time: Thursday, February 04, 1999 14:06:35
Method File: c:\elandata\Method\6020_soil.mth
Dataset File: C:\elandata\Dataset\020499\QC Std 5.068
Tuning File: q_tune.tun
Optimization File: analog_9k.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg): 1e+003
Sample Prep Volume (mL): 1e+002
Aliquot Volume (mL): 0.1
Diluted To Volume (mL): 1e+001

Concentration Results

	Analyte	Mass	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	Li	6			66179.937	ug/L	63856.071
⌈	Be	9	0.0266	259.16	6.000	ug/L	4.667
|	Al	27	-0.3636	5.14	1764.793	ug/L	2373.555
|>	Sc	45			252215.477	ug/L	256004.117
|	V	51	0.1294	22.66	3594.211	ug/L	3104.630
|	Cr	52	0.3393	29.09	13485.497	ug/L	12446.881
|	Mn	55	-0.0245	7.35	1660.113	ug/L	1827.802
|	Fe	57	28.3409	15.68	37326.276	ug/L	34554.064
|	Co	59	-0.0001	2458.62	151.002	ug/L	153.669
|	Ni	60	-0.0022	622.32	176.295	ug/L	181.178
⌊	Cu	65	-0.2249	6.90	295.304	ug/L	537.104
⌈>	Ge	72			492696.035	ug/L	487677.767
|	Zn	68	-1.0538	4.30	194.670	ug/L	598.019
|	As	75	-0.0570	191.06	-248.585	ug/L	-199.313
⌊	Se	82	0.2238	44.86	31.267	ug/L	14.139
	Y	89			318734.095	ug/L	323983.364
⌈	Mo	97	0.0045	124.85	55.334	ug/L	51.001
|	Ag	107	0.0031	39.33	94.668	ug/L	85.001
|>	In	115			368123.005	ug/L	366655.658
|	Cd	111	-0.0079	64.96	13.889	ug/L	19.565
|	Sn	117	-0.1127	7.06	159.002	ug/L	231.004
|	Sb	121	0.2201	1.35	971.709	ug/L	443.011
⌊	Ba	135	-0.0103	82.32	14.667	ug/L	19.667
	Tb	159			218512.058	ug/L	211603.416
⌈>	Ho	165			194351.197	ug/L	189623.197
|	Tl	205	0.0003	877.98	40.000	ug/L	38.334
|	Pb	208	-0.1083	6.56	151.668	ug/L	505.675
⌊	U	238	-0.0282	6.34	22.667	ug/L	92.335

	Bi	209			110753.895	ug/L	110790.527
⌈>	Sc	45			252215.477	ug/L	256004.117
|	Cr	50	-0.3031	37.17	311.523	ug/L	366.029
⌊	Cr	53	-0.1715	67.96	1236.399	ug/L	1331.409
⌈	Ni	61	1.6081	64.95	1347.077	ug/L	1279.070
|	Cu	63	-0.2080	6.45	472.013	ug/L	940.707
|	Br	79			385.676	ug/L	770.695
⌊>	Ge	74			675076.494	ug/L	675373.098
⌈	Ag	109	0.0126	19.34	100.001	ug/L	64.667
⌊>	In	115			368123.005	ug/L	366655.658
⌈	Pb	206	-0.0953	7.51	45.667	ug/L	128.669
|	Pb	207	-0.1035	7.20	38.334	ug/L	114.335
⌊>	Bi	209			110753.895	ug/L	110790.527
	Hg	200			18.000	ug/L	32.000
	Pd	106			221.970	ug/L	233.417
	Kr	83			122.668	ug/L	137.335
	Ti	48			-1404.064	ug/L	-148.271
	Ca	44			25936.783	ug/L	27063.882

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Difference
	Li	6				
⌈	Be	9				
|	Al	27				
|>	Sc	45		98.520		
|	V	51				
|	Cr	52				
|	Mn	55				
|	Fe	57				
|	Co	59				
|	Ni	60				
⌊	Cu	65				
⌈>	Ge	72		101.029		
|	Zn	68				
|	As	75				
⌊	Se	82				
	Y	89				
⌈	Mo	97				
|	Ag	107				
|>	In	115		100.400		
|	Cd	111				
|	Sn	117				
|	Sb	121				
⌊	Ba	135				
	Tb*	159				
⌈>	Ho	165		102.493		
|	Tl	205				
|	Pb	208				
⌊	U	238				
	Bi	209				
⌈>	Sc	45		98.520		
|	Cr	50				
⌊	Cr	53				
⌈	Ni	61				
|	Cu	63				
|	Br	79				
⌊>	Ge	74		99.956		
⌈	Ag	109				
⌊>	In	115		100.400		
⌈	Pb	206				
|	Pb	207				
⌊>	Bi	209		99.967		
	Hg	200				
	Pd	106				
	Kr	83				
	Ti	48				
	Ca	44				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Quanterra Incorporated
4955 Yarrow Street
Arvada, Colorado 80002

303 421-6611 Telephone
303 431-7171 Fax

ANALYTICAL REPORT

I-70 & Vasquez Project

Lot #: D8J280164

Gerald Almquist

Roy F. Weston

QUANTERRA INCORPORATED

Ellen La Riviere
Project Manager

December 7, 1998

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Project Narrative

Standard analytical protocols were followed in the analyses of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within acceptable limits.

SAMPLE SUMMARY

D8J280164

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
CMVVF	001	D3825AD-I	10/06/98	04:35
CMVVL	002	D3825AD-5	10/06/98	04:40
CMVVM	003	D4691VI-I	10/06/98	06:52
CMVVV	004	D4691VI-5	10/06/98	07:00
CMVVX	005	D5195SS-I	10/06/98	07:00
CMVW2	006	D5195SS-5	10/06/98	07:05
CMVW3	007	D4641CY-I	10/07/98	14:30
CMVW7	008	D4641CY-5	10/07/98	14:35
CMVW8	009	D4690CY-I	10/07/98	04:30
CMVWC	010	D4690CY-5	10/07/98	04:35
CMVWF	011	D4771VI-I	10/08/98	09:45
CMVWM	012	D4771VI-5	10/08/98	09:50
CMVWQ	013	D4850AD-I	10/08/98	14:15
CMVX1	014	D4850AD-5	10/08/98	14:20
CMVX7	015	D3818MA-I	10/08/98	07:00
CMVXD	016	D3818MA-5	10/08/98	07:05
CMVXE	017	D4044ST-I	10/08/98	07:00
CMVXG	018	D4044ST-5	10/08/98	07:10
CMVXJ	019	D4936ST-I	10/08/98	10:00
CMVXL	020	D4936ST-5	10/08/98	10:05
CMVXM	021	D4715ST-I	10/13/98	07:00
CMVXR	022	D4715ST-5	10/13/98	07:10
CMW00	023	D4940STEELE-I	10/13/98	07:00
CMW02	024	D4940STEELE-5	10/13/98	07:10
CMW06	025	D4980STEELE-I	10/13/98	07:00
CMW08	026	D4980STEELE-5	10/13/98	07:10
CMW09	027	3818 MADISON MINT	10/07/98	
CMW1X	028	3818 MADISON POTATO	10/07/98	
CMW23	029	3818 MADISON SOIL	10/07/98	
CMW26	030	4715 ST PAUL CT. SOIL	10/07/98	

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- *This report must not be reproduced, except in full, without the written approval of the laboratory.*
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

SDG SAMPLE SUMMARY REPORT

D8J280164

WESTON, ROY F. 00107801

LOT-SAMPLE #	QC	RECEIPT DATE	CLIENT SAMPLE ID
D8K030000-276	L	10/22/98	DUPLICATE CHECK
D8K030194-003	D	11/03/98	LAB MS/MSD
D8K030194-003	S	11/03/98	LAB MS/MSD
D8K040207-001	D	11/04/98	LAB MS/MSD
D8K040207-001	S	11/04/98	LAB MS/MSD
D8K050000-233	L	10/22/98	DUPLICATE CHECK
D8K060000-203	L	10/22/98	DUPLICATE CHECK
D8K170000-228	L	11/03/98	DUPLICATE CHECK
D8K170000-237	L	11/04/98	DUPLICATE CHECK

Quanterra, Inc.

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
D3818MA-5	CMVXD
D3818MA-I	CMVX7
D3825AD-1	CMVVF
D3825AD-5	CMVVL
D4044ST-5	CMVXG
D4044ST-I	CMVXE
D4641CY-5	CMVW7
D4641CY-I	CMVW3
D4690CY-5	CMVWC
D4690CY-I	CMVW8
D4691VI-1	CMVVM
D4691VI-5	CMVVV
D4771VI-5	CMVWM
D4771VI-I	CMVWF
D4850AD-5	CMVX1
D4850AD-I	CMVWQ
D4936ST-5	CMVXL
D4936ST-I	CMVXJ
D5195SS-5	CMVW2
D5195SS-I	CMVVX

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: R.M. Persichitte Name: R.M. Persichitte

Date: 12-2-98 Title: Data Review Assc.

Cover Page Equivalent

Quanterra, Inc.

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
D4715ST-5	CMVXR
D4715ST-I	CMVXM
D4940STEELE-I	CMW00
D4940STELLE-5	CMW02

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: R.M. Persichitte Name: R.M. Persichitte

Date: 12-2-98 Title: Data Review Assc.

Cover Page Equivalent

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Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
3818 Madison Mint	CMW09
3818 Madison Potato	CMW1X
3818 Madison Soil	CMW23
4715 St Paul Ct. Soil	CMW26

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: R.M. Peerschitte Name: R.M. Peerschitte

Date: 12-2-98 Title: Data Review Assc.

Cover Page Equivalent

WESTON, ROY F.

Client Sample ID: D3825AD-I

TOTAL Metals

Lot-Sample #...: D8J280164-001 Matrix.....: WATER
Date Sampled...: 10/06/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVVF101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D3825AD-5

TOTAL Metals

Lot-Sample #...: D8J280164-002 Matrix.....: WATER
Date Sampled...: 10/06/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8321237						
Lead	ND	3.0	ug/L	SW846 6010B	11/17-11/19/98	CMVVL201

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4691VI-I

TOTAL Metals

Lot-Sample #...: D8J280164-003 Matrix.....: WATER
Date Sampled...: 10/06/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVVM101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4691VI-5

TOTAL Metals

Lot-Sample #...: D8J280164-004 Matrix.....: WATER
Date Sampled...: 10/06/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	4.3	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVVV101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D5195SS-I

TOTAL Metals

Lot-Sample #...: D8J280164-005 Matrix.....: WATER
Date Sampled...: 10/06/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVVX101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D5195SS-5

TOTAL Metals

Lot-Sample #...: D8J280164-006 Matrix.....: WATER
Date Sampled...: 10/06/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVW2101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4641CY-I

TOTAL Metals

Lot-Sample #...: D8J280164-007 Matrix.....: WATER
Date Sampled...: 10/07/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVW3101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4641CY-5

TOTAL Metals

Lot-Sample #...: D8J280164-008 Matrix.....: WATER
Date Sampled...: 10/07/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVW7101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4690CY-I

TOTAL Metals

Lot-Sample #...: D8J280164-009 Matrix.....: WATER
Date Sampled...: 10/07/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	3.1	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVW8101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4690CY-5

TOTAL Metals

Lot-Sample #...: D8J280164-010 Matrix.....: WATER
Date Sampled...: 10/07/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVWC101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4771VI-I

TOTAL Metals

Lot-Sample #...: D8J280164-011 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	11.4	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVWF101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4771VI-5

TOTAL Metals

Lot-Sample #...: D8J280164-012 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	6.0	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVWM101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4850AD-I

TOTAL Metals

Lot-Sample #...: D8J280164-013 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	5.4	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVWQ101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4850AD-5

TOTAL Metals

Lot-Sample #...: D8J280164-014 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	5.9	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVX1101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D3818MA-I

TOTAL Metals

Lot-Sample #...: D8J280164-015 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVX7101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D3818MA-5

TOTAL Metals

Lot-Sample #...: D8J280164-016 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVXD101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4044ST-I

TOTAL Metals

Lot-Sample #...: D8J280164-017 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVXE101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4044ST-5

TOTAL Metals

Lot-Sample #...: D8J280164-018 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVXG101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4936ST-I

TOTAL Metals

Lot-Sample #...: D8J280164-019 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVXJ101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4936ST-5

TOTAL Metals

Lot-Sample #...: D8J280164-020 Matrix.....: WATER
Date Sampled...: 10/08/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CMVXL101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4715ST-I

TOTAL Metals

Lot-Sample #...: D8J280164-021 Matrix.....: WATER
Date Sampled...: 10/13/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8310203						
Lead	4.5	3.0	ug/L	SW846 6010B	11/09-11/10/98	CMVXM101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4715ST-5

TOTAL Metals

Lot-Sample #...: D8J280164-022 Matrix.....: WATER
Date Sampled...: 10/13/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8310203						
Lead	ND	3.0	ug/L	SW846 6010B	11/09-11/10/98	CMVXR101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4940STEELE-I

TOTAL Metals

Lot-Sample #...: D8J280164-023 Matrix.....: WATER
Date Sampled...: 10/13/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8310203						
Lead	3.1	3.0	ug/L	SW846 6010B	11/09-11/10/98	CMW00101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4940STEELE-5

TOTAL Metals

Lot-Sample #...: D8J280164-024 Matrix.....: WATER
Date Sampled...: 10/13/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8310203						
Lead	ND	3.0	ug/L	SW846 6010B	11/09-11/10/98	CMW02101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4980STEELE-I

TOTAL Metals

Lot-Sample #...: D8J280164-025 Matrix.....: WATER
Date Sampled...: 10/13/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8310203						
Lead	ND	3.0	ug/L	SW846 6010B	11/09-11/10/98	CMW06101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: D4980STEELE-5

TOTAL Metals

Lot-Sample #...: D8J280164-026 Matrix.....: WATER
Date Sampled...: 10/13/98 Date Received..: 10/22/98

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8310203						
Lead	ND	3.0	ug/L	SW846 6010B	11/09-11/10/98	CMW08101

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: 3818 MADISON MINT

TOTAL Metals

Lot-Sample #...: D8J280164-027 Matrix.....: SOLID
Date Sampled...: 10/07/98 Date Received..: 10/22/98
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8307276						
Arsenic	ND	1.0	mg/kg	SW846 6010B	11/04-11/09/98	CMW09101
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/04-11/09/98	CMW09102
Lead	ND	5.0	mg/kg	SW846 6010B	11/04-11/09/98	CMW09103
Zinc	15.5	2.0	mg/kg	SW846 6010B	11/04-11/09/98	CMW09104

FORM 1
Equivalent

WESTON, ROY F.

Client Sample ID: 3818 MADISON POTATO

TOTAL Metals

Lot-Sample #...: D8J280164-028 Matrix.....: SOLID
Date Sampled...: 10/07/98 Date Received..: 10/22/98
% Moisture.....:

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8307276						
Arsenic	ND	1.0	mg/kg	SW846 6010B	11/04-11/09/98	CMW1X101
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/04-11/09/98	CMW1X102
Lead	ND	5.0	mg/kg	SW846 6010B	11/04-11/09/98	CMW1X103
Zinc	4.3	2.0	mg/kg	SW846 6010B	11/04-11/09/98	CMW1X104

FORM I
Equivalent

WESTON, ROY F.

Client Sample ID: 3818 MADISON SOIL

TOTAL Metals

Lot-Sample #...: D8J280164-029 Matrix.....: SOLID
Date Sampled...: 10/07/98 Date Received..: 10/22/98
% Moisture.....: 8.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8321228						
Arsenic	4.3	1.1	mg/kg	SW846 6010B	11/17-11/24/98	CMW23201
Cadmium	ND	0.54	mg/kg	SW846 6010B	11/17-11/24/98	CMW23202
Lead	40.3	5.4	mg/kg	SW846 6010B	11/17-11/24/98	CMW23203
Zinc	62.9	2.2	mg/kg	SW846 6010B	11/17-11/24/98	CMW23204

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

WESTON, ROY F.

Client Sample ID: 4715 ST PAUL CT. SOIL

TOTAL Metals

Lot-Sample #...: D8J280164-030 Matrix.....: SOLID
Date Sampled...: 10/07/98 Date Received..: 10/22/98
% Moisture.....: 3.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 8307276						
Arsenic	9.6	1.0	mg/kg	SW846 6010B	11/04-11/09/98	CMW26101
Cadmium	1.4	0.52	mg/kg	SW846 6010B	11/04-11/09/98	CMW26102
Lead	81.7	0.31	mg/kg	SW846 6010B	11/04-11/09/98	CMW26103
Zinc	137	2.1	mg/kg	SW846 6010B	11/04-11/09/98	CMW26104

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICP Trace

Units: ppb

Chart Number: 11091.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICV 11/9/98 8:21 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Lead	220.353	500	478.86	95.8								

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST

Units: ug/L

Chart Number: 1109w.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICV 11/9/98 10:22 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	500	489.74	**97.9**								
Cadmium	226.502	500	512.11	**102.4**								
Lead	220.353	500	509.88	**102.0**								
Zinc	206.2	500	515.58	**103.1**								

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST

Units: ug/L

Chart Number: 1110w2.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICV 11/10/98 8:29 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	500	475.44	**95.1**								
Cadmium	226.502	500	493.89	**98.8**								
Lead	220.353	500	494.68	**98.9**								
Zinc	206.2	500	486.05	**97.2**								

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST

Units: ug/L

Chart Number: 1119o1.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICV 11/19/98 10:12 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	500	488.55	**97.7**								
Cadmium	226.502	500	508.18	**101.6**								
Lead	220.353	500	503.91	**100.8**								
Zinc	206.2	500	503.13	**100.6**								

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST

Units: ug/L

Chart Number: 981124w.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICV 11/24/98 9:11 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	500	482.77	**96.6**								
Cadmium	226.502	500	497.53	**99.5**								
Lead	220.353	500	493.32	**98.7**								
Zinc	206.2	500	492.97	**98.6**								

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICP Trace

Units: ppb

Chart Number: 1109l.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CCV1 11/9/98 8:43 AM		CCV2 11/9/98 10:13 AM		CCV3 11/9/98 11:07 AM		CCV4 11/9/98 11:43 AM			
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Lead	220.353	500	492.78	**98.6**	493.11	**98.6**	504.27	**100.9**	489.75	**98.0**		

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: 1109w.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CCV1 11/9/98 10:50 AM Found	% Rec	CCV2 11/9/98 11:53 AM Found	% Rec	CCV3 11/9/98 1:05 PM Found	% Rec	CCV4 11/9/98 2:04 PM Found	% Rec	CCV5 11/9/98 2:47 PM Found	% Rec
Arsenic	189.042	1000	997.41	**99.7**	999.94	**100.0**	981.85	**98.2**	959.24	**95.9**	973.59	**97.4**
Cadmium	226.502	500	511.01	**102.2**	511.17	**102.2**	500.5	**100.1**	486.1	**97.2**	497.24	**99.4**
Lead	220.353	500	503.57	**100.7**	511.08	**102.2**	499.49	**99.9**	498.15	**99.6**	509.61	**101.9**
Zinc	206.2	500	517.12	**103.4**	510	**102.0**	492.03	**98.4**	468.66	**93.7**	485.49	**97.1**

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: 1109w.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CCV6 11/9/98 3:40 PM Found	% Rec	CCV7 11/9/98 4:32 PM Found	% Rec	CCV8 11/9/98 5:38 PM Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	970.19	**97.0**	985.04	**98.5**	1007	**100.7**				
Cadmium	226.502	500	490.77	**98.2**	498.91	**99.8**	509.4	**101.9**				
Lead	220.353	500	489.14	**97.8**	495.12	**99.0**	515.7	**103.1**				
Zinc	206.2	500	475.62	**95.1**	486.06	**97.2**	512.25	**102.5**				

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: 1110w2.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CCV1 11/10/98 9:09 AM Found	% Rec	CCV2 11/10/98 10:10 AM Found	% Rec	CCV3 11/10/98 10:58 AM Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	995.35	**99.5**	986.05	**98.6**	995.59	**99.6**				
Cadmium	226.502	500	516.63	**103.3**	511.39	**102.3**	519.02	**103.8**				
Lead	220.353	500	515.15	**103.0**	500.92	**100.2**	512.8	**102.6**				
Zinc	206.2	500	522.96	**104.6**	507.37	**101.5**	516.16	**103.2**				

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: 1119o1.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CCV1 11/19/98 10:37 PM Found	% Rec	CCV2 11/19/98 11:36 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	957.62	**95.8**	975.84	**97.6**						
Cadmium	226.502	500	487.91	**97.6**	504.84	**101.0**						
Lead	220.353	500	482.38	**96.5**	498.41	**99.7**						
Zinc	206.2	500	476.19	**95.2**	501.54	**100.3**						

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: 981124w.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CCV1 11/24/98 9:33 AM		CCV2 11/24/98 10:29 AM		CCV3 11/24/98 11:18 AM		CCV4 11/24/98 11:50 AM		CCV5 11/24/98 12:22 PM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	960.09	**96.0**	935.12	**93.5**	933.03	**93.3**	917.62	**91.8**	918.88	**91.9**
Cadmium	226.502	500	490.14	**98.0**	484.46	**96.9**	484.15	**96.8**	473.95	**94.8**	473.5	**94.7**
Lead	220.353	500	483.5	**96.7**	473.15	**94.6**	470.51	**94.1**	461.93	**92.4**	461.82	**92.4**
Zinc	206.2	500	483.02	**96.6**	472.65	**94.5**	473.01	**94.6**	458.05	**91.6**	458.2	**91.6**

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: 981124w.arc

Acceptable Range: 90% - 110%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CCV6 11/24/98 1:09 PM Found	% Rec	CCV7 11/24/98 2:04 PM Found	% Rec	CCV8 11/24/98 2:53 PM Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	919.7	92.0	937.45	93.7	955.2	95.5				
Cadmium	226.502	500	479.02	95.8	486.03	97.2	493.34	98.7				
Lead	220.353	500	464.05	92.8	474.77	95.0	482.6	96.5				
Zinc	206.2	500	471.86	94.4	477.54	95.5	483.63	96.7				

Quanterra, Inc.

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICP Trace

Units: ppb

Chart Number: 1109l.arc

Acceptable Range: 50% - 150%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CRI 11/9/98 8:30 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Lead	220.353	6	4.7	**78.3**								

Quanterra, Inc.

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST

Units: ug/L

Chart Number: 1109w.arc

Acceptable Range: 50% - 150%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CRI 11/9/98 10:35 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	20	18.59	**93.0**								
Cadmium	226.502	10	10.35	**103.5**								
Lead	220.353	6	7.37	**122.8**								
Zinc	206.2	40	43.2	**108.0**								

Quanterra, Inc.

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST

Units: ug/L

Chart Number: 1110w2.arc

Acceptable Range: 50% - 150%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CRI 11/10/98 8:38 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	20	17.03	**85.2**								
Cadmium	226.502	10	9.85	**98.5**								
Lead	220.353	6	3.96	**66.0**								
Zinc	206.2	40	39.25	**98.1**								

Quanterra, Inc.

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST

Units: ug/L

Chart Number: 1119o1.arc

Acceptable Range: 50% - 150%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CRI 11/19/98 10:25 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	20	18.89	**94.5**								
Cadmium	226.502	10	10.01	**100.1**								
Lead	220.353	6	5.29	**88.2**								
Zinc	206.2	40	38.36	**95.9**								

Quanterra, Inc.

Metals Data Reporting Form

Contract Required Detection Limit Standard

Instrument: ICPST

Units: ug/L

Chart Number: 981124w.arc

Acceptable Range: 50% - 150%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	CRI 11/24/98 9:20 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	20	18.37	**91.9**								
Cadmium	226.502	10	10.1	**101.0**								
Lead	220.353	6	5.27	**87.8**								
Zinc	206.2	40	39.24	**98.1**								

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICP Trace **Units:** ppb

Chart Number: 1109l.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	ICB 11/9/98 8:26 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Lead	220.353	3	1.8	U								

B Result is between CRDL and IDL

U Result is less than the IDL

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 1109w.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	ICB 11/9/98 10:31 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**								
Cadmium	226.502	5	0.5	U								
Lead	220.353	3	1.6	U								
Zinc	206.2	20	1.5	U								

B Result is between CRDL and IDL

U Result is less than the IDL

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 1110w2.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	ICB 11/10/98 8:33 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**								
Cadmium	226.502	5	0.5	U								
Lead	220.353	3	1.6	U								
Zinc	206.2	20	1.5	U								

Report Generator Version 1.40

B Result is between CRDL and IDL
U Result is less than the IDL

Form 3 Equivalent

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 1119o1.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	ICB 11/19/98 10:21 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**								
Cadmium	226.502	5	0.5	U								
Lead	220.353	3	1.6	U								
Zinc	206.2	20	1.5	U								

B Result is between CRDL and IDL

U Result is less than the IDL

Quanterra, Inc.

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 981124w.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	ICB 11/24/98 9:16 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**								
Cadmium	226.502	5	0.5	U								
Lead	220.353	3	1.6	U								
Zinc	206.2	20	1.5	U								

Report Generator Version 1.40

B Result is between CRDL and IDL

U Result is less than the IDL

Form 3 Equivalent

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP Trace **Units:** ppb

Chart Number: 1109l.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	CCB1 11/9/98 8:48 AM Found	Q	CCB2 11/9/98 10:19 AM Found	Q	CCB3 11/9/98 11:12 AM Found	Q	CCB4 11/9/98 11:48 AM Found	Q	Found	Q
Lead	220.353	3	1.8	U	1.8	U	1.8	U	1.8	U		

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 1109w.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	CCB1 11/9/98 10:58 AM		CCB2 11/9/98 11:59 AM		CCB3 11/9/98 1:10 PM		CCB4 11/9/98 2:09 PM		CCB5 11/9/98 2:51 PM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**
Cadmium	226.502	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	220.353	3	1.6	U	1.6	U	1.6	U	1.6	B	1.6	U
Zinc	206.2	20	**4.9**	**B**	**6.6**	**B**	**5.3**	**B**	**6.5**	**B**	1.5	U

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 1109w.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	CCB6 11/9/98 3:46 PM Found	Q	CCB7 11/9/98 4:38 PM Found	Q	CCB8 11/9/98 5:45 PM Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**				
Cadmium	226.502	5	0.5	U	0.5	U	0.5	U				
Lead	220.353	3	1.6	U	1.6	B	1.6	U				
Zinc	206.2	20	1.5	U	1.5	U	1.5	U				

B Result is between CRDL and IDL

U Result is less than the IDL

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 1110w2.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	CCB1 11/10/98 9:13 AM Found	Q	CCB2 11/10/98 10:15 AM Found	Q	CCB3 11/10/98 11:07 AM Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**				
Cadmium	226.502	5	0.5	U	0.5	U	0.5	U				
Lead	220.353	3	1.6	U	1.6	U	1.6	U				
Zinc	206.2	20	1.5	U	1.5	U	1.5	U				

B Result is between CRDL and IDL
U Result is less than the IDL

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 111901.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	CCB1 11/19/98 10:43 PM Found	Q	CCB2 11/19/98 11:41 PM Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**	**1.6**	**U**						
Cadmium	226.502	5	0.5	U	0.5	U						
Lead	220.353	3	1.6	U	1.6	U						
Zinc	206.2	20	1.5	U	1.5	U						

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 981124w.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	CCB1 11/24/98 9:38 AM		CCB2 11/24/98 10:33 AM		CCB3 11/24/98 11:22 AM		CCB4 11/24/98 11:55 AM		CCB5 11/24/98 12:26 PM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**
Cadmium	226.502	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	220.353	3	1.6	U	1.6	U	1.6	U	1.6	U	1.6	U
Zinc	206.2	20	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U

Quanterra, Inc.

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: 981124w.arc

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	CCB5 11/24/98 12:39 PM		CCB6 11/24/98 1:18 PM		CCB7 11/24/98 2:08 PM		CCB8 11/24/98 2:57 PM			
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**	**1.6**	**U**		
Cadmium	226.502	5	0.5	U	0.5	U	0.5	U	0.5	U		
Lead	220.353	3	1.6	U	1.6	U	1.6	U	1.6	U		
Zinc	206.2	20	1.5	U	1.5	U	1.5	U	1.5	U		

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D8K170000-228 **Prep Batch #...:** 8321228						
Arsenic	ND	1.0	mg/kg	SW846 6010B	11/17-11/24/98	CNHGG10J
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/17-11/24/98	CNHGG103
Lead	ND	5.0	mg/kg	SW846 6010B	11/17-11/24/98	CNHGG12A
Zinc	ND	2.0	mg/kg	SW846 6010B	11/17-11/24/98	CNHGG10H
MB Lot-Sample #: D8K030000-276 **Prep Batch #...:** 8307276						
Arsenic	ND	1.0	mg/kg	SW846 6010B	11/04-11/09/98	CN3DN101
Cadmium	ND	0.50	mg/kg	SW846 6010B	11/04-11/09/98	CN3DN102
Lead	ND	0.30	mg/kg	SW846 6010B	11/04-11/09/98	CN3DN103
Zinc	ND	2.0	mg/kg	SW846 6010B	11/04-11/09/98	CN3DN104

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 3
Equivalent

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D8K170000-237 **Prep Batch #...:** 8321237						
Lead	ND	3.0	ug/L	SW846 6010B	11/17-11/19/98	CNHJN10E
MB Lot-Sample #: D8K050000-233 **Prep Batch #...:** 8309233						
Lead	ND	3.0	ug/L	SW846 6010B	11/05-11/09/98	CN5ED101
MB Lot-Sample #: D8K060000-203 **Prep Batch #...:** 8310203						
Lead	ND	3.0	ug/L	SW846 6010B	11/09-11/10/98	CN704101

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICP Trace

Units: ppb

Chart Number: 11091.arc

Acceptable Range:

Standard Source:

Standard ID:

Element	WL/ Mass	Report Limit	True Conc	ICSA 11/9/98 8:34 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215		500000	478000									
Calcium	317.933		500000	487000									
Iron	271.441		200000	195000									
Lead	220.353	3		- 1.8	U								
Magnesium	279.078		500000	504000									

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST

Units: ug/L

Chart Number: 1109w.arc

Acceptable Range:

Standard Source:

Standard ID:

Element	WL/ Mass	Report Limit	True Conc	ICSA 11/9/98 10:42 AM Found	Q	ICSA 11/9/98 2:39 PM Found	Q	ICSA 11/9/98 5:27 PM Found	Q	Found	Q	Found	Q
Aluminum	308.215		500000	453000		457000		459000					
Arsenic	189.042	10		5.9	B	1.7	B	1.6	U				
Cadmium	226.502	5		3	B	1.7	B	3	B				
Calcium	317.933		500000	477000		488000		466000					
Iron	271.441		200000	185000		186000		182000					
Lead	220.353	3		1.6	U	4.8		1.6	U				
Magnesium	279.078		500000	533000		542000		521000					
Zinc	206.2	20		8.7	B	7.6	B	5	B				

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST

Units: ug/L

Chart Number: 1110w2.arc

Acceptable Range:

Standard Source:

Standard ID:

Element	WL/ Mass	Report Limit	True Conc	ICSA 11/10/98 8:57 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215		500000	455000									
Arsenic	189.042	10		1.6	U								
Cadmium	226.502	5		1	B								
Calcium	317.933		500000	495000									
Iron	271.441		200000	190000									
Lead	220.353	3		1.6	U								
Magnesium	279.078		500000	549000									
Zinc	206.2	20		6.5	B								

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST **Units:** ug/L

Chart Number: 1119o1.arc **Acceptable Range:**

Standard Source: **Standard ID:**

Element	WL/ Mass	Report Limit	True Conc	ICSA 11/19/98 10:29 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215		500000	464000									
Arsenic	189.042	10		2.8	B								
Cadmium	226.502	5		0.5	U								
Calcium	317.933		500000	490000									
Iron	271.441		200000	187000									
Lead	220.353	3		1.6	U								
Magnesium	279.078		500000	535000									
Zinc	206.2	20		7.1	B								

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST

Units: ug/L

Chart Number: 981124w.arc

Acceptable Range:

Standard Source:

Standard ID:

Element	WL/ Mass	Report Limit	True Conc	ICSA 11/24/98 9:24 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215		500000	459000									
Arsenic	189.042	10		2	B								
Cadmium	226.502	5		0.5	U								
Calcium	317.933		500000	482000									
Iron	271.441		200000	183000									
Lead	220.353	3		1.6	U								
Magnesium	279.078		500000	525000									
Zinc	206.2	20		6.1	B								

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICP Trace

Units: ppb

Chart Number: 11091.arc

Acceptable Range: 80% - 120%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICSAB 11/9/98 8:38 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	474390	**94.9**								
Calcium	317.933	500000	485050	**97.0**								
Iron	271.441	200000	194470	**97.2**								
Lead	220.353	1000	1004.7	**100.5**								
Magnesium	279.078	500000	500780	**100.2**								

B Result is between CRDL and IDL
U Result is less than the IDL
R Spike recovery failed

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: 1109w.arc

Acceptable Range: 80% - 120%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICSAB 11/9/98 10:46 AM Found	% Rec	ICSAB 11/9/98 2:43 PM Found	% Rec	ICSAB 11/9/98 5:32 PM Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	460870	92.2	458710	91.7	460550	92.1				
Arsenic	189.042	2000	1994.8	99.7	1966.8	98.3	1947.9	97.4				
Cadmium	226.502	1000	984.27	98.4	970.55	97.0	944.96	94.5				
Calcium	317.933	500000	494310	98.9	490400	98.1	478000	95.6				
Iron	271.441	200000	189800	94.9	186970	93.5	185600	92.8				
Lead	220.353	1000	996.71	99.7	983.5	98.4	971.67	97.2				
Magnesium	279.078	500000	548740	109.7	542260	108.5	531160	106.2				
Zinc	206.2	1000	963.6	96.4	931.39	93.1	906.58	90.7				

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: 1110w2.arc

Acceptable Range: 80% - 120%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICSAB 11/10/98 9:04 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	450550	**90.1**								
Arsenic	189.042	2000	1949.6	**97.5**								
Cadmium	226.502	1000	964.02	**96.4**								
Calcium	317.933	500000	481300	**96.3**								
Iron	271.441	200000	185800	**92.9**								
Lead	220.353	1000	985.79	**98.6**								
Magnesium	279.078	500000	533050	**106.6**								
Zinc	206.2	1000	931.73	**93.2**								

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: 1119o1:arc

Acceptable Range: 80% - 120%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICSAB 11/19/98 10:33 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	464210	**92.8**								
Arsenic	189.042	2000	2009.4	**100.5**								
Cadmium	226.502	1000	1003	**100.3**								
Calcium	317.933	500000	484930	**97.0**								
Iron	271.441	200000	185880	**92.9**								
Lead	220.353	1000	1013.1	**101.3**								
Magnesium	279.078	500000	527760	**105.6**								
Zinc	206.2	1000	953.4	**95.3**								

Quanterra, Inc.

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: 981124w.arc

Acceptable Range: 80% - 120%

Standard Source:

Standard ID:

Element	WL/ Mass	True Conc	ICSAB 11/24/98 9:29 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	461130	**92.2**								
Arsenic	189.042	2000	1980.8	**99.0**								
Cadmium	226.502	1000	979.23	**97.9**								
Calcium	317.933	500000	483150	**96.6**								
Iron	271.441	200000	183200	**91.6**								
Lead	220.353	1000	989.43	**98.9**								
Magnesium	279.078	500000	524260	**104.9**								
Zinc	206.2	1000	939.56	**94.0**								

B Result is between CRDL and IDL
U Result is less than the IDL
R Spike recovery failed

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** WATER
Date Sampled...: 10/06/98 **Date Received..:** 10/22/98

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8J280164-001 **Prep Batch #...:** 8309233									
Lead									
	ND	500	487	ug/L	97		SW846 6010B	11/05-11/09/98	CMVVF102
	ND	500	479	ug/L	96	1.6	SW846 6010B	11/05-11/09/98	CMVVF103

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 5A
Equivalent

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** WATER
Date Sampled...: 10/13/98 **Date Received..:** 10/22/98

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8J280164-021 **Prep Batch #...:** 8310203									
Lead									
	4.5	500	519	ug/L	103		SW846 6010B	11/09-11/10/98	CMVXM102
	4.5	500	514	ug/L	102	0.90	SW846 6010B	11/09-11/10/98	CMVXM103

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 5A
Equivalent

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** SOLID
Date Sampled...: 10/07/98 **Date Received..:** 10/22/98

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8J280164-030 **Prep Batch #...:** 8307276									
Arsenic									
	9.6	206	187 N	mg/kg	86		SW846 6010B	11/04-11/09/98	CMW26105
	9.6	206	194	mg/kg	89	3.3	SW846 6010B	11/04-11/09/98	CMW26106
Cadmium									
	1.4	5.16	5.94	mg/kg	87		SW846 6010B	11/04-11/09/98	CMW26107
	1.4	5.16	6.07	mg/kg	90	2.1	SW846 6010B	11/04-11/09/98	CMW26108
Lead									
	81.7	51.6	354 N	mg/kg	528		SW846 6010B	11/04-11/09/98	CMW26109
	81.7	51.6	138 *	mg/kg	109	88	SW846 6010B	11/04-11/09/98	CMW2610A
Zinc									
	137	51.6	201 N	mg/kg	124		SW846 6010B	11/04-11/09/98	CMW2610C
	137	51.6	178 N,*	mg/kg	79	12	SW846 6010B	11/04-11/09/98	CMW2610D

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

* Relative percent difference (RPD) is outside stated control limits.

N Spiked analyte recovery is outside stated control limits.

FORM 5A
Equivalent

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** SOLID
Date Sampled...: 10/27/98 **Date Received..:** 11/03/98

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8K030194-003 **Prep Batch #...:** 8321228									
Arsenic									
	2.4	200	171 N	mg/kg	84		SW846 6010B	11/17-11/24/98	CN3T811W
	2.4	200	171 N	mg/kg	84	0.05	SW846 6010B	11/17-11/24/98	CN3T811X
Cadmium									
	ND	5.00	4.26	mg/kg	85		SW846 6010B	11/17-11/24/98	CN3T8110
	ND	5.00	4.32	mg/kg	86	1.5	SW846 6010B	11/17-11/24/98	CN3T8111
Zinc									
	51.5	50.0	113 N	mg/kg	122		SW846 6010B	11/17-11/24/98	CN3T811U
	51.5	50.0	104	mg/kg	105	8.1	SW846 6010B	11/17-11/24/98	CN3T811V

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

FORM 5A
Equivalent

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** WATER
Date Sampled...: 11/02/98 **Date Received..:** 11/04/98

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8K040207-001 **Prep Batch #...:** 8321237									
Lead									
	ND	500	527	ug/L	105		SW846 6010B	11/17-11/19/98	CN4V211U
	ND	500	512	ug/L	102	2.9	SW846 6010B	11/17-11/19/98	CN4V211V

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 5A
Equivalent

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** WATER
Date Sampled...: 10/06/98 **Date Received..:** 10/22/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8J280164-001 **Prep Batch #...:** 8309233							
Lead	97	(80 - 120)			SW846 6010B	11/05-11/09/98	CMVVF102
	96	(80 - 120)	1.6	(0-20)	SW846 6010B	11/05-11/09/98	CMVVF103

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 5A
Equivalent

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** WATER
Date Sampled...: 10/13/98 **Date Received..:** 10/22/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8J280164-021 **Prep Batch #...:** 8310203							
Lead	103	(80 - 120)			SW846 6010B	11/09-11/10/98	CMVXM102
	102	(80 - 120)	0.90	(0-20)	SW846 6010B	11/09-11/10/98	CMVXM103

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 5A
Equivalent

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** SOLID
Date Sampled...: 10/07/98 **Date Received..:** 10/22/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8J280164-030 **Prep Batch #...:** 8307276							
Arsenic	86 N	(88 - 108)			SW846 6010B	11/04-11/09/98	CMW26105
	89	(88 - 108)	3.3	(0-10)	SW846 6010B	11/04-11/09/98	CMW26106
Cadmium	87	(80 - 120)			SW846 6010B	11/04-11/09/98	CMW26107
	90	(80 - 120)	2.1	(0-16)	SW846 6010B	11/04-11/09/98	CMW26108
Lead	528 N	(82 - 114)			SW846 6010B	11/04-11/09/98	CMW26109
	109 *	(82 - 114)	88	(0-11)	SW846 6010B	11/04-11/09/98	CMW2610A
Zinc	124 N	(80 - 120)			SW846 6010B	11/04-11/09/98	CMW2610C
	79 N,*	(80 - 120)	12	(0-10)	SW846 6010B	11/04-11/09/98	CMW2610D

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

* Relative percent difference (RPD) is outside stated control limits.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** SOLID
Date Sampled...: 10/27/98 **Date Received..:** 11/03/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8K030194-003 **Prep Batch #...:** 8321228							
Arsenic	84 N	(88 - 108)			SW846 6010B	11/17-11/24/98	CN3T811W
	84 N	(88 - 108)	0.05	(0-10)	SW846 6010B	11/17-11/24/98	CN3T811X
Cadmium	85	(80 - 120)			SW846 6010B	11/17-11/24/98	CN3T8110
	86	(80 - 120)	1.5	(0-16)	SW846 6010B	11/17-11/24/98	CN3T8111
Zinc	122 N	(80 - 120)			SW846 6010B	11/17-11/24/98	CN3T811U
	105	(80 - 120)	8.1	(0-10)	SW846 6010B	11/17-11/24/98	CN3T811V

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

FORM 5A
Equivalent

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: D8J280164 **Matrix.....:** WATER
Date Sampled...: 11/02/98 **Date Received..:** 11/04/98

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: D8K040207-001 **Prep Batch #...:** 8321237							
Lead	105	(80 - 120)			SW846 6010B	11/17-11/19/98	CN4V211U
	102	(80 - 120)	2.9	(0-20)	SW846 6010B	11/17-11/19/98	CN4V211V

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 5A
Equivalent

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: D8J280164 **Work Order #...:** CMVVL-SMP CMVVL-DUP **Matrix.....:** WATER

Date Sampled...: 10/06/98 **Date Received..:** 10/22/98

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Lead						SD Lot-Sample #: D8J280164-002		
	ND	ND	ug/L	29	(0-20)	SW846 6010B	11/17-11/19/98	8321237

FORM 6
Equivalent

SAMPLE DUPLICATE EVALUATION REPORT

Metals

Client Lot #...: D8J280164 **Work Order #...:** CMW23-SMP CMW23-DUP **Matrix.....:** SOLID

Date Sampled...: 10/07/98 **Date Received..:** 10/22/98

% Moisture.....: 8.0

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic						SD Lot-Sample #: D8J280164-029		
	4.3	4.9	mg/kg	12	(0-10)	SW846 6010B	11/17-11/24/98	8321228
Cadmium						SD Lot-Sample #: D8J280164-029		
	ND	ND	mg/kg	200	(0-16)	SW846 6010B	11/17-11/24/98	8321228
Lead						SD Lot-Sample #: D8J280164-029		
	40.3	46.9	mg/kg	15	(0-11)	SW846 6010B	11/17-11/24/98	8321228
Zinc						SD Lot-Sample #: D8J280164-029		
	62.9	73.1	mg/kg	15	(0-10)	SW846 6010B	11/17-11/24/98	8321228

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

FORM 6
Equivalent

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: D8J280164 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Arsenic	200	199	mg/kg	99		SW846 6010B	11/04-11/09/98	8307276
	200	199	mg/kg	100	0.27	SW846 6010B	11/04-11/09/98	8307276
Cadmium	5.00	5.20	mg/kg	104		SW846 6010B	11/04-11/09/98	8307276
	5.00	5.23	mg/kg	105	0.63	SW846 6010B	11/04-11/09/98	8307276
Lead	50.0	52.3	mg/kg	105		SW846 6010B	11/04-11/09/98	8307276
	50.0	52.6	mg/kg	105	0.45	SW846 6010B	11/04-11/09/98	8307276
Zinc	50.0	51.5	mg/kg	103		SW846 6010B	11/04-11/09/98	8307276
	50.0	51.7	mg/kg	103	0.29	SW846 6010B	11/04-11/09/98	8307276
Arsenic	200	191	mg/kg	95		SW846 6010B	11/17-11/24/98	8321228
	200	192	mg/kg	96	0.60	SW846 6010B	11/17-11/24/98	8321228
Cadmium	5.00	5.10	mg/kg	102		SW846 6010B	11/17-11/24/98	8321228
	5.00	5.09	mg/kg	102	0.17	SW846 6010B	11/17-11/24/98	8321228
Zinc	50.0	49.2	mg/kg	98		SW846 6010B	11/17-11/24/98	8321228
	50.0	49.2	mg/kg	98	0.07	SW846 6010B	11/17-11/24/98	8321228

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 7
Equivalent

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Lot-Sample #...: D8J280164 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Lead	500	473	ug/L	95		SW846 6010B	11/05-11/09/98	8309233
	500	486	ug/L	97	2.9	SW846 6010B	11/05-11/09/98	8309233
Lead	500	517	ug/L	103		SW846 6010B	11/09-11/10/98	8310203
	500	518	ug/L	104	0.19	SW846 6010B	11/09-11/10/98	8310203
Lead	500	504	ug/L	101		SW846 6010B	11/17-11/19/98	8321237
	500	495	ug/L	99	1.7	SW846 6010B	11/17-11/19/98	8321237

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: D8J280164 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Arsenic	99	(88 - 108)			SW846 6010B	11/04-11/09/98	8307276
	100	(88 - 108)	0.27	(0-10)	SW846 6010B	11/04-11/09/98	8307276
Cadmium	104	(80 - 120)			SW846 6010B	11/04-11/09/98	8307276
	105	(80 - 120)	0.63	(0-16)	SW846 6010B	11/04-11/09/98	8307276
Lead	105	(82 - 114)			SW846 6010B	11/04-11/09/98	8307276
	105	(82 - 114)	0.45	(0-11)	SW846 6010B	11/04-11/09/98	8307276
Zinc	103	(80 - 120)			SW846 6010B	11/04-11/09/98	8307276
	103	(80 - 120)	0.29	(0-10)	SW846 6010B	11/04-11/09/98	8307276
Arsenic	95	(88 - 108)			SW846 6010B	11/17-11/24/98	8321228
	96	(88 - 108)	0.60	(0-10)	SW846 6010B	11/17-11/24/98	8321228
Cadmium	102	(80 - 120)			SW846 6010B	11/17-11/24/98	8321228
	102	(80 - 120)	0.17	(0-16)	SW846 6010B	11/17-11/24/98	8321228
Zinc	98	(80 - 120)			SW846 6010B	11/17-11/24/98	8321228
	98	(80 - 120)	0.07	(0-10)	SW846 6010B	11/17-11/24/98	8321228

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 7
Equivalent

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Lot-Sample #...: D8J280164 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP-BATCH #
Lead	95	(80 - 120)			SW846 6010B	11/05-11/09/98	8309233
	97	(80 - 120)	2.9	(0-20)	SW846 6010B	11/05-11/09/98	8309233
Lead	103	(80 - 120)			SW846 6010B	11/09-11/10/98	8310203
	104	(80 - 120)	0.19	(0-20)	SW846 6010B	11/09-11/10/98	8310203
Lead	101	(80 - 120)			SW846 6010B	11/17-11/19/98	8321237
	99	(80 - 120)	1.7	(0-20)	SW846 6010B	11/17-11/19/98	8321237

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM 7
Equivalent

Quanterra, Inc.

Metals Data Reporting Form

Serial Dilution Report

Serial Dilution Sample ID: CMVVFP

Original Sample ID: CMVVF **Client ID:** D3825AD-1

Matrix: Water **Units:** ppb **Prep Date:** 11/5/98 **Prep Batch:** 8309233

Weight: 50 **Volume:** 50 **Percent Moisture:**

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Lead	220.353	1.8	U	9	U		1	5	ICPST	11/9/98	9:42	11/9/98	9:47

Comments:

Report Generator Version 1.40

B Result is between CRDL and IDL
U Result is less than the IDL
* Duplicate analysis RPD was not within limits

Form 9 Equivalent

Quanterra, Inc.

Metals Data Reporting Form

Serial Dilution Report

Serial Dilution Sample ID: CMW26P

Original Sample ID: CMW26 **Client ID:** 4715 St Paul Ct. Soil

Matrix: Soil **Units:** mg/kg **Prep Date:** 11/4/98 **Prep Batch:** 8307276

Weight: 1 **Volume:** 100 **Percent Moisture:** 3.1

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	9.3		9.5		1.6%	1	5	ICPST	11/9/98	13:15	11/9/98	13:20
Cadmium	226.502	1.4		1.4			1	5	ICPST	11/9/98	13:15	11/9/98	13:20
Lead	220.353	79.2		82.7			1	5	ICPST	11/9/98	13:15	11/9/98	13:20
Zinc	206.2	133		142		6.5%	1	5	ICPST	11/9/98	13:15	11/9/98	13:20

Comments:

Quanterra, Inc.

Metals Data Reporting Form

Serial Dilution Report

Serial Dilution Sample ID: CMVXMP

Original Sample ID: CMVXM **Client ID:** D4715ST-I

Matrix: Water **Units:** ug/L **Prep Date:** 11/10/98 **Prep Batch:** 8310203

Weight: 50 **Volume:** 50 **Percent Moisture:**

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	1.6	U	7.9	U		1	5	ICPST	11/10/98	9:43	11/10/98	9:47
Cadmium	226.502	0.5	U	2.5	U		1	5	ICPST	11/10/98	9:43	11/10/98	9:47
Lead	220.353	4.5		8.1	U		1	5	ICPST	11/10/98	9:43	11/10/98	9:47
Zinc	206.2	84.2		85.9	U	2.0 %	1	5	ICPST	11/10/98	9:43	11/10/98	9:47

Comments:

Report Generator Version 1.40

B Result is between CRDL and IDL
U Result is less than the IDL
* Duplicate analysis RPD was not within limits

Form 9 Equivalent

Quanterra, Inc.

Metals Data Reporting Form

Serial Dilution Report

Serial Dilution Sample ID: CN4V2P

Original Sample ID: CN4V2 **Client ID:**

Matrix: Water **Units:** ug/L **Prep Date:** 11/17/98 **Prep Batch:** 8321237

Weight: 50 **Volume:** 50 **Percent Moisture:**

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	12.7		15.7	U		2	10	ICPST	11/19/98	23:00	11/19/98	23:04
Cadmium	226.502	1	U	5	U		2	10	ICPST	11/19/98	23:00	11/19/98	23:04
Lead	220.353	3.2	U	16.1	U		2	10	ICPST	11/19/98	23:00	11/19/98	23:04
Zinc	206.2	45		50.6	B		2	10	ICPST	11/19/98	23:00	11/19/98	23:04

Comments:

Report Generator Version 1.40

B Result is between CRDL and IDL
U Result is less than the IDL
* Duplicate analysis RPD was not within limits

Quanterra, Inc.

Metals Data Reporting Form

Serial Dilution Report

Serial Dilution Sample ID: CN3T8P

Original Sample ID: CN3T8 **Client ID:**

Matrix: Soil **Units:** mg/kg **Prep Date:** 11/17/81 **Prep Batch:** 8321228

Weight: 1 **Volume:** 100 **Percent Moisture:**

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	2.4		2.4			1	5	ICPST	11/24/98	10:16	11/24/98	10:20
Cadmium	226.502	0.05	U	0.25	U		1	5	ICPST	11/24/98	10:16	11/24/98	10:20
Lead	220.353	10		10.9			1	5	ICPST	11/24/98	10:16	11/24/98	10:20
Zinc	206.2	51.5		57.2			1	5	ICPST	11/24/98	10:16	11/24/98	10:20

Comments:

Report Generator Version 1.40

B Result is between CRDL and IDL
U Result is less than the IDL
* Duplicate analysis RPD was not within limits

Form 9 Equivalent

Quanterra, Inc.

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICP Trace **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	IDL	Date of IDL
Lead	220.35	3	1.8	4/10/98

Quanterra, Inc.

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Reporting Limit	IDL	Date of IDL
Arsenic	189.04	10	1.57	10/15/98
Cadmium	226.50	5	0.501	10/15/98
Lead	220.35	3	1.61	10/15/98
Zinc	206.20	20	1.53	10/15/98

Quanterra, Inc.

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP Trace **Date of IEC's:** 4/10/98

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Cd(-0.000003), Pb(0.00018), Sb(-0.000024), Se(0.000028), Tl(-0.000055)
Calcium	317.933	As(-0.000001), Ca(-0.000013), Pb(0.000002), Se(-0.000011), Tl(-0.000002)
Chromium	267.716	As(0.000243), Sb(0.01024), Se(-0.000069), Tl(0.000442)
Iron	271.441	Cd(0.00017), Fe(0.00014), Sb(0.00027), Se(-0.00033), Tl(0.00009)
Magnesium	279.078	As(-0.000008), Pb(0.000006), Sb(-0.000018), Se(0.000021), Tl(0.000017)
Manganese	257.61	Se(0.0003), Tl(0.00095)
Molybdenum	202.03	As(0.000372), Pb(-0.00064), Sb(-0.0059), Se(0.000189), Tl(-0.00092)
Vanadium	292.402	Sb(-0.0083), Tl(0.0016)

Quanterra, Inc.

Metals Data Reporting Form

[redacted]-Element Correction Factors

Instrument: ICPST **Date of IEC's:** 10/15/98

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(0.000496)
Barium	493.409	Co(0.000851)
Calcium	317.933	Sr(0.000047)
Chromium	267.716	Sb(0.00748), V(-0.00174), Zn(-0.00584)
Cobolt	228.616	Fe(0.085), Pb(-0.00062)
Iron	271.441	As(-0.000024), Cd(0.00008), Cr(-0.000012), Cu(-0.000041), Mg(-0.00026), Mn(-0.000011), Pb(0.000088), Sb(0.000031), Se(-0.000065), Tl(-0.000368), V(-0.00025)
Magnesium	279.078	Fe(0.000576), Mn(0.000013)
Manganese	257.61	Se(0.00051)
[redacted]olybdenum	202.03	Pb(-0.00072)
Nickel	231.604	Pb(0.000274)
Vanadium	292.402	Al(0.0209), Be(-0.00732), Fe(-0.595), Pb(-0.00009), Se(0.00011)

Quanterra, Inc.

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICP Trace **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Lead	220.35	30000	4/10/98

Quanterra, Inc.

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST **Units:** ug/L

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	20000	10/15/98
Cadmium	226.50	10000	10/15/98
Lead	220.35	25000	10/15/98
Zinc	206.20	50000	10/15/98

Quanterra, Inc.

Metals Data Reporting Form

Preparation Log

Preparation Batch: 8307276 **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
CN3DNB	11/4/98	1	100	
CN3DNC	11/4/98	1	100	
CN3DNL	11/4/98	1	100	
CMW09	11/4/98	1	100	
CMW1X	11/4/98	1	100	
CMW23	11/4/98	1	100	8.0
CMW26	11/4/98	1	100	3.1
CMW26D	11/4/98	1	100	3.1
CMW26S	11/4/98	1	100	3.1

Quanterra, Inc.

Metals Data Reporting Form

Preparation Log

Preparation Batch: 8309233 **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
CN5EDB	11/5/98	50	50	
CN5EDC	11/5/98	50	50	
CN5EDL	11/5/98	50	50	
CMVVF	11/5/98	50	50	
CMVVFD	11/5/98	50	50	
CMVVFS	11/5/98	50	50	
CMVVL	11/5/98	50	50	
CMVVM	11/5/98	50	50	
CMVVV	11/5/98	50	50	
CMVVX	11/5/98	50	50	
CMVW2	11/5/98	50	50	
CMVW3	11/5/98	50	50	
CMVW7	11/5/98	50	50	
CMVW8	11/5/98	50	50	
CMVWC	11/5/98	50	50	
CMVWF	11/5/98	50	50	
CMVWM	11/5/98	50	50	
CMVWQ	11/5/98	50	50	
CMVX1	11/5/98	50	50	
CMVX7	11/5/98	50	50	
CMVXD	11/5/98	50	50	
CMVXE	11/5/98	50	50	
CMVXG	11/5/98	50	50	
CMVXJ	11/5/98	50	50	

Quanterra, Inc.

Metals Data Reporting Form

Preparation Log

Preparation Batch: 8310203 **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
CN704B	11/10/98	50	50	
CN704C	11/10/98	50	50	
CN704L	11/10/98	50	50	
CMVXM	11/10/98	50	50	
CMVXMD	11/10/98	50	50	
CMVXMS	11/10/98	50	50	
CMVXR	11/10/98	50	50	
CMW00	11/10/98	50	50	
CMW02	11/10/98	50	50	

Quanterra, Inc.

Metals Data Reporting Form

Preparation Log

Preparation Batch: 8321228 **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
CNHGGB	11/17/98	1	100	
CNHGGC	11/17/98	1	100	
CNHGGL	11/17/98	1	100	
CMW23	11/17/98	1	100	8.0
CMW23X	11/17/98	1	100	8.0

Quanterra, Inc.

Metals Data Reporting Form

Preparation Log

Preparation Batch: 8321237 **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
CNHJNB	11/17/98	50	50	
CNHJNC	11/17/98	50	50	
CNHJNL	11/17/98	50	50	
CMVVL	11/17/98	50	50	
CMVVLX	11/17/98	50	50	

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP Trace

Chart Number: 11091.arc

Sample Name	Date of Analysis	Time of Analysis
STD1-Blank	11/9/98	8:09 AM
CALSTD	11/9/98	8:13 AM
HIGH STANDARD	11/9/98	8:17 AM
ICV	11/9/98	8:21 AM
ICB	11/9/98	8:26 AM
CRI	11/9/98	8:30 AM
ICSA	11/9/98	8:34 AM
ICSAB	11/9/98	8:38 AM
CCV1	11/9/98	8:43 AM
CCB1	11/9/98	8:48 AM
CN5EDB	11/9/98	9:30 AM
CN5EDC	11/9/98	9:34 AM
CN5EDL	11/9/98	9:38 AM
CMVVF	11/9/98	9:42 AM
CMVVFP	11/9/98	9:47 AM
CMVVFS	11/9/98	9:51 AM
CMVVFD	11/9/98	9:55 AM
CMVVL	11/9/98	9:59 AM
CMVVM	11/9/98	10:04 AM
CMVVV	11/9/98	10:08 AM
CCV2	11/9/98	10:13 AM
CCB2	11/9/98	10:19 AM
CMVVX	11/9/98	10:23 AM
CMVW2	11/9/98	10:27 AM
CMVW3	11/9/98	10:31 AM
CMVW7	11/9/98	10:36 AM
CMVW8	11/9/98	10:40 AM
CMVWC	11/9/98	10:44 AM
CMVWF	11/9/98	10:48 AM
CMVWM	11/9/98	10:53 AM
CMVWQ	11/9/98	10:57 AM
CMVX1	11/9/98	11:01 AM
CCV3	11/9/98	11:07 AM
CCB3	11/9/98	11:12 AM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP Trace

Chart Number: 1109l.arc

Sample Name	Date of Analysis	Time of Analysis
CMVX7	11/9/98	11:16 AM
CMVXD	11/9/98	11:21 AM
CMVXE	11/9/98	11:25 AM
CMVXG	11/9/98	11:29 AM
CMVXJ	11/9/98	11:33 AM
CMVXL	11/9/98	11:38 AM
CCV4	11/9/98	11:43 AM
CCB4	11/9/98	11:48 AM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: 1109w.arc

Sample Name	Date of Analysis	Time of Analysis
STD1-Blank	11/9/98	10:08 AM
HISTD	11/9/98	10:13 AM
HIGH STD	11/9/98	10:17 AM
ICV	11/9/98	10:22 AM
ICB	11/9/98	10:26 AM
ICB	11/9/98	10:31 AM
CRI	11/9/98	10:35 AM
ICSA	11/9/98	10:42 AM
ICSAB	11/9/98	10:46 AM
CCV1	11/9/98	10:50 AM
CCB1	11/9/98	10:58 AM
CN68WB	11/9/98	11:01 AM
CMRR0	11/9/98	11:06 AM
CMRR0P	11/9/98	11:11 AM
CMRR0S	11/9/98	11:16 AM
CMRR0P	11/9/98	11:33 AM
CMRR0S	11/9/98	11:38 AM
CMRR0D	11/9/98	11:43 AM
CMRR5	11/9/98	11:47 AM
CCV2	11/9/98	11:53 AM
CCB2	11/9/98	11:59 AM
CN3DNB	11/9/98	12:16 PM
CN3DNC	11/9/98	12:21 PM
CN3DNL	11/9/98	12:26 PM
CMQ8M	11/9/98	12:30 PM
CMQ8N	11/9/98	12:35 PM
CMQ8P	11/9/98	12:40 PM
CMQ8Q	11/9/98	12:45 PM
CMW09	11/9/98	12:49 PM
CMW1X	11/9/98	12:54 PM
CMW23	11/9/98	12:59 PM
CCV3	11/9/98	1:05 PM
CCB3	11/9/98	1:10 PM
CMW26	11/9/98	1:15 PM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: 1109w.arc

Sample Name	Date of Analysis	Time of Analysis
CMW26P	11/9/98	1:20 PM
CMW26S	11/9/98	1:25 PM
CMW26D	11/9/98	1:29 PM
CMQC6	11/9/98	1:34 PM
CMQC7	11/9/98	1:39 PM
CMQC8	11/9/98	1:44 PM
CMQC9	11/9/98	1:48 PM
CMQCA	11/9/98	1:53 PM
CMQCC	11/9/98	1:58 PM
CCV4	11/9/98	2:04 PM
CCB4	11/9/98	2:09 PM
CMQCD	11/9/98	2:14 PM
CMQCE	11/9/98	2:19 PM
CMQCF	11/9/98	2:24 PM
CMQCG	11/9/98	2:28 PM
CMQCH	11/9/98	2:33 PM
ICSA	11/9/98	2:39 PM
ICSAB	11/9/98	2:43 PM
CCV5	11/9/98	2:47 PM
CCB5	11/9/98	2:51 PM
CN5AVB	11/9/98	2:58 PM
CN5AVC	11/9/98	3:02 PM
CN5AVL	11/9/98	3:06 PM
CN46J	11/9/98	3:11 PM
CN48X	11/9/98	3:15 PM
CN47P	11/9/98	3:19 PM
CN489	11/9/98	3:23 PM
CN48K	11/9/98	3:27 PM
CMVDW	11/9/98	3:31 PM
CMVE5	11/9/98	3:36 PM
CCV6	11/9/98	3:40 PM
CCB6	11/9/98	3:46 PM
CMVE6	11/9/98	3:50 PM
CMVED	11/9/98	3:54 PM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: 1109w.arc

Sample Name	Date of Analysis	Time of Analysis
CN20R	11/9/98	3:58 PM
CMK9Q	11/9/98	4:03 PM
CMK9QP	11/9/98	4:07 PM
CMK9QS	11/9/98	4:11 PM
CMK9QD	11/9/98	4:15 PM
CMKA3	11/9/98	4:19 PM
CMKA7	11/9/98	4:23 PM
CN2E9	11/9/98	4:28 PM
CCV7	11/9/98	4:32 PM
CCB7	11/9/98	4:38 PM
CN2EA	11/9/98	4:42 PM
CN2ED	11/9/98	4:46 PM
ICSA	11/9/98	5:27 PM
ICSAB	11/9/98	5:32 PM
CCV8	11/9/98	5:38 PM
CCB8	11/9/98	5:45 PM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: 1110w2.arc

Sample Name	Date of Analysis	Time of Analysis
STD1-Blank	11/10/98	8:15 AM
HISTD	11/10/98	8:20 AM
HIGH STD	11/10/98	8:24 AM
ICV	11/10/98	8:29 AM
ICB	11/10/98	8:33 AM
CRI	11/10/98	8:38 AM
ICSA	11/10/98	8:57 AM
ICSA	11/10/98	9:01 AM
ICSAB	11/10/98	9:04 AM
CCV1	11/10/98	9:09 AM
CCB1	11/10/98	9:13 AM
CN704B	11/10/98	9:31 AM
CN704C	11/10/98	9:35 AM
CN704L	11/10/98	9:39 AM
CMVXM	11/10/98	9:43 AM
CMVXMS	11/10/98	9:51 AM
CMVXMD	11/10/98	9:55 AM
CMVXR	11/10/98	9:58 AM
CMW00	11/10/98	10:02 AM
CMW02	11/10/98	10:06 AM
CCV2	11/10/98	10:10 AM
CCB2	11/10/98	10:15 AM
CMX06	11/10/98	10:19 AM
CMW08	11/10/98	10:23 AM
CNOFD	11/10/98	10:27 AM
CN0G6	11/10/98	10:31 AM
CM19G	11/10/98	10:35 AM
CN19H	11/10/98	10:38 AM
CN19J	11/10/98	10:42 AM
CN19K	11/10/98	10:46 AM
CN0N6	11/10/98	10:50 AM
CN0NR	11/10/98	10:54 AM
CCV3	11/10/98	10:58 AM
CCB3	11/10/98	11:03 AM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: 1110w2.arc

Sample Name	Date of Analysis	Time of Analysis
CCB3	11/10/98	11:07 AM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: 1119o1.arc

Sample Name	Date of Analysis	Time of Analysis
STD1-Blank	11/19/98	10:00 PM
HISTD	11/19/98	10:04 PM
HIGH STD	11/19/98	10:08 PM
ICV	11/19/98	10:12 PM
ICB	11/19/98	10:21 PM
CRI	11/19/98	10:25 PM
ICSA	11/19/98	10:29 PM
ICSAB	11/19/98	10:33 PM
CCV1	11/19/98	10:37 PM
CCB1	11/19/98	10:43 PM
CNHGGC	11/19/98	10:51 PM
CNHGGL	11/19/98	10:55 PM
CN4V2	11/19/98	11:00 PM
CN4V2P	11/19/98	11:04 PM
CN4V2S	11/19/98	11:09 PM
CNH2LB	11/19/98	11:18 PM
CNH2LC	11/19/98	11:22 PM
CNH2LL	11/19/98	11:26 PM
CN3XR	11/19/98	11:31 PM
CCV2	11/19/98	11:36 PM
CCB2	11/19/98	11:41 PM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: 981124w.arc

Sample Name	Date of Analysis	Time of Analysis
STD1-Blank	11/24/98	8:59 AM
HISTD	11/24/98	9:03 AM
HIGH STD	11/24/98	9:07 AM
ICV	11/24/98	9:11 AM
ICB	11/24/98	9:16 AM
CRI	11/24/98	9:20 AM
ICSA	11/24/98	9:24 AM
ICSAB	11/24/98	9:29 AM
CCV1	11/24/98	9:33 AM
CCB1	11/24/98	9:38 AM
CNHGGB	11/24/98	9:48 AM
CNHGGC	11/24/98	9:52 AM
CNHGGL	11/24/98	9:56 AM
CMW23	11/24/98	10:00 AM
CMW23X	11/24/98	10:04 AM
CN5J4	11/24/98	10:12 AM
CN3T8	11/24/98	10:16 AM
CN3T8P	11/24/98	10:20 AM
CN3T8S	11/24/98	10:24 AM
CCV2	11/24/98	10:29 AM
CCB2	11/24/98	10:33 AM
CN3T8S	11/24/98	10:37 AM
CN3TA	11/24/98	10:41 AM
CN3TG	11/24/98	10:45 AM
CN3TJ	11/24/98	10:49 AM
CN3TM	11/24/98	10:53 AM
CN3TP	11/24/98	10:57 AM
CN3TR	11/24/98	11:01 AM
CN3V0	11/24/98	11:05 AM
CN9FE	11/24/98	11:09 AM
CN9GL	11/24/98	11:13 AM
CCV3	11/24/98	11:18 AM
CCB3	11/24/98	11:22 AM
CN9H0	11/24/98	11:26 AM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: 981124w.arc

Sample Name	Date of Analysis	Time of Analysis
CN9H7	11/24/98	11:30 AM
CN9HD	11/24/98	11:34 AM
CN9HT	11/24/98	11:38 AM
CN9J3	11/24/98	11:42 AM
CN9J6	11/24/98	11:46 AM
CCV4	11/24/98	11:50 AM
CCB4	11/24/98	11:55 AM
SEM BLANK	11/24/98	12:10 PM
CNDPE	11/24/98	12:14 PM
CNDPE	11/24/98	12:18 PM
CCV5	11/24/98	12:22 PM
CCB5	11/24/98	12:26 PM
CCB5	11/24/98	12:39 PM
SEM BLANK	11/24/98	12:45 PM
CN84W	11/24/98	12:49 PM
CN84WP	11/24/98	12:53 PM
CN857	11/24/98	12:57 PM
CN6RN	11/24/98	1:01 PM
CN6RT	11/24/98	1:05 PM
CCV6	11/24/98	1:09 PM
CCB6	11/24/98	1:18 PM
CNL5AB	11/24/98	1:24 PM
CNL5AC	11/24/98	1:28 PM
CNL5AL	11/24/98	1:32 PM
CN9J9	11/24/98	1:36 PM
CN9JD	11/24/98	1:40 PM
CN9JJ	11/24/98	1:44 PM
CN9L5	11/24/98	1:48 PM
CN9LD	11/24/98	1:52 PM
CN9LH	11/24/98	1:56 PM
CN9LL	11/24/98	2:00 PM
CCV7	11/24/98	2:04 PM
CCB7	11/24/98	2:08 PM
CN9LR	11/24/98	2:12 PM

Quanterra, Inc.

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: 981124w.arc

Sample Name	Date of Analysis	Time of Analysis
CN9LX	11/24/98	2:16 PM
CN9M1	11/24/98	2:20 PM
CN9M2	11/24/98	2:24 PM
CN9M5	11/24/98	2:28 PM
CNA6W	11/24/98	2:32 PM
CNA6X	11/24/98	2:36 PM
CNA6XP	11/24/98	2:40 PM
CNA6XS	11/24/98	2:44 PM
CNA6XD	11/24/98	2:48 PM
CCV8	11/24/98	2:53 PM
CCB8	11/24/98	2:57 PM

SAMPLE CHECKLIST

Lot #: D85280164 Date/Time Received: 10.22.98 @ 1205

Company Name & Sampling Site: Ray F. Weston / 170 + Vasquez

*Cooler #(s): _____ _____ _____ _____ _____ _____ _____ _____

Temperatures: 5.4 - 5.8 _____ _____ _____ _____ _____ _____

Unpacking & Labeling Check Points:

N/A	Yes	No		Initials
	☑	☐	1. Radiation checked, record if reading > 0.5 mR/hr. (_____mR/hr)	JAT
	☑	☐	2. Cooler seals intact.	
	☑	☐	3. Chain of custody present.	
	☐	☑	4. Bottles broken and/or are leaking, comment if yes.	
			PHOTOGRAPH BROKEN BOTTLES	
	☑	☐	5. Containers labeled, comment if no.	
	☑	☐	6. pH of all samples checked and meet requirements, note exceptions.	
	☑	☐	7. Chain of custody includes "received by" and "relinquished" by signatures, dates, and times.	
	☑	☐	8. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☑	☐	9. Chain of custody agrees with bottle count, comment if no.	
	☑	☐	10. Chain of custody agrees with labels, comment if no.	
	☐	☐	11. VOA samples filled completely, comment if no.	
☑	☐	☐	12. VOA bottles preserved, check for labels.	
	☐	☑	13. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	14. If yes to #12, did the samples contain residual chlorine?	
☑	☐	☐	15. Sediment present in "D," dissolved, bottles.	
	☐	☑	16. Are analyses with short holding times requested?	
☐	☐	☑	17. Is extra sample volume provided for MS, MSD or matrix duplicates?	
	☐	☑	18. Multiphase samples present? If yes, comment below.	
	☐	☑	19. Any subsampling for volatiles? If yes, list samples.	
			PHOTOGRAPH MULTIPHASE SAMPLES	
☑	☐	☐	20. Clear picture taken, labeled, and stapled to project folder.	
☑	☐	☐	21. Subcontract COC signed and sent with samples to bottle prep?	V
	☐	☐	22. Was sample labeling double checked?	

Comments: Include action taken to resolve discrepancies/problems. Include a hard copy of e-mail or use extra paper if more space is needed. Collection dates for vegetables and soils were obtained from the sample containers

Initials: _____

FAX TRANSMITTAL	# Pages 1 of 1	
To: Gerald Almquist	From Ellen La Riviere	
Co.: Roy F. Weston, Inc	Quanterra, Denver	
Fax #: (303)980-1622	Phone: (303)421-6611	Fax: (303)431-7171

Quanterra
Environmental Services

CONFIRMATION OF COMMUNICATION

Pursuant to our conversation today, the following is Quanterra's understanding of your instructions. We believe this ☐ **is** ☒ **is not** a contract change. An estimate of the schedule and cost impact (if any) will follow, so that change order negotiations may begin, if necessary. Meanwhile, Quanterra ☒ **will** ☐ **will not** perform according to the revised instructions, unless you instruct otherwise.

Client Name: Roy F. Weston,, Inc.	Program Name/LIMS Number: I-70 and Vasquez Project
Quanterra Project Number: D8J280164	Contact at Laboratory: Ellen La Riviere
Date of Request: October 26, 1998	Contract/Order Number: SBAHQ-97-D-003
Date Change Order Submitted to Client: October 30, 1998	Authorized Client Representative: Gerald Almquist

TYPE OF CHANGE:	**DESCRIPTION OF MODIFICATION/CHANGE/DISCREPANCY/NOTIFICATION:**
☐ Method ☐ Sample Delivery Schedule ☐ SDA Criteria ☐ Matrix ☐ QC Change ☐ Bottles Received ☐ Deliverable ☒ C of C Discrepancies ☐ PROGRAM CHANGE ☒ PROJECT CHANGE ONLY	The chains of custody received with samples on October 22, 1998 requested arsenic and lead analyses be performed on all samples received. Per discussion with the client, the samples should be analyzed as quoted. The aqueous samples will be analyzed for lead only, and the vegetable and soil samples will be analyzed for arsenic, cadmium, lead and zinc. In addition, two vegetable samples(cucumber and tomato) were received at the laboratory, but were not listed on the chain of custody. The client requested these samples not be analyzed.

Date change is to be implemented: October 27, 1998	
APPROVED BY: CLIENT REP:	**QUANTERRA REP:** Ellen La Riviere

Follow-up required:	☐ N/A
☐ Yes, Describe:	

Chain of Custody Record

D8J280164

Quanterra

QUA-4124

Client	Project Manager	Date	Chain Of Custody Number
Roy F. Weston, Inc./Corps of Engineers	Gerald Almquist		40259
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page ____ of ____**
215 Union Blvd., Suite 600	(303) 980-6800 / (303) 980-1622		
City / **State** / **Zip Code**	**Site Contact**		
Lakewood / CO / 80401	James Jackson		
Project Name	**Carrier/Waybill Number**		
I-70 & Vasquez Project			

Contract/Purchase Order/Quote No.

	Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt	Analysis: Lead Arsenic
1	D3825AD-I	10/6/98	04:35	H_2O	~~500~~ 250 ml	~~8~~ 2 plastic	1	~~HCl~~ HNO_3		X X
2	D3825AD-5		04:40		750 ml		1			
3	D4691VI-I		06:52		~~250~~ 500 ml		1			
4	D4691VI-5		07:00		750 ml		1			
5	D5195S5-I		07:00		~~250~~ 500 ml		1			
6	D5195S5-5		07:05		750 ml		1			
7	D4641CY-I	10/7/98	14:30		~~250~~ 500 ml		1			
8	D4641CY-5		14:35		750 ml		1			
9	D4690CY-I		04:30		~~250~~ 500 ml		1			
10	D4690CY-5		04:35		750 ml		1			
11	D4771VI-I	10/8/98	09:45		~~250~~ 500 ml		1			
12	D4771VI-5		09:50		750 ml		1			
13	D4850AD-I		14:15		~~250~~ 500 ml		1			
14	D4850AD-5		14:20		750 ml		1			
15	D3818MA-I		07:00		~~250~~ 500 ml		1			
16	D3818MA-5		07:05		750 ml		1			

Special Instructions

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Turn Around Time Required

☐ Normal ☐ Rush

QC Level

☐ I. ☐ II. ☐ III.

Project Specific (Specify)

	Date	Time		Date	Time
1. Relinquished By	10/22	1210	1. Received By	10-22-98	1205
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

Chain of Custody Record

Quanterra

Quote

QUA-4124

Client: Roy F. Weston, Inc./Corps of Engineers	Project Manager: Gerald Almquist	Date:	Chain Of Custody Number: 40260
Address: 215 Union Blvd., Suite 600	Telephone Number (Area Code)/Fax Number: (303) 980-6800 / (303) 980-1622	Lab Number:	Page ____ of ____
City: Lakewood; State: CO; Zip Code: 80401	Site Contact: James Jackson		
Project Name: I-70 & Vasquez Project	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Analysis: Arsenic lead

	Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type	Containers No.	Preservative	Condition on Receipt
17	D4044ST-I	10/8/98	07:00	H_2O	500ml ~~250ml~~	#2 plastic	1	HNO_3 HCl	
18	D4044ST-5		07:10		750ml		1		
19	D4936ST-I		10:00		500ml ~~250ml~~		1		
20	D4936ST-5		10:05		750ml		1		
21	D4715 St I	10/13/98	0700		500ml		1		
22	D4715 St-5	10/13/98	0710		750ml		1		
23	D4940 Steele-I		0700		500ml		1		
24	D4940 Steele-5		0710		750ml		1		
25	D4980 Steele-I		0700		500ml		1		
26	D4980 Steele-5		0710		750ml		1		
27	3818 Madison Mint			vegetable			1	4°C	
28	3818 Madison Potato			vegetable			1	4°C	
29	3818 Madison Soil			soil		Plastic Bag	1	–	
30	4715 St Paul Ct Soil			soil			1	–	

Special Instructions

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Turn Around Time Required: ☐ Normal ☐ Rush

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	10/22	1209	1. Received By: [signature]	10-22-98	1205
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments

125

DISTRIBUTION: WHITE - Stays with Sample; CANARY - Returned to Client with Report; PINK - Field Copy

ANALYTICAL RAW DATA

FOR

ROY F. WESTON, INC.

QUANTERRA INCORPORATED

DENVER NO. D8J280164

Description of Supporting Documentation

The enclosed ***Expanded*** raw data package is arranged in the order in which the initial calibration curve, internal quality control samples, and the samples for this lot were analyzed. Also included are any client requested batch quality control samples. When applicable, the data is organized alphabetically by instrument ID, then chronologically by analysis date.

GC/MS

I. Initial Calibration
   A. Run log pages.
   B. Tuning data (summary, bar graph spectrum, and mass listings).
   C. Initial calibration summary (listing response factors, %RSDs), target compound report, internal standard summary, and chromatograms (RIC).

II. Sample Data
   A. Preparation logs (when applicable), run log pages, target compound report, IS summary, and chromatograms (RIC).
   B. Tuning data (summary, bar graph spectrum, and mass listing).
   C. Continuing calibration summary (response factors, %RSDs, and %Ds).
   D. Quality control sample raw data and sample raw data.*

GC

I. Initial Calibration Data
   A. Initial calibration summary, analysis report, and chromatograms for each column used in analysis.

II. Sample Data
   A. Preparation logs (when applicable) and run log pages.
   B. Bracketing continuing calibration standards (when applicable).
   C. Quality control sample raw data and sample raw data.**

Metals

I. Preparation Logs

II. ICP and/or ICP/MS Data
   A. Computer printouts listing all calibrations.
   B. Quality control sample raw data and sample raw data.

III. GFAA and/or CVAA Raw Data
   A. Analysis bench sheets listing all calibrations.
   B. Quality control sample raw data and sample raw data.

Wet Chemistry

I. Preparation Logs

II. Sample Data
   A. Analysis bench sheets listing all calibration.
   B. Quality control sample raw data and sample raw data.

* Raw data includes the target compound report, IS summary, surrogate recovery report, chromatograms (RIC), spectra, and Tentatively Identified Compound (TIC) report with library searches (when applicable).

** Raw data includes the analysis report and chromatograms for each column.

Sample Data

Metals—Supporting Documentation

D8J280164

Method	Element	CRA/CRI (mg/L)	ICV Icp/Icptra (mg/L)	LCS / DCS (Aq Diss) CCV Icp/Icptra (mg/L)	HIGH STANDARD Icp/Icptra (mg/L)	ICSA (mg/L)	ICSAB Icp/Icptra (mg/L)	LCS / DCS MS, SD Aq Total (mg/L)	LCS / DCS MS, SD Soil (mg/kg)
7041 / 204.2	Antimony	0.010	0.030	0.040	NA	NA	NA	0.040	4.0
7060 / 206.2	Arsenic	0.005	0.040	0.050	NA	NA	NA	0.040	4.0
7131 / 213.3	Cadmium	0.0005	0.004	0.005	NA	NA	NA	0.004	0.4
7191 / 218.2	Chromium	0.005	0.020	0.040	NA	NA	NA	0.010	1.0
7421 / 239.2	Lead	0.003	0.030	0.040	NA	NA	NA	0.040	4.0
7470 / 245.1	Mercury-AQ	NA	0.002	0.005	NA	NA	NA	0.005	--
7471 / 245.3	Mercury-SOIL	NA	0.1667	0.4167	NA	NA	NA	--	0.4167
7761 / 272.2	Silver	0.0005	0.004	0.005	NA	NA	NA	0.005	0.5
7740 / 270.2	Selenium	0.005	0.030	0.040	NA	NA	NA	0.040	4.0
7841 / 279.2	Thallium	0.005	0.030	0.040	NA	NA	NA	0.040	4.0
6010 / 200.7	Aluminum	NA	5.0	5.0	10.0	500	500	2.00	200
6010 / 200.7	Antimony	0.120	0.50/0.50	0.50/0.50	1.0/1.0	NA	1.0/1.0	0.500	50
6010 / 200.7	Arsenic	0.020	0.50/0.50	1.00/0.50	2.0/1.0	NA	2.0/1.0	2.00	200
6010 / 200.7	Barium	NA	0.500	0.500	1.0	NA	0.500	2.00	200
6010 / 200.7	Beryllium	0.010	0.500	0.500	1.0	NA	0.500	0.050	5
6010 / 200.7	Boron	NA	0.500	0.500	1.0	NA	2.0	1.00	100
6010 / 200.7	Cadmium	0.010	0.50/0.50	0.50/0.50	1.0/1.0	NA	1.0/1.0	0.050	5
6010 / 200.7	Calcium	NA	20.0	50.0	100.0	500	500	50.0	5000
6010 / 200.7	Chromium	0.020	0.500	0.500	1.0	NA	0.500	0.200	20
6010 / 200.7	Cobalt	0.100	0.500	0.500	1.0	NA	0.500	0.500	50
6010 / 200.7	Copper	0.050	0.500	0.500	1.0	NA	0.500	0.250	25
6010 / 200.7	Iron	NA	5.00	5.00	10.0	200	200	1.00	100
6010 / 200.7	Lead	0.006	0.50/0.50	0.50/0.50	1.0/1.0	NA	1.0/1.0	0.500	50
6010 / 200.7	Lithium	NA	5.00	5.00	10.0	NA	1.0	1.00	100
6010 / 200.7	Magnesium	NA	20.0	50.0	100.0	500	500	50.0	5000
6010 / 200.7	Manganese	0.030	0.500	0.500	1.0	NA	0.500	0.500	50
6010 / 200.7	Molybdenum	NA	0.500	0.500	1.0	NA	1.0	1.00	100
6010 / 200.7	Nickel	0.080	0.500	0.500	1.0	NA	1.00	0.500	50
6010 / 200.7	Phosphorus	NA	2.00	2.00	10.0	NA	2.0	10.0	1000
6010 / 200.7	Potassium	NA	50.0	50.0	100.0	NA	50.0	50.0	5000
6010 / 200.7	Selenium	0.010	5.0/0.50	5.0/0.50	10.0/1.0	NA	5.0/1.0	2.00	200
6010 / 200.7	Silver	0.020	0.500	0.500	1.0	NA	1.00	0.050	5
6010 / 200.7	Sodium	NA	200.0	50.0	100.0	NA	50.0	50.0	5000
6010 / 200.7	Strontium	NA	0.500	0.500	1.0	NA	1.0	1.00	100
6010 / 200.7	Silicon	NA	50.0	50.0	100.0	NA	10.0	10.0	1000
6010 / 200.7	Thallium	0.020	5.0/0.50	5.0/0.50	10.0/1.0	NA	10.0/1.0	2.00	200
6010 / 200.7	Tin	NA	0.50	5.00	10.0	NA	10.0	2.00	200
6010 / 200.7	Titanium	NA	0.500	0.500	1.0	NA	1.0	1.00	100
6010 / 200.7	Vanadium	0.100	0.500	0.500	1.0	NA	0.500	0.500	50
6010 / 200.7	Zinc	0.040	0.500	0.500	1.0	NA	1.00	0.500	50

QUANTERRA-DENVER

SUPER TRACE IDL -1998-qt 4

Effective 10-15-98

All units are mg/L

ANALYTE	IDL Super Trace	MDL aqueous	MDL soil	QRL	CRDL	LINEAR RANGE Super Trace
Aluminum	0.0286	0.0134	2.47	0.1	0.2	600
Antimony	0.0026	0.00194	0.135	0.01	0.06	50
Arsenic	0.00157	0.000975	0.197	0.01	0.01	20
Barium	0.0012	0.00642	0.134	0.01	0.2	25
Beryllium	0.000386	0.000321	0.0576	0.002	0.005	25
Boron	0.00153	0.00111	1.64	0.1		50
Cadmium	0.000501	0.000236	0.0465	0.005	0.005	10
Calcium	0.0101	0.0107		0.2	5	600
Chromium	0.001	0.00104	0.405	0.01	0.01	50
Cobalt	0.00111	0.000642	1.08	0.01	0.05	50
Copper	0.00189	0.00142	0.4	0.02	0.025	50
Iron	0.0131	0.036	1.56	0.1	0.1	1000
Lead	0.00161	0.00147	0.0765	0.003	0.003	25
Magnesium	0.0132	0.00738	1.905	0.2	5	1000
Manganese	0.000962	0.0036	0.088	0.01	0.015	50
Molybdenum	0.00112	0.000702	0.086	0.02		20
Nickel	0.00114	0.000486	1.42	0.04	0.04	50
Phosphorus	0.00154	0.0309	0.48	0.3		50
Selenium	0.00259	0.0019	0.348	0.005	0.005	50
Silica (SiO_2)	0.0569	0.03	16.11	0.5		428
Silver	0.00109	0.000504	0.072	0.01	0.01	25
Strontium	0.000936	0.000345	0.084	0.05		10
Thallium	0.00266	0.0017	0.164	0.01	0.01	50
Tin	0.00163	0.00171	0.333	0.1		50
Titanium	0.0009	0.000345	0.0834	0.015		10
Vanadium	0.00105	0.000531	0.096	0.01	0.05	50
Zinc	0.00153	0.00194	0.366	0.02	0.02	50

Quanterra, Inc.

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST **Date of IEC's:**

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(0.000496)
Barium	493.409	Co(0.000851)
Calcium	317.933	Sr(0.000047)
Chromium	267.716	Sb(0.00748), V(-0.00174), Zn(-0.00584)
Cobolt	228.616	Fe(0.085), Pb(-0.00062)
Iron	271.441	As(-0.000024), Cd(0.00008), Cr(-0.000012), Cu(-0.000041), Mg(-0.00026), Mn(-0.000011), Pb(0.000088), Sb(0.000031), Se(-0.000065), Tl(-0.000368), V(-0.00025)
Magnesium	279.078	Fe(0.000576), Mn(0.000013)
Manganese	257.61	Se(0.00051)
Molybdenum	202.03	Pb(-0.00072)
Nickel	231.604	Pb(0.000274)
Vanadium	292.402	Al(0.0209), Be(-0.00732), Fe(-0.595), Pb(-0.00009), Se(0.00011)

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/04/98
Time: 12:05:01

BATCH NUMBER: 8308200

PREP DATE: 11/04/98
DUE DATE 11/09/98

INITIALS TAA

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J210213	CMM8J	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/09/98					
D8J260141	CMRLT	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRLW	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRM1	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRNG	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRP1	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRPT	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRPX	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRQ1	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRQ3	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRQ6	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRQ8	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRQ9	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRQH	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRQN	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRQQ	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/11/98					

RQC057 Quanterra Incorporated Run Date: 11/04/98
METALS PREP LOG/BATCH SUMMARY Time: 12:05:01

BATCH NUMBER: 8308200 PREP DATE: 11/04/98
DUE DATE 11/09/98 INITIALS: TH

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J260141	CMRQV	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRR0	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE: 11/11/98					
	CMRR0S		50 g	____g	____g	____g
	CMRR0D		50 g	____g	____g	____g
D8J260141	CMRR5	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE: 11/11/98					
D8K040000	CN48WB	01	X 50 g	____g	____g	____g
WATER	DUE DATE: 0/00/00					
	CN48WC		50 g	____g	____g	____g
	CN48WL		50 g	____g	____g	____g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG —
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG ✓

COMMENTS: _____
B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS
SPIKING WITNESSED BY _____

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/04/98
Time: 12:05:01

BATCH NUMBER: 8308200

PREP DATE: 11/04/98
DUE DATE 11/09/98

INITIALS: TAA

ICP ELEMENTS WITHIN THE BATCH:

AS CD CR CU NI PB SE ZN

MS/MSD 1:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 2:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 3:	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK :	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK DUP:	ICP - 1	ICP - 2	GFAA	HG	ODD
STANDARD NUMBERS	_____	_____	____	___	___

Batch 8308200

SOP: CorpMT0003DEN

Spiking Information

Verification Number	Spike amount (ul)	Expiration Date
11759	500	10/99
11758	500	9/2000
11705	500	6/2000

Acid Lot Information

HNO3 6623 KXGD

HCl 5587 KXHL

H2O2 ———

RQC057 Quanterra Incorporated Run Date: 11/04/98
METALS PREP LOG/BATCH SUMMARY Time: 12:39:23

BATCH NUMBER: 8307276 PREP DATE: 11/04/98
DUE DATE 11/09/98 INITIALS: LJ

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J240110	CMQ8M	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/09/98			
D8J240110	CMQ8N	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/09/98			
D8J240110	CMQ8P	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/09/98			
D8J240110	CMQ8Q	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/09/98			
D8J280164	CMW09	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/10/98			
D8J280164	CMW1X	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/10/98			
D8J280164	CMW23	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/10/98			
D8J280164	CMW26	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/10/98			
	CMW26S		1.0 g	g	g	g
	CMW26D		1.0 g	g	g	g
D8J240121	CMQC6	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/12/98			
D8J240121	CMQC7	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/12/98			
D8J240121	CMQC8	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/12/98			
D8J240121	CMQC9	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/12/98			
D8J240121	CMQCA	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/12/98			
D8J240121	CMQCC	01	X 1.0 g	g	g	g
SOLID	TO DUE DATE:		11/12/98			

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/04/98
Time: 12:39:23

BATCH NUMBER: 8307276

PREP DATE: 11/04/98
DUE DATE 11/09/98

INITIALS: KJ

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J240121	CMQCD	01	X 1.0 g	____g	____g	____g
SOLID	TO DUE DATE:		11/12/98			
D8J240121	CMQCE	01	X 1.0 g	____g	____g	____g
SOLID	TO DUE DATE:		11/12/98			
D8J240121	CMQCF	01	X 1.0 g	____g	____g	____g
SOLID	TO DUE DATE:		11/12/98			
D8J240121	CMQCG	01	X 1.0 g	____g	____g	____g
SOLID	TO DUE DATE:		11/12/98			
D8J240121	CMQCH	01	X 1.0 g	____g	____g	____g
SOLID	TO DUE DATE:		11/12/98			
D8K030000	CN3DNB	01	X 1.0 g	____g	____g	____g
SOLID	DUE DATE:		0/00/00			
	CN3DNC		1.0 g	____g	____g	____g
	CN3DNL		1.0 g	____g	____g	____g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG ✓

COMMENTS: Sample brought to 100.0 g final wt

B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS

SPIKING WITNESSED BY _____

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/04/98
Time: 12:39:23

BATCH NUMBER: 8307276

PREP DATE: 11/04/98
DUE DATE 11/09/98

INITIALS: LF

ICP ELEMENTS WITHIN THE BATCH:

AS CD CR CU PB SE TL ZN

MS/MSD 1:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 2:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 3:	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK :	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK DUP:	ICP - 1	ICP - 2	GFAA	HG	ODD
STANDARD NUMBERS	_____	_____	____	___	___

RQC057 Quanterra Incorporated Run Date: 11/05/98
METALS PREP LOG/BATCH SUMMARY Time: 10:53:53

BATCH NUMBER: 8309211 PREP DATE: 11/05/98
DUE DATE 11/06/98 INITIALS: JS

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8K040132	CN46J	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/06/98			
D8K040141	CN48X	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/06/98			
D8K040137	CN47P	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/11/98			
D8K040137	CN489	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/11/98			
D8K040137	CN48K	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/11/98			
D8J280110	CMVDW	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/13/98			
D8J280110	CMVE5	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/13/98			
D8J280110	CMVE6	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/13/98			
D8J280110	CMVED	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/13/98			
D8K020122	CN20R	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/13/98			
D8J200143	CMK9Q	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/16/98			
	CMK9QS		50 g	g	g	g
	CMK9QD		50 g	g	g	g
D8J200143	CMKA3	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/16/98			
D8J200143	CMKA7	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/16/98			
D8K020168	CN2E9	01	X 50 g	g	g	g
WATER	DI DUE DATE:		11/16/98			

RQC057 Quanterra Incorporated Run Date: 11/05/98
METALS PREP LOG/BATCH SUMMARY Time: 10:53:53

BATCH NUMBER: 8309211 PREP DATE: 11/05/98
DUE DATE 11/06/98 INITIALS: JS

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8K020168	CN2EA	01	X 50 g	_____g	_____g	_____g
WATER	DI DUE DATE:		11/16/98			
D8K020168	CN2ED	01	X 50 g	_____g	_____g	_____g
WATER	DI DUE DATE:		11/16/98			
D8K050000	CN5AVB	01	X 50 g	_____g	_____g	_____g
WATER	DUE DATE:		0/00/00			
	CN5AVC		50 g	_____g	_____g	_____g
	CN5AVL		50 g	_____g	_____g	_____g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG —
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG JS

COMMENTS: rebluned to 50 ml
B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS
SPIKING WITNESSED BY _____

ICP ELEMENTS WITHIN THE BATCH:

	AG	AL	AS	BA	BE	BX	CA	CD	CO	CR	CU	FE	KX	MG	MN	NA	NI	PB	SA	SB	SE	TL
MS/MSD 1:	ICP - 1						ICP - 2				GFAA		HG		ODD							
MS/MSD 2:	ICP - 1						ICP - 2				GFAA		HG		ODD							
MS/MSD 3:	ICP - 1						ICP - 2				GFAA		HG		ODD							
CHECK :	ICP - 1						ICP - 2				GFAA		HG		ODD							
CHECK DUP:	ICP - 1						ICP - 2				GFAA		HG		ODD							
STANDARD NUMBERS	_____						_____				____		___		___							

Batch - 8309211

Sop -

Spiking Information

Verification Number	Spike amount (ul)	Expiration Date
11705	500.0	6-2000
11758	500.0	9-2000
11759	500.0	10-99

Acid Lot Information

HNO3 6623 KTGD

HCl 5587 KTHL

H2O2 —

Instrument Upload — Run Log - Page 1

Started Tue Nov 10 08:55:23 1998 by LOGANW

Data File: UPL$DEN_DATA_ROOT:<TJA>1109W.ASP;1

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
1	STD1	1	09-NOV-1998	10:08:00			016
2	HISTD	1	09-NOV-1998	10:13:00			016
3	HIGH	1	09-NOV-1998	10:17:00			016
4	ICV	1	09-NOV-1998	10:22:00			016
5	ICB-REANALYZE	1	09-NOV-1998	10:26:00			016
6	ICB	1	09-NOV-1998	10:31:00			016
7	CRI	1	09-NOV-1998	10:35:00			016
8	ICSA	1	09-NOV-1998	10:42:00			016
9	ICSAB	1	09-NOV-1998	10:46:00			016
10	CCV1	1	09-NOV-1998	10:50:00			016
11	CCB1	1	09-NOV-1998	10:58:00			016
12	CN48WB	1	09-NOV-1998	11:01:00	8308200	D8K040000	016
13	CNRR0		09-NOV-1998	11:06:00			016
14	CMRR0P		09-NOV-1998	11:11:00			016
15	CMRR0S	1	09-NOV-1998	11:16:00	8308200	D8J260141	016
16	CMRR0	1000	09-NOV-1998	11:28:00	8308200	D8J260141	016
17	CMRR0P	5000	09-NOV-1998	11:33:00			016
18	CMRR0S	1000	09-NOV-1998	11:38:00	8308200	D8J260141	016
19	CMRR0D	1000	09-NOV-1998	11:43:00	8308200	D8J260141	016
20	CMRR5	1	09-NOV-1998	11:47:00	8308200	D8J260141	016
21	CCV2	1	09-NOV-1998	11:53:00			016
22	CCB2	1	09-NOV-1998	11:59:00			016
23	CN3DNB	1	09-NOV-1998	12:16:00	8307276	D8K030000	016
24	CN3DNC	1	09-NOV-1998	12:21:00	8307276	D8K030000	016
25	CN3DNL	1	09-NOV-1998	12:26:00	8307276	D8K030000	016
26	CMQ8M	1	09-NOV-1998	12:30:00			016
27	CMQ8N	1	09-NOV-1998	12:35:00			016
28	CMQ8P	1	09-NOV-1998	12:40:00			016
29	CMQ8Q	1	09-NOV-1998	12:45:00			016
30	CMW09	1	09-NOV-1998	12:49:00	8307276	D8J280164	016
31	CMW1X	1	09-NOV-1998	12:54:00	8307276	D8J280164	016
32	CMW23	1	09-NOV-1998	12:59:00	8307276	D8J280164	016
33	CCV3	1	09-NOV-1998	13:05:00			016
34	CCB3	1	09-NOV-1998	13:10:00			016
35	CMW26	1	09-NOV-1998	13:15:00	8307276	D8J280164	016
36	CMW26P	1	09-NOV-1998	13:20:00			016
37	CMW26S	1	09-NOV-1998	13:25:00	8307276	D8J280164	016
38	CMW26D	1	09-NOV-1998	13:29:00	8307276	D8J280164	016
39	CMQC6	1	09-NOV-1998	13:34:00	8307276	D8J240121	016
40	CMQC7	1	09-NOV-1998	13:39:00	8307276	D8J240121	016
41	CMQC8	1	09-NOV-1998	13:44:00	8307276	D8J240121	016
42	CMQC9	1	09-NOV-1998	13:48:00	8307276	D8J240121	016
43	CMQCA	1	09-NOV-1998	13:53:00	8307276	D8J240121	016
44	CMQCC	1	09-NOV-1998	13:58:00	8307276	D8J240121	016

(continued)

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:       Instrument Upload                                    Run Log - Page  2 :
:       Started Tue Nov 10 08:55:24 1998 by LOGANW                             :
:       Data File: UPL$DEN_DATA_ROOT:<TJA>1109W.ASP;1                          :
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#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
45	CCV4	1	09-NOV-1998	14:04:00			016
46	CCB4	1	09-NOV-1998	14:09:00			016
47	CMQCD	1	09-NOV-1998	14:14:00	8307276	D8J240121	016
48	CMQCE	1	09-NOV-1998	14:19:00	8307276	D8J240121	016
49	CMQCF	1	09-NOV-1998	14:24:00	8307276	D8J240121	016
50	CMQCG	1	09-NOV-1998	14:28:00	8307276	D8J240121	016
51	CMQCH	1	09-NOV-1998	14:33:00	8307276	D8J240121	016
52	ICSA	1	09-NOV-1998	14:39:00			016
53	ICSAB	1	09-NOV-1998	14:43:00			016
54	CCV5	1	09-NOV-1998	14:47:00			016
55	CCB5	1	09-NOV-1998	14:51:00			016
56	CN5AVBF	1	09-NOV-1998	14:58:00	8309211	D8K050000	016
57	CN5AVCF	1	09-NOV-1998	15:02:00	8309211	D8K050000	016
58	CN5AVLF	1	09-NOV-1998	15:06:00	8309211	D8K050000	016
59	CN46JF	1	09-NOV-1998	15:11:00	8309211	D8K040132	016
60	CN48XF	1	09-NOV-1998	15:15:00	8309211	D8K040141	016
61	CN47PF	1	09-NOV-1998	15:19:00	8309211	W645	016 D8K040137 ↓
62	CN489F	1	09-NOV-1998	15:23:00	8309211	W645	016
63	CN48KF	1	09-NOV-1998	15:27:00	8309211	W645	016
64	CMVDWF	1	09-NOV-1998	15:31:00	8309211	SDG 520	016 D8J280110 ↓
65	CMVE5F	1	09-NOV-1998	15:36:00	8309211	SDG 520	016
66	CCV6	1	09-NOV-1998	15:40:00			016
67	CCB6	1	09-NOV-1998	15:46:00			016
68	CMVE6F	1	09-NOV-1998	15:50:00	8309211	SDG 520	016 D8J280110 ↓
69	CMVEDF	1	09-NOV-1998	15:54:00	8309211	SDG 520	016
70	CN20RF	1	09-NOV-1998	15:58:00	8309211	D8K020122	016
71	CMK9QF	1	09-NOV-1998	16:03:00	8309211	D8J200143	016
72	CMK9QP	1	09-NOV-1998	16:07:00			016
73	CMK9QSF	1	09-NOV-1998	16:11:00		D8J200143	016
74	CMK9QDF	1	09-NOV-1998	16:15:00		D8J200143	016
75	CMKA3F	1	09-NOV-1998	16:19:00	8309211	D8J200143	016
76	CMKA7F	1	09-NOV-1998	16:23:00	8309211	D8J200143	016
77	CN2E9F	1	09-NOV-1998	16:28:00	8309211	D8K020168	016
78	CCV7	1	09-NOV-1998	16:32:00			016
79	CCB7	1	09-NOV-1998	16:38:00			016
80	CN2EAF	1	09-NOV-1998	16:42:00	8309211	D8K020168	016
81	CN2EDF	1	09-NOV-1998	16:46:00	8309211	D8K020168	016
82	ICSA	1	09-NOV-1998	17:27:00			016
83	ICSAB	1	09-NOV-1998	17:32:00			016
84	CCV8	1	09-NOV-1998	17:38:00			016
85	CCB8	1	09-NOV-1998	17:45:00			016

not used

```
---------- End of Report ----------
```

Method: TRACE Standard: STD1-Blank
Run Time: 11/09/98 10:08:38

Elem	Ag	Sb	Al	As	B	Ba	Be
Avge	.0001	.0004	.0025	-.0012	.0009	.0000	-.0072
SDev	.0000	.0000	.0001	.0003	.0001	.0000	.0000
%RSD	13.60	5.721	2.499	21.42	6.126	25.97	.4062
#1	.0001	.0005	.0026	-.0010	.0010	.0000	-.0072
#2	.0001	.0004	.0025	-.0014	.0009	.0000	-.0072

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Avge	.0025	.0003	-.0001	.0003	.0018	.0001	.0000
SDev	.0000	.0000	.0000	.0000	.0000	.0000	.0000
%RSD	1.410	.2629	18.74	1.711	.3847	10.74	141.4
#1	.0025	.0003	-.0001	.0003	.0018	.0001	.0000
#2	.0025	.0003	-.0001	.0003	.0018	.0001	.0000

Elem	Mn	Mo	Ni	P	SiO2	Sn	Sr
Avge	.0002	.0004	.0004	.0010	.0153	.0004	.0000
SDev	.0000	.0000	.0000	.0001	.0001	.0001	.0000
%RSD	5.394	8.577	10.98	5.142	.9476	33.49	38.81
#1	.0001	.0004	.0003	.0009	.0154	.0005	.0000
#2	.0002	.0005	.0004	.0010	.0152	.0003	.0000

Elem	Ti	Tl	V	Zn	Pb/1	Pb/2	Se/1
Avge	.0001	-.0021	.0000	.0000	.0085	-.0014	-.0063
SDev	.0000	.0005	.0000	.0000	.0032	.0010	.0001
%RSD	10.36	24.30	478.1	14.37	37.70	74.25	2.180
#1	.0001	-.0017	.0000	.0000	.0062	-.0021	-.0064
#2	.0001	-.0024	-.0000	.0000	.0107	-.0007	-.0062

Elem	Se/2
Avge	.0020
SDev	.0005
%RSD	23.99
#1	.0017
#2	.0024

WLOW
11/9/98
ST-ICP
SOB#ICRP-MT.0001PEN

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	323070	--	--	--	--	--	--
SDev	849.2352	--	--	--	--	--	--
%RSD	.2628646	--	--	--	--	--	--
#1	322469	--	--	--	--	--	--
#2	323670	--	--	--	--	--	--

Method: TRACE Standard: HISTD
Run Time: 11/09/98 10:13:08

Elem	Ag	Sb	Al	As	B	Ba	Be
Avge	.2790	.1797	.1986	.6524	.1633	.4594	.8455
SDev	.0003	.0013	.0008	.0134	.0017	.0029	.0135
%RSD	.1220	.6942	.3934	2.056	1.031	.6278	1.596
#1	.2793	.1806	.1991	.6618	.1644	.4574	.8550
#2	.2788	.1788	.1980	.6429	.1621	.4615	.8359

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Avge	2.356	.9534	.1173	.2047	.1434	.0415	.1082
SDev	.061	.0249	.0020	.0035	.0010	.0009	.0030
%RSD	2.577	2.606	1.708	1.701	.6777	2.253	2.742
#1	2.399	.9710	.1187	.2072	.1427	.0422	.1103
#2	2.313	.9359	.1159	.2022	.1441	.0409	.1061

Elem	Mn	Mo	Ni	P	SiO2	Sn	Sr
Avge	.4909	.2672	.2764	.9092	14.22	1.366	.9900
SDev	.0061	.0037	.0056	.0158	.15	.031	.0042
%RSD	1.235	1.367	2.025	1.737	1.072	2.293	.4213
#1	.4951	.2697	.2804	.9204	14.32	1.389	.9871
#2	.4866	.2646	.2725	.8980	14.11	1.344	.9930

Elem	Ti	Tl	V	Zn	Pb/1	Pb/2	Se/1
Avge	.4691	4.049	.1462	.0746	2.246	1.154	4.347
SDev	.0022	.048	.0014	.0028	.023	.036	.030
%RSD	.4613	1.192	.9775	3.797	1.031	3.099	.7012
#1	.4706	4.083	.1472	.0766	2.262	1.179	4.368
#2	.4675	4.015	.1452	.0726	2.230	1.128	4.325

Elem	Se/2
Avge	2.302
SDev	.039
%RSD	1.678
#1	2.329
#2	2.274

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	303025	--	--	--	--	--	--
SDev	5993.437	--	--	--	--	--	--
%RSD	1.977869	--	--	--	--	--	--
#1	307263	--	--	--	--	--	--
#2	298787	--	--	--	--	--	--

Method: TRACE Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	HISTD	STD1-Blank	3.58484	-.000294	11/09/98 10:13:08
Sb	206.838	HISTD	STD1-Blank	5.62130	-.002480	11/09/98 10:13:08
Al	308.215	HISTD	STD1-Blank	51.1161	-.130061	11/09/98 10:13:08
As	189.042	HISTD	STD1-Blank	3.05988	.003645	11/09/98 10:13:08
B	249.678	HISTD	STD1-Blank	6.16059	-.005750	11/09/98 10:13:08
Ba	493.409	HISTD	STD1-Blank	2.17677	-.000074	11/09/98 10:13:08
Be	313.042	HISTD	STD1-Blank	1.16419	.008378	11/09/98 10:13:08
Ca	317.933	HISTD	STD1-Blank	16.9942	-.042162	11/09/98 10:13:08
Cd	226.502	HISTD	STD1-Blank	1.05006	-.000358	11/09/98 10:13:08
Co	228.616	HISTD	STD1-Blank	8.52495	.000884	11/09/98 10:13:08
Cr	267.716	HISTD	STD1-Blank	4.89266	-.001628	11/09/98 10:13:08
Cu	324.753	HISTD	STD1-Blank	7.05899	-.012684	11/09/98 10:13:08
Fe	271.441	HISTD	STD1-Blank	229.543	-.019186	11/09/98 10:13:08
Mg	279.078	HISTD	STD1-Blank	369.793	-.000573	11/09/98 10:13:08
Mn	257.610	HISTD	STD1-Blank	2.03875	-.000316	11/09/98 10:13:08
Mo	202.030	HISTD	STD1-Blank	3.74940	-.001671	11/09/98 10:13:08
Ni	231.604	HISTD	STD1-Blank	3.62231	-.001340	11/09/98 10:13:08
P	178.287	HISTD	STD1-Blank	11.0104	-.010701	11/09/98 10:13:08
Pb	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SiO2	288.158	HISTD	STD1-Blank	15.0697	-.231224	11/09/98 10:13:08
Sn	189.989	HISTD	STD1-Blank	7.32086	-.002845	11/09/98 10:13:08
Sr	421.552	HISTD	STD1-Blank	1.01202	-.000034	11/09/98 10:13:08
Ti	334.941	HISTD	STD1-Blank	2.13251	-.000277	11/09/98 10:13:08
Tl	190.864	HISTD	STD1-Blank	2.46747	.005100	11/09/98 10:13:08
V	292.402	HISTD	STD1-Blank	6.80985	-.000053	11/09/98 10:13:08
Zn	206.200	HISTD	STD1-Blank	13.3296	-.000598	11/09/98 10:13:08
Pb/1	220.351	HISTD	STD1-Blank	.448989	-.003808	11/09/98 10:13:08
Pb/2	220.352	HISTD	STD1-Blank	.863225	.001185	11/09/98 10:13:08
Se/1	196.021	HISTD	STD1-Blank	2.29736	.014425	11/09/98 10:13:08
Se/2	196.022	HISTD	STD1-Blank	4.34772	-.008751	11/09/98 10:13:08

Method: TRACE Sample Name: HIGH STD Operator:
Run Time: 11/09/98 10:17:38
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.002518	1.007116	10.01817	2.010232	1.006426	1.003548	1.005269
SDev	.001383	.001248	.00733	.010049	.002655	.008241	.005811
%RSD	.1379533	.1239569	.0731553	.4999087	.2637879	.8211876	.5781003
#1	1.003496	1.007999	10.02336	2.003126	1.008303	1.009376	1.001159
#2	1.001540	1.006233	10.01299	2.017338	1.004549	.9977213	1.009378
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.050000	1.050000	10.50000	2.100000	1.050000	1.050000	1.050000
Low	.9500000	.9500000	9.500000	1.900000	.9500000	.9500000	.9500000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.27445	1.007867	1.006296	1.006240	1.000789	10.06526	40.31103
SDev	.36070	.007774	.007925	.006173	.005857	.06223	.38903
%RSD	.8956021	.7713807	.7875794	.6134883	.5852696	.6182416	.9650632
#1	40.01940	1.002370	1.000692	1.001875	1.004931	10.02126	40.03594
#2	40.52950	1.013364	1.011900	1.010605	.9966477	10.10926	40.58611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	42.00000	1.050000	1.050000	1.050000	1.050000	10.50000	42.00000
Low	38.00000	.9500000	.9500000	.9500000	.9500000	9.500000	38.00000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.004593	1.005286	1.007657	10.03396	1.012107	10.09270	215.0912
SDev	.005409	.007469	.003891	.04689	.009304	.05545	.7555
%RSD	.5384230	.7429317	.3861347	.4672684	.9192367	.5494444	.3512404
#1	1.000768	1.000005	1.004906	10.00080	1.005529	10.05349	214.5570
#2	1.008417	1.010567	1.010408	10.06711	1.018686	10.13191	215.6254
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1.050000	1.050000	1.050000	10.50000	1.050000	10.50000	
Low	.9500000	.9500000	.9500000	9.500000	.9500000	9.500000	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.06957	1.001849	1.003135	10.03587	1.004195	1.010872	1.013984
SDev	.10833	.004153	.001740	.03327	.002587	.016317	.006438
%RSD	1.075818	.4145275	.1734636	.3315550	.2575998	1.614195	.6348811
#1	9.992964	1.004786	1.001905	10.01234	1.002366	.9993337	1.009432
#2	10.14617	.9989125	1.004366	10.05940	1.006024	1.022410	1.018536
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.50000	1.050000	1.050000	10.50000	1.050000	1.050000	
Low	9.500000	.9500000	.9500000	9.500000	.9500000	.9500000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	1.011170	10.04931	10.11436
SDev	.010735	.04423	.06106
%RSD	1.061596	.4401490	.6036592
#1	1.003580	10.01803	10.07119
#2	1.018761	10.08059	10.15754
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	303498	--	--	--	--	--	--
SDev	1553.514	--	--	--	--	--	--
%RSD	.5118686	--	--	--	--	--	--
#1	302400	--	--	--	--	--	--
#2	304597	--	--	--	--	--	--

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Method: TRACE Sample Name: ICV Operator:
Run Time: 11/09/98 10:22:06
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4859860	.4781253	4.806555	.4897474	.5186058	.4934023	.5027240
SDev	.0000633	.0004931	.008997	.0006827	.0012744	.0021108	.0004080
%RSD	.0130260	.1031313	.1871855	.1394059	.2457428	.4278133	.0811542
#1	.4860308	.4784740	4.812917	.4892646	.5195069	.4948949	.5024355
#2	.4859412	.4777767	4.800193	.4902301	.5177046	.4919097	.5030125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	5.520000	.5520000	.5520000	.5520000	.5520000
Low	.4480000	.4480000	4.480000	.4480000	.4480000	.4480000	.4480000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.31409	.5121159	.5009619	.5080853	.4894959	5.082753	20.64979
SDev	.02302	.0002573	.0010509	.0005547	.0008467	.002829	.03636
%RSD	.1133383	.0502356	.2097659	.1091818	.1729800	.0556568	.1760968
#1	20.29781	.5119340	.5002188	.5076930	.4900946	5.080752	20.62408
#2	20.33037	.5122978	.5017049	.5084775	.4888972	5.084753	20.67551
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.10000	.5520000	.5520000	.5520000	.5520000	5.520000	22.10000
Low	17.92000	.4480000	.4480000	.4480000	.4480000	4.480000	17.92000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5009279	.4990158	.5066942	1.991506	.5098816	4.931709	107.9502
SDev	.0006647	.0006853	.0005336	.002968	.0003649	.005171	.0020
%RSD	.1327018	.1373319	.1053142	.1490531	.0715671	.1048571	.0018641
#1	.5004578	.4995004	.5063169	1.993605	.5096235	4.928052	107.9516
#2	.5013979	.4985312	.5070716	1.989407	.5101396	4.935366	107.9488
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	.5520000	2.210000	.5520000	5.520000	117.7000
Low	.4480000	.4480000	.4480000	1.792000	.4480000	4.480000	96.30000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.006665	.4916665	.4997282	4.960844	.4996886	.5155826	.5093950
SDev	.009775	.0007334	.0002966	.000816	.0002168	.0016605	.0017725
%RSD	.1952472	.1491571	.0593455	.0164413	.0433835	.3220713	.3479673
#1	4.999753	.4921850	.4995185	4.960267	.4995353	.5144084	.5081416
#2	5.013578	.4911479	.4999379	4.961421	.4998419	.5167568	.5106484
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.519000	.5520000	.5520000	5.520000	.5520000	.5520000	
Low	4.481000	.4480000	.4480000	4.480000	.4480000	.4480000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5101244	4.919694	4.937707
SDev	.0003378	.007896	.003811
%RSD	.0662288	.1605038	.0771765
#1	.5103633	4.914111	4.935013
#2	.5098856	4.925278	4.940402
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	312350	--	--	--	--	--	--
SDev	19.79899	--	--	--	--	--	--
%RSD	.0063387	--	--	--	--	--	--
#1	312336	--	--	--	--	--	--
#2	312364	--	--	--	--	--	--

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Method: TRACE Sample Name: ICB Operator:
Run Time: 11/09/98 10:26:34
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0020925	.0066980	.0137897	.0023038	.0037179	.0004035	.0000643
SDev	.0069863	.0194113	.0373906	.0109876	.0079456	.0011364	.0002458
%RSD	333.8757	289.8085	271.1493	476.9416	213.7108	286.5776	382.0116
#1	.0070325	H.0204238	.0402288	H.0100732	.0093363	.0012212	.0002381
#2	-.002848	-.007028	-.012649	-.005466	-.001900	-.000414	-.000109
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0027373	.0003970	.0014502	.0012907	.0015610	.0310450	.0155419
SDev	.0083104	.0014012	.0051321	.0049497	.0052710	.1006831	.0456785
%RSD	303.6028	352.9420	353.8762	383.4976	337.6689	324.3134	293.9056
#1	.0086136	.0013878	.0050792	.0047906	.0052882	H.1022387	.0478414
#2	-.003139	-.000594	-.002179	-.002209	-.002166	-.040149	-.016758
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002087	.0012941	.0012096	.0010405	H.0066191	H.0086808	.0508439
SDev	.0007146	.0061977	.0048855	.0069725	.0019697	.0006076	.0689320
%RSD	342.4385	478.9197	403.8958	670.1309	29.75844	6.999424	135.5758
#1	.0007140	.0056766	.0046642	.0059708	H.0052263	H.0091105	.0995861
#2	-.000297	-.003088	-.002245	-.003890	H.0080119	H.0082512	.0021016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC High	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0041556	.0001781	.0006058	.0059902	.0017580	.0005711	.0147522
SDev	.0114207	.0004078	.0018612	.0109601	.0050479	.0027908	.0484842
%RSD	274.8286	228.9237	307.2485	182.9677	287.1446	488.6593	328.6567
#1	.0122312	.0004664	.0019219	H.0137402	.0053274	.0025445	.0490358
#2	-.003920	-.000110	-.000710	-.001760	-.001811	-.001402	-.019531
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0025585	.0192976	.0033804
SDev	.0271591	.0546196	.0263579
%RSD	1061.506	283.0385	779.7311
#1	-.016646	.0579195	-.015257
#2	.0217629	-.019324	.0220182
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	320532	--	--	--	--	--	--
SDev	623.6681	--	--	--	--	--	--
%RSD	.1945728	--	--	--	--	--	--
#1	320973	--	--	--	--	--	--
#2	320091	--	--	--	--	--	--

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Method: TRACE Sample Name: ICB Operator:
Run Time: 11/09/98 10:31:34
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000360	-.000105	.0007218	-.001951	-.000116	-.000064	.0001024
SDev	.000187	.000809	.0021289	.000581	.000623	.000005	.0000895
%RSD	51.97869	771.4977	294.9578	29.76983	536.6892	7.410488	87.43340
#1	-.000228	.0004673	.0022272	-.001540	.0003242	-.000061	.0001657
#2	-.000493	-.000677	-.000784	-.002361	-.000556	-.000067	.0000391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.002631	-.000118	-.000245	-.000408	-.000470	-.006394	-.002853
SDev	.000150	.000027	.000073	.000129	.000074	.000122	.001612
%RSD	5.709982	23.09685	29.86833	31.64128	15.67258	1.911872	56.51655
#1	-.002525	-.000137	-.000193	-.000317	-.000418	-.006308	-.003993
#2	-.002737	-.000099	-.000296	-.000499	-.000522	-.006481	-.001713
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000099	-.000938	-.000559	.0004697	.0010770	-.000386	.0096297
SDev	.000014	.000205	.000316	.0006104	.0005480	.000414	.0033231
%RSD	13.69373	21.83671	56.58791	129.9409	50.88168	107.1963	34.50894
#1	-.000089	-.000793	-.000335	.0009013	.0014645	-.000679	.0119795
#2	-.000109	-.001083	-.000782	.0000381	.0006895	-.000093	.0072799
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000411	-.000017	-.000054	-.000881	.0000810	-.000416	.0012602
SDev	.000353	.000011	.000074	.000950	.0001931	.000262	.0005681
%RSD	85.98373	64.07438	137.9791	107.9284	238.3018	63.05188	45.08114
#1	-.000161	-.000009	-.000001	-.000209	.0002176	-.000230	.0016619
#2	-.000660	-.000025	-.000107	-.001552	-.000056	-.000601	.0008585
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0009856	-.000412	-.000373
SDev	.0005380	.000160	.000541
%RSD	54.58459	38.82330	144.8341
#1	.0013660	-.000525	-.000756
#2	.0006052	-.000299	.0000090
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	324792	--	--	--	--	--	--
SDev	322.4407	--	--	--	--	--	--
%RSD	.0992761	--	--	--	--	--	--
#1	324564	--	--	--	--	--	--
#2	325020	--	--	--	--	--	--

Method: TRACE Sample Name: CRI Operator:
Run Time: 11/09/98 10:35:22
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0188196	.1129698	.0059579	.0185946	.0003233	.0000765	.0100748
SDev	.0000890	.0011587	.0023443	.0003685	.0005236	.0000142	.0000986
%RSD	.4727200	1.025655	39.34727	1.981631	161.9528	18.53258	.9788942
#1	.0188825	.1137891	.0076156	.0188551	.0006935	.0000665	.0101445
#2	.0187567	.1121504	.0043003	.0183340	-.000047	.0000865	.0100051
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.0300000	.1800000		.0300000			.0150000
Low	.0100000	.0600000		.0100000			.0050000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0223924	.0103529	.0996045	.0211476	.0489324	.0123433	.0068230
SDev	.0058506	.0001686	.0009065	.0003048	.0003173	.0016894	.0008051
%RSD	26.12745	1.628952	.9100988	1.441283	.6484180	13.68653	11.79924
#1	.0265294	.0104721	.1002455	.0209321	.0491568	.0111488	.0073922
#2	.0182555	.0102336	.0989635	.0213631	.0487081	.0135379	.0062537
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High		.0150000	.1500000	.0300000	.0750000		
Low		.0050000	.0500000	.0100000	.0250000		

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0314325	-.000304	.0834181	.0020666	.0073713	.0103720	.0204370
SDev	.0002270	.000253	.0009675	.0007162	.0002072	.0006296	.0007117
%RSD	.7221422	82.95309	1.159759	34.65903	2.810925	6.070088	3.482282
#1	.0315930	-.000483	.0841022	.0015601	.0075178	.0108172	.0199338
#2	.0312720	-.000126	.0827341	.0025730	.0072248	.0099268	.0209403
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	.0450000		.1200000		.0090000	.0150000	
Low	.0150000		.0400000		.0030000	.0050000	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000289	.0000656	.0000540	.0195476	.1004517	.0432095	.0082771
SDev	.000175	.0000064	.0000047	.0026636	.0006527	.0005564	.0004914
%RSD	60.36303	9.666979	8.697452	13.62609	.6497933	1.287573	5.936379
#1	-.000413	.0000701	.0000573	.0214310	.1009132	.0436029	.0086245
#2	-.000166	.0000611	.0000506	.0176641	.0999901	.0428161	.0079296
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK
High				.0300000	.1500000	.0600000	
Low				.0100000	.0500000	.0200000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0069191	.0112192	.0099490
SDev	.0000653	.0012983	.0002958
%RSD	.9442914	11.57172	2.972720
#1	.0069653	.0121372	.0101581
#2	.0068729	.0103012	.0097399
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	325124	--	--	--	--	--	--
SDev	54.44722	--	--	--	--	--	--
%RSD	.0167466	--	--	--	--	--	--
#1	325085	--	--	--	--	--	--
#2	325162	--	--	--	--	--	--

Method: TRACE Sample Name: ICSA Operator:
Run Time: 11/09/98 10:42:19
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0021794	.0150116	453.3990	.0059007	-.000855	.0015541	-.000948
SDev	.0030568	.0178568	1.0464	.0089946	.004343	.0005231	.000162
%RSD	140.2540	118.9530	.2307845	152.4308	507.7559	33.66030	17.08301
#1	.0043409	H.0276383	452.6592	.0122609	.0022156	.0019240	-.001063
#2	.0000180	.0023850	454.1390	-.000459	-.003926	.0011842	-.000834
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200000	.0200000	600.0000	.0200000	.1000000	.0200000	.0040000
Low	-.020000	-.020000	400.0000	-.020000	-.100000	-.020000	-.004000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	477.2627	.0030052	.0025426	.0168050	.0046150	184.7820	533.3440
SDev	12.6800	.0015449	.0024314	.0025374	.0028901	2.8768	12.2473
%RSD	2.656812	51.40820	95.62514	15.09882	62.62445	1.556836	2.296317
#1	468.2966	.0040976	.0042619	.0185992	.0066587	182.7479	524.6838
#2	486.2288	.0019128	.0008234	.0150108	.0025714	186.8162	542.0041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	.0100000	.0200000	.0200000	.0200000	240.0000	600.0000
Low	400.0000	-.010000	-.020000	-.020000	-.020000	160.0000	400.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000490	.0038857	.0054198	.0215777	.0015505	.0025672	.0449442
SDev	.000807	.0062888	.0023702	.0035708	.0246905	.0101010	.0430125
%RSD	164.5767	161.8462	43.73165	16.54841	1592.476	393.4611	95.70197
#1	.0000803	.0083326	.0070957	.0241026	L-.015908	-.004575	.0753586
#2	-.001061	-.000561	.0037438	.0190528	H.0190092	.0097097	.0145298
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200000	.0200000	.0400000	.3000000	.0060000	.0100000	.5000000
Low	-.020000	-.020000	-.040000	-.300000	-.006000	-.010000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0085932	-.001773	.0041747	-.003321	.0001132	.0086653	.0372518
SDev	.0088213	.000873	.0016856	.011946	.0034696	.0025389	.0482738
%RSD	102.6544	49.24821	40.37738	359.6855	3065.172	29.29970	129.5876
#1	.0148308	-.001156	.0053667	.0051257	.0025666	.0104606	.0713865
#2	.0023556	-.002391	.0029828	-.011768	-.002340	.0068700	.0031171
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0200000	2.000000	.0200000	.0200000	
Low	-.100000	-.050000	-.020000	-2.00000	-.020000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.016273	-.0439777	-.018107
SDev	.061118	.0533797	.041794
%RSD	375.5674	121.3791	230.8162
#1	-.059490	.0817229	-.047660
#2	.0269434	.0062325	.0114457
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	283572	--	--	--	--	--	--
SDev	5079.148	--	--	--	--	--	--
%RSD	1.791135	--	--	--	--	--	--
#1	279980	--	--	--	--	--	--
#2	287163	--	--	--	--	--	--

Method: TRACE Sample Name: ICSAB Operator:
Run Time: 11/09/98 10:46:29
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.045138	.9571234	460.8648	1.994846	2.093066	.5137136	.5079544
SDev	.000466	.0009545	.2761	.006932	.003276	.0010042	.0013756
%RSD	.0445609	.0997303	.0599104	.3474858	.1565002	.1954768	.2708178
#1	1.045467	.9577984	460.6695	1.989945	2.090750	.5144237	.5069817
#2	1.044809	.9564484	461.0600	1.999748	2.095382	.5130035	.5089271
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.200000	1.200000	600.0000	2.400000	2.400000	.6000000	.6000000
Low	.8000000	.8000000	400.0000	1.590000	1.590000	.4000000	.4000000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	494.3074	.9842715	.4780390	.5110418	.5266679	189.7950	548.7372
SDev	2.5468	.0037066	.0011742	.0035556	.0013277	.5512	2.3040
%RSD	.5152167	.3765793	.2456264	.6957537	.2520883	.2904341	.4198670
#1	492.5066	.9816505	.4772087	.5085276	.5276067	189.4053	547.1081
#2	496.1082	.9868924	.4788692	.5135560	.5257291	190.1848	550.3664
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	1.200000	.6000000	.6000000	.6000000	240.0000	600.0000
Low	400.0000	.8000000	.4000000	.4000000	.4000000	160.0000	400.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4912043	.9692306	.9635473	2.002932	.9967157	4.994815	21.38503
SDev	.0009190	.0029476	.0033794	.009125	.0064361	.000721	.01953
%RSD	.1870936	.3041157	.3507268	.4555761	.6457284	.0144326	.0913343
#1	.4905545	.9671464	.9611577	1.996479	.9921647	4.995325	21.37122
#2	.4918542	.9713149	.9659369	2.009384	1.001267	4.994305	21.39884
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.6000000	1.200000	1.200000		1.200000	6.000000	25.68000
Low	.4000000	.8000000	.8000000		.8000000	4.000000	17.12000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.746838	.9867812	.9878598	9.531879	.4902397	.9636065	.9999448
SDev	.036306	.0015460	.0000057	.026846	.0005102	.0069918	.0054542
%RSD	.3724932	.1566741	.0005802	.2816429	.1040733	.7255892	.5454525
#1	9.721166	.9878744	.9878558	9.512897	.4898789	.9586626	1.003802
#2	9.772510	.9856880	.9878639	9.550862	.4906005	.9685505	.9960880
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	12.00000	1.200000	1.200000	12.00000	.6000000	1.200000	
Low	8.000000	.8000000	.8000000	8.000000	.4000000	.8000000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.9951036	4.980601	5.001911
SDev	.0123723	.016337	.007075
%RSD	1.243317	.3280084	.1414515
#1	.9863551	4.992153	4.996908
#2	1.003852	4.969049	5.006914
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	283758	--	--	--	--	--	--
SDev	1246.629	--	--	--	--	--	--
%RSD	.4393291	--	--	--	--	--	--
#1	282876	--	--	--	--	--	--
#2	284639	--	--	--	--	--	--

Method: TRACE Sample Name: CCV1 Operator:
Run Time: 11/09/98 10:50:57
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5079255	.4966088	4.939076	.9974140	.4961928	.4996646	.5079644
SDev	.0040829	.0143689	.034529	.0026751	.0067513	.0038849	.0012494
%RSD	.8038451	2.893394	.6991063	.2682081	1.360610	.7774945	.2459707
#1	.5108125	.5067692	4.963492	.9993056	.5009667	.5024116	.5070809
#2	.5050384	.4864486	4.914661	.9955224	.4914190	.4969176	.5088479
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	5.520000	1.100000	.5520000	.5520000	.5520000
Low	.4480000	.4480000	4.480000	.9000000	.4480000	.4480000	.4480000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.42543	.5110108	.5074902	.5195509	.4955381	5.225276	20.41369
SDev	.08134	.0013384	.0015444	.0017205	.0051491	.093679	.04215
%RSD	.3982360	.2619153	.3043186	.3311550	1.039093	1.792810	.2064834
#1	20.36791	.5100644	.5085822	.5207675	.4991790	5.291518	20.38389
#2	20.48294	.5119572	.5063981	.5183343	.4918971	5.159035	20.44350
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00000	.5520000	.5520000	.5520000	.5520000	5.520000	22.00000
Low	18.00000	.4480000	.4480000	.4480000	.4480000	4.480000	17.92000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5081954	.4989669	.5245619	4.980174	.5035759	4.918192	105.9349
SDev	.0012316	.0011744	.0012951	.010426	.0112067	.102414	.2697
%RSD	.2423424	.2353665	.2468815	.2093457	2.225420	2.082354	.2545820
#1	.5073246	.4997973	.5254777	4.972802	.4956516	4.845774	105.7442
#2	.5090663	.4981364	.5236462	4.987546	.5115002	4.990610	106.1256
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	.5520000	5.520000	.5520000	5.520000	117.7000
Low	.4480000	.4480000	.4480000	4.480000	.4480000	4.480000	96.30000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.007473	.5016086	.4978323	5.015330	.5049409	.5171226	.5249251
SDev	.023332	.0012798	.0009088	.003057	.0027647	.0031780	.0315953
%RSD	.4659401	.2551370	.1825497	.0609564	.5475391	.6145461	6.019011
#1	4.990974	.5025136	.4984749	5.013168	.5068959	.5148755	.5472664
#2	5.023971	.5007037	.4971897	5.017492	.5029860	.5193698	.5025839
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520000	.5520000	.5520000	5.520000	.5520000	.5520000	
Low	4.480000	.4480000	.4480000	4.480000	.4480000	.4480000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.4929173	4.986174	4.884252
SDev	.0325756	.059782	.183391
%RSD	6.608734	1.198958	3.754735
#1	.4698829	5.028446	4.754575
#2	.5159518	4.943901	5.013929
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	314125	--	--	--	--	--	--
SDev	444.0630	--	--	--	--	--	--
%RSD	.1413651	--	--	--	--	--	--
#1	314439	--	--	--	--	--	--
#2	313811	--	--	--	--	--	--

Method: TRACE Sample Name: CCB1 Operator:
Run Time: 11/09/98 10:58:00
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000300	.0009042	.0110365	-.000908	-.000582	-.000051	.0001674
SDev	.000242	.0012010	.0013236	.000740	.000323	.000005	.0000048
%RSD	80.89066	132.8253	11.99295	81.51145	55.55027	9.368722	2.866813
#1	-.000128	.0017534	.0101005	-.000385	-.000353	-.000054	.0001708
#2	-.000471	.0000550	.0119724	-.001431	-.000810	-.000047	.0001640
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0037009	-.000006	-.000050	-.000398	-.000535	.0010731	.0039890
SDev	.0006723	.000007	.000130	.000117	.000029	.0014577	.0000001
%RSD	18.16642	112.9101	262.2239	29.51320	5.506733	135.8304	.0029468
#1	.0041763	-.000001	.0000424	-.000315	-.000556	.0000424	.0039891
#2	.0032255	-.000011	-.000142	-.000481	-.000514	.0021038	.0039889
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000067	.0000810	-.000396	-.000649	.0006272	-.000256	-.002596
SDev	.000013	.0002537	.000119	.000527	.0007740	.000962	.002918
%RSD	19.87662	313.3609	29.97994	81.24339	123.4088	375.7541	112.4163
#1	-.000058	.0002603	-.000312	-.001022	.0011745	.0004242	-.000532
#2	-.000077	-.000098	-.000479	-.000276	.0000799	-.000936	-.004659
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000565	.0000013	-.000087	.0006182	.0001356	.0049291	.0005044
SDev	.000383	.0000066	.000009	.0005370	.0000890	.0000304	.0003148
%RSD	67.81787	529.0793	10.77424	86.86919	65.62225	.6164167	62.41806
#1	-.000835	.0000059	-.000080	.0009980	.0001985	.0049505	.0007270
#2	-.000294	-.000003	-.000093	.0002385	.0000727	.0049076	.0002818
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0006885	.0005234	-.000645
SDev	.0010033	.0029444	.000028
%RSD	145.7160	562.4951	4.322099
#1	.0013979	.0026054	-.000665
#2	-.000021	-.001559	-.000625
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	324229	--	--	--	--	--	--
SDev	36.76955	--	--	--	--	--	--
%RSD	.0113406	--	--	--	--	--	--
#1	324203	--	--	--	--	--	--
#2	324255	--	--	--	--	--	--

Method: TRACE Sample Name: CCV2 Operator: wgl
Run Time: 11/09/98 11:53:36
Comment: 8308200
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5081011	.4908765	4.971918	.9999424	.4905330	.4934760	.5111881
SDev	.0000625	.0036184	.002465	.0004804	.0010501	.0019309	.0007797
%RSD	.0122931	.7371372	.0495802	.0480460	.2140752	.3912844	.1525303
#1	.5081453	.4883179	4.973661	1.000282	.4912756	.4948413	.5106368
#2	.5080569	.4934351	4.970175	.9996027	.4897905	.4921106	.5117395
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	5.520000	1.100000	.5520000	.5520000	.5520000
Low	.4480000	.4480000	4.480000	.9000000	.4480000	.4480000	.4480000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.64447	.5111769	.5088434	.5121164	.4947866	5.172126	20.57710
SDev	.05293	.0011174	.0020199	.0011661	.0009119	.015978	.05798
%RSD	.2563998	.2185848	.3969566	.2277058	.1843038	.3089195	.2817462
#1	20.60704	.5103868	.5074152	.5112919	.4954314	5.160828	20.53610
#2	20.68190	.5119670	.5102717	.5129410	.4941418	5.183423	20.61809
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00000	.5520000	.5520000	.5520000	.5520000	5.520000	22.00000
Low	18.00000	.4480000	.4480000	.4480000	.4480000	4.480000	17.92000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5102661	.4982828	.5103514	5.000132	.5110800	5.011769	106.7837
SDev	.0010961	.0032470	.0009948	.002660	.0036214	.010508	.2816
%RSD	.2148038	.6516451	.1949230	.0531913	.7085746	.2096608	.2636779
#1	.5094911	.4959868	.5096480	4.998251	.5085194	5.004339	106.5847
#2	.5110412	.5005788	.5110548	5.002012	.5136408	5.019199	106.9828
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	.5520000	5.520000	.5520000	5.520000	117.7000
Low	.4480000	.4480000	.4480000	4.480000	.4480000	4.480000	96.30000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.034169	.5012590	.5009255	5.048147	.5065178	.5100081	.5105830
SDev	.022864	.0009087	.0007698	.009196	.0009548	.0024987	.0006760
%RSD	.4541861	.1812807	.1536780	.1821746	.1885017	.4899369	.1323963
#1	5.018002	.5019016	.5003812	5.041644	.5058427	.5082412	.5101051
#2	5.050337	.5006165	.5014698	5.054650	.5071930	.5117750	.5110611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520000	.5520000	.5520000	5.520000	.5520000	.5520000	
Low	4.480000	.4480000	.4480000	4.480000	.4480000	.4480000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5113282	4.998973	5.018157
SDev	.0050919	.007006	.012256
%RSD	.9958077	.1401519	.2442324
#1	.5077277	4.994019	5.009491
#2	.5149286	5.003927	5.026823
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	310542	--	--	--	--	--	--
SDev	332.3402	--	--	--	--	--	--
%RSD	.1070194	--	--	--	--	--	--
#1	310307	--	--	--	--	--	--
#2	310777	--	--	--	--	--	--

Method: TRACE Sample Name: CCB2 Operator: wgl
Run Time: 11/09/98 11:59:28
Comment: 8308200
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001252	.0010460	.0048167	-.001928	.0000439	.0000617	.0000036
SDev	.0001345	.0007664	.0052121	.000471	.0003683	.0000865	.0000878
%RSD	107.4177	73.27440	108.2091	24.43297	839.5524	140.2000	2442.446
#1	.0002203	.0015879	.0085022	-.001595	.0003043	.0001228	.0000657
#2	.0000301	.0005040	.0011312	-.002261	-.000217	.0000005	-.000058
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0011986	.0000288	.0002455	-.000170	.0001197	.0014257	.0011573
SDev	.0000857	.0000738	.0000374	.000400	.0001123	.0047646	.0008173
%RSD	7.147953	255.8934	15.22122	234.4374	93.83209	334.2047	70.62158
#1	.0012592	.0000811	.0002720	.0001121	.0001992	.0047947	.0017351
#2	.0011380	-.000023	.0002191	-.000453	.0000403	-.001943	.0005794
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000048	.0000423	.0002026	.0005643	.0014077	.0013366	.0003213
SDev	.000018	.0000740	.0004078	.0027226	.0007100	.0008497	.0024503
%RSD	37.37106	174.9917	201.2608	482.4832	50.43520	63.57363	762.5693
#1	-.000036	-.000010	.0004910	.0024895	.0019098	.0019374	.0020539
#2	-.000061	.0000946	-.000086	-.001361	.0009057	.0007357	-.001411
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000092	.0000349	.0000520	.0009639	.0003825	.0065937	.0033862
SDev	.0001285	.0000179	.0001459	.0007013	.0003475	.0003569	.0027289
%RSD	1393.358	51.17826	280.5364	72.75825	90.83250	5.412778	80.58961
#1	-.000082	.0000475	.0001552	.0004680	.0006282	.0068461	.0053158
#2	.0001001	.0000223	-.000051	.0014598	.0001368	.0063414	.0014566
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0004200	-.0047555	-.000370
SDev	.0002980	.0045429	.000994
%RSD	70.94396	95.53027	268.4528
#1	.0002093	.0079679	-.001073
#2	.0006307	.0015432	.0003326
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	320600	--	--	--	--	--	--
SDev	79.19596	--	--	--	--	--	--
%RSD	.0247024	--	--	--	--	--	--
#1	320544	--	--	--	--	--	--
#2	320656	--	--	--	--	--	--

Method: TRACE Sample Name: CN3DNB Operator: WGL
Run Time: 11/09/98 12:16:40
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0482444	.2092473	.0097427	-.073228	-.108360	.0098869	-.009457
SDev	.0450232	.1409199	.7182257	.021493	.048802	.0081531	.004459
%RSD	93.32313	67.34611	7371.943	29.35093	45.03724	82.46442	47.15313
#1	.0800806	.3088927	.5176049	-.088426	-.073851	.0156520	-.006304
#2	.0164082	.1096019	-.498120	-.058030	-.142868	.0041217	-.012611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.000000	1.000000	10.00000	1.000000	10.00000	1.000000	.2000000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8610746	.0051471	.0126343	.0110553	.1815991	.1520326	.3460903
SDev	.0328489	.0055019	.0319477	.0301714	.0153362	.5702955	.4075988
%RSD	3.814874	106.8944	252.8650	272.9127	8.445097	375.1139	117.7724
#1	.8843023	.0090375	.0352248	.0323897	.1924434	.5552924	.6343062
#2	.8378469	.0012566	-.009956	-.010279	.1707547	-.251227	.0578745
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00000	.5000000	1.000000	1.000000	2.000000	10.00000	20.00000
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003275	-.009332	.0698249	4.559992	.1304370	.0049567	2.639328
SDev	.007635	.031376	.0646334	.016032	.0434409	.0762117	.317805
%RSD	233.1002	336.2169	92.56500	.3515719	33.30414	1537.542	12.04112
#1	.0021234	.0128540	.1155277	4.571328	.1611543	-.048933	2.864050
#2	-.008674	-.031518	.0241222	4.548656	.0997196	.0588465	2.414607
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.000000	2.000000	4.000000	30.00000	.3000000	.5000000	50.00000
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1536094	.0042402	.0164749	-.175573	.0552464	.2684826	.4728788
SDev	.0289695	.0024507	.0061027	.016533	.0287022	.0233827	.3502934
%RSD	18.85917	57.79762	37.04219	9.416546	51.95307	8.709201	74.07679
#1	.1740939	.0059731	.0207902	-.187263	.0755420	.2519486	.7205736
#2	.1331249	.0025072	.0121597	-.163882	.0349509	.2850167	.2251839
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.00000	5.000000	1.500000	1.000000	1.000000	2.000000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.040529	.3168261	-.150744
SDev	.109758	.1338954	.181108
%RSD	270.8136	42.26150	120.1424
#1	-.118139	.4115045	-.278807
#2	.0370815	.2221477	-.022682
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	320824	--	--	--	--	--	--
SDev	54.44722	--	--	--	--	--	--
%RSD	.0169711	--	--	--	--	--	--
#1	320862	--	--	--	--	--	--
#2	320785	--	--	--	--	--	--

Method: TRACE Sample Name: CN3DNC Operator: WGL
Run Time: 11/09/98 12:21:25
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.300338	46.84959	200.8136	198.6288	106.9438	203.1244	5.297998
SDev	.076002	.25298	1.3078	.1424	.4717	.9238	.004915
%RSD	1.767339	.5399852	.6512540	.0717138	.4410520	.4548135	.0927772
#1	4.354079	47.02848	201.7384	198.7295	107.2773	203.7777	5.301474
#2	4.246596	46.67071	199.8888	198.5281	106.6103	202.4712	5.294523
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	4.535600	56.50000	240.0000	216.0000	125.0000	224.0000	5.900000
Low	3.155200	41.00000	176.0000	176.0000	85.00000	170.0000	4.000000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5289.679	5.200772	51.97023	20.91779	25.01619	H123.6807	5342.430
SDev	.732	.010933	.03842	.08325	.09066	1.3202	2.475
%RSD	.0138441	.2102167	.0739199	.3979986	.3623874	1.067398	.0463313
#1	5289.161	5.208503	51.99740	20.97666	25.08029	H124.6142	5340.680
#2	5290.196	5.193042	51.94307	20.85892	24.95208	H122.7472	5344.180
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	5700.000	6.000000	58.00000	22.40000	28.75000	117.0000	5650.000
Low	4250.000	4.000000	40.00000	16.60000	21.00000	87.00000	4200.000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.58089	102.9090	51.30748	1014.468	52.34929	196.7897	1855.015
SDev	.04327	.1622	.03872	1.293	.02034	.7213	4.160
%RSD	.0822903	.1576359	.0754741	.1274967	.0388616	.3665309	.2242310
#1	52.61149	102.7943	51.33486	1015.383	52.36367	197.2998	1857.956
#2	52.55030	103.0237	51.28009	1013.554	52.33490	196.2797	1852.073
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	57.00000	120.0000	56.00000		57.00000	240.0000	2568.000
Low	42.00000	80.00000	42.00000		41.00000	160.0000	1712.000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	192.7860	102.4947	101.6812	203.2670	51.78362	51.54290	52.50989
SDev	.1352	.3415	.1928	.1941	.12816	.10617	.39326
%RSD	.0701542	.3331788	.1896221	.0954925	.2474838	.2059777	.7489341
#1	192.6903	102.7362	101.8175	203.4043	51.87425	51.46783	52.78797
#2	192.8816	102.2532	101.5449	203.1298	51.69300	51.61797	52.23181
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	240.0000	120.0000	120.0000	240.0000	58.00000	60.00000	
Low	160.0000	80.00000	80.00000	160.0000	42.50000	40.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	52.26911	196.5511	196.9097
SDev	.16583	.4478	.8579
%RSD	.3172684	.2278072	.4356667
#1	52.15185	196.8677	197.5163
#2	52.38637	196.2344	196.3031
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	310490	--	--	--	--	--	--
SDev	766.5037	--	--	--	--	--	--
%RSD	.2468691	--	--	--	--	--	--
#1	309948	--	--	--	--	--	--
#2	311032	--	--	--	--	--	--

Method: TRACE Sample Name: CN3DNL Operator: WGL
Run Time: 11/09/98 12:26:09
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.311738	46.83167	200.8807	199.1724	106.7168	204.0019	5.343224
SDev	.086675	.11472	.6752	.3886	.4015	.7438	.000490
%RSD	2.010206	.2449574	.3361316	.1950955	.3762063	.3646268	.0091689
#1	4.373026	46.91279	201.3582	198.8976	107.0007	204.5278	5.342877
#2	4.250450	46.75056	200.4033	199.4472	106.4329	203.4759	5.343570
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	4.535600	56.50000	240.0000	216.0000	125.0000	224.0000	5.900000
Low	3.155200	41.00000	176.0000	176.0000	85.00000	170.0000	4.000000

Elem	Ca	Cd	Co	Cr	Cu	Fe NR	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5310.726	5.233924	52.05013	20.95616	25.09643	H124.8136	5357.615
SDev	9.182	.001499	.05529	.06715	.13688	2.9328	9.587
%RSD	.1728959	.0286416	.1062166	.3204263	.5454142	2.349748	.1789485
#1	5304.233	5.232864	52.01104	21.00364	25.19321	H126.8874	5350.836
#2	5317.219	5.234984	52.08922	20.90868	24.99964	H122.7398	5364.395
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	5700.000	6.000000	58.00000	22.40000	28.75000	117.0000	5650.000
Low	4250.000	4.000000	40.00000	16.60000	21.00000	87.00000	4200.000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.67318	103.1490	51.68880	1006.284	52.58722	196.6447	2010.335
SDev	.08329	.2795	.00032	.199	.17304	.2762	1.300
%RSD	.1581316	.2709350	.0006210	.0197975	.3290497	.1404797	.0646623
#1	52.61429	102.9513	51.68857	1006.425	52.46486	196.4494	2011.255
#2	52.73208	103.3466	51.68902	1006.144	52.70957	196.8401	2009.416
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	57.00000	120.0000	56.00000		57.00000	240.0000	2568.000
Low	42.00000	80.00000	42.00000		41.00000	160.0000	1712.000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	193.0556	101.8970	101.5704	203.8088	52.00715	51.69398	52.62632
SDev	.4279	.1539	.0480	.5493	.01125	.12849	.41151
%RSD	.2216203	.1509953	.0472926	.2695217	.0216385	.2485600	.7819466
#1	192.7531	102.0057	101.5364	203.4204	52.01510	51.60312	52.91730
#2	193.3581	101.7882	101.6044	204.1973	51.99919	51.78483	52.33534
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	240.0000	120.0000	120.0000	240.0000	58.00000	60.00000	
Low	160.0000	80.00000	80.00000	160.0000	42.50000	40.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	52.56770	196.3631	196.7861
SDev	.46488	.0563	.3861
%RSD	.8843359	.0286659	.1961838
#1	52.23898	196.3233	196.5131
#2	52.89642	196.4029	197.0591
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	310990	--	--	--	--	--	--
SDev	136.4716	--	--	--	--	--	--
%RSD	.0438829	--	--	--	--	--	--
#1	310894	--	--	--	--	--	--
#2	311087	--	--	--	--	--	--

Method: TRACE Sample Name: CMQ8M Operator: WGL
Run Time: 11/09/98 12:30:52
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.007365	1.891987	15974.30	15.88564	9.634756	159.6040	.8331425
SDev	.105598	.369302	9.94	.32594	.177003	1.3209	.0220367
%RSD	1433.712	19.51926	.0622264	2.051803	1.837133	.8276412	2.645004
#1	-.082035	1.630851	15967.27	15.65517	9.509596	160.5380	.8175602
#2	.0673039	2.153123	15981.33	16.11612	9.759916	158.6699	.8487247
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20640.79	.5008461	6.832257	17.43790	26.01254	16462.79	3918.704
SDev	321.40	.0083398	.177312	.25797	.10986	172.66	66.980
%RSD	1.557134	1.665135	2.595220	1.479378	.4223229	1.048767	1.709236
#1	20413.53	.5067432	6.706879	17.25549	26.09023	16340.70	3871.342
#2	20868.06	.4949490	6.957636	17.62032	25.93486	16584.87	3966.066
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	270.2311	1.155428	14.29598	357.7546	19.68905	-.153916	1244.760
SDev	2.0531	.098266	.22935	3.0059	1.01914	.559974	13.810
%RSD	.7597444	8.504727	1.604323	.8401992	5.176179	363.8170	1.109443
#1	268.7793	1.085944	14.13380	355.6291	20.40969	.2420449	1234.995
#2	271.6828	1.224913	14.45816	359.8800	18.96841	L-.549878	1254.525
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.731542	59.42229	206.7537	-.339573	38.35593	89.85578	17.86019
SDev	.351491	.29315	.4911	.366084	.33980	2.31930	5.87938
%RSD	20.29932	.4933343	.2375182	107.8073	.8859107	2.581135	32.91888
#1	1.483000	59.62958	206.4065	-.598433	38.11566	88.21579	22.01754
#2	1.980084	59.21501	207.1009	-.080712	38.59621	91.49577	13.70285
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	20.60211	-.891338	.2142414
SDev	1.40733	4.460811	1.387521
%RSD	6.831012	500.4626	647.6435
#1	19.60697	2.262932	-.766884
#2	21.59724	-4.04561	1.195367
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	323176	--	--	--	--	--	--
SDev	4253.247	--	--	--	--	--	--
%RSD	1.316076	--	--	--	--	--	--
#1	320169	--	--	--	--	--	--
#2	326184	--	--	--	--	--	--

Method: TRACE Sample Name: CMQ8N Operator: WGL
Run Time: 11/09/98 12:35:35
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2153448	1.323065	13249.34	12.22887	12.53463	170.7973	.8139234
SDev	.2871893	1.011225	7.34	.62868	.35918	.5670	.0160683
%RSD	133.3625	76.43054	.0554331	5.140943	2.865503	.3319622	1.974181
#1	.4184183	2.038109	13244.15	12.67342	12.78861	171.1982	.8252854
#2	.0122713	.6080202	13254.54	11.78433	12.28065	170.3964	.8025613
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

OK No affecting ICCs 11-12-98

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H65380.30	.7998052	9.972094	17.02466	21.09181	19643.99	3801.483
SDev	88.48	.0734373	.145474	.15733	.22922	21.68	3.936
%RSD	.1353348	9.181898	1.458811	.9241369	1.086790	.1103646	.1035488
#1	H65317.73	.8517332	10.07496	17.13591	21.25389	19628.66	3798.700
#2	H65442.86	.7478772	9.869228	16.91341	20.92972	19659.32	3804.266
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	370.9863	1.127615	26.87730	473.6957	15.11180	-.487340	985.9653
SDev	.7705	.299968	.15403	1.1834	.89186	.785781	1.5121
%RSD	.2077030	26.60196	.5730992	.2498143	5.901767	161.2389	.1533664
#1	370.4415	1.339724	26.98622	472.8589	15.74244	.0682915	987.0346
#2	371.5312	.9155055	26.76838	474.5325	14.48115	L-1.04297	984.8961
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.942105	111.9847	110.1156	-.450929	42.46684	113.9744	20.09672
SDev	.487200	.0939	.0571	.527597	.32537	.2505	.70249
%RSD	25.08616	.0838909	.0518680	117.0022	.7661640	.2197973	3.495552
#1	2.286608	112.0511	110.0752	-.077862	42.69690	113.7973	20.59346
#2	1.597603	111.9183	110.1560	-.823996	42.23677	114.1516	19.59999
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	12.62307	4.074107	-2.76464
SDev	.98641	1.242511	.55776
%RSD	7.814330	30.49776	20.17469
#1	13.32057	4.952695	-2.37025
#2	11.92557	3.195519	-3.15904
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	309706	--	--	--	--	--	--
SDev	120.9153	--	--	--	--	--	--
%RSD	.0390420	--	--	--	--	--	--
#1	309791	--	--	--	--	--	--
#2	309620	--	--	--	--	--	--

Method: TRACE Sample Name: CMQ8P Operator: WGL
Run Time: 11/09/98 12:40:19
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.149264	.3038112	16594.22	4.092608	6.186945	181.8142	.8371084
SDev	.038832	.2832694	1.32	.192033	.057645	.5602	.0060222
%RSD	26.01561	93.23864	.0079814	4.692196	.9317268	.3081442	.7194094
#1	-.121806	.5041130	16593.29	4.228396	6.227707	182.2103	.8413668
#2	-.176722	.1035095	16595.16	3.956820	6.146184	181.4180	.8328500
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8796.541	.1565470	7.481728	13.09594	14.68497	20303.81	4366.996
SDev	23.982	.0120976	.019045	.01828	.07735	26.89	9.837
%RSD	.2726327	7.727767	.2545578	.1395512	.5267149	.1324420	.2252658
#1	8779.583	.1651013	7.495194	13.10887	14.73966	20284.80	4360.040
#2	8813.499	.1479928	7.468260	13.08302	14.63027	20322.83	4373.952
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	469.1533	.1943486	9.719461	445.1382	10.92274	.1446038	1140.060
SDev	.7704	.0201380	.006141	.5001	.06422	.0760749	6.177
%RSD	.1642196	10.36177	.0631787	.1123514	.5879447	52.60920	.5417982
#1	468.6085	.2085883	9.715119	444.7846	10.87733	.1983968	1135.693
#2	469.6981	.1801089	9.723804	445.4919	10.96815	.0908107	1144.428
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.084575	114.0542	402.8953	-.837742	45.50800	57.84674	10.72618
SDev	.009684	.1516	.2389	.143236	.03187	.24078	.50888
%RSD	.8928688	.1329186	.0592912	17.09781	.0700252	.4162434	4.744282
#1	1.091422	114.1614	402.7264	-.736459	45.53053	57.67648	11.08602
#2	1.077727	113.9470	403.0642	-.939025	45.48546	58.01700	10.36635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	11.02074	.3497985	.0421602
SDev	.35034	1.006278	.3883295
%RSD	3.178912	287.6737	921.0800
#1	10.77301	1.061345	-.232430
#2	11.26846	-.361748	.3167507
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	345434	--	--	--	--	--	--
SDev	174.6554	--	--	--	--	--	--
%RSD	.0505612	--	--	--	--	--	--
#1	345310	--	--	--	--	--	--
#2	345557	--	--	--	--	--	--

Method: TRACE Sample Name: CMQ8Q Operator: WGL
Run Time: 11/09/98 12:45:02
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.071992	.4578223	11034.03	4.795148	328.1049	87.69443	.7040219
SDev	.052080	.0006236	4.96	.272606	.8990	.26488	.0053158
%RSD	72.34176	.1362157	.0449403	5.685034	.2739943	.3020540	.7550636
#1	-.035166	.4573813	11030.53	4.987910	328.7406	87.88173	.7077808
#2	-.108818	.4582632	11037.54	4.602387	327.4693	87.50713	.7002631
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm ok	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H60699.04	.1418233	4.798120	11.45066	9.738936	10353.36	2968.441
SDev	202.33	.0003748	.027598	.00509	.044294	14.26	6.605
%RSD	.3333273	.2642586	.5751786	.0444338	.4548133	.1377485	.2224943
#1	H60555.98	.1415583	4.817635	11.44706	9.770256	10343.28	2963.771
#2	H60842.11	.1420884	4.778606	11.45425	9.707615	10363.45	2973.111
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	154.8732	.2753007	13.64401	178.7871	11.28746	.1338934	1059.865
SDev	.2052	.0809326	.01032	.0351	.02496	.1012382	.456
%RSD	.1324723	29.39789	.0756295	.0196556	.2210978	75.61107	.0429847
#1	154.7282	.3325287	13.65131	178.7623	11.30511	.2054796	1060.187
#2	155.0183	.2180727	13.63672	178.8120	11.26981	.0623071	1059.543
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.478349	61.77873	186.5326	-.663367	24.56424	36.71160	11.30945
SDev	.169795	.09424	.0801	.066257	.01059	.13667	.18523
%RSD	11.48546	.1525428	.0429252	9.987945	.0431059	.3722923	1.637801
#1	1.598412	61.84537	186.4760	-.616516	24.57172	36.61496	11.44042
#2	1.358285	61.71209	186.5892	-.710217	24.55675	36.80825	11.17847
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	11.27648	.1345059	.1335875
SDev	.05506	.3462469	.0210825
%RSD	.4882605	257.4213	15.78180
#1	11.23755	.3793395	.1186799
#2	11.31542	-.110328	.1484951
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	311464	--	--	--	--	--	--
SDev	47.37616	--	--	--	--	--	--
%RSD	.0152108	--	--	--	--	--	--
#1	311431	--	--	--	--	--	--
#2	311498	--	--	--	--	--	--

Method: TRACE Sample Name: CMW09 Operator: WGL
Run Time: 11/09/98 12:49:45
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.005854	.2208267	23.29432	-.154916	4.581122	11.97452	.0006445
SDev	.031734	.1689499	.66794	.131932	.137774	.09589	.0033676
%RSD	542.0695	76.50791	2.867414	85.16320	3.007422	.8008102	522.5049
#1	.0165853	.3402923	23.76663	-.061626	4.678543	12.04233	-.001737
#2	-.028294	.1013611	22.82201	-.248206	4.483701	11.90671	.0030257
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2602.354	.0357028	-.020206	.2019492	2.103553	36.85029	533.2660
SDev	2.036	.0026100	.040971	.0239722	.050836	1.12420	.2407
%RSD	.0782317	7.310424	202.7688	11.87042	2.416682	3.050715	.0451359
#1	2600.915	.0338573	.0087651	.2189002	2.139499	37.64521	533.4362
#2	2603.794	.0375484	-.049177	.1849983	2.067606	36.05536	533.0958
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.247558	.1320241	.0911812	750.8274	.3394562	.1774378	270.1241
SDev	.012633	.0465694	.0727513	2.2493	.0884710	.1382052	2.9858
%RSD	.2022058	35.27337	79.78761	.2995799	26.06255	77.88937	1.105329
#1	6.256491	.1649536	.1426241	752.4180	.4020146	.2751636	272.2354
#2	6.238625	.0990946	.0397382	749.2369	.2768978	.0797120	268.0129
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3543611	16.55621	.7841705	-.401524	.0946892	15.50136	.7184813
SDev	.0749615	.08012	.0494520	.021353	.0472382	.07762	.5132348
%RSD	21.15399	.4839567	6.306281	5.318071	49.88761	.5007193	71.43328
#1	.4073669	16.61286	.8191384	-.416623	.1280916	15.44648	1.081393
#2	.3013553	16.49955	.7492027	-.386425	.0612868	15.55625	.3555695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.1502277	.6027043	-.034877
SDev	.1235927	.4413356	.013133
%RSD	82.27026	73.22590	37.65499
#1	.0628344	.9147757	-.044163
#2	.2376209	.2906329	-.025590
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	320346	--	--	--	--	--	--
SDev	1125.007	--	--	--	--	--	--
%RSD	.3511855	--	--	--	--	--	--
#1	319550	--	--	--	--	--	--
#2	321141	--	--	--	--	--	--

Method: TRACE Sample Name: CMW1X Operator: WGL
Run Time: 11/09/98 12:54:28
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.019460	.1683596	30.91134	-.060900	.9665705	.6913216	.0124847
SDev	.004697	.0284714	.17844	.041674	.0162824	.0081286	.0014220
%RSD	24.13897	16.91106	.5772541	68.43033	1.684552	1.175807	11.39027
#1	-.016138	.1884919	31.03751	-.090369	.9550571	.6970694	.0134903
#2	-.022781	.1482273	30.78516	-.031432	.9780839	.6855738	.0114792
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	132.7105	.0298930	.0168173	.1243718	1.474899	43.55991	263.8680
SDev	.2880	.0052638	.0110913	.0023612	.003666	.68716	1.1685
%RSD	.2170025	17.60895	65.95214	1.898475	.2485262	1.577498	.4428481
#1	132.5068	.0336151	.0246600	.1260413	1.477491	44.04580	263.0417
#2	132.9141	.0261709	.0089745	.1227022	1.472307	43.07402	264.6943
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.900171	.1363700	.1184502	951.5082	.2160084	.2388842	129.3828
SDev	.009610	.0381908	.0361377	1.4228	.0226727	.1115041	.7180
%RSD	.5057300	28.00529	30.50875	.1495358	10.49621	46.67705	.5549458
#1	1.893376	.1093650	.0928970	952.5143	.1999764	.1600389	129.8905
#2	1.906966	.1633750	.1440034	950.5021	.2320405	.3177295	128.8751
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2922269	.8536218	1.197648	-.371741	.1422937	4.258696	.4707544
SDev	.0713888	.0013361	.007912	.017858	.0032500	.017026	.1442213
%RSD	24.42922	.1565210	.6606541	4.803827	2.283983	.3997933	30.63621
#1	.2417475	.8545666	1.203243	-.359114	.1445918	4.246656	.5727342
#2	.3427064	.8526771	1.192053	-.384369	.1399956	4.270735	.3687745
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0888264	-.4696226	.1236888
SDev	.1059947	.0373724	.1858297
%RSD	119.3280	7.957972	150.2398
#1	.0138768	.4960489	-.007713
#2	.1637760	.4431963	.2550902
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	324304	--	--	--	--	--	--
SDev	248.1945	--	--	--	--	--	--
%RSD	.0765313	--	--	--	--	--	--
#1	324129	--	--	--	--	--	--
#2	324480	--	--	--	--	--	--

Method: TRACE Sample Name: CMW23 Operator: WGL
Run Time: 11/09/98 12:59:12
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.168833	.4300632	7724.087	4.646642	3.963514	107.6910	.4967744
SDev	.049496	.2378419	7.174	.009613	.113428	.5791	.0060367
%RSD	29.31639	55.30393	.0928733	.2068847	2.861816	.5377364	1.215182
#1	-.133835	.5982428	7729.160	4.639844	4.043720	108.1005	.5010430
#2	-.203832	.2618836	7719.015	4.653439	3.883308	107.2815	.4925058
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4447.133	.4546990	4.451805	12.87579	14.33241	12520.25	2092.117
SDev	6.237	.0138679	.038199	.01676	.09659	5.33	2.680
%RSD	.1402532	3.049906	.8580459	.1301847	.6739164	.0425894	.1281146
#1	4442.722	.4645051	4.478816	12.88764	14.40071	12516.48	2090.221
#2	4451.543	.4448930	4.424795	12.86393	14.26411	12524.02	2094.012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	221.0403	.4380307	6.732226	778.0123	41.58756	.4464156	1250.946
SDev	.1211	.0615998	.088661	.2690	.01676	.1264921	2.052
%RSD	.0547924	14.06291	1.316961	.0345705	.0403044	28.33505	.1640434
#1	220.9546	.4815883	6.794918	777.8221	41.59941	.5358590	1249.495
#2	221.1259	.3944730	6.669533	778.2024	41.57571	.3569722	1252.397
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.506414	61.37912	338.1176	-.858906	27.39149	63.74155	41.34739
SDev	.032243	.18302	.4005	.224626	.10152	.17782	.28153
%RSD	2.140398	.2981859	.1184464	26.15262	.3706086	.2789670	.6808898
#1	1.529214	61.50854	338.4008	-.700071	27.46328	63.61581	41.54646
#2	1.483615	61.24970	337.8344	L-1.01774	27.31971	63.86728	41.14831
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	41.70747	.5786524	.3803963
SDev	.11542	.1857956	.0968848
%RSD	.2767475	32.10832	25.46944
#1	41.62585	.7100297	.4489042
#2	41.78908	.4472751	.3118884
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	340518	--	--	--	--	--	--
SDev	927.7241	--	--	--	--	--	--
%RSD	.2724450	--	--	--	--	--	--
#1	339862	--	--	--	--	--	--
#2	341174	--	--	--	--	--	--

Method: TRACE Sample Name: CCV3 Operator: WGL
Run Time: 11/09/98 13:05:04
Comment: 8307276
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5074667	.4866093	4.948061	.9818559	.4876267	.5014546	.5029969
SDev	.0000490	.0011492	.000816	.0015487	.0005617	.0024104	.0017281
%RSD	.0096591	.2361686	.0164837	.1577348	.1151931	.4806857	.3435534
#1	.5074320	.4874219	4.947484	.9807608	.4880238	.5031590	.5017750
#2	.5075013	.4857967	4.948638	.9829511	.4872295	.4997501	.5042189
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	5.520000	1.100000	.5520000	.5520000	.5520000
Low	.4480000	.4480000	4.480000	.9000000	.4480000	.4480000	.4480000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.15680	.5005087	.4987799	.5028673	.4973245	5.050712	20.08742
SDev	.13135	.0026310	.0023255	.0020639	.0013671	.021573	.14133
%RSD	.6516402	.5256602	.4662281	.4104241	.2748944	.4271302	.7035556
#1	20.06392	.4986484	.4971356	.5014080	.4982912	5.035457	19.98748
#2	20.24968	.5023691	.5004243	.5043268	.4963578	5.065966	20.18735
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00000	.5520000	.5520000	.5520000	.5520000	5.520000	22.00000
Low	18.00000	.4480000	.4480000	.4480000	.4480000	4.480000	17.92000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5004454	.4892785	.5019710	4.913896	.4994990	4.944694	105.7312
SDev	.0020292	.0012573	.0023087	.019147	.0052435	.036055	.3968
%RSD	.4054793	.2569624	.4599225	.3896462	1.049754	.7291608	.3753356
#1	.4990105	.4883895	.5003386	4.900357	.4957913	4.919200	105.4505
#2	.5018802	.4901675	.5036035	4.927435	.5032067	4.970189	106.0118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	.5520000	5.520000	.5520000	5.520000	117.7000
Low	.4480000	.4480000	.4480000	4.480000	.4480000	4.480000	96.30000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.911750	.5034954	.4943037	4.970894	.4994708	.4920380	.5044396
SDev	.033941	.0009338	.0008141	.015171	.0014151	.0046717	.0071296
%RSD	.6910170	.1854646	.1646981	.3051934	.2833286	.9494557	1.413375
#1	4.887750	.5041558	.4937280	4.960167	.4984701	.4887346	.4993982
#2	4.935750	.5028352	.4948793	4.981622	.5004714	.4953414	.5094810
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520000	.5520000	.5520000	5.520000	.5520000	.5520000	
Low	4.480000	.4480000	.4480000	4.480000	.4480000	.4480000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.4970324	4.930286	4.951888
SDev	.0043018	.044412	.031883
%RSD	.8655059	.9008063	.6438468
#1	.4939905	4.898881	4.929344
#2	.5000743	4.961690	4.974432
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	308170	--	--	--	--	--	--
SDev	474.4687	--	--	--	--	--	--
%RSD	.1539635	--	--	--	--	--	--
#1	307834	--	--	--	--	--	--
#2	308505	--	--	--	--	--	--

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Method: TRACE Sample Name: CCB3 Operator: WGL
Run Time: 11/09/98 13:10:56
Comment: 8307276
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003003	-.008028	.0004248	-.005048	-.003905	-.000439	-.000180
SDev	.005914	.016103	.0256033	.008537	.005283	.000976	.000475
%RSD	196.9423	200.5723	6026.912	169.1110	135.2901	222.3292	264.4915
#1	.0011789	.0033580	.0185290	.0009884	-.000169	.0002511	.0001564
#2	-.007184	L-.019415	-.017679	L-.011085	-.007640	-.001129	-.000516
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004775	-.000618	-.002115	-.002299	-.002163	-.040026	-.016906
SDev	.0067306	.001041	.004015	.004417	.003985	.083875	.037757
%RSD	1409.445	168.4694	189.8627	192.1247	184.2364	209.5492	223.3274
#1	.0052368	.0001181	.0007243	.0008243	.0006548	.0192822	.0097915
#2	-.004282	-.001354	-.004954	-.005422	-.004980	-.099335	-.043604
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000278	-.002636	-.002294	-.004069	.0007317	-.000064	-.013091
SDev	.000594	.004665	.004061	.004047	.0008571	.000733	.040195
%RSD	213.3430	177.0088	176.9975	99.47227	117.1441	1140.088	307.0448
#1	.0001415	.0006632	.0005772	-.001207	.0001256	.0004538	.0153311
#2	-.000698	-.005934	-.005166	-.006930	.0013377	-.000582	-.041513
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003882	-.000135	-.000784	-.004991	-.001739	.0053173	-.006159
SDev	.010072	.000329	.001543	.010794	.004042	.0023208	.021455
%RSD	259.4218	243.5958	196.7570	216.2788	232.4332	43.64686	348.3687
#1	.0032394	.0000976	.0003069	.0026418	.0011191	.0069584	.0090122
#2	-.011004	-.000368	-.001875	L-.012624	-.004597	.0036762	-.021330
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0041717	-.006914	.0033553
SDev	.0119964	.025173	.0114692
%RSD	287.5658	364.1050	341.8236
#1	-.004311	.0108863	-.004755
#2	.0126545	-.024714	.0114652
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	315405	--	--	--	--	--	--
SDev	8268.906	--	--	--	--	--	--
%RSD	2.621679	--	--	--	--	--	--
#1	321252	--	--	--	--	--	--
#2	309558	--	--	--	--	--	--

Method: TRACE Sample Name: CMW26 Operator: WGL
Run Time: 11/09/98 13:15:40
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.054337	.6046172	5864.472	9.331663	3.759908	88.72020	.4288324
SDev	.086392	.3589333	1.527	.216561	.176473	.42096	.0092811
%RSD	158.9911	59.36538	.0260401	2.320715	4.693553	.4744820	2.164271
#1	.0067507	.8584214	5865.552	9.484796	3.884693	89.01787	.4353951
#2	-.115426	.3508131	5863.392	9.178532	3.635122	88.42254	.4222697
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7241.098	1.394267	4.161389	13.31477	21.93547	12030.40	1839.088
SDev	32.516	.016609	.066701	.06236	.17000	29.24	8.397
%RSD	.4490413	1.191215	1.602853	.4683504	.7750167	.2430851	.4566074
#1	7218.106	1.406011	4.208554	13.35887	22.05568	12009.72	1833.150
#2	7264.090	1.382523	4.114224	13.27068	21.81526	12051.08	1845.026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	243.2609	.9872749	7.159103	1324.183	79.19460	.3555423	1255.992
SDev	.6455	.1105050	.089182	4.940	.36592	.3131084	7.915
%RSD	.2653567	11.19293	1.245720	.3730533	.4620564	88.06500	.6301504
#1	242.8044	1.065414	7.222165	1320.690	78.93584	.5769434	1250.396
#2	243.7173	.9091361	7.096042	1327.676	79.45334	.1341413	1261.589
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.974860	42.39432	283.0273	-.501512	20.29638	133.1571	79.60268
SDev	.180475	.08918	.2209	.479356	.11722	.9753	1.40727
%RSD	9.138623	.2103553	.0780435	95.58226	.5775588	.7324214	1.767861
#1	2.102475	42.45738	282.8711	-.162556	20.37927	132.4675	80.59777
#2	1.847245	42.33126	283.1835	-.840468	20.21349	133.8468	78.60760
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	78.99085	1.101499	-.016877
SDev	1.25118	1.420320	.239667
%RSD	1.583959	128.9443	1420.102
#1	78.10613	2.105817	-.186347
#2	79.87557	.0971811	.1525937
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	337322	--	--	--	--	--	--
SDev	366.9884	--	--	--	--	--	--
%RSD	.1087948	--	--	--	--	--	--
#1	337062	--	--	--	--	--	--
#2	337581	--	--	--	--	--	--

Method: TRACE Sample Name: CMW26P Operator: WGL
Run Time: 11/09/98 13:20:24
Comment: 8307276
Mode: CONC Corr. Factor: 500

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.232091	.5381995	5958.525	9.476994	2.934217	89.79234	.4708415
SDev	.268070	.5318306	9.988	.399668	.220314	.60454	.0492575
%RSD	115.5020	98.81661	.1676292	4.217246	7.508456	.6732655	10.46160
#1	-.042537	.9142605	5965.588	9.194385	3.090003	90.21982	.5056718
#2	-.421646	.1621385	5951.462	9.759602	2.778431	89.36487	.4360111

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7519.940	1.357628	4.260538	13.67923	21.73776	12531.12	1914.512
SDev	4.019	.042743	.096325	.12237	.09253	1.06	.965
%RSD	.0534434	3.148327	2.260875	.8945398	.4256533	.0084752	.0504146
#1	7522.782	1.327404	4.328651	13.76575	21.80319	12531.87	1915.194
#2	7517.098	1.387851	4.192426	13.59270	21.67234	12530.37	1913.829

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	252.8953	.6762797	7.230527	1369.983	82.71426	1.450470	1298.277
SDev	.1432	.1771407	.240659	5.853	.09492	.657691	3.237
%RSD	.0566155	26.19340	3.328368	.4272416	.1147517	45.34333	.2493409
#1	252.9966	.5510223	7.400698	1365.844	82.78138	1.915528	1300.566
#2	252.7941	.8015371	7.060356	1374.122	82.64715	.9854121	1295.988

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.803543	43.26439	288.7460	-.648292	20.69697	141.8288	82.32083
SDev	.203214	.18315	.4802	.759286	.08684	.3729	.85872
%RSD	7.248462	.4233226	.1662910	117.1210	.4195980	.2629220	1.043134
#1	2.947236	43.39389	289.0855	-.111395	20.75838	141.5651	82.92804
#2	2.659849	43.13488	288.4065	-1.18519	20.63556	142.0925	81.71363

Elem	Pb/2	Se/1	Se/2
Units	ppm	ppm	ppm
Avge	82.91068	2.212380	1.070087
SDev	.28640	.108576	1.040251
%RSD	.3454307	4.907642	97.21182
#1	82.70817	2.135605	1.805655
#2	83.11320	2.289154	.3345183

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	326114	--	--	--	--	--	--
SDev	369.8168	--	--	--	--	--	--
%RSD	.1134013	--	--	--	--	--	--
#1	325852	--	--	--	--	--	--
#2	326375	--	--	--	--	--	--

Method: TRACE Sample Name: CMW26S Operator: WGL
Run Time: 11/09/98 13:25:08
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.731754	32.04022	8273.984	181.5826	98.30811	268.2485	4.993935
SDev	.012964	.14679	23.328	4.0168	.79404	4.3538	.134369
%RSD	.3473979	.4581463	.2819477	2.212091	.8077040	1.623061	2.690648
#1	3.722587	31.93642	8257.489	178.7423	97.74664	271.3272	4.898921
#2	3.740921	32.14402	8290.480	184.4229	98.86958	265.1699	5.088948
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11262.87	5.754705	48.75596	30.51350	43.13654	10709.98	6461.102
SDev	393.46	.159113	1.19120	.73165	.64963	265.91	238.666
%RSD	3.493456	2.764922	2.443195	2.397784	1.505987	2.482786	3.693887
#1	10984.65	5.642195	47.91365	29.99614	43.59589	10521.96	6292.340
#2	11541.09	5.867215	49.59827	31.03085	42.67718	10898.01	6629.864
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	268.9830	88.10590	50.18170	2054.060	343.1662	174.9288	2844.907
SDev	4.9838	1.87680	1.24594	50.143	3.2486	.0164	44.171
%RSD	1.852814	2.130165	2.482855	2.441188	.9466600	.0093753	1.552635
#1	265.4590	86.77879	49.30069	2018.603	340.8691	174.9172	2813.674
#2	272.5071	89.43299	51.06271	2089.517	345.4633	174.9404	2876.141
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	160.6547	131.6490	400.7840	173.9659	65.45210	195.1506	348.0547
SDev	5.8487	1.2465	2.6764	3.4021	.78152	11.0189	11.4469
%RSD	3.640522	.9468117	.6677916	1.955588	1.194029	5.646355	3.288814
#1	156.5191	132.5303	398.8915	171.5603	64.89948	187.3590	356.1489
#2	164.7904	130.7676	402.6765	176.3715	66.00472	202.9421	339.9605
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	340.7256	177.7629	173.5138
SDev	10.5854	7.8772	3.9573
%RSD	3.106713	4.431303	2.280689
#1	333.2406	183.3330	170.7156
#2	348.2106	172.1929	176.3121
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	325997	--	--	--	--	--	--
SDev	10131.43	--	--	--	--	--	--
%RSD	3.107828	--	--	--	--	--	--
#1	318833	--	--	--	--	--	--
#2	333161	--	--	--	--	--	--

Method: TRACE Sample Name: CMW26D Operator: WGL
Run Time: 11/09/98 13:29:52
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.849548	32.70469	8381.434	187.7144	99.42342	273.5007	5.141171
SDev	.071831	.37870	5.392	.7753	.33488	1.2373	.008456
%RSD	1.865956	1.157925	.0643372	.4129965	.3368241	.4523964	.1644697
#1	3.900340	32.97247	8377.621	187.1662	99.66021	274.3756	5.135191
#2	3.798756	32.43691	8385.247	188.2626	99.18662	272.6258	5.147150
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11253.96	5.879662	49.90283	31.12270	43.98154	11784.51	6677.057
SDev	79.21	.000844	.21222	.05889	.18627	57.72	46.009
%RSD	.7038208	.0143537	.4252567	.1892132	.4235159	.4897986	.6890647
#1	11197.95	5.880258	49.75277	31.08106	44.11326	11743.69	6644.523
#2	11309.97	5.879065	50.05289	31.16434	43.84983	11825.32	6709.590
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	287.5366	89.91183	51.77471	2070.607	133.5407	175.1535	3179.291
SDev	1.3121	.24419	.06017	10.265	1.0900	.7959	18.747
%RSD	.4563098	.2715884	.1162167	.4957713	.8161960	.4543983	.5896747
#1	286.6089	89.73916	51.73217	2063.349	132.7700	174.5907	3166.035
#2	288.4644	90.08450	51.81726	2077.866	134.3114	175.7163	3192.548
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	163.0786	132.8060	400.7219	176.8988	67.54306	172.4890	133.7765
SDev	.9763	.2380	.7482	.8865	.10209	1.7314	.4102
%RSD	.5986729	.1792389	.1867222	.5011430	.1511497	1.003784	.3066379
#1	162.3882	132.9743	400.1928	176.2720	67.47087	171.2647	134.0666
#2	163.7689	132.6377	401.2509	177.5257	67.61525	173.7133	133.4865
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	133.4230	175.5220	174.9695
SDev	1.8389	1.0382	1.7116
%RSD	1.378251	.5914908	.9782071
#1	132.1227	176.2561	173.7592
#2	134.7233	174.7878	176.1798
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	329425	--	--	--	--	--	--
SDev	284.2569	--	--	--	--	--	--
%RSD	.0862888	--	--	--	--	--	--
#1	329224	--	--	--	--	--	--
#2	329626	--	--	--	--	--	--

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Method: TRACE Sample Name: CMQC6 Operator: WGL
Run Time: 11/09/98 13:34:36
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0123111	.3518168	1675.056	4.834903	1.523783	53.70656	.1352455
SDev	.0110086	.2440399	1.659	.175606	.017630	.20753	.0015654
%RSD	89.42052	69.36562	.0990574	3.632049	1.156958	.3864141	1.157417
#1	.0045268	.1792545	1673.883	4.710731	1.536249	53.85330	.1363524
#2	.0200953	.5243790	1676.229	4.959075	1.511317	53.55981	.1341387
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8817.065	.4044188	2.877042	9.087639	45.82915	4721.505	792.9857
SDev	32.553	.0030767	.032961	.023736	.11153	11.011	3.8846
%RSD	.3692063	.7607757	1.145639	.2611947	.2433530	.2332149	.4898645
#1	8794.046	.4065943	2.853736	9.070855	45.90801	4713.719	790.2390
#2	8840.083	.4022432	2.900349	9.104423	45.75029	4729.291	795.7325
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	192.0742	.4883375	4.424197	236.4808	8.302836	.5524479	751.4356
SDev	.4550	.0150128	.011804	.6491	.264246	.2424500	.8084
%RSD	.2368694	3.074270	.2668089	.2744658	3.182599	43.88649	.1075749
#1	191.7524	.4777219	4.432544	236.0218	8.489685	.7238860	752.0071
#2	192.3959	.4989532	4.415850	236.9397	8.115985	.3810099	750.8640
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.023011	32.60779	39.26923	-.295203	9.578951	163.6577	8.541338
SDev	.026183	.05497	.07737	.005548	.019182	1.1980	.091708
%RSD	2.559418	.1685802	.1970369	1.879465	.2002503	.7319897	1.073698
#1	1.041526	32.64666	39.21451	-.299126	9.565387	162.8107	8.606185
#2	1.004497	32.56892	39.32394	-.291280	9.592514	164.5048	8.476490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	8.183763	.7530628	.4522909
SDev	.350385	.0550393	.3909716
%RSD	4.281465	7.308729	86.44251
#1	8.431522	.7141441	.7287496
#2	7.936003	.7919815	.1758322
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	317757	--	--	--	--	--	--
SDev	1216.224	--	--	--	--	--	--
%RSD	.3827527	--	--	--	--	--	--
#1	316897	--	--	--	--	--	--
#2	318617	--	--	--	--	--	--

Method: TRACE Sample Name: CMQC7 Operator: WGL
Run Time: 11/09/98 13:39:19
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0302593	.3650827	3363.784	1.749540	2.061065	56.89340	.1875350
SDev	.0255857	.0401676	.022	.143931	.106589	.14158	.0035213
%RSD	84.55511	11.00233	.0006518	8.226767	5.171545	.2488532	1.877651
#1	.0483511	.3934855	3363.768	1.851314	2.136434	56.99352	.1900249
#2	.0121674	.3366799	3363.799	1.647765	1.985695	56.79329	.1850451
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11462.77	.1294234	1.364648	5.209953	7.348127	4752.621	1120.061
SDev	8.68	.0095614	.002591	.010906	.000092	2.237	1.059
%RSD	.0756994	7.387665	.1898303	.2093285	.0012481	.0470612	.0945580
#1	11468.91	.1361844	1.366479	5.217665	7.348192	4754.202	1120.809
#2	11456.64	.1226625	1.362816	5.202241	7.348062	4751.039	1119.312
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	39.17372	.4095959	3.394550	145.1767	3.564899	.2595964	985.9611
SDev	.01351	.0337750	.071546	.0844	.073524	.2128570	1.2791
%RSD	.0344838	8.245923	2.107667	.0581409	2.062433	81.99538	.1297341
#1	39.16417	.3857134	3.445141	145.1170	3.616888	.4101091	986.8655
#2	39.18327	.4334784	3.343960	145.2363	3.512910	.1090837	985.0566
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5887620	30.17761	85.77924	-.165202	10.59154	54.09589	3.918449
SDev	.0209632	.03708	.03597	.132851	.01377	.04302	.022544
%RSD	3.560558	.1228674	.0419361	80.41711	.1300051	.0795319	.5753343
#1	.5739388	30.20383	85.80468	-.259142	10.60127	54.06547	3.902508
#2	.6035852	30.15139	85.75381	-.071262	10.58180	54.12631	3.934390
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	3.388390	.5235889	.1277980
SDev	.121485	.1899328	.2243020
%RSD	3.585344	36.27518	175.5128
#1	3.474293	.6578917	.2864035
#2	3.302487	.3892861	-.030807
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	318555	--	--	--	--	--	--
SDev	651.9524	--	--	--	--	--	--
%RSD	.2046593	--	--	--	--	--	--
#1	318094	--	--	--	--	--	--
#2	319016	--	--	--	--	--	--

Method: TRACE Sample Name: CMQC8 Operator: WGL
Run Time: 11/09/98 13:44:03
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1310925	1.086662	8531.952	6.274977	3.440233	94.46175	.1757648
SDev	.1219481	.371398	8.336	.284448	.257588	.25928	.0032967
%RSD	93.02449	34.17783	.0977048	4.533054	7.487508	.2744808	1.875653
#1	.0448622	.8240445	8537.847	6.073842	3.258091	94.64508	.1734336
#2	.2173228	1.349280	8526.058	6.476112	3.622375	94.27840	.1780959
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13601.01	.8674598	1.780401	15.68264	61.12919	7119.949	1459.552
SDev	61.13	.0522342	.081966	.15408	.03633	23.735	7.261
%RSD	.4494535	6.021507	4.603795	.9825184	.0594247	.3333645	.4974907
#1	13557.78	.8305246	1.722442	15.57369	61.15488	7103.166	1454.418
#2	13644.23	.9043949	1.838360	15.79159	61.10350	7136.732	1464.687
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	138.2979	.8016791	4.806336	1310.609	13.99000	.5206763	936.7777
SDev	.2945	.1734474	.060118	4.884	.15890	.2059462	1.6888
%RSD	.2129397	21.63552	1.250813	.3726889	1.135790	39.55360	.1802808
#1	138.0897	.6790333	4.763826	1307.155	13.87765	.3750503	935.5835
#2	138.5061	.9243250	4.848846	1314.062	14.10236	.6663022	937.9719
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.421159	103.1239	63.19163	-.023750	11.97533	491.8901	13.27886
SDev	.308540	.1900	.10742	.312285	.11630	3.2822	2.96290
%RSD	12.74346	.1842123	.1699885	1314.903	.9711943	.6672661	22.31292
#1	2.202989	103.2583	63.11567	-.244568	11.89309	489.5692	11.18377
#2	2.639330	102.9896	63.26758	.1970692	12.05757	494.2110	15.37395
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	14.34504	.4072591	.5772998
SDev	1.24100	2.568040	.9733299
%RSD	8.651092	630.5666	168.6004
#1	15.22256	-1.40862	1.265548
#2	13.46752	2.223137	-.110948
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	315234	--	--	--	--	--	--
SDev	2126.270	--	--	--	--	--	--
%RSD	.6745064	--	--	--	--	--	--
#1	313730	--	--	--	--	--	--
#2	316737	--	--	--	--	--	--

Method: TRACE Sample Name: CMQC9 Operator: WGL
Run Time: 11/09/98 13:48:47
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1307045	.5916491	3061.849	2.254024	1.802935	53.82890	.1735026
SDev	.2820314	.9470703	2.675	.398443	.319215	.39222	.0037519
%RSD	215.7778	160.0730	.0873754	17.67697	17.70528	.7286482	2.162417
#1	.3301308	1.261329	3059.957	2.535766	2.028653	54.10624	.1761555
#2	-.068722	-.078031	3063.740	1.972282	1.577216	53.55156	.1708496
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12218.04	.2031094	1.630839	6.085582	11.25527	4465.604	1099.901
SDev	61.79	.0599879	.202261	.195181	.30819	11.912	3.667
%RSD	.5057079	29.53479	12.40226	3.207270	2.738225	.2667513	.3333697
#1	12174.35	.2455273	1.773859	6.223596	11.47320	4457.180	1097.308
#2	12261.73	.1606915	1.487819	5.947568	11.03734	4474.026	1102.493
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	67.22535	.3562242	3.919031	323.7618	3.930311	.3365427	991.4468
SDev	.17150	.2583030	.189623	1.4370	.025892	.0615589	1.0100
%RSD	.2551130	72.51138	4.838527	.4438452	.6587686	18.29157	.1018705
#1	67.10408	.5388720	4.053115	322.7457	3.948619	.3800714	990.7327
#2	67.34662	.1735763	3.784947	324.7779	3.912003	.2930139	992.1610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8328644	40.93107	75.23407	-.014148	9.436588	91.48126	4.010203
SDev	.5292025	.14952	.01303	.513122	.202699	.81891	3.015214
%RSD	63.54006	.3652892	.0173244	3626.849	2.148015	.8951653	75.18856
#1	1.207067	41.03680	75.24329	.3486839	9.579919	90.90221	6.142282
#2	.4586617	40.82535	75.22485	-.376980	9.293259	92.06032	1.878125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	3.890410	.2473592	.3810675
SDev	1.466508	3.125904	1.468317
%RSD	37.69546	1263.710	385.3167
#1	2.853432	2.457707	-.657189
#2	4.927387	-1.96299	1.419324
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	318116	--	--	--	--	--	--
SDev	1485.631	--	--	--	--	--	--
%RSD	.4670101	--	--	--	--	--	--
#1	317065	--	--	--	--	--	--
#2	319166	--	--	--	--	--	--

Method: TRACE Sample Name: CMQCA Operator: WGL
Run Time: 11/09/98 13:53:30
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1145441	.8111839	4359.518	5.595962	3.296867	86.86234	.1999695
SDev	.0632509	.1105006	5.113	.060134	.106317	.81401	.0058339
%RSD	55.21973	13.62213	.1172850	1.074598	3.224792	.9371266	2.917391
#1	.1592692	.8893197	4355.902	5.553441	3.372045	87.43793	.1958443
#2	.0698189	.7330483	4363.133	5.638484	3.221690	86.28674	.2040947
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13225.20	.5116709	1.761663	13.94543	23.49738	8870.918	1644.639
SDev	184.39	.0025720	.000029	.08754	.18078	93.365	26.578
%RSD	1.394236	.5026690	.0016604	.6277182	.7693782	1.052484	1.616010
#1	13094.82	.5098523	1.761643	13.88353	23.62521	8804.898	1625.846
#2	13355.59	.5134897	1.761684	14.00733	23.36954	8936.936	1663.432
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	96.14593	.5940096	5.040235	1280.226	10.93040	.4073456	899.2844
SDev	.75028	.0675190	.062591	10.959	.18936	.0851268	4.2352
%RSD	.7803512	11.36664	1.241823	.8559827	1.732417	20.89794	.4709542
#1	95.61540	.6417528	4.995976	1272.477	10.79650	.3471518	896.2896
#2	96.67645	.5462666	5.084493	1287.975	11.06429	.4675393	902.2791
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.32160	108.1713	77.71101	-.123881	12.90648	345.2321	11.98545
SDev	.05440	.5579	.14051	.015204	.00337	8.2095	.15755
%RSD	.5270348	.5157986	.1808077	12.27343	.0261035	2.377966	1.314513
#1	10.28314	108.5658	77.61166	-.134632	12.90410	339.4271	11.87405
#2	10.36007	107.7768	77.81037	-.113130	12.90887	351.0371	12.09686
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	10.40366	1.555700	-.165971
SDev	.20524	.341773	.298257
%RSD	1.972784	21.96908	179.7043
#1	10.25853	1.797370	-.376870
#2	10.54879	1.314030	.0449285
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	311049	--	--	--	--	--	--
SDev	4603.265	--	--	--	--	--	--
%RSD	1.479917	--	--	--	--	--	--
#1	307794	--	--	--	--	--	--
#2	314304	--	--	--	--	--	--

Method: TRACE Sample Name: CMQCC Operator: WGL
Run Time: 11/09/98 13:58:14
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3437815	1.437887	3688.854	2.809316	2.273828	47.25075	.2199161
SDev	.0476715	.060114	.634	.057662	.098922	.20710	.0022859
%RSD	13.86680	4.180688	.0171938	2.052520	4.350455	.4383074	1.039431
#1	.3774903	1.480393	3688.405	2.850089	2.343776	47.39720	.2215325
#2	.3100727	1.395380	3689.302	2.768543	2.203879	47.10431	.2182997
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11961.19	.1826554	2.019763	5.219651	7.021092	5673.102	1218.715
SDev	36.69	.0020605	.008926	.003825	.042871	13.769	5.498
%RSD	.3067433	1.128090	.4419177	.0732790	.6105996	.2426989	.4511336
#1	11935.24	.1811985	2.026075	5.222356	7.051407	5663.366	1214.827
#2	11987.13	.1841125	2.013452	5.216947	6.990778	5682.838	1222.602
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	86.29596	.5347589	4.064408	391.0222	4.709188	1.429523	850.7406
SDev	.16405	.0199602	.029788	1.9151	.151708	.296487	.3342
%RSD	.1901020	3.732568	.7329081	.4897756	3.221541	20.74027	.0392856
#1	86.17996	.5206449	4.085472	389.6680	4.816463	1.639171	850.9769
#2	86.41196	.5488730	4.043345	392.3764	4.601914	1.219875	850.5043
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.120464	39.81728	83.30312	.5196952	11.12073	46.70307	5.928898
SDev	.067964	.10250	.04604	.0954886	.05037	.27323	.377685
%RSD	6.065721	.2574153	.0552671	18.37396	.4529246	.5850370	6.370234
#1	1.168522	39.88975	83.27057	.5872158	11.15634	46.50987	6.195962
#2	1.072406	39.74480	83.33568	.4521746	11.08511	46.89628	5.661835
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	4.100247	2.834987	.7278451
SDev	.038889	.433121	.2282723
%RSD	.9484647	15.27772	31.36275
#1	4.127747	3.141250	.8892580
#2	4.072749	2.528724	.5664322
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	319970	--	--	--	--	--	--
SDev	1477.146	--	--	--	--	--	--
%RSD	.4616507	--	--	--	--	--	--
#1	318926	--	--	--	--	--	--
#2	321015	--	--	--	--	--	--

Method: TRACE Sample Name: CCV4 Operator: WGL
Run Time: 11/09/98 14:04:06
Comment: 8307276
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5055054	.4811572	4.954568	.9592429	.4827243	.5073319	.4937222
SDev	.0038893	.0111935	.023920	.0159294	.0057605	.0037327	.0058855
%RSD	.7693906	2.326376	.4827839	1.660627	1.193324	.7357416	1.192070
#1	.5027553	.4732422	4.937654	.9479791	.4786510	.5099713	.4895605
#2	.5082556	.4890723	4.971482	.9705067	.4867975	.5046925	.4978839
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	5.520000	1.100000	.5520000	.5520000	.5520000
Low	.4480000	.4480000	4.480000	.9000000	.4480000	.4480000	.4480000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.61596	.4861058	.4862489	.4912273	.5019006	4.890197	19.48124
SDev	.38018	.0090469	.0090454	.0083950	.0006842	.131217	.42817
%RSD	1.938120	1.861107	1.860247	1.708993	.1363158	2.683272	2.197872
#1	19.34713	.4797086	.4798528	.4852911	.5023843	4.797412	19.17848
#2	19.88479	.4925029	.4926450	.4971635	.5014167	4.982982	19.78401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00000	.5520000	.5520000	.5520000	.5520000	5.520000	22.00000
Low	18.00000	.4480000	.4480000	.4480000	.4480000	4.480000	17.92000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4924853	.4793106	.4900811	4.818954	.4981568	4.951315	104.9030
SDev	.0054046	.0080597	.0077396	.062799	.0122775	.114851	.9255
%RSD	1.097413	1.681510	1.579239	1.303176	2.464577	2.319603	.8822737
#1	.4886636	.4736116	.4846084	4.774548	.5068383	5.032527	104.2485
#2	.4963069	.4850097	.4955538	4.863360	.4894754	4.870103	105.5574
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	.5520000	5.520000	.5520000	5.520000	117.7000
Low	.4480000	.4480000	.4480000	4.480000	.4480000	4.480000	96.30000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.762914	.5069983	.4909074	4.892922	.4928818	.4686597	.4831520
SDev	.097445	.0023145	.0021651	.049104	.0056232	.0151721	.0084568
%RSD	2.045916	.4565010	.4410500	1.003581	1.140872	3.237331	1.750336
#1	4.694009	.5086349	.4893764	4.858201	.4889057	.4579315	.4771722
#2	4.831818	.5053617	.4924384	4.927645	.4968580	.4793880	.4891319
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520000	.5520000	.5520000	5.520000	.5520000	.5520000	
Low	4.480000	.4480000	.4480000	4.480000	.4480000	.4480000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5056480	4.847147	5.003321
SDev	.0226291	.003352	.170517
%RSD	4.475260	.0691511	3.408070
#1	.5216492	4.849517	5.123895
#2	.4896469	4.844777	4.882748
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	301989	--	--	--	--	--	--
SDev	4839.439	--	--	--	--	--	--
%RSD	1.602521	--	--	--	--	--	--
#1	298567	--	--	--	--	--	--
#2	305411	--	--	--	--	--	--

Method: TRACE Sample Name: CCB4 Operator: WGL
Run Time: 11/09/98 14:09:58
Comment: 8307276
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002638	.0021167	.0239149	.0007280	-.001060	.0001092	.0001232
SDev	.0005011	.0000298	.0045199	.0004066	.000668	.0000942	.0002450
%RSD	189.9558	1.405279	18.89997	55.85414	62.96478	86.24187	198.9228
#1	.0006181	.0021377	.0271110	.0010155	-.000588	.0001758	.0002964
#2	-.000091	.0020956	.0207189	.0004405	-.001532	.0000426	-.000050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0031369	-.000007	.0004002	.0003366	.0000378	.0065583	.0051850
SDev	.0005981	.000084	.0005714	.0004425	.0000389	.0065907	.0048431
%RSD	19.06605	1193.695	142.7711	131.4747	102.8973	100.4938	93.40597
#1	.0035598	.0000521	.0008042	.0006495	.0000653	.0112187	.0086096
#2	.0027140	-.000066	-.000004	.0000237	.0000103	.0018980	.0017604
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000381	.0001455	.0002785	-.000837	.0016221	.0007047	.0132034
SDev	.0000635	.0003106	.0004299	.001078	.0000368	.0003882	.0036423
%RSD	166.5216	213.4564	154.3419	128.7922	2.266518	55.08951	27.58593
#1	.0000831	.0003651	.0005825	-.000075	.0015961	.0009792	.0157789
#2	-.000007	-.000074	-.000025	-.001600	.0016481	.0004302	.0106279
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008467	.0000506	.0001154	-.000257	.0005425	.0065132	.0068314
SDev	.0012687	.0000482	.0001747	.001626	.0005680	.0002438	.0005555
%RSD	149.8484	95.34470	151.4214	633.0783	104.7035	3.743463	8.132129
#1	.0017438	.0000847	.0002389	.0008931	.0009441	.0066856	.0072243
#2	-.000050	.0000165	-.000008	-.001407	.0001408	.0063408	.0064386
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.000979	.0060098	-.001944
SDev	.000333	.0003783	.000393
%RSD	33.97138	6.294715	20.22666
#1	-.001214	.0062773	-.001666
#2	-.000744	.0057423	-.002222
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	319612	--	--	--	--	--	--
SDev	3738.474	--	--	--	--	--	--
%RSD	1.169689	--	--	--	--	--	--
#1	322256	--	--	--	--	--	--
#2	316969	--	--	--	--	--	--

Method: TRACE Sample Name: CMQCD Operator: WGL
Run Time: 11/09/98 14:14:41
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.067426	.3484903	3851.276	1.986625	2.050067	72.36798	.2158601
SDev	.088823	.1286266	6.248	.224725	.058850	.25756	.0067780
%RSD	131.7341	36.90967	.1622441	11.31189	2.870620	.3559085	3.139989
#1	-.130234	.2575375	3846.857	1.827721	2.008454	72.55010	.2206528
#2	-.004619	.4394431	3855.694	2.145530	2.091680	72.18585	.2110673
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14867.35	.2474458	1.833573	5.317329	5.051491	5380.942	1409.373
SDev	64.42	.0146728	.075171	.071620	.052001	20.235	8.265
%RSD	.4332793	5.929691	4.099674	1.346923	1.029421	.3760441	.5864249
#1	14821.80	.2370706	1.780419	5.266685	5.014720	5366.634	1403.529
#2	14912.90	.2578210	1.886726	5.367971	5.088261	5395.251	1415.217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	132.2296	.2068574	4.246439	152.6854	9.147392	.7261710	867.2377
SDev	.4080	.0311927	.099896	.7535	.557189	.6269916	3.2926
%RSD	.3085525	15.07933	2.352476	.4935279	6.091238	86.34214	.3796597
#1	131.9411	.1848008	4.175802	152.1526	8.753400	.2828210	864.9095
#2	132.5181	.2289140	4.317077	153.2183	9.541385	1.169521	869.5659
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4340042	34.52308	78.61491	-.326273	12.75346	46.34122	8.837128
SDev	.1229477	.06957	.06098	.048205	.09161	.43037	1.121406
%RSD	28.32870	.2015055	.0775646	14.77453	.7183340	.9287037	12.68971
#1	.3470671	34.57227	78.57180	-.360359	12.68868	46.03690	8.044174
#2	.5209414	34.47389	78.65803	-.292187	12.81823	46.64554	9.630082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	9.302292	.4725670	.8527828
SDev	.275504	1.373826	.2541342
%RSD	2.961681	290.7156	29.80057
#1	9.107481	-.498875	.6730828
#2	9.497103	1.444009	1.032483
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	317282	--	--	--	--	--	--
SDev	1184.404	--	--	--	--	--	--
%RSD	.3732975	--	--	--	--	--	--
#1	316444	--	--	--	--	--	--
#2	318119	--	--	--	--	--	--

Method: TRACE Sample Name: CMQCE Operator: WGL
Run Time: 11/09/98 14:19:25
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3202329	1.460831	3759.805	2.833308	2.646985	50.34183	.1905836
SDev	.3183691	1.024045	7.004	.462961	.396781	.03087	.0337470
%RSD	99.41799	70.10020	.1862794	16.33996	14.98991	.0613242	17.70717
#1	.5453539	2.184941	3764.758	3.160671	2.927551	50.32000	.2144463
#2	.0951119	.7367215	3754.853	2.505945	2.366418	50.36366	.1667209
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31316.96	.2995399	2.529326	5.186098	4.891689	4822.084	1275.518
SDev	410.39	.0641906	.233527	.254700	.206522	46.144	19.200
%RSD	1.310431	21.42973	9.232793	4.911203	4.221901	.9569285	1.505294
#1	31607.15	.3449295	2.694455	5.366198	5.037723	4854.712	1289.095
#2	31026.78	.2541503	2.364197	5.005998	4.745656	4789.455	1261.942
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	90.58049	.5210590	4.382092	282.4245	4.397552	1.092076	879.0360
SDev	.45677	.3598350	.266150	3.3866	.822323	.899280	6.1509
%RSD	.5042720	69.05841	6.073588	1.199107	18.69956	82.34591	.6997311
#1	90.90348	.7755008	4.570289	284.8192	4.979023	1.727963	883.3854
#2	90.25751	.2666172	4.193896	280.0299	3.816082	.4561891	874.6867
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.416838	48.65826	86.32490	.4638946	12.91330	119.0095	5.064102
SDev	.475615	.11975	.19169	.6805870	.35846	2.3124	1.094778
%RSD	33.56876	.2461007	.2220540	146.7116	2.775917	1.943015	21.61839
#1	1.753149	48.57358	86.46044	.9451422	13.16678	120.6445	5.838226
#2	1.080528	48.74293	86.18935	-.017353	12.65983	117.3744	4.289977
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	4.064762	2.063771	.6069572
SDev	.686322	1.134612	.7817905
%RSD	16.88468	54.97762	128.8049
#1	4.550065	2.866063	1.159767
#2	3.579459	1.261479	.0541478
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	308507	--	--	--	--	--	--
SDev	4731.958	--	--	--	--	--	--
%RSD	1.533825	--	--	--	--	--	--
#1	311853	--	--	--	--	--	--
#2	305161	--	--	--	--	--	--

Method: TRACE Sample Name: CMQCF Operator: WGL
Run Time: 11/09/98 14:24:09
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0737304	.4936349	3445.515	1.728154	1.706897	46.09660	.1985971
SDev	.1126439	.4342995	.847	.169124	.160670	.13692	.0063283
%RSD	152.7782	87.97989	.0245859	9.786399	9.412971	.2970341	3.186511
#1	.1533816	.8007311	3446.114	1.847742	1.820508	46.19342	.2030719
#2	-.005921	.1865389	3444.916	1.608565	1.593287	45.99978	.1941223
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11478.16	.1038550	1.747098	4.475955	20.28598	4412.447	1140.109
SDev	21.21	.0243075	.057593	.125024	.11826	5.554	.703
%RSD	.1848016	23.40518	3.296519	2.793231	.5829543	.1258704	.0616727
#1	11463.16	.1210430	1.787823	4.564360	20.36960	4408.520	1139.612
#2	11493.16	.0866670	1.706373	4.387549	20.20236	4416.374	1140.606
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	87.60953	.2388881	3.597271	121.8110	4.803852	.3116950	879.2605
SDev	.11962	.1125602	.082021	.5231	.112061	.2584749	.8223
%RSD	.1365363	47.11838	2.280094	.4294675	2.332733	82.92560	.0935214
#1	87.52494	.3184801	3.655268	122.1809	4.883091	.4944643	879.8419
#2	87.69411	.1592960	3.539273	121.4411	4.724613	.1289256	878.6790
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4659131	25.02249	79.91951	.0283309	10.23707	18.25243	5.270761
SDev	.2504296	.03351	.03688	.2236063	.09370	.00128	.498044
%RSD	53.75029	.1339133	.0461450	789.2656	.9153027	.0070049	9.449178
#1	.6429936	25.04618	79.94559	.1864445	10.30333	18.25153	5.622931
#2	.2888326	24.99879	79.89343	-.129783	10.17082	18.25334	4.918591
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	4.570748	.8770835	.0294244
SDev	.080641	.7326006	.0217675
%RSD	1.764286	83.52688	73.97750
#1	4.513726	1.395110	.0448164
#2	4.627770	.3590567	.0140325
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	320082	--	--	--	--	--	--
SDev	583.3631	--	--	--	--	--	--
%RSD	.1822545	--	--	--	--	--	--
#1	319669	--	--	--	--	--	--
#2	320494	--	--	--	--	--	--

Method: TRACE Sample Name: CMQCG Operator: WGL
Run Time: 11/09/98 14:28:53
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2384469	1.101458	3182.927	1.894469	1.656516	42.38164	.1847766
SDev	.0989445	.268089	.547	.365549	.073368	.11213	.0073765
%RSD	41.49539	24.33945	.0171932	19.29561	4.429028	.2645678	3.992128
#1	.1684826	.9118908	3183.314	1.635986	1.604637	42.46092	.1899926
#2	.3084112	1.291026	3182.540	2.152951	1.708395	42.30235	.1795606
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14365.82	.1345915	1.678069	4.319310	3.297307	3793.587	1129.531
SDev	9.74	.0396155	.083357	.082643	.118796	3.619	1.556
%RSD	.0677901	29.43387	4.967442	1.913343	3.602822	.0953956	.1377209
#1	14358.93	.1065791	1.619127	4.260872	3.213306	3791.029	1128.431
#2	14372.70	.1626038	1.737011	4.377747	3.381309	3796.146	1130.631
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	76.34494	.4348368	3.408725	101.5645	4.254287	.6518716	1033.915
SDev	.05559	.0795790	.103106	.0423	.397322	.3744852	1.317
%RSD	.0728116	18.30090	3.024773	.0416278	9.339327	57.44770	.1273736
#1	76.30563	.3785659	3.335818	101.5346	3.973338	.3870705	1032.984
#2	76.38425	.4911077	3.481632	101.5944	4.535235	.9166726	1034.846
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8045993	28.19062	77.85759	.3262291	9.297802	14.79521	5.407045
SDev	.2250728	.02173	.04426	.2702190	.106784	.03634	.496125
%RSD	27.97327	.0770785	.0568529	82.83106	1.148486	.2456203	9.175535
#1	.6454489	28.20598	77.82629	.1351554	9.222294	14.76951	5.056232
#2	.9637498	28.17525	77.88889	.5173028	9.373309	14.82090	5.757859
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	3.678771	1.906858	.0253195
SDev	.347994	.359623	.3819053
%RSD	9.459515	18.85946	1508.346
#1	3.432702	1.652566	-.244728
#2	3.924840	2.161149	.2953673
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	318056	--	--	--	--	--	--
SDev	1086.823	--	--	--	--	--	--
%RSD	.3417076	--	--	--	--	--	--
#1	318825	--	--	--	--	--	--
#2	317288	--	--	--	--	--	--

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Method: TRACE Sample Name: CMQCH Operator: WGL
Run Time: 11/09/98 14:33:37
Comment: 8307276
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0774659	.4238478	3253.048	1.469421	2.442220	35.07872	.1943025
SDev	.1385756	.5335218	2.113	.146909	.168049	.20627	.0053149
%RSD	178.8859	125.8758	.0649449	9.997728	6.881012	.5880127	2.735356
#1	.1754536	.8011047	3251.554	1.573301	2.561049	35.22458	.1980607
#2	-.020522	.0465908	3254.542	1.365541	2.323391	34.93287	.1905443
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.000	5000.000	60000.00	2000.000	5000.000	2500.000	2500.000
Low	-1.00000	-1.00000	-10.0000	-1.00000	-10.0000	-1.00000	-.200000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5357.474	.0955766	1.521228	4.149875	3.089914	3925.481	1051.487
SDev	22.158	.0264537	.095524	.109289	.109572	11.348	2.893
%RSD	.4135942	27.67800	6.279434	2.633553	3.546130	.2890916	.2751417
#1	5341.806	.1142821	1.588774	4.227154	3.167393	3917.457	1049.441
#2	5373.142	.0768710	1.453682	4.072596	3.012434	3933.506	1053.532
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.00	1000.000	5000.000	5000.000	5000.000	100000.0	100000.0
Low	-20.0000	-.500000	-1.00000	-1.00000	-2.00000	-10.0000	-20.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	82.03632	.2011336	2.865054	172.4073	4.556460	.4255238	1004.268
SDev	.26467	.0803389	.076802	.0520	.179932	.1479645	1.557
%RSD	.3226238	39.94303	2.680654	.0301833	3.948950	34.77231	.1550708
#1	81.84917	.2579418	2.919362	172.3705	4.683692	.5301505	1003.167
#2	82.22347	.1443255	2.810747	172.4441	4.429229	.3208971	1005.369
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.000	5000.000	2500.000	5000.000	2500.000	5000.000	42800.00
Low	-1.00000	-2.00000	-4.00000	-30.0000	-.300000	-.500000	-50.0000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5015299	17.86800	85.14970	-.272001	8.258751	17.20973	5.039852
SDev	.2163898	.04259	.11818	.481847	.102359	.09053	.795174
%RSD	43.14595	.2383471	.1387890	177.1493	1.239399	.5260480	15.77773
#1	.6545406	17.89812	85.06614	.0687168	8.331129	17.14571	5.602125
#2	.3485191	17.83789	85.23327	-.612718	8.186372	17.27374	4.477579
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.000	1000.000	1000.000	5000.000	5000.000	5000.000	
Low	-10.0000	-5.00000	-1.50000	-1.00000	-1.00000	-2.00000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	4.315127	1.020517	.1284730
SDev	.127228	.918716	.2368335
%RSD	2.948407	90.02450	184.3449
#1	4.225163	1.670148	-.038994
#2	4.405090	.3708873	.2959395
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	322316	--	--	--	--	--	--
SDev	482.2468	--	--	--	--	--	--
%RSD	.1496193	--	--	--	--	--	--
#1	321975	--	--	--	--	--	--
#2	322657	--	--	--	--	--	--

Method: TRACE Sample Name: ICSA Operator: WGL
Run Time: 11/09/98 14:39:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000269	.0013495	456.8577	.0017250	-.006365	.0012233	-.000641
SDev	.000036	.0021920	.3954	.0008884	.000077	.0000328	.000107
%RSD	13.21434	162.4263	.0865467	51.50304	1.202592	2.678464	16.68958
#1	-.000244	.0028995	456.5781	.0023532	-.006311	.0012001	-.000566
#2	-.000294	-.000200	457.1373	.0010968	-.006419	.0012465	-.000717
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200000	.0200000	600.0000	.0200000	.1000000	.0200000	.0040000
Low	-.020000	-.020000	400.0000	-.020000	-.100000	-.020000	-.004000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	488.1394	.0016510	.0009126	.0149417	.0018117	185.7350	541.5608
SDev	2.2822	.0000681	.0000845	.0000361	.0003448	.6757	2.4111
%RSD	.4675290	4.125400	9.261344	.2419015	19.02963	.3637970	.4452185
#1	486.5257	.0016029	.0008529	.0149673	.0015679	185.2572	539.8558
#2	489.7532	.0016992	.0009724	.0149161	.0020555	186.2128	543.2657
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	.0100000	.0200000	.0200000	.0200000	240.0000	600.0000
Low	400.0000	-.010000	-.020000	-.020000	-.020000	160.0000	400.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.001070	-.001875	.0042040	.0157817	.0048441	.0009549	.0183463
SDev	.000028	.000214	.0005135	.0018641	.0063387	.0001875	.0004862
%RSD	2.588365	11.40688	12.21517	11.81152	130.8551	19.63625	2.649901
#1	-.001051	-.001724	.0038409	.0144636	.0003619	.0008223	.0186901
#2	-.001090	-.002026	.0045672	.0170998	H.0093263	.0010875	.0180026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200000	.0200000	.0400000	.3000000	.0060000	.0100000	.5000000
Low	-.020000	-.020000	-.040000	-.300000	-.006000	-.010000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000060	-.002390	.0030611	-.016669	-.002324	.0076210	-.017170
SDev	.000634	.000166	.0001226	.000940	.000453	.0001344	.032481
%RSD	1052.554	6.960458	4.004775	5.641866	19.50738	1.763480	189.1700
#1	.0003883	-.002273	.0029745	-.016004	-.002004	.0075260	.0057973
#2	-.000509	-.002508	.0031478	-.017334	-.002645	.0077161	-.040138
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0200000	2.000000	.0200000	.0200000	
Low	-.100000	-.050000	-.020000	-2.00000	-.020000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0158348	-.006337	.0045956
SDev	.0257196	.032738	.0166256
%RSD	162.4243	516.5873	361.7761
#1	-.002352	.0168120	-.007161
#2	.0340213	-.029487	.0163517
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	285217	--	--	--	--	--	--
SDev	84.85281	--	--	--	--	--	--
%RSD	.0297503	--	--	--	--	--	--
#1	285277	--	--	--	--	--	--
#2	285157	--	--	--	--	--	--

Method: TRACE Sample Name: ICSAB Operator: WGL
Run Time: 11/09/98 14:43:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.039480	.9500374	458.7144	1.966835	2.069345	.5081283	.5030708
SDev	.001285	.0036178	.2958	.001492	.002211	.0015980	.0014090
%RSD	.1236088	.3808062	.0644815	.0758792	.1068628	.3144871	.2800737
#1	1.040389	.9525956	458.5053	1.965780	2.070909	.5092582	.5020745
#2	1.038571	.9474792	458.9236	1.967891	2.067782	.5069983	.5040671
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.200000	1.200000	600.0000	2.400000	2.400000	.6000000	.6000000
Low	.8000000	.8000000	400.0000	1.590000	1.590000	.4000000	.4000000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	490.4002	.9705464	.4711418	.5018216	.5248494	186.9664	542.2582
SDev	3.0104	.0048494	.0007452	.0013483	.0009346	.6455	2.7374
%RSD	.6138669	.4996584	.1581731	.2686767	.1780633	.3452483	.5048161
#1	488.2715	.9671173	.4706148	.5008683	.5255102	186.5100	540.3225
#2	492.5289	.9739754	.4716688	.5027750	.5241886	187.4228	544.1938
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	1.200000	.6000000	.6000000	.6000000	240.0000	600.0000
Low	400.0000	.8000000	.4000000	.4000000	.4000000	160.0000	400.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4839265	.9551994	.9473160	1.993653	.9835013	4.939210	21.26878
SDev	.0007518	.0026495	.0019261	.005128	.0023003	.016423	.02381
%RSD	.1553443	.2773743	.2033185	.2572293	.2338879	.3325116	.1119351
#1	.4833949	.9533259	.9459541	1.990027	.9818747	4.927597	21.25194
#2	.4844580	.9570728	.9486780	1.997280	.9851278	4.950823	21.28561
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.6000000	1.200000	1.200000		1.200000	6.000000	25.68000
Low	.4000000	.8000000	.8000000		.8000000	4.000000	17.12000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.595367	.9779018	.9761777	9.418232	.4855022	.9313932	.9829395
SDev	.037836	.0017002	.0005662	.029417	.0008696	.0071109	.0039431
%RSD	.3943196	.1738667	.0580061	.3123426	.1791081	.7634726	.4011529
#1	9.568612	.9791040	.9757773	9.397430	.4848874	.9263650	.9857277
#2	9.622121	.9766995	.9765781	9.439033	.4861171	.9364214	.9801513
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	12.00000	1.200000	1.200000	12.00000	.6000000	1.200000	
Low	8.000000	.8000000	.8000000	8.000000	.4000000	.8000000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.9837817	4.898606	4.959482
SDev	.0054173	.006368	.021444
%RSD	.5506568	.1300006	.4323767
#1	.9799511	4.894103	4.944319
#2	.9876123	4.903110	4.974645
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	281997	--	--	--	--	--	--
SDev	502.0458	--	--	--	--	--	--
%RSD	.1780323	--	--	--	--	--	--
#1	281642	--	--	--	--	--	--
#2	282352	--	--	--	--	--	--

Method: TRACE Sample Name: CCV5 Operator: WGL
Run Time: 11/09/98 14:47:43
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4896277	.4792803	4.975185	.9735985	.4866729	.5024918	.5009481
SDev	.0056021	.0156016	.040598	.0249024	.0101733	.0035709	.0087210
%RSD	1.144150	3.255206	.8160004	2.557771	2.090377	.7106327	1.740908
#1	.4935890	.4903123	5.003892	.9912072	.4938666	.4999668	.5071148
#2	.4856665	.4682483	4.946478	.9559898	.4794793	.5050167	.4947814
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	5.520000	1.100000	.5520000	.5520000	.5520000
Low	.4480000	.4480000	4.480000	.9000000	.4480000	.4480000	.4480000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.06425	.4972432	.4942077	.4974276	.4981388	4.970132	19.94459
SDev	.54457	.0137509	.0121768	.0120172	.0012982	.221082	.63205
%RSD	2.714109	2.765422	2.463911	2.415866	.2606200	4.448214	3.169038
#1	20.44932	.5069665	.5028180	.5059250	.4972207	5.126461	20.39152
#2	19.67918	.4875199	.4855973	.4889301	.4990568	4.813804	19.49767
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00000	.5520000	.5520000	.5520000	.5520000	5.520000	22.00000
Low	18.00000	.4480000	.4480000	.4480000	.4480000	4.480000	17.92000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4984672	.4859561	.4982807	4.943821	.5096191	5.044523	106.2222
SDev	.0068076	.0110605	.0142436	.100235	.0058220	.066436	.7478
%RSD	1.365703	2.276027	2.858543	2.027480	1.142421	1.316998	.7040163
#1	.5032809	.4937771	.5083524	5.014698	.5055023	4.997545	106.7510
#2	.4936535	.4781352	.4882089	4.872944	.5137358	5.091500	105.6934
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	.5520000	5.520000	.5520000	5.520000	117.7000
Low	.4480000	.4480000	.4480000	4.480000	.4480000	4.480000	96.30000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.869927	.5044413	.4935154	4.964148	.4964222	.4854981	.4816014
SDev	.132817	.0032257	.0028982	.071522	.0088066	.0214882	.0395723
%RSD	2.727294	.6394618	.5872663	1.440761	1.774019	4.426001	8.216808
#1	4.963842	.5021604	.4955647	5.014721	.5026494	.5006926	.5095832
#2	4.776010	.5067222	.4914660	4.913574	.4901950	.4703037	.4536196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520000	.5520000	.5520000	5.520000	.5520000	.5520000	
Low	4.480000	.4480000	.4480000	4.480000	.4480000	.4480000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5236069	4.907119	5.113149
SDev	.0284851	.110790	.154955
%RSD	5.440172	2.257731	3.030515
#1	.5034649	4.985459	5.003580
#2	.5437489	4.828779	5.222719
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	308604	--	--	--	--	--	--
SDev	7212.489	--	--	--	--	--	--
%RSD	2.337134	--	--	--	--	--	--
#1	313704	--	--	--	--	--	--
#2	303504	--	--	--	--	--	--

Method: TRACE Sample Name: CCB5 Operator: WGL
Run Time: 11/09/98 14:51:42
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000384	.0010676	.0271777	-.001167	-.001370	.0000240	.0001121
SDev	.000095	.0008257	.0038708	.000742	.000494	.0000043	.0000428
%RSD	24.77558	77.33464	14.24271	63.60021	36.07442	18.05023	38.15141
#1	-.000451	.0004838	.0299148	-.001692	-.001021	.0000210	.0000818
#2	-.000316	.0016515	.0244406	-.000642	-.001720	.0000271	.0001423
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0058922	-.000005	.0001539	-.000015	-.000224	.0008171	.0086354
SDev	.0037346	.000086	.0003221	.000180	.000383	.0001537	.0032955
%RSD	63.38160	1695.765	209.3339	1234.526	171.4408	18.81194	38.16255
#1	.0085329	-.000066	-.000074	.0001124	.0000475	.0009258	.0109657
#2	.0032515	.0000558	.0003816	-.000142	-.000495	.0007085	.0063051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001254	-.000027	.0005825	-.000116	-.000409	.0001826	.0104775
SDev	.0001410	.000256	.0005745	.001211	.003431	.0023910	.0085042
%RSD	112.4224	936.7169	98.61704	1041.147	839.9799	1309.599	81.16614
#1	.0002251	-.000209	.0009887	.0007400	-.002835	-.001508	.0164909
#2	.0000257	.0001539	.0001763	-.000973	.0020179	.0018732	.0044641
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000170	.0000487	-.000002	.0013881	.0000532	.0003141	-.000389
SDev	.000133	.0000291	.000062	.0024846	.0000607	.0001225	.000447
%RSD	77.96147	59.80971	3311.678	178.9886	114.2093	39.00261	114.9733
#1	-.000264	.0000693	.0000421	.0031450	.0000961	.0004007	-.000704
#2	-.000076	.0000281	-.000046	-.000369	.0000102	.0002275	-.000073
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.000418	-.0024911	-.000970
SDev	.004922	.0007018	.003234
%RSD	1176.053	28.17139	333.4493
#1	-.003899	.0019948	-.003257
#2	.0030616	.0029873	.0013170
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	321526	--	--	--	--	--	--
SDev	1481.389	--	--	--	--	--	--
%RSD	.4607376	--	--	--	--	--	--
#1	320478	--	--	--	--	--	--
#2	322573	--	--	--	--	--	--

QUANTERRA-DENVER

TRACE IDLs Q2 1998

EFFECTIVE DATE IDL 04/10/98 MDL 01/09/98

All units are mg/L

ANALYTE	IDL	MDL Aqueous	MDL Soils	QRL Aqueous	CRDL	LDR
Arsenic	0.0068	0.00563	0.46	0.01	0.01	20
Antimony	0.0066	0.00232	0.32	0.01	0.06	20
Cadmium	0.0011	0.0005	0.06	0.005	0.005	20
Lead	0.0018	0.0020	0.18	0.003	0.003	30
Selenium	0.0036	0.00455	0.24	0.005	0.005	20
Thallium	0.0057	0.00739	0.36	0.01	0.01	30
INTERFERING ANALYTES						
Aluminum						1000
Calcium						1000
Chromium						100
Iron						1000
Magnesium						1000
Manganese						50
Molybdenum						25
Vanadium						10

STANDARDS

STANDARD	VERIFICATION #	EXP. DATE	DILLUTION FACTOR
CAL STD	11757	3/99	10X
ICV-1	11392	2/99	20X
ICV-2	11391	2/99	20X
CRI	11504	3/99	1000X
ICSA *	11695	7/00	10X
ICSAB *	11110	7/98	100X
As *	6-38AS	2/99	1000X
Se *	5-158SE	11/98	1000X
Tl *	6-39TL	10/98	1000X
Sb *	6-101SB	2/99	1000X
CCV	11757	3/99	20X

* Add all for ICSAB.

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/05/98
Time: 9:47:48

BATCH NUMBER: 8309233

PREP DATE: 11/05/98
DUE DATE 11/10/98

INITIALS: JS

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J280164	CMVVF	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
	CMVVFS		50 g	g	g	g
	CMVVFD		50 g	g	g	g
D8J280164	CMVVL	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVVM	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVVV	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVVX	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVW2	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVW3	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVW7	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVW8	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVWC	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVWF	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVWM	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVWQ	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVX1	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/05/98
Time: 9:47:48

BATCH NUMBER: 8309233

PREP DATE: 11/05/98
DUE DATE 11/10/98

INITIALS: JS

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J280164	CMVX7	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVXD	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVXE	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVXG	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVXJ	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J280164	CMVXL	01	X 50 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8K050000	CN5EDB	01	X 50 g	g	g	g
WATER	DUE DATE: 0/00/00					
	CN5EDC		50 g	g	g	g
	CN5EDL		50 g	g	g	g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG —
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG JS

COMMENTS: rebalanced to 50 ml

B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS

SPIKING WITNESSED BY _____

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/05/98
Time: 9:47:48

BATCH NUMBER: 8309233

PREP DATE: 11/05/98
DUE DATE 11/10/98

INITIALS: _____

ICP ELEMENTS WITHIN THE BATCH:

PB

MS/MSD 1:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 2:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 3:	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK :	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK DUP:	ICP - 1	ICP - 2	GFAA	HG	ODD
STANDARD NUMBERS	_____	_____	____	___	___

Instrument Upload Run Log - Page 1

Started Mon Nov 9 13:45:23 1998 by LOGANW

Data File: UPL$DEN_DATA_ROOT:<TJA>1109L.ASP;1

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
1	STD1	1	09-NOV-1998	08:09:00			003
2	CALSTD	1	09-NOV-1998	08:13:00			003
3	HIGH	1	09-NOV-1998	08:17:00			003
4	ICV	1	09-NOV-1998	08:21:00			003
5	ICB	1	09-NOV-1998	08:26:00			003
6	CRI	1	09-NOV-1998	08:30:00			003
7	ICSA	1	09-NOV-1998	08:34:00			003
8	ICSAB	1	09-NOV-1998	08:38:00			003
9	CCV1	1	09-NOV-1998	08:43:00			003
10	CCB1	1	09-NOV-1998	08:48:00			003
11	CN5EDB	1	09-NOV-1998	09:30:00	8309233	D8K050000	003
12	CN5EDC	1	09-NOV-1998	09:34:00	8309233	D8K050000	003
13	CN5EDL	1	09-NOV-1998	09:38:00	8309233	D8K050000	003
14	CMVVF	1	09-NOV-1998	09:42:00	8309233	D8J280164	003
15	CMVVFP	1	09-NOV-1998	09:47:00			003
16	CMVVFS	1	09-NOV-1998	09:51:00	8309233	D8J280164	003
17	CMVVFD	1	09-NOV-1998	09:55:00	8309233	D8J280164	003
18	CMVVL	1	09-NOV-1998	09:59:00	8309233	D8J280164	003
19	CMVVM	1	09-NOV-1998	10:04:00	8309233	D8J280164	003
20	CMVVV	1	09-NOV-1998	10:08:00	8309233	D8J280164	003
21	CCV2	1	09-NOV-1998	10:13:00			003
22	CCB2	1	09-NOV-1998	10:19:00			003
23	CMVVX	1	09-NOV-1998	10:23:00	8309233	D8J280164	003
24	CMVW2	1	09-NOV-1998	10:27:00	8309233	D8J280164	003
25	CMVW3	1	09-NOV-1998	10:31:00	8309233	D8J280164	003
26	CMVW7	1	09-NOV-1998	10:36:00	8309233	D8J280164	003
27	CMVW8	1	09-NOV-1998	10:40:00	8309233	D8J280164	003
28	CMVWC	1	09-NOV-1998	10:44:00	8309233	D8J280164	003
29	CMVWF	1	09-NOV-1998	10:48:00	8309233	D8J280164	003
30	CMVWM	1	09-NOV-1998	10:53:00	8309233	D8J280164	003
31	CMVWQ	1	09-NOV-1998	10:57:00	8309233	D8J280164	003
32	CMVX1	1	09-NOV-1998	11:01:00	8309233	D8J280164	003
33	CCV3	1	09-NOV-1998	11:07:00			003
34	CCB3	1	09-NOV-1998	11:12:00			003
35	CMVX7	1	09-NOV-1998	11:16:00	8309233	D8J280164	003
36	CMVXD	1	09-NOV-1998	11:21:00	8309233	D8J280164	003
37	CMVXE	1	09-NOV-1998	11:25:00	8309233	D8J280164	003
38	CMVXG	1	09-NOV-1998	11:29:00	8309233	D8J280164	003
39	CMVXJ	1	09-NOV-1998	11:33:00	8309233	D8J280164	003
40	CMVXL	1	09-NOV-1998	11:38:00	8309233	D8J280164	003
41	CCV4	1	09-NOV-1998	11:43:00			003
42	CCB4	1	09-NOV-1998	11:48:00			003

End of Report

Standardization Rpt. Mon 11-09-98 08:13:40 AM page 1

Method: TRACEICP Standard: STD1-Blank

Elem	As	Cd	Tl	2Al308	2Ca317	Cr2677	2Fe271
Avge	-.16573	.00942	-.21843	.0345	.0111	.0002	.0031
SDev	.02927	.02726	.03442	.0009	.0003	.0006	.0006
%RSD	17.662	289.42	15.760	2.601	3.078	312.6	20.22
#1	-.14116	.01643	-.24612	.0338	.0110	-.0003	.0037
#2	-.19812	-.02066	-.17988	.0343	.0109	.0000	.0033
#3	-.15791	.03249	-.22927	.0355	.0115	.0009	.0024

Elem	2Mg279	2Mn257	Mo2020	2Pb/1	2Pb/2	2Sb/1	2Sb/2
Avge	-.0009	.0084	.0768	.27768	-.02187	-.08625	.06708
SDev	.0008	.0002	.0048	.00419	.01430	.05724	.02260
%RSD	88.18	2.000	6.227	1.5101	65.392	66.364	33.696
#1	.0000	.0082	.0815	.27715	-.00821	-.14268	.09309
#2	-.0012	.0085	.0769	.27378	-.02066	-.08782	.05226
#3	-.0015	.0085	.0720	.28211	-.03674	-.02824	.05588

Elem	2Se/1	2Se/2	2V2924
Avge	-.23684	.18267	.0352
SDev	.03285	.02597	.0003
%RSD	13.868	14.215	.9297
#1	-.20383	.19592	.0350
#2	-.26952	.19933	.0349
#3	-.23717	.15275	.0355

WLorm
11-9-98
TRACE
SOIL CORP-MT-0001DEN

IntStd	1	2	3	4	5	6	7
Mode	Time	#Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3290	--	--	--	--	--
SDev	.0000000	3.055050	--	--	--	--	--
%RSD	.0000000	.0928493	--	--	--	--	--
#1	667	3287	--	--	--	--	--
#2	667	3291	--	--	--	--	--
#3	667	3293	--	--	--	--	--

Standardization Rpt. Mon 11-09-98 08:17:41 AM page 1

Method: TRACEICP Standard: CALSTD

Elem	As	Cd	Tl	2Al308	2Ca317	Cr2677	2Fe271
Avge	23.495	76.339	10.513	164.5	80.37	28.93	19.56
SDev	.100	.469	.092	1.0	.54	.18	.12
%RSD	.42422	.61380	.87751	.5996	.6723	.6113	.6026
#1	23.390	75.801	10.411	163.4	79.75	28.73	19.43
#2	23.589	76.562	10.535	165.0	80.66	29.03	19.63
#3	23.506	76.655	10.592	165.2	80.71	29.03	19.63

Elem	2Mg279	2Mn257	Mo2020	2Pb/1	2Pb/2	2Sb/1	2Sb/2
Avge	87.64	7.045	266.2	30.766	18.615	28.165	13.971
SDev	.52	.042	1.6	.197	.125	.129	.077
%RSD	.5910	.6016	.5965	.63935	.67076	.45810	.55306
#1	87.05	6.996	264.4	30.557	18.471	28.025	13.947
#2	87.90	7.070	267.0	30.948	18.681	28.191	14.058
#3	87.98	7.069	267.2	30.791	18.693	28.279	13.909

Elem	2Se/1	2Se/2	2V2924
Avge	10.385	10.852	6.925
SDev	.112	.041	.040
%RSD	1.0803	.37736	.5751
#1	10.257	10.805	6.879
#2	10.463	10.875	6.947
#3	10.435	10.877	6.948

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	2844	--	--	--	--	--
SDev	.0000000	8.544004	--	--	--	--	--
%RSD	.0000000	.3004221	--	--	--	--	--
#1	667	2853	--	--	--	--	--
#2	667	2836	--	--	--	--	--
#3	667	2843	--	--	--	--	--

Standardization Report Mon 11-09-98 08:17:44 AM page 1

Method: TRACEICP Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
As	189.042	CALSTD	STD1-Blank	.042476	.007039	11/09/98 08:13:47
Cd	226.502	CALSTD	STD1-Blank	.013434	-.000127	11/09/98 08:13:47
Pb	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Sb	206.838	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Tl	190.864	CALSTD	STD1-Blank	.094733	.020692	11/09/98 08:13:47
2Al308	308.215	CALSTD	STD1-Blank	3.03744	-.104929	11/09/98 08:13:47
2Ca317	317.933	CALSTD	STD1-Blank	6.20511	-.069147	11/09/98 08:13:47
Cr2677	267.716	CALSTD	STD1-Blank	.345659	-.000070	11/09/98 08:13:47
2Fe271	271.441	CALSTD	STD1-Blank	9.96648	-.031303	11/09/98 08:13:47
2Mg279	279.078	CALSTD	STD1-Blank	5.69966	.005194	11/09/98 08:13:47
2Mn257	257.610	CALSTD	STD1-Blank	1.42113	-.011949	11/09/98 08:13:47
Mo2020	202.030	CALSTD	STD1-Blank	.037577	-.002886	11/09/98 08:13:47
2Pb/1	220.351	CALSTD	STD1-Blank	.035836	-.009951	11/09/98 08:13:47
2Pb/2	220.352	CALSTD	STD1-Blank	.051208	.001120	11/09/98 08:13:47
2Sb/1	206.831	CALSTD	STD1-Blank	.034203	.002950	11/09/98 08:13:47
2Sb/2	206.832	CALSTD	STD1-Blank	.072205	-.004843	11/09/98 08:13:47
2Se/1	196.021	CALSTD	STD1-Blank	.093796	.022215	11/09/98 08:13:47
2Se/2	196.022	CALSTD	STD1-Blank	.088815	-.016224	11/09/98 08:13:47
2V2924	292.402	CALSTD	STD1-Blank	.145147	-.005102	11/09/98 08:13:47
2Y3710	371.030		NONE	1.00000	.000000	*NOT STANDARDIZED

Analysis Report Mon 11-09-98 08:21:44 AM page 1

Method: TRACEICP Sample Name: HIGH STANDARD Operator:
Run Time: 11/09/98 08:17:48
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	L.94888	L.94877	.95438	.95104	L.94797	L.93797	473.2
SDev	.00888	.00283	.00863	.00602	.00541	.01214	1.1
%RSD	.93622	.29830	.90439	.63250	.57096	1.2938	.2288
#1	.95564	.95131	.95358	L.94870	.95059	.95165	474.4
#2	.95217	L.94929	L.94618	L.94654	L.94175	L.92849	472.7
#3	L.93882	L.94572	.96339	.95787	.95158	L.93377	472.4
Errors	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Low	NOCHECK
High	1.0500	1.0500	1.0500	1.0500	1.0500	1.0500	
Low	.95000	.95000	.95000	.95000	.95000	.95000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	475.5	9.513	190.1	474.8	9.492	9.505	.94872
SDev	.4	.016	.3	1.0	.014	.017	.00526
%RSD	.0894	.1715	.1666	.2203	.1514	.1744	.55467
#1	476.0	9.532	190.4	476.0	9.509	9.524	.95171
#2	475.4	9.506	189.8	474.0	9.482	9.500	.94264
#3	475.2	9.501	189.9	474.3	9.486	9.491	.95180
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.95721	.95516	.94438	.94917	.95197	.9482	2.5167
SDev	.01086	.00177	.00726	.01220	.00471	.0015	.0150
%RSD	1.1351	.18567	.76825	1.2855	.49457	.1640	.59670
#1	.95452	.95557	.94810	.95141	.94735	.9499	2.5052
#2	.94794	.95321	.93602	.93600	.95180	.9473	2.5337
#3	.96917	.95669	.94903	.96010	.95676	.9472	2.5112

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	2991	--	--	--	--	--
SDev	.0000000	10.14889	--	--	--	--	--
%RSD	.0000000	.3393143	--	--	--	--	--
#1	667	2980	--	--	--	--	--
#2	667	3000	--	--	--	--	--
#3	667	2993	--	--	--	--	--

Analysis Report Mon 11-09-98 08:25:43 AM page 1

Method: TRACEICP Sample Name: ICV Operator:
Run Time: 11/09/98 08:21:48
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.46683	.45609	.47887	.48884	.47547	.45766	231.2
SDev	.00370	.00126	.00096	.00279	.00139	.00207	.3
%RSD	.79354	.27537	.19936	.57104	.29225	.45228	.1415
#1	.46262	.45575	.47785	.49030	.47554	.45644	231.5
#2	.46960	.45748	.47974	.49061	.47683	.46005	230.9
#3	.46826	.45504	.47901	.48563	.47405	.45648	231.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.55000	.55000	.55000	.55000	.55000	.55000	
Low	.45000	.45000	.45000	.45000	.45000	.45000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	235.4	4.696	94.09	232.1	4.692	4.817	.47350
SDev	.9	.013	.22	.2	.013	.015	.00496
%RSD	.3777	.2830	.2386	.0884	.2687	.3177	1.0482
#1	234.7	4.686	94.00	232.0	4.684	4.808	.47842
#2	236.4	4.711	94.34	232.3	4.707	4.835	.47358
#3	235.0	4.691	93.92	231.9	4.686	4.809	.46850
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.48139	.47874	.47384	.49415	.48619	.4613	2.6622
SDev	.00353	.00374	.00346	.00251	.00298	.0009	.0075
%RSD	.73291	.78157	.73057	.50905	.61186	.1898	.28345
#1	.47740	.47500	.47580	.49485	.48803	.4609	2.6612
#2	.48265	.47874	.47587	.49625	.48780	.4623	2.6552
#3	.48410	.48248	.46984	.49136	.48276	.4607	2.6702

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3127	--	--	--	--	--
SDev	.0000000	9.539392	--	--	--	--	--
%RSD	.0000000	.3050653	--	--	--	--	--
#1	667	3122	--	--	--	--	--
#2	667	3121	--	--	--	--	--
#3	667	3138	--	--	--	--	--

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Method: TRACEICP Sample Name: ICB Operator:
Run Time: 11/09/98 08:26:39
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00023	.00005	-.00018	.00188	-.00060	.00334	.0225
SDev	.00226	.00020	.00050	.00125	.00136	.00105	.0047
%RSD	976.74	381.01	269.78	66.053	227.52	31.473	20.70
#1	-.00269	.00018	.00028	.00062	-.00182	.00252	.0267
#2	.00026	-.00018	-.00071	.00193	-.00084	.00298	.0234
#3	.00174	.00016	-.00012	.00311	.00086	.00452	.0175
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.01000	.00500	.00300	.00500	.01000	.01000	
Low	-.01000	-.00500	-.03000	-.00500	-.01000	-.01000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.0159	.0004	.0076	.0153	.0002	.0037	-.00237
SDev	.0056	.0004	.0172	.0044	.0001	.0012	.00070
%RSD	35.15	113.0	227.5	28.98	63.23	32.83	29.695
#1	.0218	.0002	-.0074	.0171	.0004	.0051	-.00271
#2	.0153	.0000	.0037	.0103	.0002	.0030	-.00285
#3	.0107	.0008	.0264	.0186	.0001	.0031	-.00156
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00091	.00187	-.00183	.00140	.00213	-.0001	2.9045
SDev	.00076	.00188	.00131	.00352	.00231	.0001	.0397
%RSD	83.462	100.76	71.653	252.53	108.56	118.5	1.3679
#1	.00177	-.00028	-.00258	-.00118	.00152	.0000	2.8651
#2	.00035	.00266	-.00258	.00541	.00019	-.0001	2.9040
#3	.00060	.00323	-.00032	-.00005	.00468	-.0001	2.9445

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	#Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3384	--	--	--	--	--
SDev	.0000000	40.50926	--	--	--	--	--
%RSD	.0000000	1.197082	--	--	--	--	--
#1	667	3344	--	--	--	--	--
#2	667	3383	--	--	--	--	--
#3	667	3425	--	--	--	--	--

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Method: TRACEICP Sample Name: CRI Operator:
Run Time: 11/09/98 08:30:38
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.01712	.00907	.00470	.00829	.10357	.02132	.0213
SDev	.00312	.00023	.00075	.00123	.00026	.00466	.0032
%RSD	18.232	2.5223	15.876	14.887	.24903	21.861	14.80
#1	.01353	.00886	.00460	.00784	.10378	.02120	.0237
#2	.01919	.00904	.00401	.00734	.10365	.01672	.0177
#3	.01864	.00931	.00550	.00968	.10328	.02604	.0226
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.03000	.01500	.00900	.01500	.18000	.03000	
Low	.01000	.00500	.00300	.00500	.06000	.01000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.0078	.0186	-.0176	.0068	.0273	.0004	.00297
SDev	.0083	.0002	.0138	.0030	.0003	.0002	.00077
%RSD	107.1	1.284	78.47	43.29	.9482	59.99	25.852
#1	-.0174	.0184	-.0256	.0051	.0271	.0001	.00221
#2	-.0028	.0185	-.0016	.0103	.0273	.0005	.00295
#3	-.0031	.0188	-.0255	.0051	.0276	.0004	.00375
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00557	.10412	.10329	.01347	.00570	.0086	2.8861
SDev	.00093	.00152	.00056	.00344	.00118	.0000	.0218
%RSD	16.707	1.4625	.54382	25.553	20.626	.3068	.75459
#1	.00579	.10410	.10362	.01015	.00668	.0086	2.8636
#2	.00455	.10565	.10265	.01324	.00440	.0086	2.8876
#3	.00637	.10261	.10362	.01702	.00602	.0086	2.9070

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3366	--	--	--	--	--
SDev	.0000000	14.01190	--	--	--	--	--
%RSD	.0000000	.4162362	--	--	--	--	--
#1	667	3352	--	--	--	--	--
#2	667	3367	--	--	--	--	--
#3	667	3380	--	--	--	--	--

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Method: TRACEICP Sample Name: ICSA Operator:
Run Time: 11/09/98 08:34:37
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00181	-.00257	-.00055	-.00541	-.00200	-.00327	478.2
SDev	.00322	.00031	.00423	.00241	.00383	.00377	18.4
%RSD	178.31	12.022	770.59	44.593	191.76	115.25	3.853
#1	-.00104	-.00284	-.00274	-.00773	.00043	-.00395	457.0
#2	-.00534	-.00223	-.00324	-.00291	-.00642	-.00666	490.1
#3	.00097	-.00263	.00433	-.00560	-.00001	.00079	487.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.02000	.01000	.00600	.01000	.02000	.02000	
Low	-.02000	-.01000	-.00600	-.01000	-.02000	-.02000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	487.0	.0110	195.3	504.4	.0206	-.0028	.02247
SDev	18.9	.0003	7.6	19.9	.0010	.0016	.00179
%RSD	3.874	2.293	3.869	3.947	4.865	55.17	7.9696
#1	465.2	.0108	186.6	481.5	.0194	-.0037	.02042
#2	497.9	.0113	199.8	516.5	.0212	-.0038	.02321
#3	497.9	.0110	199.5	515.3	.0211	-.0010	.02376
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	-.01204	-.00870	.00135	.00549	-.01086	.0036	2.4838
SDev	.00588	.00682	.00275	.00341	.00480	.0003	.1304
%RSD	48.802	78.356	204.13	62.047	44.169	7.469	5.2520
#1	-.01431	-.00673	.00400	.00916	-.01616	.0033	2.6342
#2	-.01644	-.01629	-.00149	.00491	-.00682	.0038	2.4018
#3	-.00537	-.00309	.00153	.00241	-.00960	.0037	2.4153

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	#Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	2928	--	--	--	--	--
SDev	.0000000	91.74058	--	--	--	--	--
%RSD	.0000000	3.132860	--	--	--	--	--
#1	667	3034	--	--	--	--	--
#2	667	2869	--	--	--	--	--
#3	667	2882	--	--	--	--	--

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Method: TRACEICP Sample Name: ICSAB Operator:
Run Time: 11/09/98 08:38:36
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.99478	.95454	1.0047	1.0683	1.0108	1.0140	474.4
SDev	.00626	.00187	.0036	.0022	.0052	.0031	.4
%RSD	.62886	.19632	.35513	.20789	.51353	.30544	.0799
#1	.99038	.95341	1.0086	1.0700	1.0167	1.0105	474.0
#2	.99202	.95351	1.0038	1.0692	1.0086	1.0149	474.6
#3	1.0019	.95670	1.0017	1.0658	1.0071	1.0165	474.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	
Low	.80000	.80000	.80000	.80000	.80000	.80000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	485.1	.5094	194.5	500.8	.5198	-.0024	1.0000
SDev	1.2	.0004	.3	.6	.0014	.0010	.0052
%RSD	.2506	.0804	.1464	.1276	.2685	41.55	.51647
#1	483.9	.5093	194.3	500.3	.5189	-.0019	1.0034
#2	484.9	.5090	194.3	500.5	.5191	-.0035	1.0026
#3	486.3	.5098	194.8	501.5	.5214	-.0018	.99410
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	1.0070	1.0010	1.0157	1.0555	1.0747	.0518	2.4778
SDev	.0037	.0026	.0083	.0023	.0022	.0001	.0138
%RSD	.36387	.25746	.81715	.21702	.20406	.1371	.55895
#1	1.0112	.99960	1.0253	1.0570	1.0765	.0518	2.4618
#2	1.0044	1.0040	1.0109	1.0566	1.0755	.0518	2.4858
#3	1.0054	.99943	1.0109	1.0528	1.0723	.0519	2.4858

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	2952	--	--	--	--	--
SDev	.0000000	6.429100	--	--	--	--	--
%RSD	.0000000	.2177634	--	--	--	--	--
#1	667	2945	--	--	--	--	--
#2	667	2957	--	--	--	--	--
#3	667	2955	--	--	--	--	--

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Method: TRACEICP Sample Name: CCV1 Operator:
Run Time: 11/09/98 08:43:26
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.48574	.49667	.49278	.49329	.48714	.48382	241.4
SDev	.00121	.00059	.00391	.00659	.00126	.00851	.9
%RSD	.24852	.11832	.79313	1.3357	.25937	1.7588	.3533
#1	.48630	.49631	.48827	.49695	.48580	.47400	240.4
#2	.48657	.49734	.49483	.48568	.48729	.48882	241.7
#3	.48436	.49634	.49524	.49724	.48832	.48865	242.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.55000	.55000	.55000	.55000	.55000	.55000	
Low	.45000	.45000	.45000	.45000	.45000	.45000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	249.5	4.923	98.74	241.9	4.962	4.943	.48668
SDev	.7	.008	.14	.5	.011	.012	.00131
%RSD	.2786	.1636	.1461	.2107	.2200	.2439	.26875
#1	248.7	4.914	98.58	241.3	4.949	4.929	.48793
#2	249.8	4.926	98.78	242.1	4.967	4.949	.48532
#3	250.0	4.929	98.86	242.3	4.969	4.950	.48680
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.49583	.49071	.48535	.48863	.49561	.4872	2.5547
SDev	.00639	.00519	.00070	.00940	.00523	.0011	.0135
%RSD	1.2888	1.0576	.14496	1.9235	1.0559	.2227	.52817
#1	.48845	.48535	.48603	.49481	.49802	.4860	2.5682
#2	.49953	.49108	.48540	.47782	.48961	.4877	2.5412
#3	.49945	.49571	.48463	.49328	.49921	.4879	2.5547

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3029	--	--	--	--	--
SDev	.0000000	6.429100	--	--	--	--	--
%RSD	.0000000	.2122282	--	--	--	--	--
#1	667	3032	--	--	--	--	--
#2	667	3022	--	--	--	--	--
#3	667	3034	--	--	--	--	--

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Method: TRACEICP Sample Name: CCB1 Operator:
Run Time: 11/09/98 08:48:16
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00085	.00011	.00030	.00189	-.00015	.00233	.0168
SDev	.00056	.00043	.00012	.00197	.00026	.00109	.0038
%RSD	66.699	402.31	38.960	104.55	173.50	46.917	22.46
#1	.00141	.00015	.00017	-.00037	.00011	.00330	.0191
#2	.00085	-.00034	.00040	.00276	-.00014	.00115	.0125
#3	.00028	.00052	.00033	.00328	-.00042	.00254	.0189
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.01000	.00500	.00300	.00500	.01000	.01000	
Low	-.01000	-.00500	-.03000	-.00500	-.01000	-.01000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.0092	.0003	.0036	.0207	.0001	.0021	-.00305
SDev	.0078	.0002	.0018	.0083	.0004	.0009	.00168
%RSD	84.83	61.75	50.12	40.21	270.9	43.21	55.129
#1	.0136	.0002	.0029	.0300	-.0000	.0027	-.00471
#2	.0002	.0001	.0022	.0183	-.0001	.0025	-.00311
#3	.0139	.0005	.0056	.0139	.0006	.0011	-.00134
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00198	.00145	-.00095	.00264	.00151	-.0000	2.9090
SDev	.00073	.00072	.00023	.00574	.00191	.0001	.1003
%RSD	37.194	49.255	24.243	217.17	126.33	281.8	3.4474
#1	.00261	.00177	-.00072	-.00197	.00043	-.0001	2.9325
#2	.00215	.00196	-.00119	.00083	.00372	-.0002	2.9955
#3	.00117	.00063	-.00095	.00906	.00039	.0001	2.7991

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3410	--	--	--	--	--
SDev	.0000000	107.9089	--	--	--	--	--
%RSD	.0000000	3.164175	--	--	--	--	--
#1	667	3451	--	--	--	--	--
#2	667	3492	--	--	--	--	--
#3	667	3288	--	--	--	--	--

Method: TRACEICP Sample Name: CN5EDB Operator: WGL
Run Time: 11/09/98 09:30:02
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00037	.00008	-.00155	-.00035	-.00270	.00429	-.0697
SDev	.00086	.00007	.00046	.00245	.00054	.00121	.0056
%RSD	228.79	91.858	29.952	695.10	19.820	28.313	7.995
#1	-.00112	.00016	-.00122	-.00013	-.00239	.00498	-.0752
#2	-.00057	.00001	-.00135	.00198	-.00332	.00500	-.0697
#3	.00056	.00007	-.00208	-.00291	-.00240	.00289	-.0641
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.01000	.00500	.00300	.00500	.01000	.01000	
Low	-.01000	-.00500	-.03000	-.00500	-.01000	-.01000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.0061	.0005	.1295	.0026	.0005	-.0014	-.00417
SDev	.0001	.0003	.0033	.0055	.0000	.0009	.00085
%RSD	2.136	57.69	2.556	211.6	4.905	67.94	20.393
#1	.0060	.0003	.1312	.0089	.0005	-.0013	-.00512
#2	.0061	.0009	.1316	.0003	.0005	-.0005	-.00391
#3	.0063	.0003	.1257	-.0014	.0005	-.0024	-.00347
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	-.00024	.00012	-.00412	.00449	-.00277	.0001	2.7196
SDev	.00107	.00008	.00079	.00127	.00313	.0000	.0108
%RSD	436.66	67.460	19.216	28.302	113.05	53.52	.39753
#1	.00072	.00006	-.00361	.00389	-.00213	.0001	2.7226
#2	-.00007	.00009	-.00503	.00594	-.00001	.0001	2.7286
#3	-.00139	.00022	-.00371	.00362	-.00617	.0000	2.7076
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	#Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3312	--	--	--	--	--
SDev	.0000000	6.429100	--	--	--	--	--
%RSD	.0000000	.1940958	--	--	--	--	--
#1	667	3317	--	--	--	--	--
#2	667	3315	--	--	--	--	--
#3	667	3305	--	--	--	--	--

Method: TRACEICP Sample Name: CN5EDC Operator: WGL
Run Time: 11/09/98 09:34:18
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	1.8916	.04839	.47266	2.0938	.45273	1.9226	1.795
SDev	.0026	.00003	.00191	.0065	.00060	.0052	.006
%RSD	.14005	.05648	.40325	.30916	.13360	.27200	.3332
#1	1.8940	.04842	.47453	2.1010	.45343	1.9167	1.802
#2	1.8888	.04836	.47274	2.0917	.45240	1.9266	1.790
#3	1.8921	.04839	.47072	2.0886	.45236	1.9245	1.794
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	2.2640	.06054	.58540	2.2840	.57540	2.3840	
Low	1.7160	.04746	.45460	1.6160	.44460	1.7900	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	48.65	.1870	1.187	44.37	.4842	.9617	.44909
SDev	.04	.0010	.012	.09	.0006	.0020	.00116
%RSD	.0817	.5399	1.001	.2081	.1235	.2115	.25846
#1	48.66	.1882	1.176	44.48	.4846	.9627	.44859
#2	48.60	.1864	1.200	44.30	.4835	.9594	.45042
#3	48.68	.1865	1.184	44.34	.4844	.9631	.44827
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.48443	.44385	.45716	2.0669	2.1072	.0463	2.7306
SDev	.00281	.00191	.00057	.0071	.0062	.0001	.0114
%RSD	.58084	.43029	.12382	.34308	.29295	.2750	.41574
#1	.48748	.44568	.45729	2.0747	2.1142	.0465	2.7226
#2	.48388	.44187	.45765	2.0650	2.1050	.0462	2.7436
#3	.48193	.44399	.45654	2.0609	2.1024	.0463	2.7256
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3305	--	--	--	--	--
SDev	.0000000	9.712535	--	--	--	--	--
%RSD	.0000000	.2939036	--	--	--	--	--
#1	667	3294	--	--	--	--	--
#2	667	3313	--	--	--	--	--
#3	667	3307	--	--	--	--	--

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Method: TRACEICP Sample Name: CN5EDL Operator: WGL
Run Time: 11/09/98 09:38:34
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	1.9423	.04889	.48642	2.1539	.46527	1.9737	1.878
SDev	.0520	.00151	.01197	.0621	.01357	.0521	.049
%RSD	2.6753	3.0948	2.4611	2.8833	2.9156	2.6391	2.584
#1	1.8827	L.04714	.47285	2.0823	.44983	1.9136	1.822
#2	1.9666	.04978	.49090	2.1868	.47071	2.0042	1.907
#3	1.9777	.04974	.49549	2.1927	.47527	2.0034	1.904
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	2.2640	.06054	.58540	2.2840	.57540	2.3840	
Low	1.7160	.04746	.45460	1.6160	.44460	1.7900	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	49.53	.1909	.9749	45.81	.4958	.9864	.46092
SDev	1.30	.0048	.0297	1.22	.0135	.0256	.01206
%RSD	2.616	2.496	3.050	2.668	2.726	2.596	2.6171
#1	48.04	.1854	.9408	44.40	.4802	.9571	.44700
#2	50.35	.1938	.9955	46.54	.5040	1.005	.46753
#3	50.21	.1936	.9884	46.50	.5032	.9975	.46824
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.49914	.45896	.46842	2.1243	2.1687	.0477	2.5617
SDev	.01205	.01271	.01423	.0670	.0597	.0013	.1060
%RSD	2.4133	2.7689	3.0384	3.1519	2.7520	2.746	4.1360
#1	.48576	.44543	.45202	2.0471	2.0999	.0462	2.6717
#2	.50257	.46080	.47566	2.1599	2.2002	.0484	2.4603
#3	.50910	.47065	.47758	2.1660	2.2060	.0484	2.5532
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3147	--	--	--	--	--
SDev	.0000000	72.75301	--	--	--	--	--
%RSD	.0000000	2.311821	--	--	--	--	--
#1	667	3231	--	--	--	--	--
#2	667	3104	--	--	--	--	--
#3	667	3106	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVVF Operator: WGL
Run Time: 11/09/98 09:42:49
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00184	.00020	-.00143	.00114	-.00073	.00671	.0092
SDev	.00146	.00015	.00055	.00288	.00057	.00105	.0023
%RSD	79.345	74.164	38.568	252.21	77.402	15.651	24.87
#1	.00344	.00036	-.00082	.00445	-.00035	.00792	.0096
#2	.00152	.00006	-.00190	-.00012	-.00139	.00598	.0113
#3	.00057	.00018	-.00156	-.00090	-.00047	.00625	.0067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	24.29	-.0000	.0666	7.005	.0031	.0022	-.00627
SDev	.04	.0005	.0093	.006	.0000	.0007	.00107
%RSD	.1722	1486.	13.93	.0914	.2225	31.15	17.119
#1	24.34	.0006	.0767	7.008	.0032	.0025	-.00506
#2	24.27	-.0003	.0645	7.008	.0031	.0026	-.00662
#3	24.26	-.0004	.0585	6.997	.0031	.0014	-.00712
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00099	.00047	-.00134	.00707	-.00182	.0003	2.7291
SDev	.00046	.00308	.00185	.00259	.00306	.0000	.0038
%RSD	46.950	651.86	138.84	36.570	168.78	.7964	.13825
#1	.00129	-.00266	.00080	.01006	.00164	.0003	2.7331
#2	.00045	.00058	-.00237	.00546	-.00290	.0003	2.7286
#3	.00121	.00349	-.00244	.00570	-.00419	.0003	2.7256
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3295	--	--	--	--	--
SDev	.0000000	1.527525	--	--	--	--	--
%RSD	.0000000	.0463542	--	--	--	--	--
#1	667	3294	--	--	--	--	--
#2	667	3297	--	--	--	--	--
#3	667	3295	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVVFP Operator: WGL
Run Time: 11/09/98 09:47:04
Comment: 8309233
Mode: CONC Corr. Factor: 5

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00340	-.00045	-.00629	-.00119	-.00704	.00157	-.1417
SDev	.00849	.00074	.01135	.00361	.00438	.01750	.0100
%RSD	249.43	166.04	180.33	304.34	62.271	1112.6	7.071
#1	-.01060	.00031	L-.01923	.00137	-.01082	-.00567	-.1386
#2	-.00558	-.00048	.00200	-.00532	-.00805	-.01115	-.1529
#3	.00596	-.00117	-.00165	.00040	-.00224	.02153	-.1336
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	150.00	100.00	100.00	150.00	5000.
Low	-.05000	-.02500	-.01500	-.02500	-.05000	-.05000	-5.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	24.57	-.0021	-.0262	6.978	.0056	.0031	-.01392
SDev	.03	.0016	.0530	.027	.0000	.0007	.00516
%RSD	.1217	76.53	201.9	.3805	.7497	23.22	37.041
#1	24.57	-.0003	.0042	7.009	.0055	.0031	-.01647
#2	24.54	-.0025	-.0874	6.963	.0055	.0024	-.01730
#3	24.60	-.0035	.0045	6.963	.0056	.0039	-.00799
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	5000.	500.0	5000.	5000.		125.0	
Low	-.5000	-.5000	-.5000	-.5000		-.5000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	-.00248	-.00180	-.00965	.01998	-.01176	.0009	13.511
SDev	.01648	.00983	.00273	.00665	.00688	.0000	.038
%RSD	663.36	545.28	28.273	33.291	58.544	1.787	.28472
#1	-.02060	-.00686	-.01280	.02503	-.01045	.0009	13.553
#2	.01163	-.00808	-.00804	.02247	-.01920	.0009	13.501
#3	.00151	.00953	-.00811	.01245	-.00562	.0010	13.478
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						50.00	
Low						-.0500	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3264	--	--	--	--	--
SDev	.0000000	2.081666	--	--	--	--	--
%RSD	.0000000	.0637700	--	--	--	--	--
#1	667	3265	--	--	--	--	--
#2	667	3266	--	--	--	--	--
#3	667	3262	--	--	--	--	--

Method: TRACEICP Sample Name: CMVVFS Operator: WGL
Run Time: 11/09/98 09:51:19
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	1.9195	.04974	.48684	2.1051	.46235	1.9615	1.940
SDev	.0029	.00037	.00437	.0039	.00087	.0024	.010
%RSD	.14986	.74288	.89818	.18294	.18888	.12491	.5214
#1	1.9180	.05015	.48400	2.1008	.46156	1.9639	1.947
#2	1.9177	.04945	.49188	2.1064	.46219	1.9616	1.928
#3	1.9228	.04961	.48466	2.1082	.46329	1.9590	1.944
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	74.55	.1906	1.065	53.02	.4970	.9839	.46158
SDev	.29	.0008	.016	.08	.0011	.0023	.00298
%RSD	.3831	.4236	1.542	.1501	.2198	.2367	.64585
#1	74.62	.1911	1.083	53.05	.4970	.9840	.45923
#2	74.23	.1897	1.050	52.93	.4959	.9816	.46494
#3	74.79	.1911	1.063	53.07	.4981	.9862	.46059
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.49946	.45491	.46606	2.0744	2.1205	.0475	2.6587
SDev	.00509	.00334	.00088	.0054	.0056	.0001	.0106
%RSD	1.0192	.73416	.18775	.26118	.26265	.2839	.40007
#1	.49636	.45362	.46553	2.0710	2.1157	.0476	2.6702
#2	.50533	.45242	.46707	2.0806	2.1192	.0473	2.6492
#3	.49667	.45871	.46557	2.0714	2.1266	.0475	2.6567
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3205	--	--	--	--	--
SDev	.0000000	2.081666	--	--	--	--	--
%RSD	.0000000	.0649573	--	--	--	--	--
#1	667	3203	--	--	--	--	--
#2	667	3204	--	--	--	--	--
#3	667	3207	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVVFD Operator: WGL
Run Time: 11/09/98 09:55:35
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	1.8929	.04842	.47884	2.0808	.45652	1.9329	1.899
SDev	.0032	.00026	.00263	.0023	.00009	.0032	.003
%RSD	.16730	.54526	.54947	.10888	.02070	.16760	.1412
#1	1.8966	.04821	.47582	2.0791	.45662	1.9332	1.898
#2	1.8913	.04871	.48061	2.0834	.45643	1.9360	1.901
#3	1.8909	.04833	.48010	2.0800	.45651	1.9295	1.896
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	73.46	.1875	1.066	52.21	.4887	.9692	.45428
SDev	.10	.0002	.009	.06	.0006	.0021	.00136
%RSD	.1423	.1158	.8162	.1164	.1188	.2127	.29879
#1	73.57	.1878	1.072	52.26	.4894	.9714	.45521
#2	73.36	.1874	1.069	52.22	.4883	.9686	.45491
#3	73.45	.1874	1.056	52.14	.4885	.9675	.45272
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.49110	.44821	.46067	2.0481	2.0972	.0467	2.6752
SDev	.00433	.00298	.00146	.0040	.0021	.0000	.0017
%RSD	.88175	.66471	.31696	.19456	.09999	.0479	.06472
#1	.48611	.44757	.46114	2.0476	2.0948	.0467	2.6732
#2	.49344	.44560	.46184	2.0523	2.0989	.0467	2.6762
#3	.49376	.45146	.45904	2.0444	2.0977	.0466	2.6762
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3234	--	--	--	--	--
SDev	.0000000	7.211102	--	--	--	--	--
%RSD	.0000000	.2229778	--	--	--	--	--
#1	667	3226	--	--	--	--	--
#2	667	3236	--	--	--	--	--
#3	667	3240	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVVL Operator: WGL
Run Time: 11/09/98 09:59:49
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00131	.00012	-.00165	.00133	-.00215	.00610	.0071
SDev	.00126	.00018	.00007	.00102	.00091	.00227	.0022
%RSD	96.206	145.12	4.3214	76.453	42.458	37.286	31.67
#1	.00203	.00011	-.00165	.00232	-.00160	.00683	.0075
#2	-.00015	.00031	-.00158	.00137	-.00166	.00791	.0046
#3	.00205	-.00005	-.00173	.00029	-.00321	.00355	.0090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	21.80	-.0003	.1613	6.103	.0019	.0023	-.00545
SDev	.17	.0005	.0109	.042	.0001	.0005	.00110
%RSD	.7800	193.7	6.756	.6871	4.372	23.48	20.219
#1	21.99	.0000	.1686	6.151	.0020	.0029	-.00535
#2	21.66	-.0009	.1488	6.073	.0019	.0022	-.00660
#3	21.75	.0000	.1666	6.086	.0019	.0018	-.00440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00024	.00161	-.00403	.00877	-.00239	.0002	2.8256
SDev	.00066	.00034	.00123	.00277	.00213	.0000	.0159
%RSD	269.24	20.889	30.392	31.538	89.473	19.97	.56236
#1	.00020	.00194	-.00336	.01024	-.00163	.0002	2.8426
#2	.00092	.00161	-.00329	.00558	-.00073	.0002	2.8111
#3	-.00039	.00127	-.00545	.01048	-.00479	.0002	2.8231
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3384	--	--	--	--	--
SDev	.0000000	20.30599	--	--	--	--	--
%RSD	.0000000	.5999998	--	--	--	--	--
#1	667	3361	--	--	--	--	--
#2	667	3394	--	--	--	--	--
#3	667	3398	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVVM Operator: WGL
Run Time: 11/09/98 10:04:04
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00015	-.00002	-.00288	-.00111	-.00249	.00890	-.0125
SDev	.00247	.00015	.00069	.00187	.00216	.00175	.0007
%RSD	1685.2	737.18	24.037	169.42	86.576	19.696	5.961
#1	-.00121	-.00010	-.00246	.00038	-.00495	.00903	-.0128
#2	-.00190	.00016	-.00368	-.00321	-.00096	.01058	-.0131
#3	.00267	-.00012	-.00250	-.00049	-.00155	.00708	-.0117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	5.301	.0003	.0609	1.170	.0016	.0000	-.00870
SDev	.042	.0006	.0027	.009	.0001	.0002	.00100
%RSD	.7901	158.4	4.518	.7872	5.370	474.0	11.469
#1	5.258	-.0003	.0640	1.160	.0015	-.0001	-.00888
#2	5.302	.0008	.0590	1.171	.0016	.0002	-.00960
#3	5.342	.0006	.0596	1.178	.0017	.0000	-.00763
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00003	.00089	-.00418	.00925	-.00628	.0001	2.7756
SDev	.00074	.00225	.00219	.00370	.00151	.0000	.0172
%RSD	2555.3	252.11	52.518	40.043	24.075	58.69	.62137
#1	.00075	-.00166	-.00660	.01334	-.00609	.0000	2.7931
#2	-.00072	.00176	-.00232	.00612	-.00787	.0001	2.7586
#3	.00006	.00257	-.00361	.00829	-.00487	.0001	2.7751
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	#Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3348	--	--	--	--	--
SDev	.0000000	21.65641	--	--	--	--	--
%RSD	.0000000	.6468461	--	--	--	--	--
#1	667	3371	--	--	--	--	--
#2	667	3345	--	--	--	--	--
#3	667	3328	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVVV Operator: WGL
Run Time: 11/09/98 10:08:19
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00149	.00007	.00430	-.00123	.00058	.00679	.0114
SDev	.00024	.00027	.00151	.00210	.00012	.00243	.0029
%RSD	16.434	367.91	35.121	170.24	21.192	35.765	25.25
#1	.00157	.00021	.00589	-.00125	.00049	.00660	.0096
#2	.00121	-.00024	.00288	-.00332	.00072	.00931	.0099
#3	.00168	.00024	.00414	.00087	.00052	.00446	.0147
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	24.56	.0002	.1030	6.879	.0027	.0016	-.00049
SDev	.02	.0003	.0130	.007	.0000	.0007	.00169
%RSD	.0686	151.0	12.60	.1003	1.415	40.94	344.63
#1	24.55	.0001	.1071	6.885	.0027	.0018	.00089
#2	24.55	-.0001	.1134	6.871	.0027	.0022	.00002
#3	24.58	.0005	.0884	6.881	.0027	.0009	-.00238
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00670	.00167	.00003	.00680	-.00524	.0004	2.7326
SDev	.00213	.00127	.00070	.00149	.00246	.0000	.0106
%RSD	31.759	75.851	2255.9	21.892	47.017	3.995	.38924
#1	.00839	.00076	.00036	.00741	-.00557	.0004	2.7346
#2	.00431	.00113	.00051	.00510	-.00752	.0004	2.7211
#3	.00739	.00312	-.00078	.00789	-.00263	.0003	2.7421
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3297	--	--	--	--	--
SDev	.0000000	8.621678	--	--	--	--	--
%RSD	.0000000	.2615271	--	--	--	--	--
#1	667	3295	--	--	--	--	--
#2	667	3289	--	--	--	--	--
#3	667	3306	--	--	--	--	--

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Method: TRACEICP Sample Name: CCV2 Operator: WGL
Run Time: 11/09/98 10:13:42
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.49009	.50015	.49311	.50336	.49008	.49313	241.6
SDev	.00071	.00102	.00263	.00359	.00233	.00559	.2
%RSD	.14402	.20321	.53257	.71379	.47467	1.1330	.0990
#1	.48944	.50059	.49597	.50727	.49229	.48816	241.5
#2	.49000	.50086	.49254	.50261	.48765	.49918	241.9
#3	.49084	.49898	.49082	.50021	.49030	.49204	241.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.55000	.55000	.55000	.55000	.55000	.55000	
Low	.45000	.45000	.45000	.45000	.45000	.45000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	247.7	4.870	98.23	241.3	4.937	4.925	.48389
SDev	.2	.005	.10	.3	.006	.007	.00098
%RSD	.0608	.1058	.0983	.1276	.1119	.1339	.20328
#1	247.7	4.875	98.31	241.6	4.944	4.933	.48473
#2	247.5	4.865	98.12	241.4	4.935	4.922	.48281
#3	247.8	4.870	98.24	241.0	4.934	4.920	.48414
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.49771	.49018	.49003	.49946	.50531	.4853	2.4863
SDev	.00373	.00320	.00197	.00284	.00503	.0005	.0218
%RSD	.74924	.65219	.40225	.56842	.99619	.1038	.87869
#1	.50159	.49363	.49162	.50163	.51009	.4858	2.4633
#2	.49740	.48731	.48782	.49625	.50578	.4852	2.4888
#3	.49415	.48962	.49064	.50051	.50006	.4849	2.5067
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3030	--	--	--	--	--
SDev	.0000000	18.23001	--	--	--	--	--
%RSD	.0000000	.6017168	--	--	--	--	--
#1	667	3010	--	--	--	--	--
#2	667	3033	--	--	--	--	--
#3	667	3046	--	--	--	--	--

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Method: TRACEICP Sample Name: CCB2 Operator: WGL
Run Time: 11/09/98 10:19:06
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00024	.00003	-.00102	-.00032	-.00062	.00254	-.0434
SDev	.00091	.00004	.00117	.00180	.00096	.00134	.0033
%RSD	378.74	159.74	114.87	567.70	155.91	52.709	7.663
#1	.00024	-.00002	-.00237	-.00050	-.00171	.00378	-.0425
#2	-.00129	.00004	-.00030	-.00201	.00010	.00112	-.0471
#3	.00033	.00006	-.00038	.00157	-.00024	.00272	-.0407
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.01000	.00500	.00300	.00500	.01000	.01000	
Low	-.01000	-.00500	-.03000	-.00500	-.01000	-.01000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.0103	.0003	.0024	.0097	.0003	.0010	-.00323
SDev	.0019	.0005	.0091	.0052	.0000	.0011	.00125
%RSD	18.15	171.8	382.0	53.17	5.813	114.6	38.690
#1	.0123	.0004	-.0075	.0154	.0003	.0022	-.00203
#2	.0102	.0008	.0042	.0086	.0003	.0000	-.00452
#3	.0085	-.0003	.0105	.0052	.0003	.0007	-.00314
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00008	.00243	-.00214	.00656	-.00375	.0000	2.7766
SDev	.00231	.00121	.00084	.00174	.00246	.0000	.0079
%RSD	2771.6	50.027	39.197	26.477	65.524	231.9	.28572
#1	-.00255	.00104	-.00309	.00829	-.00489	.0000	2.7706
#2	.00180	.00331	-.00150	.00482	-.00542	-.0000	2.7856
#3	.00099	.00292	-.00182	.00657	-.00093	.0000	2.7736
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3358	--	--	--	--	--
SDev	.0000000	5.131601	--	--	--	--	--
%RSD	.0000000	.1528020	--	--	--	--	--
#1	667	3354	--	--	--	--	--
#2	667	3364	--	--	--	--	--
#3	667	3357	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVVX Operator: WGL
Run Time: 11/09/98 10:23:21
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00037	.00017	-.00172	-.00106	-.00221	.01045	.0203
SDev	.00078	.00030	.00129	.00185	.00049	.00365	.0029
%RSD	208.85	173.75	75.117	173.69	22.325	34.947	14.14
#1	.00127	.00005	L-.00305	.00101	-.00277	.00893	.0172
#2	-.00018	-.00005	-.00048	-.00254	-.00198	.00780	.0210
#3	.00003	.00051	-.00162	-.00166	-.00187	.01462	.0228
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	5.305	-.0000	.1169	1.206	.0012	-.0006	-.00694
SDev	.003	.0001	.0090	.005	.0000	.0009	.00155
%RSD	.0655	13280.	7.677	.3947	.9713	163.3	22.287
#1	5.305	-.0001	.1247	1.209	.0012	.0005	-.00849
#2	5.309	-.0001	.1071	1.208	.0013	-.0009	-.00540
#3	5.302	.0001	.1189	1.200	.0012	-.0013	-.00695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00089	.00189	-.00425	.01057	-.00687	.0001	2.7421
SDev	.00116	.00145	.00062	.00264	.00174	.0000	.0040
%RSD	130.47	76.646	14.688	24.940	25.398	6.803	.14465
#1	-.00034	.00098	-.00464	.01279	-.00487	.0001	2.7466
#2	.00198	.00112	-.00353	.00765	-.00763	.0001	2.7391
#3	.00104	.00356	-.00457	.01126	-.00811	.0001	2.7406
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3340	--	--	--	--	--
SDev	.0000000	3.055050	--	--	--	--	--
%RSD	.0000000	.0914777	--	--	--	--	--
#1	667	3343	--	--	--	--	--
#2	667	3337	--	--	--	--	--
#3	667	3339	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVW2 Operator: WGL
Run Time: 11/09/98 10:27:37
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00010	.00018	-.00052	-.00338	-.00108	.00712	-.0001
SDev	.00060	.00031	.00105	.00321	.00106	.00187	.0033
%RSD	604.83	170.20	203.88	95.129	98.681	26.333	4029.
#1	.00034	.00043	.00059	-.00262	-.00091	.00541	-.0036
#2	.00054	-.00016	-.00151	-.00690	-.00011	.00912	.0029
#3	-.00059	.00027	-.00063	-.00061	-.00222	.00682	.0004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	25.19	.0003	.0515	7.149	.0030	.0013	-.00415
SDev	.10	.0007	.0107	.036	.0001	.0000	.00039
%RSD	.4014	256.2	20.69	.5091	1.679	2.045	9.3031
#1	25.16	.0011	.0638	7.135	.0030	.0013	-.00411
#2	25.30	-.0003	.0458	7.190	.0030	.0013	-.00456
#3	25.11	.0000	.0449	7.121	.0029	.0013	-.00379
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00130	.00065	-.00194	.00408	-.00710	.0003	2.7626
SDev	.00149	.00111	.00105	.00222	.00383	.0001	.0116
%RSD	114.79	171.81	54.017	54.368	54.014	19.85	.42153
#1	.00293	.00068	-.00170	.00352	-.00568	.0003	2.7496
#2	.00001	.00173	-.00103	.00220	-.01144	.0003	2.7721
#3	.00095	-.00048	-.00309	.00653	-.00417	.0002	2.7661
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3335	--	--	--	--	--
SDev	.0000000	11.15049	--	--	--	--	--
%RSD	.0000000	.3343140	--	--	--	--	--
#1	667	3331	--	--	--	--	--
#2	667	3327	--	--	--	--	--
#3	667	3348	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVW3 Operator: WGL
Run Time: 11/09/98 10:31:53
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00068	-.00003	-.00205	-.00031	-.00263	.01195	-.0319
SDev	.00261	.00022	.00056	.00195	.00045	.00165	.0039
%RSD	386.92	772.60	27.517	629.91	17.207	13.839	12.17
#1	-.00301	-.00013	-.00196	-.00235	-.00315	.01162	-.0363
#2	.00215	.00022	-.00153	.00154	-.00237	.01049	-.0292
#3	-.00117	-.00018	-.00265	-.00012	-.00236	.01375	-.0301
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	4.878	.0001	-.0010	1.062	.0003	-.0005	-.00717
SDev	.011	.0003	.0156	.004	.0000	.0007	.00148
%RSD	.2262	468.3	1499.	.4238	3.348	152.7	20.658
#1	4.882	.0001	-.0069	1.059	.0003	-.0013	-.00682
#2	4.886	.0003	.0167	1.067	.0003	-.0001	-.00588
#3	4.865	-.0003	-.0129	1.061	.0003	.0000	-.00879
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00051	.00124	-.00455	.01245	-.00668	.0000	2.7771
SDev	.00012	.00123	.00049	.00569	.00136	.0000	.0087
%RSD	23.686	99.383	10.739	45.704	20.438	15.49	.31169
#1	.00046	.00023	-.00483	.00844	-.00774	.0000	2.7721
#2	.00065	.00088	-.00399	.01896	-.00716	.0000	2.7871
#3	.00042	.00260	-.00484	.00994	-.00514	.0000	2.7721
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3368	--	--	--	--	--
SDev	.0000000	2.645751	--	--	--	--	--
%RSD	.0000000	.0785556	--	--	--	--	--
#1	667	3365	--	--	--	--	--
#2	667	3370	--	--	--	--	--
#3	667	3369	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVW7 Operator: WGL
Run Time: 11/09/98 10:36:10
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00004	.00005	-.00065	-.00132	-.00173	.00756	.0034
SDev	.00081	.00018	.00192	.00204	.00044	.00093	.0053
%RSD	1841.8	382.52	296.98	154.22	25.482	12.235	157.7
#1	.00085	.00005	-.00223	-.00013	-.00195	.00817	-.0025
#2	-.00077	-.00014	-.00120	-.00368	-.00202	.00650	.0048
#3	.00005	.00023	.00149	-.00016	-.00122	.00802	.0077
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	11.25	.0001	.0943	2.121	.0013	.0018	-.00583
SDev	.03	.0007	.0075	.008	.0003	.0014	.00234
%RSD	.2547	502.8	7.902	.3613	21.11	78.32	40.221
#1	11.28	.0000	.0904	2.129	.0013	.0034	-.00840
#2	11.23	.0008	.1029	2.114	.0011	.0010	-.00524
#3	11.24	-.0005	.0897	2.119	.0016	.0010	-.00383
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00194	.00120	-.00319	.00603	-.00500	.0002	2.7696
SDev	.00191	.00162	.00074	.00049	.00292	.0000	.0419
%RSD	98.515	135.17	23.086	8.1846	58.403	17.48	1.5141
#1	.00086	.00223	-.00404	.00660	-.00349	.0002	2.7376
#2	.00081	-.00067	-.00269	.00570	-.00836	.0001	2.8171
#3	.00414	.00204	-.00285	.00581	-.00314	.0002	2.7541
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3354	--	--	--	--	--
SDev	.0000000	28.21347	--	--	--	--	--
%RSD	.0000000	.8411888	--	--	--	--	--
#1	667	3328	--	--	--	--	--
#2	667	3384	--	--	--	--	--
#3	667	3350	--	--	--	--	--

Method: TRACEICP Sample Name: CMVW8 Operator: WGL
Run Time: 11/09/98 10:40:26
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00115	.00020	.00308	-.00179	-.00184	.00486	.0187
SDev	.00042	.00018	.00140	.00121	.00160	.00118	.0044
%RSD	36.311	90.840	45.445	67.848	87.106	24.328	23.30
#1	-.00155	.00041	.00151	-.00064	-.00119	.00622	.0155
#2	-.00120	.00011	.00355	-.00305	-.00066	.00429	.0170
#3	-.00071	.00008	.00419	-.00166	-.00367	.00407	.0237
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	12.70	.0005	.0961	2.786	.0017	.0022	-.00276
SDev	.10	.0004	.0011	.014	.0001	.0006	.00258
%RSD	.8107	82.77	1.137	.5094	5.038	26.71	93.549
#1	12.60	.0009	.0951	2.772	.0017	.0028	-.00124
#2	12.69	.0007	.0959	2.785	.0017	.0016	-.00574
#3	12.80	.0000	.0973	2.800	.0018	.0021	-.00130
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00600	-.00013	-.00269	.00451	-.00493	.0004	2.6497
SDev	.00277	.00228	.00228	.00271	.00078	.0001	.0146
%RSD	46.239	1714.1	84.641	60.123	15.915	14.44	.54956
#1	.00288	-.00213	-.00072	.00615	-.00403	.0004	2.6657
#2	.00818	.00235	-.00217	.00138	-.00527	.0004	2.6462
#3	.00692	-.00062	-.00519	.00600	-.00549	.0005	2.6372
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3216	--	--	--	--	--
SDev	.0000000	20.66398	--	--	--	--	--
%RSD	.0000000	.6425366	--	--	--	--	--
#1	667	3235	--	--	--	--	--
#2	667	3219	--	--	--	--	--
#3	667	3194	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVWC Operator: WGL
Run Time: 11/09/98 10:44:42
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00067	.00011	-.00093	-.00230	-.00142	.00634	.0084
SDev	.00091	.00030	.00070	.00054	.00125	.00108	.0008
%RSD	136.36	280.93	75.746	23.499	88.009	17.067	8.977
#1	.00035	-.00013	-.00015	-.00209	-.00248	.00510	.0075
#2	-.00095	.00000	-.00112	-.00190	-.00004	.00682	.0089
#3	-.00140	.00045	-.00152	-.00291	-.00174	.00709	.0087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	10.48	.0003	.0430	1.982	.0011	.0009	-.00712
SDev	.02	.0002	.0032	.004	.0000	.0006	.00134
%RSD	.1709	51.34	7.522	.2251	3.152	64.32	18.761
#1	10.46	.0004	.0413	1.982	.0012	.0010	-.00633
#2	10.50	.0001	.0409	1.978	.0011	.0015	-.00867
#3	10.49	.0003	.0467	1.987	.0011	.0003	-.00637
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00216	.00160	-.00293	.00418	-.00554	.0000	2.7846
SDev	.00110	.00201	.00090	.00488	.00177	.0000	.0122
%RSD	50.752	125.16	30.788	116.74	31.954	42.84	.43851
#1	.00294	-.00034	-.00355	.00328	-.00477	.0000	2.7706
#2	.00264	.00367	-.00189	.00945	-.00756	.0000	2.7931
#3	.00091	.00149	-.00334	-.00018	-.00428	.0000	2.7901
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3363	--	--	--	--	--
SDev	.0000000	9.291574	--	--	--	--	--
%RSD	.0000000	.2762609	--	--	--	--	--
#1	667	3353	--	--	--	--	--
#2	667	3366	--	--	--	--	--
#3	667	3371	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVWF Operator: WGL
Run Time: 11/09/98 10:48:57
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00128	.00014	.01139	.00049	-.00148	.00591	.0026
SDev	.00079	.00023	.00074	.00044	.00063	.00021	.0022
%RSD	61.752	167.06	6.5164	90.330	42.765	3.6085	84.59
#1	-.00060	.00006	.01224	.00043	-.00121	.00568	.0034
#2	-.00109	-.00005	.01100	.00008	-.00220	.00609	.0001
#3	-.00214	.00039	.01092	.00095	-.00103	.00598	.0044
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	19.98	.0009	.0242	5.105	.0016	.0012	.00751
SDev	.03	.0003	.0040	.016	.0001	.0009	.00194
%RSD	.1600	31.61	16.43	.3066	3.437	77.00	25.837
#1	20.02	.0010	.0288	5.122	.0017	.0022	.00861
#2	19.95	.0006	.0221	5.091	.0016	.0004	.00527
#3	19.98	.0011	.0218	5.102	.0016	.0010	.00864
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.01333	.00079	-.00261	.00773	-.00313	.0003	2.6742
SDev	.00110	.00152	.00133	.00030	.00073	.0001	.0121
%RSD	8.2535	192.66	50.995	3.8151	23.379	14.10	.45316
#1	.01406	-.00094	-.00134	.00806	-.00337	.0004	2.6672
#2	.01386	.00139	-.00400	.00765	-.00370	.0003	2.6672
#3	.01206	.00190	-.00249	.00748	-.00231	.0003	2.6882
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3240	--	--	--	--	--
SDev	.0000000	13.50309	--	--	--	--	--
%RSD	.0000000	.4168048	--	--	--	--	--
#1	667	3226	--	--	--	--	--
#2	667	3240	--	--	--	--	--
#3	667	3253	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVWM Operator: WGL
Run Time: 11/09/98 10:53:12
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00086	.00006	.00598	-.00180	-.00129	.00830	.0036
SDev	.00058	.00012	.00088	.00117	.00208	.00181	.0019
%RSD	67.674	187.22	14.740	65.044	161.11	21.860	54.67
#1	.00102	.00001	.00580	-.00136	-.00307	.00991	.0057
#2	.00135	.00020	.00520	-.00313	-.00180	.00867	.0018
#3	.00022	-.00002	.00694	-.00091	.00099	.00634	.0032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	16.50	.0007	.0202	4.039	.0013	.0018	.00108
SDev	.06	.0001	.0001	.011	.0003	.0009	.00127
%RSD	.3509	15.71	.3028	.2636	20.16	50.93	117.60
#1	16.47	.0006	.0202	4.047	.0010	.0011	.00249
#2	16.46	.0008	.0201	4.027	.0014	.0028	.00001
#3	16.56	.0007	.0202	4.042	.0015	.0014	.00074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00843	.00089	-.00238	.00868	-.00703	.0002	2.7251
SDev	.00140	.00143	.00258	.00097	.00181	.0000	.0136
%RSD	16.608	160.81	108.39	11.244	25.730	6.870	.49920
#1	.00746	-.00075	-.00423	.00762	-.00584	.0002	2.7271
#2	.00779	.00156	-.00347	.00886	-.00911	.0002	2.7376
#3	.01003	.00185	.00057	.00954	-.00613	.0002	2.7106
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	#Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3295	--	--	--	--	--
SDev	.0000000	7.211102	--	--	--	--	--
%RSD	.0000000	.2188499	--	--	--	--	--
#1	667	3297	--	--	--	--	--
#2	667	3301	--	--	--	--	--
#3	667	3287	--	--	--	--	--

Method: TRACEICP Sample Name: CMVWQ Operator: WGL
Run Time: 11/09/98 10:57:28
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00066	-.00013	.00536	-.00091	-.00091	.00708	.0154
SDev	.00108	.00015	.00059	.00222	.00042	.00364	.0019
%RSD	163.72	120.26	10.913	244.19	45.978	51.359	12.56
#1	-.00191	-.00003	.00515	-.00269	-.00140	.00360	.0136
#2	-.00004	-.00031	.00603	.00158	-.00063	.00678	.0175
#3	-.00003	-.00005	.00492	-.00162	-.00072	.01086	.0152
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	11.46	-.0002	-.0109	2.433	.0008	.0011	-.00023
SDev	.02	.0002	.0142	.007	.0000	.0008	.00145
%RSD	.1368	65.20	130.1	.2796	3.547	68.21	628.12
#1	11.48	-.0001	-.0268	2.434	.0008	.0012	-.00156
#2	11.47	-.0004	-.0060	2.439	.0008	.0018	-.00045
#3	11.44	-.0003	.0002	2.425	.0007	.0003	.00132
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00816	.00168	-.00221	.00845	-.00558	.0001	2.7666
SDev	.00131	.00209	.00157	.00096	.00336	.0000	.0139
%RSD	16.039	124.06	70.887	11.408	60.081	53.73	.50352
#1	.00850	.00364	-.00391	.00924	-.00864	.0000	2.7781
#2	.00926	.00192	-.00189	.00874	-.00199	.0001	2.7511
#3	.00671	-.00051	-.00082	.00738	-.00612	.0001	2.7706
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3355	--	--	--	--	--
SDev	.0000000	7.094599	--	--	--	--	--
%RSD	.0000000	.2114424	--	--	--	--	--
#1	667	3354	--	--	--	--	--
#2	667	3349	--	--	--	--	--
#3	667	3363	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVX1 Operator: WGL
Run Time: 11/09/98 11:01:43
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	-.00082	.00024	.00589	.00074	-.00096	.00611	.0019
SDev	.00092	.00028	.00040	.00148	.00122	.00029	.0017
%RSD	112.40	116.58	6.7398	199.32	127.22	4.7202	89.86
#1	-.00187	.00017	.00616	-.00053	-.00232	.00580	.0033
#2	-.00026	.00000	.00608	.00040	.00004	.00618	.0023
#3	-.00031	.00056	.00544	.00237	-.00059	.00636	.0000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	19.96	.0002	.0919	5.150	.0014	.0019	.00115
SDev	.03	.0004	.0033	.014	.0000	.0006	.00239
%RSD	.1707	226.2	3.582	.2774	2.756	31.81	207.05
#1	20.00	.0004	.0881	5.166	.0014	.0025	.00177
#2	19.93	.0005	.0940	5.139	.0014	.0019	.00317
#3	19.95	-.0003	.0935	5.145	.0014	.0013	-.00148
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00826	.00120	-.00204	.00885	-.00330	.0003	2.7176
SDev	.00069	.00064	.00202	.00147	.00207	.0000	.0125
%RSD	8.3228	53.069	99.043	16.649	62.749	3.047	.45936
#1	.00836	.00175	-.00434	.00944	-.00551	.0003	2.7136
#2	.00753	.00136	-.00062	.00717	-.00299	.0003	2.7076
#3	.00889	.00050	-.00114	.00993	-.00141	.0003	2.7316
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3296	--	--	--	--	--
SDev	.0000000	9.643651	--	--	--	--	--
%RSD	.0000000	.2925865	--	--	--	--	--
#1	667	3289	--	--	--	--	--
#2	667	3292	--	--	--	--	--
#3	667	3307	--	--	--	--	--

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Method: TRACEICP Sample Name: CCV3 Operator: WGL
Run Time: 11/09/98 11:07:07
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.50000	.51398	.50427	.52009	.50372	.50356	247.0
SDev	.00310	.00269	.00299	.00416	.00260	.00495	.6
%RSD	.62063	.52256	.59239	.79917	.51530	.98250	.2400
#1	.49644	.51093	.50093	.52284	.50667	.50907	247.6
#2	.50217	.51505	.50520	.52213	.50180	.50211	246.8
#3	.50137	.51597	.50669	.51531	.50268	.49950	246.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.55000	.55000	.55000	.55000	.55000	.55000	
Low	.45000	.45000	.45000	.45000	.45000	.45000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	254.3	4.990	100.7	246.8	5.064	5.038	.50458
SDev	1.9	.027	.5	.2	.021	.022	.01175
%RSD	.7310	.5492	.4684	.0783	.4126	.4376	2.3280
#1	252.2	4.959	100.2	246.7	5.040	5.012	.51810
#2	255.3	5.008	101.1	247.0	5.075	5.052	.49883
#3	255.5	5.004	100.9	246.7	5.076	5.049	.49682
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.50411	.49749	.50683	.52176	.51927	.4969	2.4518
SDev	.01031	.00406	.00592	.01111	.00336	.0014	.0200
%RSD	2.0448	.81540	1.1670	2.1284	.64720	.2767	.81431
#1	.49236	.49283	.51358	.53359	.51747	.4953	2.4288
#2	.50837	.50027	.50257	.52010	.52314	.4978	2.4618
#3	.51161	.49936	.50434	.51157	.51718	.4976	2.4648
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3004	--	--	--	--	--
SDev	.0000000	29.93883	--	--	--	--	--
%RSD	.0000000	.9965215	--	--	--	--	--
#1	667	2970	--	--	--	--	--
#2	667	3018	--	--	--	--	--
#3	667	3025	--	--	--	--	--

Method: TRACEICP Sample Name: CCB3 Operator: WGL
Run Time: 11/09/98 11:12:31
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00005	.00014	-.00032	.00014	-.00146	.00195	-.0518
SDev	.00308	.00026	.00113	.00074	.00065	.00159	.0045
%RSD	5770.4	185.23	354.20	527.94	44.674	81.612	8.639
#1	.00346	.00044	-.00159	-.00071	-.00174	.00322	-.0467
#2	-.00074	.00005	.00060	.00061	-.00192	.00017	-.0537
#3	-.00255	-.00006	.00003	.00052	-.00071	.00245	-.0551
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.01000	.00500	.00300	.00500	.01000	.01000	
Low	-.01000	-.00500	-.03000	-.00500	-.01000	-.01000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.0093	.0003	-.0029	.0063	.0001	.0018	.00211
SDev	.0015	.0005	.0033	.0010	.0001	.0004	.00397
%RSD	16.33	157.9	112.5	15.84	55.67	23.16	188.50
#1	.0102	.0009	-.0009	.0069	.0002	.0015	.00205
#2	.0075	.0001	-.0012	.0069	.0000	.0017	.00611
#3	.0102	-.0001	-.0067	.0052	.0002	.0023	-.00184
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	-.00153	-.00360	-.00039	.00751	-.00354	.0000	2.7096
SDev	.00225	.00292	.00085	.00387	.00165	.0000	.0258
%RSD	146.76	81.138	219.44	51.598	46.514	79.54	.95247
#1	-.00340	-.00288	-.00117	.00540	-.00376	.0000	2.6987
#2	-.00215	-.00681	.00052	.01198	-.00506	.0000	2.7391
#3	.00096	-.00110	-.00052	.00515	-.00179	.0001	2.6912
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3297	--	--	--	--	--
SDev	.0000000	18.47521	--	--	--	--	--
%RSD	.0000000	.5604209	--	--	--	--	--
#1	667	3286	--	--	--	--	--
#2	667	3318	--	--	--	--	--
#3	667	3286	--	--	--	--	--

Method: TRACEICP Sample Name: CMVX7 Operator: WGL
Run Time: 11/09/98 11:16:49
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00126	.00020	-.00160	-.00048	-.00000	.00749	.0059
SDev	.00151	.00026	.00142	.00217	.00102	.00370	.0020
%RSD	119.77	132.62	89.062	448.44	28414.	49.360	33.79
#1	.00292	-.00004	-.00103	.00057	.00097	.00324	.0082
#2	.00087	.00016	-.00055	.00095	.00009	.00927	.0043
#3	-.00002	.00048	L-.00321	-.00298	-.00107	.00996	.0053
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	14.43	.0001	.0603	3.618	.0032	.0021	-.00515
SDev	.03	.0004	.0139	.016	.0001	.0010	.00293
%RSD	.2136	420.4	23.01	.4375	2.464	47.34	56.934
#1	14.42	-.0004	.0443	3.628	.0032	.0017	-.00183
#2	14.47	.0002	.0688	3.626	.0032	.0032	-.00622
#3	14.41	.0005	.0678	3.600	.0031	.0014	-.00740
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00018	.00215	-.00108	.01070	-.00607	.0002	2.6957
SDev	.00185	.00227	.00124	.00294	.00181	.0000	.0159
%RSD	1027.5	105.16	114.75	27.476	29.847	19.34	.58860
#1	-.00063	.00464	-.00086	.01257	-.00542	.0002	2.6837
#2	.00229	.00019	.00004	.01222	-.00467	.0002	2.6897
#3	-.00112	.00164	-.00242	.00731	-.00811	.0002	2.7136
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	#Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3292	--	--	--	--	--
SDev	.0000000	17.00980	--	--	--	--	--
%RSD	.0000000	.5167534	--	--	--	--	--
#1	667	3279	--	--	--	--	--
#2	667	3285	--	--	--	--	--
#3	667	3311	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVXD Operator: WGL
Run Time: 11/09/98 11:21:05
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00021	-.00007	-.00232	-.00031	-.00158	.01106	-.0247
SDev	.00197	.00005	.00060	.00164	.00166	.00140	.0017
%RSD	946.03	69.096	26.091	521.51	104.83	12.687	6.926
#1	.00198	-.00012	-.00181	-.00127	-.00263	.00964	-.0230
#2	.00057	-.00002	-.00216	.00157	.00033	.01245	-.0247
#3	-.00192	-.00008	-.00298	-.00124	-.00245	.01110	-.0265
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	6.083	.0004	.0876	1.319	.0018	-.0001	-.00639
SDev	.015	.0001	.0017	.004	.0000	.0003	.00078
%RSD	.2434	42.00	1.983	.2937	.7286	613.8	12.186
#1	6.093	.0002	.0864	1.323	.0018	.0003	-.00691
#2	6.089	.0003	.0867	1.315	.0018	-.0004	-.00549
#3	6.066	.0005	.0896	1.320	.0018	-.0000	-.00675
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	-.00028	-.00024	-.00225	.01224	-.00658	.0001	2.8011
SDev	.00094	.00162	.00171	.00547	.00161	.0000	.0098
%RSD	330.47	677.81	75.809	44.696	24.409	4.079	.34825
#1	.00074	-.00157	-.00316	.01279	-.00829	.0001	2.8111
#2	-.00049	.00156	-.00028	.01741	-.00633	.0001	2.8006
#3	-.00110	-.00070	-.00333	.00651	-.00511	.0001	2.7916
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3418	--	--	--	--	--
SDev	.0000000	3.214550	--	--	--	--	--
%RSD	.0000000	.0940385	--	--	--	--	--
#1	667	3422	--	--	--	--	--
#2	667	3416	--	--	--	--	--
#3	667	3417	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVXE Operator: WGL
Run Time: 11/09/98 11:25:21
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00068	-.00006	-.00114	-.00068	-.00245	.00920	.0243
SDev	.00094	.00013	.00095	.00047	.00069	.00303	.0010
%RSD	136.86	206.19	83.363	68.867	28.080	32.948	4.298
#1	.00174	-.00021	-.00199	-.00122	-.00168	.00830	.0251
#2	-.00006	-.00003	-.00132	-.00035	-.00300	.00672	.0246
#3	.00038	.00005	-.00011	-.00047	-.00267	.01258	.0231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	5.376	.0007	.1214	1.220	.0011	.0004	-.00421
SDev	.019	.0001	.0126	.002	.0000	.0004	.00108
%RSD	.3444	16.33	10.35	.1848	2.154	98.42	25.558
#1	5.391	.0006	.1356	1.223	.0011	.0009	-.00429
#2	5.381	.0008	.1172	1.218	.0011	.0002	-.00524
#3	5.355	.0006	.1115	1.219	.0011	.0002	-.00309
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00039	-.00015	-.00359	.01200	-.00701	.0001	2.7821
SDev	.00113	.00129	.00084	.00381	.00205	.0000	.0077
%RSD	289.94	831.15	23.347	31.757	29.246	19.65	.27654
#1	-.00084	.00097	-.00300	.01273	-.00818	.0001	2.7736
#2	.00063	.00012	-.00455	.01540	-.00821	.0001	2.7886
#3	.00138	-.00155	-.00322	.00788	-.00464	.0001	2.7841
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3377	--	--	--	--	--
SDev	.0000000	6.110101	--	--	--	--	--
%RSD	.0000000	.1809149	--	--	--	--	--
#1	667	3372	--	--	--	--	--
#2	667	3384	--	--	--	--	--
#3	667	3376	--	--	--	--	--

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Method: TRACEICP Sample Name: CMVXG Operator: WGL
Run Time: 11/09/98 11:29:37
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00035	.00022	-.00015	-.00119	-.00259	.00610	-.0013
SDev	.00169	.00018	.00151	.00088	.00103	.00399	.0028
%RSD	478.75	81.295	985.28	74.527	39.771	65.482	206.8
#1	-.00132	.00040	-.00165	-.00122	-.00301	.00861	.0018
#2	.00206	.00005	.00138	-.00029	-.00141	.00819	-.0025
#3	.00031	.00020	-.00019	-.00205	-.00334	.00149	-.0034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	20.86	.0002	.0280	5.389	.0013	.0011	-.00490
SDev	.07	.0005	.0151	.033	.0000	.0004	.00319
%RSD	.3486	196.6	54.04	.6194	3.036	39.59	64.968
#1	20.94	.0008	.0453	5.427	.0014	.0007	-.00471
#2	20.82	-.0002	.0178	5.370	.0013	.0012	-.00818
#3	20.80	.0001	.0208	5.369	.0013	.0015	-.00182
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00222	-.00052	-.00362	.00717	-.00536	.0003	2.7211
SDev	.00342	.00259	.00066	.00163	.00106	.0000	.0052
%RSD	154.32	501.38	18.326	22.775	19.886	5.834	.19086
#1	-.00012	-.00029	-.00436	.00864	-.00614	.0003	2.7151
#2	.00615	.00195	-.00309	.00744	-.00414	.0003	2.7241
#3	.00063	-.00321	-.00340	.00541	-.00578	.0003	2.7241
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3316	--	--	--	--	--
SDev	.0000000	10.11599	--	--	--	--	--
%RSD	.0000000	.3050968	--	--	--	--	--
#1	667	3304	--	--	--	--	--
#2	667	3321	--	--	--	--	--
#3	667	3322	--	--	--	--	--

Analysis Report Mon 11-09-98 11:38:05 AM page 1

Method: TRACEICP - Sample Name: CMVXJ Operator: WGL
Run Time: 11/09/98 11:33:53
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00092	.00017	.00023	-.00018	-.00085	.00713	-.0019
SDev	.00124	.00010	.00080	.00071	.00101	.00170	.0010
%RSD	135.07	55.029	344.25	391.77	119.11	23.907	51.27
#1	-.00047	.00010	.00043	-.00025	-.00167	.00609	-.0024
#2	.00130	.00028	.00091	.00056	.00028	.00620	-.0025
#3	.00192	.00014	-.00065	-.00086	-.00114	.00909	-.0008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	11.09	.0005	.1819	2.374	.0025	.0019	-.00306
SDev	.03	.0004	.0115	.013	.0001	.0008	.00080
%RSD	.2725	80.82	6.306	.5334	3.115	39.28	26.140
#1	11.07	.0008	.1927	2.371	.0025	.0027	-.00332
#2	11.13	.0000	.1698	2.388	.0026	.0012	-.00216
#3	11.08	.0007	.1830	2.363	.0025	.0018	-.00370
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00188	.00015	-.00134	.00602	-.00328	.0003	2.6582
SDev	.00087	.00202	.00134	.00220	.00194	.0000	.0316
%RSD	46.236	1372.7	99.928	36.615	59.170	6.412	1.1885
#1	.00230	-.00209	-.00147	.00411	-.00242	.0003	2.6612
#2	.00245	.00071	.00006	.00551	-.00191	.0004	2.6252
#3	.00088	.00182	-.00261	.00843	-.00550	.0003	2.6882
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3238	--	--	--	--	--
SDev	.0000000	17.61628	--	--	--	--	--
%RSD	.0000000	.5441042	--	--	--	--	--
#1	667	3243	--	--	--	--	--
#2	667	3218	--	--	--	--	--
#3	667	3252	--	--	--	--	--

Method: TRACEICP Sample Name: CMVXL Operator: WGL
Run Time: 11/09/98 11:38:09
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00016	.00005	-.00050	-.00154	-.00242	.00871	-.0218
SDev	.00148	.00014	.00049	.00172	.00020	.00213	.0013
%RSD	904.75	250.51	98.031	111.43	8.3563	24.457	6.009
#1	.00184	.00020	-.00007	.00038	-.00237	.00774	-.0220
#2	-.00035	.00004	-.00103	-.00207	-.00264	.00724	-.0230
#3	-.00100	-.00007	-.00039	-.00294	-.00224	.01115	-.0204
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.000	20.000	30.000	20.000	20.000	30.000	1000.
Low	-.01000	-.00500	-.00300	-.00500	-.01000	-.01000	-1.000

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	7.937	.0001	.0002	1.730	.0005	-.0004	-.00490
SDev	.006	.0002	.0120	.018	.0003	.0004	.00149
%RSD	.0804	155.2	6358.	1.035	46.65	107.6	30.492
#1	7.939	-.0001	.0140	1.721	.0007	.0001	-.00662
#2	7.930	.0001	-.0067	1.750	.0007	-.0007	-.00394
#3	7.943	.0002	-.0068	1.718	.0003	-.0006	-.00414
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK
High	1000.	100.0	1000.	1000.		25.00	
Low	-.1000	-.1000	-.1000	-.1000		-.1000	

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.00170	.00024	-.00374	.00979	-.00720	.0000	2.7681
SDev	.00140	.00224	.00095	.00108	.00230	.0000	.0068
%RSD	82.477	948.59	25.327	11.064	31.950	29.16	.24423
#1	.00320	-.00132	-.00289	.01025	-.00455	.0000	2.7616
#2	.00042	-.00078	-.00357	.01057	-.00838	.0000	2.7676
#3	.00148	.00281	-.00476	.00855	-.00868	.0000	2.7751
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						10.00	
Low						-.0100	

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3375	--	--	--	--	--
SDev	.0000000	3.055050	--	--	--	--	--
%RSD	.0000000	.0905290	--	--	--	--	--
#1	667	3372	--	--	--	--	--
#2	667	3374	--	--	--	--	--
#3	667	3378	--	--	--	--	--

Analysis Report Mon 11-09-98 11:47:46 AM page 1

Method: TRACEICP Sample Name: CCV4 Operator: WGL
Run Time: 11/09/98 11:43:34
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2Al308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.48236	.49383	.48975	.50418	.48678	.48970	239.2
SDev	.00266	.00036	.00201	.00221	.00058	.00049	.4
%RSD	.55235	.07216	.41094	.43863	.12002	.10084	.1555
#1	.48068	.49424	.48851	.50261	.48728	.49006	238.8
#2	.48543	.49367	.49207	.50671	.48613	.48991	239.3
#3	.48097	.49358	.48868	.50322	.48691	.48914	239.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.55000	.55000	.55000	.55000	.55000	.55000	
Low	.45000	.45000	.45000	.45000	.45000	.45000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	243.3	4.780	96.75	237.8	4.859	4.836	.47962
SDev	.6	.010	.15	.3	.008	.012	.00232
%RSD	.2410	.2086	.1525	.1329	.1711	.2406	.48383
#1	242.7	4.769	96.59	237.5	4.850	4.823	.47935
#2	243.5	4.785	96.78	237.9	4.864	4.845	.48207
#3	243.8	4.787	96.88	238.0	4.864	4.840	.47745
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	.49481	.48715	.48659	.50137	.50558	.4776	2.4968
SDev	.00205	.00361	.00263	.00326	.00445	.0010	.0023
%RSD	.41370	.74160	.54111	.64944	.88123	.2124	.09173
#1	.49308	.48535	.48824	.50513	.50136	.4764	2.4993
#2	.49707	.49131	.48355	.49965	.51024	.4783	2.4948
#3	.49428	.48480	.48797	.49934	.50516	.4780	2.4963
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3083	--	--	--	--	--
SDev	.0000000	2.645751	--	--	--	--	--
%RSD	.0000000	.0858174	--	--	--	--	--
#1	667	3081	--	--	--	--	--
#2	667	3082	--	--	--	--	--
#3	667	3086	--	--	--	--	--

Analysis Report Mon 11-09-98 11:53:10 AM page 1

Method: TRACEICP Sample Name: CCB4 Operator: WGL
Run Time: 11/09/98 11:48:58
Comment: 8309233
Mode: CONC Corr. Factor: 1

Elem	As	Cd	Pb	Se	Sb	Tl	2A1308
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.00020	.00020	-.00171	-.00153	-.00024	.00278	-.0599
SDev	.00112	.00024	.00062	.00213	.00132	.00163	.0037
%RSD	563.12	122.21	36.257	138.72	559.98	58.732	6.097
#1	-.00096	.00024	-.00235	-.00190	-.00019	.00451	-.0558
#2	.00127	.00041	-.00111	-.00345	.00107	.00128	-.0629
#3	.00029	-.00006	-.00167	.00075	-.00158	.00254	-.0610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.01000	.00500	.00300	.00500	.01000	.01000	
Low	-.01000	-.00500	-.03000	-.00500	-.01000	-.01000	

Elem	2Ca317	Cr2677	2Fe271	2Mg279	2Mn257	Mo2020	2Pb/1
Units	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Avge	.0035	-.0000	-.0019	.0103	.0004	.0018	-.00257
SDev	.0113	.0007	.0083	.0089	.0001	.0015	.00193
%RSD	323.4	11180.	443.7	86.25	20.64	86.17	74.981
#1	.0165	.0008	.0077	.0206	.0004	.0035	-.00035
#2	-.0018	-.0001	-.0072	.0052	.0005	.0012	-.00357
#3	-.0042	-.0007	-.0061	.0052	.0003	.0006	-.00379
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	2Pb/2	2Sb/1	2Sb/2	2Se/1	2Se/2	2V2924	2Y3710
Units	PPM	PPM	PPM	PPM	PPM	PPM	
Avge	-.00128	.00158	-.00114	.00050	-.00255	.0001	2.6842
SDev	.00183	.00243	.00120	.00296	.00322	.0001	.0435
%RSD	142.78	153.64	104.92	592.42	126.18	104.3	1.6201
#1	-.00335	.00006	-.00032	.00369	-.00469	.0000	2.7271
#2	.00011	.00438	-.00059	-.00215	-.00410	.0000	2.6852
#3	-.00060	.00030	-.00252	-.00004	.00115	.0001	2.6402
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

IntStd	1	2	3	4	5	6	7
Mode	Time	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	--	Y	--	--	--	--	--
Wavlen	--	371.030	--	--	--	--	--
Avge	667	3300	--	--	--	--	--
SDev	.0000000	47.62352	--	--	--	--	--
%RSD	.0000000	1.443137	--	--	--	--	--
#1	667	3336	--	--	--	--	--
#2	667	3318	--	--	--	--	--
#3	667	3246	--	--	--	--	--

QUANTERRA-DENVER

SUPER TRACE IDL -1998-qt 4

Effective 10-15-98

All units are mg/L

ANALYTE	IDL Super Trace	MDL aqueous	MDL soil	QRL	CRDL	LINEAR RANGE Super Trace
Aluminum	0.0286	0.0134	2.47	0.1	0.2	600
Antimony	0.0026	0.00194	0.135	0.01	0.06	50
Arsenic	0.00157	0.000975	0.197	0.01	0.01	20
Barium	0.0012	0.00642	0.134	0.01	0.2	25
Beryllium	0.000386	0.000321	0.0576	0.002	0.005	25
Boron	0.00153	0.00111	1.64	0.1		50
Cadmium	0.000501	0.000236	0.0465	0.005	0.005	10
Calcium	0.0101	0.0107		0.2	5	600
Chromium	0.001	0.00104	0.405	0.01	0.01	50
Cobalt	0.00111	0.000642	1.08	0.01	0.05	50
Copper	0.00189	0.00142	0.4	0.02	0.025	50
Iron	0.0131	0.036	1.56	0.1	0.1	1000
Lead	0.00161	0.00147	0.0765	0.003	0.003	25
Magnesium	0.0132	0.00738	1.905	0.2	5	1000
Manganese	0.000962	0.0036	0.088	0.01	0.015	50
Molybdenum	0.00112	0.000702	0.086	0.02		20
Nickel	0.00114	0.000486	1.42	0.04	0.04	50
Phosphorus	0.00154	0.0309	0.48	0.3		50
Selenium	0.00259	0.0019	0.348	0.005	0.005	50
Silica (SiO_2)	0.0569	0.03	16.11	0.5		428
Silver	0.00109	0.000504	0.072	0.01	0.01	25
Strontium	0.000936	0.000345	0.084	0.05		10
Thallium	0.00266	0.0017	0.164	0.01	0.01	50
Tin	0.00163	0.00171	0.333	0.1		50
Titanium	0.0009	0.000345	0.0834	0.015		10
Vanadium	0.00105	0.000531	0.096	0.01	0.05	50
Zinc	0.00153	0.00194	0.366	0.02	0.02	50

RQC057 Quanterra Incorporated Run Date: 11/09/98
METALS PREP LOG/BATCH SUMMARY Time: 10:30:33

BATCH NUMBER: 8309338 PREP DATE: 11/09/98
DUE DATE 11/10/98 INITIALS: RJ

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J290136	CMWRL	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/10/98					
D8J260141	CMRWH	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
	CMRWHS		50.0 g	g	g	g
	CMRWHD		50.0 g	g	g	g
D8J260141	CMRWQ	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRWR	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRWT	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRWV	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRWW	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J260141	CMRWX	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J270119	CMTF3	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J270119	CMTF6	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J270119	CMTF9	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J270119	CMTFC	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J280157	CMVT5	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J280157	CMVTN	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					

RQC057 Quanterra Incorporated Run Date: 11/09/98
METALS PREP LOG/BATCH SUMMARY Time: 10:30:33

BATCH NUMBER: 8309338 PREP DATE: 11/09/98
DUE DATE 11/10/98 INITIALS: LF

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J280157	CMVTT	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8K020184	CN2JL	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8K020184	CN2JM	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/11/98					
D8J150202	CMG35	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/12/98					
D8J150202	CMG38	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/12/98					
D8J150202	CMG39	01	X 50.0 g	g	g	g
WATER	TO DUE DATE: 11/12/98					
D8K050000	CN62NB	01	X 50.0 g	g	g	g
WATER	DUE DATE: 0/00/00					
	CN62NC		50.0 g	g	g	g
	CN62NL		50.0 g	g	g	g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG ✓
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG ✓

COMMENTS: Samples brought to 50.0g

B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS

SPIKING WITNESSED BY _____

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/09/98
Time: 10:30:33

BATCH NUMBER: 8309338

PREP DATE: 11/09/98
DUE DATE 11/10/98

INITIALS: LF

ICP ELEMENTS WITHIN THE BATCH:

AG	AS	BA	BE	CA	CD	CO	CR	CU	FE	KX	MG	MN	NA	NI	PB	SB	SE	SN	TL	VX	ZN
MS/MSD 1:				ICP - 1			ICP - 2			GFAA		HG		ODD							
MS/MSD 2:				ICP - 1			ICP - 2			GFAA		HG		ODD							
MS/MSD 3:				ICP - 1			ICP - 2			GFAA		HG		ODD							
CHECK :				ICP - 1			ICP - 2			GFAA		HG		ODD							
CHECK DUP:				ICP - 1			ICP - 2			GFAA		HG		ODD							
STANDARD NUMBERS				_____			_____			____		___		___							

RQC057 Quanterra Incorporated Run Date: 11/09/98
METALS PREP LOG/BATCH SUMMARY Time: 10:30:07

BATCH NUMBER: 8310203 PREP DATE: 11/09/98
DUE DATE 11/10/98 INITIALS: LJ

	LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
ICP ST	D8J280164	CMVXM	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/10/98			
		CMVXMS		50.0 g	____g	____g	____g
		CMVXMD		50.0 g	____g	____g	____g
ST only	D8J280164	CMVXR	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/10/98			
	D8J280164	CMW00	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/10/98			
	D8J280164	CMW02	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/10/98			
	D8J280164	CMW06	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/10/98			
	D8J280164	CMW08	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/10/98			
ST & ICP	D8J300168	CN0FD	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/11/98			
	D8J300168	CN0G6	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/11/98			
ST & ICP	D8J310131	CN19G	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/12/98			
	D8J310131	CN19H	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/12/98			
	D8J310131	CN19J	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/12/98			
	D8J310131	CN19K	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/12/98			
ST only	D8J300184	CN0N6	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/17/98			
	D8J300184	CN0NR	01	X 50.0 g	____g	____g	____g
	WATER	TO DUE DATE:		11/17/98			

RQC057 Quanterra Incorporated Run Date: 11/09/98
METALS PREP LOG/BATCH SUMMARY Time: 10:30:07

BATCH NUMBER: 8310203 PREP DATE: 11/09/98
DUE DATE 11/10/98 INITIALS: LF

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J300184 WATER	CN0NW TO DUE DATE:	01	X 50.0 g 11/17/98	____g	____g	____g
D8K050134 WATER	CN5EW TO DUE DATE:	01	X 50.0 g 11/17/98	____g	____g	____g
D8K050134 WATER	CN5FF TO DUE DATE:	01	X 50.0 g 11/17/98	____g	____g	____g
D8K050134 WATER	CN5FG TO DUE DATE:	01	X 50.0 g 11/17/98	____g	____g	____g
D8K060000 WATER	CN704B DUE DATE:	01	X 50.0 g 0/00/00	____g	____g	____g
	CN704C		50.0 g	____g	____g	____g
	CN704L		50.0 g	____g	____g	____g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG ✓

COMMENTS: Sample brought to 50.0 g

B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS

SPIKING WITNESSED BY _____

Batch - 8310203

SOP - CORD-IP-0003

Spiking Information

Verification Number	Spike amount (ul)	Expiration Date
11705	500	6/2000
11758	500	9/2000
11759	500	10/99

Acid Lot Information

HNO3 bb23KX66

HCl 5587KXHL

H2O2 _____

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/09/98
Time: 10:30:07

BATCH NUMBER: 8310203

PREP DATE: 11/09/98
DUE DATE 11/10/98

INITIALS: LJ

ICP ELEMENTS WITHIN THE BATCH:

	AG	AS	BE	CD	CR	CU	FE	NA	NI	PB	SB	SE	TL	ZN
MS/MSD 1:	ICP - 1							ICP - 2			GFAA		HG	ODD
MS/MSD 2:	ICP - 1							ICP - 2			GFAA		HG	ODD
MS/MSD 3:	ICP - 1							ICP - 2			GFAA		HG	ODD
CHECK :	ICP - 1							ICP - 2			GFAA		HG	ODD
CHECK DUP:	ICP - 1							ICP - 2			GFAA		HG	ODD
STANDARD NUMBERS	_____							_____			____		___	___

RQC057 Quanterra Incorporated Run Date: 11/09/98
METALS PREP LOG/BATCH SUMMARY Time: 10:29:55

BATCH NUMBER: 8310214 PREP DATE: 11/09/98
DUE DATE 11/10/98 INITIALS: LF

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT		GFA/WEIGHT	FLA/WEIGH
D8J280217	CMWA3	01	X 50.0 g	____ g	AS	____ g	____ g
WATER	DI DUE DATE:		11/10/98				
	CMWA3S		50.0 g	____ g		____ g	____ g
	CMWA3D		50.0 g	____ g		____ g	____ g
D8J230223	CMPXV	01	X 50.0 g	____ g	AS	____ g	____ g
WATER	DI DUE DATE:		11/17/98				
D8J230223	CMPXW	01	X 50.0 g	____ g	AS	____ g	____ g
WATER	DI DUE DATE:		11/17/98				
D8J230223	CMPXX	01	X 50.0 g	____ g	AS	____ g	____ g
WATER	DI DUE DATE:		11/17/98				
D8K060000	CN71JB	01	X 50.0 g	____ g	AS	____ g	____ g
WATER	DUE DATE:		0/00/00				
	CN71JC		50.0 g	____ g		____ g	____ g
	CN71JL		50.0 g	____ g		____ g	____ g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG ✓

COMMENTS: Samples brought to 50.0 g
B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS
SPIKING WITNESSED BY _____

RQC057 Quanterra Incorporated Run Date: 11/09/98
METALS PREP LOG/BATCH SUMMARY Time: 10:29:55

BATCH NUMBER: 8310214 PREP DATE: 11/09/98
DUE DATE 11/10/98 INITIALS: KJ

ICP ELEMENTS WITHIN THE BATCH:

AS CD CR CU NI VX

MS/MSD 1:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 2:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 3:	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK :	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK DUP:	ICP - 1	ICP - 2	GFAA	HG	ODD
STANDARD NUMBERS	_____	_____	____	___	___

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/09/98
Time: 23:29:13

BATCH NUMBER: 8309307

PREP DATE: 11/10/98
DUE DATE 11/11/98

INITIALS: THA

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J260141	CMRR7	01	X 50 g	____ g	____ g	____ g
WATER 32 TO DUE DATE: 11/11/98						
D8J260141	CMRR8	01	X 50 g	____ g	____ g	____ g
WATER 33 TO DUE DATE: 11/11/98						
D8J260141	CMRR9	01	X 50 g	____ g	____ g	____ g
WATER 34 TO DUE DATE: 11/11/98						
D8J260141	CMRRC	01	X 50 g	____ g	____ g	____ g
WATER 35 TO DUE DATE: 11/11/98						
D8J260141	CMRRE	01	X 50 g	____ g	____ g	____ g
WATER 36 TO DUE DATE: 11/11/98						
D8J260141	CMRRJ	01	X 50 g	____ g	____ g	____ g
WATER 37 TO DUE DATE: 11/11/98						
D8J260141	CMRRL	01	X 50 g	____ g	____ g	____ g
WATER 38 TO DUE DATE: 11/11/98						
D8J260141	CMRRN	01	X 50 g	____ g	____ g	____ g
WATER 39 TO DUE DATE: 11/11/98						
D8J260141	CMRRR	01	X 50 g	____ g	____ g	____ g
WATER 40 TO DUE DATE: 11/11/98						
D8J260141	CMRT2	01	X 50 g	____ g	____ g	____ g
WATER 43 TO DUE DATE: 11/11/98						
D8J260141	CMRT3	01	X 50 g	____ g	____ g	____ g
WATER 44 TO DUE DATE: 11/11/98						
D8J260141	CMRT4	01	X 50 g	____ g	____ g	____ g
WATER 45 TO DUE DATE: 11/11/98						
D8J260141	CMRT7	01	X 50 g	____ g	____ g	____ g
WATER 46 TO DUE DATE: 11/11/98						
D8J260141	CMRT8	01	X 50 g	____ g	____ g	____ g
WATER 47 TO DUE DATE: 11/11/98						
D8J260141	CMRTE	01	X 50 g	____ g	____ g	____ g
WATER 48 TO DUE DATE: 11/11/98						
D8J260141	CMRTG	01	X 50 g	____ g	____ g	____ g
WATER 49 TO DUE DATE: 11/11/98						

RQC057 Quanterra Incorporated Run Date: 11/09/98
METALS PREP LOG/BATCH SUMMARY Time: 23:29:13

BATCH NUMBER: 8309307 PREP DATE: 11/10/98
DUE DATE 11/11/98 INITIALS: THA

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J260141	CMRTH	01	X 50 g	____ g	____ g	____ g
WATER 50 TO DUE DATE: 11/11/98						
	CMRTHS		50 g	____ g	____ g	____ g
	CMRTHD		50 g	____ g	____ g	____ g
D8J260141	CMRTL	01	X 50 g	____ g	____ g	____ g
WATER 51 TO DUE DATE: 11/11/98						
D8J260141	CMRTR	01	X 50 g	____ g	____ g	____ g
WATER 52 TO DUE DATE: 11/11/98						
D8J260141	CMRTT	01	X 50 g	____ g	____ g	____ g
WATER 53 TO DUE DATE: 11/11/98						
D8K050000	CN5VLB	01	X 50 g	____ g	____ g	____ g
WATER DUE DATE: 0/00/00						
	CN5VLC		50 g	____ g	____ g	____ g
	CN5VLL		50 g	____ g	____ g	____ g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH _____
MS/MSD AND PDS ON BATCH _____
CURVE PREPPED FOR HG _____
CORRECT SPIKES ADDED _____
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG _____

COMMENTS: _____
B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS
SPIKING WITNESSED BY _____

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/09/98
Time: 23:29:13

BATCH NUMBER: 8309307

PREP DATE: 11/10/98
DUE DATE 11/11/98

INITIALS: THA

ICP ELEMENTS WITHIN THE BATCH:

AS CD CR CU NI PB ZN

MS/MSD 1:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 2:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 3:	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK :	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK DUP:	ICP - 1	ICP - 2	GFAA	HG	ODD
STANDARD NUMBERS	_____	_____	____	___	___

RQC057 Quanterra Incorporated Run Date: 11/09/98
METALS PREP LOG/BATCH SUMMARY Time: 23:30:10

BATCH NUMBER: 8309316 PREP DATE: 11/10/98
DUE DATE 11/11/98 INITIALS: TH

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J260141	CMRTW	01	X 50 g	____g	____g	____g
WATER 54 TO DUE DATE: 11/11/98						
D8J260141	CMRV0	01	X 50 g	____g	____g	____g
WATER 55 TO DUE DATE: 11/11/98						
D8J260141	CMRV1	01	X 50 g	____g	____g	____g
WATER 56 TO DUE DATE: 11/11/98						
D8J260141	CMRV2	01	X 50 g	____g	____g	____g
WATER 57 TO DUE DATE: 11/11/98						
D8J260141	CMRV4	01	X 50 g	____g	____g	____g
WATER 58 TO DUE DATE: 11/11/98						
D8J260141	CMRV6	01	X 50 g	____g	____g	____g
WATER 59 TO DUE DATE: 11/11/98						
	CMRV6S		50 g	____g	____g	____g
	CMRV6D		50 g	____g	____g	____g
D8J260141	CMRV7	01	X 50 g	____g	____g	____g
WATER 60 TO DUE DATE: 11/11/98						
D8J260141	CMRVC	01	X 50 g	____g	____g	____g
WATER 61 TO DUE DATE: 11/11/98						
D8J260141	CMRVE	01	X 50 g	____g	____g	____g
WATER 62 TO DUE DATE: 11/11/98						
D8J260141	CMRVG	01	X 50 g	____g	____g	____g
WATER 63 TO DUE DATE: 11/11/98						
D8J260141	CMRVH	01	X 50 g	____g	____g	____g
WATER 64 TO DUE DATE: 11/11/98						
D8J260141	CMRVK	01	X 50 g	____g	____g	____g
WATER 65 TO DUE DATE: 11/11/98						
D8J260141	CMRVL	01	X 50 g	____g	____g	____g
WATER 66 TO DUE DATE: 11/11/98						
D8J260141	CMRVM	01	X 50 g	____g	____g	____g
WATER 67 TO DUE DATE: 11/11/98						

RQC057 Quanterra Incorporated Run Date: 11/09/98
METALS PREP LOG/BATCH SUMMARY Time: 23:30:10

BATCH NUMBER: 8309316 PREP DATE: 11/10/98
DUE DATE 11/11/98 INITIALS: TAA

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J260141	CMRVQ	01	X 50 g	____g	____g	____g
WATER 68 TO DUE DATE: 11/11/98						
D8J260141	CMRVR	01	X 50 g	____g	____g	____g
WATER 69 TO DUE DATE: 11/11/98						
D8J260141	CMRVV	01	X 50 g	____g	____g	____g
WATER 70 TO DUE DATE: 11/11/98						
D8J260141	CMRVW	01	X 50 g	____g	____g	____g
WATER 71 TO DUE DATE: 11/11/98						
D8J260141	CMRVX	01	X 50 g	____g	____g	____g
WATER 72 TO DUE DATE: 11/11/98						
D8J260141	CMRW0	01	X 50 g	____g	____g	____g
WATER 73 TO DUE DATE: 11/11/98						
D8K050000	CN5XEB	01	X 50 g	____g	____g	____g
WATER DUE DATE: 0/00/00						
	CN5XEC		50 g	____g	____g	____g
	CN5XEL		50 g	____g	____g	____g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH _____
MS/MSD AND PDS ON BATCH _____
CURVE PREPPED FOR HG _____
CORRECT SPIKES ADDED _____
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG _____

COMMENTS: _____
B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS
SPIKING WITNESSED BY _____

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/09/98
Time: 23:30:10

BATCH NUMBER: 8309316

PREP DATE: 11/10/98
DUE DATE 11/11/98

INITIALS: TH

ICP ELEMENTS WITHIN THE BATCH:

CU NI PB ZN

MS/MSD 1:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 2:	ICP - 1	ICP - 2	GFAA	HG	ODD
MS/MSD 3:	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK :	ICP - 1	ICP - 2	GFAA	HG	ODD
CHECK DUP:	ICP - 1	ICP - 2	GFAA	HG	ODD
STANDARD NUMBERS	_____	_____	____	___	___

Instrument Upload — Run Log - Page 1

Started Wed Nov 11 09:35:06 1998 by LOGANW

Data File: UPL$DEN_DATA_ROOT:<TJA>1110W1.ASP;1

P 11-12-98

→ not included are Blank, STD1, High STD, ICV, ICB, CRI

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
1	ICSA – not used		10-NOV-1998	08:57:00			016
2	ICSA	1	10-NOV-1998	09:01:00			016
3	ICSAB	1	10-NOV-1998	09:04:00			016
4	CCV1	1	10-NOV-1998	09:09:00			016
5	CCB1	1	10-NOV-1998	09:13:00			016
6	CN704B	1	10-NOV-1998	09:31:00	8310203	D8K060000	016
7	CN704C	1	10-NOV-1998	09:35:00	8310203	D8K060000	016
8	CN704L	1	10-NOV-1998	09:39:00	8310203	D8K060000	016
9	CMVXM	1	10-NOV-1998	09:43:00	8310203	D8J280164	016
10	CMVXMP	1	10-NOV-1998	09:47:00			016
11	CMVXMS	1	10-NOV-1998	09:51:00	8310203	D8J280164	016
12	CMVXMD	1	10-NOV-1998	09:55:00	8310203	D8J280164	016
13	CMVXR	1	10-NOV-1998	09:58:00			016
14	CMW00	1	10-NOV-1998	10:02:00			016
15	CMW02	1	10-NOV-1998	10:06:00			016
16	CCV2	1	10-NOV-1998	10:10:00			016
17	CCB2	1	10-NOV-1998	10:15:00			016
18	CMX06	1	10-NOV-1998	10:19:00			016
19	CMW08	1	10-NOV-1998	10:23:00			016
20	CNOFD	1	10-NOV-1998	10:27:00		D8J300168	016
21	CN0G6	1	10-NOV-1998	10:31:00	8310203	W465	016
22	CM19G	1	10-NOV-1998	10:35:00		D8J310131	016
23	CN19H	1	10-NOV-1998	10:38:00	8310203	W465	016
24	CN19J	1	10-NOV-1998	10:42:00	8310203	W465	016
25	CN19K	1	10-NOV-1998	10:46:00	8310203	W465	016
26	CN0N6	1	10-NOV-1998	10:50:00	8310203	W945 D8J300184	016
27	CN0NR	1	10-NOV-1998	10:54:00	8310203	W945	016
28	CCV3	1	10-NOV-1998	10:58:00			016
29	CCB3	NOT USED	10-NOV-1998	11:03:00			016
30	CCB3	1	10-NOV-1998	11:07:00			016
31	CN0NW	1	10-NOV-1998	11:10:00	8310203	W945	016
32	CN5EW	1	10-NOV-1998	11:14:00	8310203	W465	016 D8K050134
33	CN5FF	1	10-NOV-1998	11:18:00	8310203	W465	016
34	CN5FG	1	10-NOV-1998	11:22:00	8310203	W465	016
35	CCV4	1	10-NOV-1998	11:26:00			016
36	CCB4	1	10-NOV-1998	11:31:00			016
37	CN71JBF	1	10-NOV-1998	11:36:00	8310214	D8K060000	016
38	CN71JCF	1	10-NOV-1998	11:40:00	8310214	D8K060000	016
39	CN71JLF	1	10-NOV-1998	11:44:00	8310214	D8K060000	016
40	CMWA3F	1	10-NOV-1998	11:48:00	8310214	W530	016 D8J280217
41	CMWA3PF	1	10-NOV-1998	11:52:00			016
42	CMWA3SF	1	10-NOV-1998	11:56:00	8310214	W530	016
43	CMWA3DF	1	10-NOV-1998	12:00:00	8310214	W530	016
44	CMPXVF	1	10-NOV-1998	12:04:00	8310214	W505	016 D8J230223

(continued)

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
45	CMPXWF	1	10-NOV-1998	12:08:00	8310214	W505	016
46	CMPXXF	1	10-NOV-1998	12:11:00	8310214	W505	016
47	CCV5	1	10-NOV-1998	12:16:00			016
48	CCB5	NOT USED	10-NOV-1998	12:20:00			016
49	CCB5	1	10-NOV-1998	12:31:00			016
50	CN62NB	1	10-NOV-1998	12:48:00	8309338	D8K050000	016
51	CN62NC	1	10-NOV-1998	12:52:00	8309338	D8K050000	016
52	CN62NL	1	10-NOV-1998	12:55:00	8309338	D8K050000	016
53	CMWRL	1	10-NOV-1998	12:59:00	8309338	D8J290136	016
54	CMRWH	1	10-NOV-1998	13:03:00	8309338	D8J260141	016
55	CMRWHP	1	10-NOV-1998	13:07:00			016
56	CMRWHS	1	10-NOV-1998	13:11:00	8309338	D8J260141	016
57	CMRWHD	1	10-NOV-1998	13:14:00	8309338	D8J260141	016
58	CMRWQ	1	10-NOV-1998	13:18:00	8309338	D8J260141	016
59	CMRWR	1	10-NOV-1998	13:22:00	8309338	D8J260141	016
60	CCV6	1	10-NOV-1998	13:26:00			016
61	CCB6	1	10-NOV-1998	13:31:00			016
62	CMRWT	1	10-NOV-1998	13:34:00	8309338	D8J260141	016
63	CMRWV	1	10-NOV-1998	13:38:00	8309338	D8J260141	016
64	CMRWW	1	10-NOV-1998	13:42:00	8309338	D8J260141	016
65	CMRWX	1	10-NOV-1998	13:46:00	8309338	D8J260141	016
66	CMTF3	1	10-NOV-1998	13:50:00	8309338	D8J270119	016
67	CMTF6	1	10-NOV-1998	13:53:00	8309338	D8J270119	016
68	CMTF9	1	10-NOV-1998	13:57:00	8309338	D8J270119	016
69	CMTFC	1	10-NOV-1998	14:01:00	8309338	D8J270119	016
70	CMVT5	1	10-NOV-1998	14:05:00	8309338	D8J280157	016
71	CMVTN	1	10-NOV-1998	14:09:00	8309338	D8J280157	016
72	CCV7	1	10-NOV-1998	14:13:00			016
73	CCB7	1	10-NOV-1998	14:18:00			016
74	CMVTT	1	10-NOV-1998	14:21:00	8309338	D8J280157	016
75	CN2JL	1	10-NOV-1998	14:25:00	8309338	D8K020184	016
76	CN2JM	1	10-NOV-1998	14:29:00	8309338	D8K020184	016
77	CMG35	1	10-NOV-1998	14:33:00	8309338	D8J150202	016
78	CMG38	1	10-NOV-1998	14:36:00	8309338	D8J150202	016
79	CMG39	1	10-NOV-1998	14:40:00	8309338	D8J150202	016
80	ICSA	1	10-NOV-1998	14:58:00			016
81	ICSAB	1	10-NOV-1998	15:17:00			016
82	CCV8	1	10-NOV-1998	15:22:00			016
83	CCB8	1	10-NOV-1998	15:26:00			016
84	CN5VLB	NOT USED	10-NOV-1998	15:36:00	8309307	D8K050000	016
85	CN5VLCC	1	10-NOV-1998	15:41:00	8309307	D8K050000	016
86	CN5VLL	1	10-NOV-1998	15:45:00	8309307	D8K050000	016
87	CMRR7	1	10-NOV-1998	15:49:00	8309307	D8J260141	016
88	CMRR8	1	10-NOV-1998	15:53:00	8309307	D8J260141	016

D8J230223

(continued)

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
89	CMRR9	1	10-NOV-1998	15:57:00	8309307	D8J260141	016
90	CMRRC	1	10-NOV-1998	16:02:00	8309307	D8J260141	016
91	CMRRE	1	10-NOV-1998	16:06:00	8309307	D8J260141	016
92	CMRRJ	1	10-NOV-1998	16:10:00	8309307	D8J260141	016
93	CMRRL	1	10-NOV-1998	16:14:00	8309307	D8J260141	016
94	CCV9	1	10-NOV-1998	16:19:00			016
95	CCB9	1	10-NOV-1998	16:24:00			016
96	CCB9	1	10-NOV-1998	18:35:00			016
97	CMRRN	1	10-NOV-1998	18:39:00	8309307	D8J260141	016
98	CMRRR	1	10-NOV-1998	18:44:00	8309307	D8J260141	016
99	CMRT2	NOT USED	10-NOV-1998	18:48:00	8309307	D8J260141	016
100	CMRT3	1	10-NOV-1998	18:52:00	8309307	D8J260141	016
101	CMRT4	1	10-NOV-1998	18:56:00	8309307	D8J260141	016
102	CMRT7	1	10-NOV-1998	19:00:00	8309307	D8J260141	016
103	CMRT8	1	10-NOV-1998	19:05:00	8309307	D8J260141	016
104	CMRTE	1	10-NOV-1998	19:09:00	8309307	D8J260141	016
105	CMRTG	1	10-NOV-1998	19:13:00	8309307	D8J260141	016
106	CMRTH	1	10-NOV-1998	19:17:00	8309307	D8J260141	016
107	CCV10	1	10-NOV-1998	19:22:00			016
108	CCB10	1	10-NOV-1998	19:47:00	19:52 CMRTHP 5x		016
109	CMRTHS	1	10-NOV-1998	19:56:00	8309307	D8J260141	016
110	CMRTHD	1	10-NOV-1998	20:00:00	8309307	D8J260141	016
111	CMRTL	1	10-NOV-1998	20:04:00	8309307	D8J260141	016
112	CMRTR	1	10-NOV-1998	20:08:00	8309307	D8J260141	016
113	CMRTT	1	10-NOV-1998	20:12:00	8309307	D8J260141	016
114	CN5XEB	NOT USED	10-NOV-1998	20:17:00	8309316	D8K050000	016
115	CN5XEC	1	10-NOV-1998	20:21:00	8309316	D8K050000	016
116	CN5XEL	1	10-NOV-1998	20:25:00	8309316	D8K050000	016
117	CMRTW	1	10-NOV-1998	20:29:00	8309316	D8J260141	016
118	CCV11	1	10-NOV-1998	20:34:00			016
119	CCB11	1	10-NOV-1998	20:44:00			016
120	CMRV0	1	10-NOV-1998	20:49:00	8309316	D8J260141	016
121	CMRV1	1	10-NOV-1998	20:53:00	8309316	D8J260141	016
122	CMRV2	1	10-NOV-1998	20:57:00	8309316	D8J260141	016
123	CMRV4	1	10-NOV-1998	21:01:00	8309316	D8J260141	016
124	CMRV6	1	10-NOV-1998	21:05:00	8309316	D8J260141	016
125	CMRV6P	1	10-NOV-1998	21:09:00			016
126	CMRV6S	1	10-NOV-1998	21:14:00	8309316	D8J260141	016
127	CMRV6D	1	10-NOV-1998	21:18:00	8309316	D8J260141	016
128	CMRV7	1	10-NOV-1998	21:22:00	8309316	D8J260141	016
129	CMRVC	1	10-NOV-1998	21:26:00	8309316	D8J260141	016
130	CCV12	1	10-NOV-1998	21:31:00			016
131	CCB12	1	10-NOV-1998	21:36:00			016
132	CMRVE	NOT USED	10-NOV-1998	21:40:00	8309316	D8J260141	016

7mP 11-12-98

(continued)

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
133	CMRVG	NOT USED	10-NOV-1998	21:44:00	8309316	D8J260141	016
134	CMRVH	1	10-NOV-1998	21:48:00	8309316	D8J260141	016
135	CMRVK	1	10-NOV-1998	21:52:00	8309316	D8J260141	016
136	CMRVL	1	10-NOV-1998	21:57:00	8309316	D8J260141	016
137	CMRVM	NOT USED	10-NOV-1998	22:01:00	8309316	D8J260141	016
138	CMRVQ	NOT USED	10-NOV-1998	22:05:00	8309316	D8J260141	016
139	CMRVR	1	10-NOV-1998	22:09:00	8309316	D8J260141	016
140	CMRVV	1	10-NOV-1998	22:13:00	8309316	D8J260141	016
141	CMRVW	1	10-NOV-1998	22:18:00	8309316	D8J260141	016
142	CCV13	1	10-NOV-1998	22:22:00			016
143	CCB13	1	10-NOV-1998	22:27:00			016
144	CMRVX	NOT USED	10-NOV-1998	22:31:00	8309316	D8J260141	016
145	CMRW0	1	10-NOV-1998	22:36:00	8309316	D8J260141	016
146	CN5XEB	1	10-NOV-1998	22:41:00	8309316	D8K050000	016
147	CMRVG	20	10-NOV-1998	22:50:00	8309316	D8J260141	016
148	CMRVE	20	10-NOV-1998	22:55:00	8309316	D8J260141	016
149	CMRVM	5	10-NOV-1998	23:00:00	8309316	D8J260141	016
150	CMRVQ	5	10-NOV-1998	23:04:00	8309316	D8J260141	016
151	CMRVX	2	10-NOV-1998	23:09:00	8309316	D8J260141	016
152	CN5VLB	1	10-NOV-1998	23:15:00	8309307	D8K050000	016
153	CMRT2	50	10-NOV-1998	23:24:00	8309307	D8J260141	016
154	CCV14	1 not used	10-NOV-1998	23:29:00			016
155	CCV14	1	10-NOV-1998	23:53:00			016
156	CCB		11-NOV-1998	00:02:05			

End of Report

Method: TRACE Sample Name: STD1-Blank Operator:
Run Time: 11/10/98 08:15 Filename: 981110W
Mode: IR Type: X Corr. Factor: 1.00000
Lab ID.: Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Sb	Al	As	B	Ba
Units	count	count	count	count	count	count
Avge	.00037	.001	.00329	-.001	.00202	.0001
SDev	.00013	.00025	.00001	.00054	.00028	.00005
%RSD	34.83	25.3017	.38622	54.5222	14.2191	53.1199

Elems	Be	Ca	Cd	Co	Cr	Cu
Units	count	count	count	count	count	count
Avge	-.00773	.00233	.0005	-.00002	.00046	.00196
SDev	.00003	.00001	.00017	.00003	.0001	.00007
%RSD	.41448	.80369	33.9437	141.421	22.9083	3.56783

Elems	Fe	Mg	Mn	Mo	Ni	P
Units	count	count	count	count	count	count
Avge	.00015	.00001	.00019	.00058	.0004	.00112
SDev	.00002	0	.00003	.00026	.00004	.00017
%RSD	17.1945	56.6534	19.6056	45.3616	9.83407	15.1181

Elems	SiO2	Sn	Sr	Ti	Tl	V
Units	count	count	count	count	count	count
Avge	.01651	.00047	.00008	.00022	-.00253	.00014
SDev	.00026	.00011	.00003	.00008	.00093	.00009
%RSD	1.60678	24.2432	49.1535	38.2878	36.8587	68.2926

Elems	Zn	Pb/1	Pb/2	Se/1	Se/2	*Y
Units	count	count	count	count	count	
Avge	.00007	.01886	.00061	-.00539	.00245	301438
SDev	.00002	.00484	.00499	.00189	.00056	304.763
%RSD	32.2371	25.6604	807.581	35.1243	22.8713	.1011

W Layne
11-10-98
ST-ICP
SOP #CORP-MT-0001DEN

Method: TRACE Sample Name: HISTD Operator:
Run Time: 11/10/98 08:20 Filename: 981110W
Mode: IR Type: X Corr. Factor: 1.00000
Lab ID.: Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Sb	Al	As	B	Ba
Units	count	count	count	count	count	count
Avge	.29986	.19102	.21647	.69261	.17594	.49567
SDev	.00032	.00018	.0004	.00364	.00025	.00305
%RSD	.10692	.09715	.18926	.52628	.14721	.61693

Elems	Be	Ca	Cd	Co	Cr	Cu
Units	count	count	count	count	count	count
Avge	.9007	2.51168	1.0124	.12332	.21749	.15712
SDev	.00312	.01785	.00848	.00058	.00113	.00104
%RSD	.34641	.71078	.83824	.47582	.52237	.66455

Elems	Fe	Mg	Mn	Mo	Ni	P
Units	count	count	count	count	count	count
Avge	.04429	.11525	.52244	.27725	.29519	1.024
SDev	.00041	.00106	.00123	.0013	.00171	.00436
%RSD	.93542	.925	.23568	.46913	.58101	.4264

Elems	SiO2	Sn	Sr	Ti	Tl	V
Units	count	count	count	count	count	count
Avge	15.3771	1.41027	1.07222	.49989	4.32413	.15666
SDev	.0047	.01077	.00534	.0004	.01751	.00012
%RSD	.03061	.7637	.49895	.08028	.40499	.0783

Elems	Zn	Pb/1	Pb/2	Se/1	Se/2	*Y
Units	count	count	count	count	count	
Avge	.07692	2.3471	1.21606	4.55641	2.43912	283186
SDev	.00109	.07564	.02154	.09245	.00131	2012.43
%RSD	1.42184	3.22302	1.77183	2.02909	.05407	.71063

Method: TRACE Sample Name: HIGH STD Operator:
Run Time: 11/10/98 08:24 Filename: 981110W
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Sb	Al	As	B	Ba
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.001	.9980	10.03	2.008	1.003	1.007
SDev	.0033	.0159	.0131	.0319	.0135	.0065
%RSD	.3248	1.591	.1311	1.589	1.348	.6411

Elems	Be	Ca	Cd	Co	Cr	Cu
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.006	40.39	1.008	1.003	1.005	1.003
SDev	.013	.874	.0229	.0169	.016	.0055
%RSD	1.29	2.164	2.272	1.681	1.593	.5483

Elems	Fe	Mg	Mn	Mo	Ni	P
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.01	40.26	1.005	1.005	1.006	10.06
SDev	.2957	.9491	.0099	.0141	.0194	.1416
%RSD	2.953	2.358	.9838	1.405	1.926	1.407

Elems	Pb	Se	SiO2	Sn	Sr	Ti
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9901	9.992	215.1	10.05	1.005	1.005
SDev	.0505	.2918	1.511	.1887	.0055	.0037
%RSD	5.099	2.92	.7024	1.877	.5493	.3717

Elems	Tl	V	Zn	Pb/1	Pb/2	Se/1
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.04	1.003	1.008	.9964	.9870	10.10
SDev	.1252	.01	.0339	.0565	.0475	.2508
%RSD	1.246	.9971	3.365	5.671	4.811	2.484

Elems	Se/2	*Y
Units	ppm	
Avge	9.941	284328
SDev	.3123	5446.84
%RSD	3.141	1.91568

Method: TRACE Sample Name: ICV Operator:
Run Time: 11/10/98 08:29 Filename: 981110W
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Sb	Al	As	B	Ba
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4877	.4734	4.781	.4754	.5152	.5024
SDev	.0013	.0024	.0001	.0096	.0047	.0065
%RSD	.2731	.507	.0019	2.018	.9197	1.298

Elems	Be	Ca	Cd	Co	Cr	Cu
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4908	19.60	.4939	.4847	.4931	.4945
SDev	.01	.5918	.0145	.0106	.0103	.004
%RSD	2.041	3.019	2.932	2.194	2.087	.8174

Elems	Fe	Mg	Mn	Mo	Ni	P
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.887	19.78	.4898	.4916	.4933	1.933
SDev	.1166	.6085	.0083	.0099	.0109	.0434
%RSD	2.386	3.076	1.7	2.011	2.205	2.244

Elems	Pb	Se	SiO2	Sn	Sr	Ti
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4947	4.853	106.5	4.847	.4961	.4998
SDev	.0125	.081	1.19	.1488	.0032	.0035
%RSD	2.522	1.669	1.118	3.069	.6545	.6942

Elems	Tl	V	Zn	Pb/1	Pb/2	Se/1
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.845	.4910	.4861	.5073	.4884	4.917
SDev	.0791	.0058	.0236	.0185	.028	.053
%RSD	1.634	1.171	4.865	3.655	5.724	1.077

Elems	Se/2	*Y
Units	ppm	
Avge	4.820	288618
SDev	.1479	5152.69
%RSD	3.068	1.78529

Method: TRACE Sample Name: ICB Operator:
Run Time: 11/10/98 08:33 Filename: 981110W
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Sb	Al	As	B	Ba
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0026	.0211	-.0007	-.0007	.0001
SDev	.0005	.0006	.0043	.0007	.0013	0
%RSD	442.4	22.77	20.17	97.02	182.6	34.14

Elems	Be	Ca	Cd	Co	Cr	Cu
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0030	.0001	.0002	.0001	-.0006
SDev	.0001	0	.0001	.0003	.0004	.0005
%RSD	30.64	1.18	95.37	140.1	264.2	95.04

Elems	Fe	Mg	Mn	Mo	Ni	P
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0058	.0034	.0001	.0006	.0006	-.0004
SDev	.002	.0017	0	.0003	.0001	.0011
%RSD	34.29	50.23	59.16	61.49	18.35	294.3

Elems	Pb	Se	SiO2	Sn	Sr	Ti
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	.0021	.0251	.0017	.0001	.0002
SDev	.001	.0016	.0174	.0002	0	.0001
%RSD	166.4	76.12	69.35	12.4	27.57	34.7

Elems	Tl	V	Zn	Pb/1	Pb/2	Se/1
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0015	.0003	.0000	.0069	-.0043	.0112
SDev	.0004	.0001	.0002	.0041	.0036	.0042
%RSD	28.67	40.31	6502	59.87	82.09	37.42

Elems	Se/2	*Y
Units	ppm	
Avge	-.0025	302371
SDev	.0045	3346.03
%RSD	181.5	1.10659

Method: TRACE Sample Name: CRI Operator:
Run Time: 11/10/98 08:38 Filename: 981110W
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Sb	Al	As	B	Ba
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0169	.1106	.0157	.0170	-.0035	-.0002
SDev	.0014	.0018	.0057	.0026	.001	.0002
%RSD	8.2	1.66	36.42	15.25	28.65	144.7

Elems	Be	Ca	Cd	Co	Cr	Cu
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0100	-.0006	.0099	.0951	.0191	.0462
SDev	.0001	.0017	.0004	.0017	.0011	.0008
%RSD	1.379	258.1	3.721	1.737	5.733	1.777

Elems	Fe	Mg	Mn	Mo	Ni	P
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0153	-.0058	.0301	-.0010	.0797	.0005
SDev	.018	.0081	.0003	.0008	.0013	.0004
%RSD	117.9	139.5	.9343	79.03	1.665	78.95

Elems	Pb	Se	SiO2	Sn	Sr	Ti
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0040	.0078	.0032	-.0010	-.0000	-.0003
SDev	.0008	.0028	.0066	.0029	.0001	.0004
%RSD	20.41	35.54	206.5	290.1	206.6	111

Elems	Tl	V	Zn	Pb/1	Pb/2	Se/1
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0188	.0964	.0393	.0132	-.0007	.0165
SDev	.0028	.0014	.0009	.0033	.0028	.002
%RSD	15.1	1.473	2.373	24.65	435.2	12.39

Elems	Se/2	*Y
Units	ppm	
Avge	.0035	303617
SDev	.0052	2575.28
%RSD	148	.8482

Method: TRACE Sample Name: ICSA Operator:
Run Time: 11/10/98 08:57:03
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.001785	-.001418	454.7820	-.003286	-.009076	.0009077	-.000666
SDev	.001709	.010041	1.0995	.004443	.002945	.0002792	.000064
%RSD	95.72694	708.3537	.2417743	135.2126	32.45214	30.76101	9.598707
#1	-.000577	.0056826	455.5595	-.000144	-.006993	.0011052	-.000621
#2	-.002994	-.008518	454.0045	-.006427	-.011159	.0007103	-.000711
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200000	.0200000	600.0000	.0200000	.1000000	.0200000	.0040000
Low	-.020000	-.020000	400.0000	-.020000	-.100000	-.020000	-.004000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	495.0470	.0010033	-.000974	.0142397	.0008472	189.5693	549.3082
SDev	2.7577	.0005612	.001509	.0015212	.0016522	.8439	2.8629
%RSD	.5570607	55.93926	154.9247	10.68268	195.0079	.4451427	.5211847
#1	496.9970	.0014001	.0000930	.0153154	.0020155	190.1660	551.3326
#2	493.0970	.0006064	-.002040	.0131641	-.000321	188.9726	547.2839
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	.0100000	.0200000	.0200000	.0200000	240.0000	600.0000
Low	400.0000	-.010000	-.020000	-.020000	-.020000	160.0000	400.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.001310	-.001664	.0037030	.0158975	L-.006407	-.006868	-.006163
SDev	.000328	.004364	.0016170	.0035023	.008515	.009383	.018380
%RSD	25.01340	262.2112	43.66730	22.03053	132.9032	136.6217	298.2079
#1	-.001078	.0014215	.0048464	.0183740	-.000386	-.000233	.0068331
#2	-.001541	-.004750	.0025596	.0134210	L-.012428	L-.013503	-.019160
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	.0200000	.0200000	.0400000	.3000000	.0060000	.0100000	.5000000
Low	-.020000	-.020000	-.040000	-.300000	-.006000	-.010000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.001992	-.002725	.0026217	-.016966	-.003303	.0064769	.0063007
SDev	.005538	.000021	.0005031	.006110	.002264	.0017298	.0181892
%RSD	277.9762	.7703603	19.18922	36.01504	68.55136	26.70705	288.6870
#1	.0019236	-.002740	.0029775	-.012645	-.001702	.0077001	.0191624
#2	-.005908	-.002710	.0022660	-.021287	-.004904	.0052538	-.006561
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0200000	2.000000	.0200000	.0200000	
Low	-.100000	-.050000	-.020000	-2.00000	-.020000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.012751	.0011562	-.010874
SDev	.003685	.0271497	.000513
%RSD	28.89804	2348.189	4.717204
#1	-.010145	.0203539	-.010511
#2	-.015356	-.018042	-.011237
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	266948	--	--	--	--	--	--
SDev	965.2007	--	--	--	--	--	--
%RSD	.3615681	--	--	--	--	--	--
#1	267631	--	--	--	--	--	--
#2	266266	--	--	--	--	--	--

11-10-98

Method: TRACE Sample Name: ICSA Operator:
Run Time: 11/10/98 09:01:46
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007849	.0105907	446.2065	.0022212	-.006638	.0012774	-.000360
SDev	.0005020	.0016539	.4479	.0048061	.000007	.0001241	.000072
%RSD	63.96162	15.61689	.1003790	216.3738	.1015867	9.712567	20.04403
#1	.0004299	.0094212	445.8897	-.001177	-.006634	.0011896	-.000309
#2	.0011399	.0117602	446.5232	.0056196	-.006643	.0013651	-.000411
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200000	.0200000	600.0000	.0200000	.1000000	.0200000	.0040000
Low	-.020000	-.020000	400.0000	-.020000	-.100000	-.020000	-.004000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	486.7113	.0016461	.0012818	.0164834	.0021988	186.4211	539.2987
SDev	.6887	.0003884	.0005756	.0005236	.0008443	.1306	.5652
%RSD	.1414918	23.59471	44.90706	3.176521	38.39881	.0700492	.1048031
#1	486.2244	.0013714	.0008748	.0161131	.0016018	186.3288	538.8990
#2	487.1983	.0019207	.0016888	.0168536	.0027959	186.5135	539.6984
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	.0100000	.0200000	.0200000	.0200000	240.0000	600.0000
Low	400.0000	-.010000	-.020000	-.020000	-.020000	160.0000	400.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000939	.0021766	.0055609	.0183101	-.003285	-.004836	.0181919
SDev	.000097	.0016074	.0003137	.0020976	.002867	.000123	.0069452
%RSD	10.29999	73.85231	5.641201	11.45615	87.27348	2.548029	38.17725
#1	-.001007	.0010399	.0053391	.0168269	-.001258	-.004923	.0132809
#2	-.000871	.0033132	.0057827	.0197934	-.005312	-.004749	.0231029
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200000	.0200000	.0400000	.3000000	.0060000	.0100000	.5000000
Low	-.020000	-.020000	-.040000	-.300000	-.006000	-.010000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0052964	-.002368	.0032416	-.007969	-.000026	.0081385	.0324181
SDev	.0010179	.000007	.0001057	.000773	.000341	.0003230	.0046496
%RSD	19.21843	.2813800	3.262314	9.695044	1332.061	3.968321	14.34253
#1	.0045767	-.002373	.0031668	-.007423	-.000267	.0079101	.0291303
#2	.0060162	-.002363	.0033164	-.008516	.0002155	.0083669	.0357058
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0200000	2.000000	.0200000	.0200000	
Low	-.100000	-.050000	-.020000	-2.00000	-.020000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.021110	.0303889	-.022422
SDev	.006619	.0055095	.002566
%RSD	31.35752	18.12990	11.44349
#1	-.016429	.0264931	-.020608
#2	-.025790	.0342847	-.024236
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	269898	--	--	--	--	--	--
SDev	447.5986	--	--	--	--	--	--
%RSD	.1658396	--	--	--	--	--	--
#1	270215	--	--	--	--	--	--
#2	269582	--	--	--	--	--	--

Method: TRACE Sample Name: ICSAB Operator:
Run Time: 11/10/98 09:04:48
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.044390	.9535316	450.5488	1.949623	2.076159	.5162078	.5005388
SDev	.004676	.0233286	1.1045	.001323	.003516	.0037848	.0040895
%RSD	.4477681	2.446549	.2451427	.0678674	.1693703	.7331905	.8170171
#1	1.047697	.9700274	449.7679	1.950559	2.078645	.5188841	.4976471
#2	1.041084	.9370357	451.3298	1.948688	2.073672	.5135316	.5034305
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.200000	1.200000	600.0000	2.400000	2.400000	.6000000	.6000000
Low	.8000000	.8000000	400.0000	1.590000	1.590000	.4000000	.4000000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	481.3032	.9640242	.4663506	.4952938	.5279971	185.7958	533.0470
SDev	7.6051	.0095620	.0005608	.0011935	.0064896	1.5955	6.7007
%RSD	1.580104	.9918819	.1202632	.2409625	1.229090	.8587271	1.257061
#1	475.9255	.9572629	.4659540	.4944499	.5325860	184.6676	528.3088
#2	486.6808	.9707856	.4667471	.4961377	.5234083	186.9239	537.7851
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	1.200000	.6000000	.6000000	.6000000	240.0000	600.0000
Low	400.0000	.8000000	.4000000	.4000000	.4000000	160.0000	400.0000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4820973	.9522890	.9446678	1.968776	.9857954	4.961207	20.84900
SDev	.0023969	.0005498	.0061127	.010475	.0235461	.056587	.03992
%RSD	.4971800	.0577396	.6470723	.5320355	2.388542	1.140590	.1914662
#1	.4804024	.9526778	.9403455	1.961369	.9691457	4.921195	20.82078
#2	.4837921	.9519002	.9489902	1.976183	1.002445	5.001221	20.87723
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.6000000	1.200000	1.200000		1.200000	6.000000	25.68000
Low	.4000000	.8000000	.8000000		.8000000	4.000000	17.12000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.513899	.9865175	.9843805	9.333863	.4832458	.9317342	1.066384
SDev	.097172	.0040949	.0010697	.057668	.0026781	.0140250	.034947
%RSD	1.021373	.4150824	.1086660	.6178329	.5541846	1.505262	3.277188
#1	9.445188	.9894131	.9836241	9.293086	.4851395	.9218170	1.091096
#2	9.582610	.9836221	.9851369	9.374640	.4813521	.9416514	1.041673
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	12.00000	1.200000	1.200000	12.00000	.6000000	1.200000	
Low	8.000000	.8000000	.8000000	8.000000	.4000000	.8000000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.9455614	5.066017	4.908882
SDev	.0527491	.039305	.104461
%RSD	5.578597	.7758521	2.128003
#1	.9082622	5.093810	4.835017
#2	.9828606	5.038224	4.982747
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	262916	--	--	--	--	--	--
SDev	2882.874	--	--	--	--	--	--
%RSD	1.096498	--	--	--	--	--	--
#1	260878	--	--	--	--	--	--
#2	264955	--	--	--	--	--	--

Method: TRACE Sample Name: CCV1 Operator:
Run Time: 11/10/98 09:09:15
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4923623	.4927885	4.896140	.9953550	.4929361	.4980715	.5116072
SDev	.0033094	.0097602	.025736	.0003006	.0046149	.0031929	.0015365
%RSD	.6721585	1.980598	.5256292	.0302036	.9362003	.6410435	.3003291
#1	.4947024	.4996899	4.914338	.9951425	.4961993	.5003293	.5105208
#2	.4900221	.4858870	4.877943	.9955676	.4896729	.4958139	.5126937
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	5.520000	1.100000	.5520000	.5520000	.5520000
Low	.4480000	.4480000	4.480000	.9000000	.4480000	.4480000	.4480000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.65237	.5166351	.5057454	.5087590	.4901670	5.165469	20.52209
SDev	.09152	.0015840	.0001887	.0004936	.0039132	.062634	.06462
%RSD	.4431520	.3065922	.0373012	.0970251	.7983418	1.212544	.3149011
#1	20.58765	.5155151	.5058788	.5091081	.4929341	5.209758	20.47639
#2	20.71708	.5177552	.5056120	.5084100	.4874000	5.121181	20.56778
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00000	.5520000	.5520000	.5520000	.5520000	5.520000	22.00000
Low	18.00000	.4480000	.4480000	.4480000	.4480000	4.480000	17.92000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5058408	.4984950	.5140525	4.989903	.5151578	5.003952	105.3472
SDev	.0011887	.0017105	.0010634	.012258	.0026293	.027002	.2071
%RSD	.2349968	.3431262	.2068674	.2456491	.5103933	.5396061	.1965684
#1	.5050003	.4997045	.5148044	4.981235	.5132986	4.984859	105.2007
#2	.5066814	.4972855	.5133005	4.998570	.5170171	5.023046	105.4936
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	.5520000	5.520000	.5520000	5.520000	117.7000
Low	.4480000	.4480000	.4480000	4.480000	.4480000	4.480000	96.30000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.036289	.4994297	.5001157	5.010652	.5035568	.5229663	.5203939
SDev	.027839	.0010989	.0000832	.004658	.0018349	.0024747	.0161926
%RSD	.5527648	.2200299	.0166273	.0929566	.3643973	.4732035	3.111614
#1	5.016604	.5002067	.5001745	5.007359	.5048543	.5212164	.5318438
#2	5.055974	.4986526	.5000569	5.013946	.5022593	.5247161	.5089439
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520000	.5520000	.5520000	5.520000	.5520000	.5520000	
Low	4.480000	.4480000	.4480000	4.480000	.4480000	.4480000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5125438	5.007110	5.002376
SDev	.0120262	.006907	.043930
%RSD	2.346380	.1379444	.8781927
#1	.5040399	5.011994	4.971312
#2	.5210476	5.002226	5.033440
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	299729	--	--	--	--	--	--
SDev	646.2956	--	--	--	--	--	--
%RSD	.2156266	--	--	--	--	--	--
#1	299272	--	--	--	--	--	--
#2	300186	--	--	--	--	--	--

Method: TRACE Sample Name: CCB1 Operator:
Run Time: 11/10/98 09:13:42
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000905	-.001133	.0241811	-.000549	-.004053	-.000093	.0006327
SDev	.000597	.000096	.0021781	.001315	.000038	.000070	.0000244
%RSD	65.96904	8.444541	9.007451	239.6094	.9259420	74.65207	3.861417
#1	-.001328	-.001200	.0226410	-.001479	-.004079	-.000143	.0006499
#2	-.000483	-.001065	.0257213	.0003812	-.004026	-.000044	.0006154
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0089262	-.000103	-.000506	.0021184	-.001506	-.002106	.0049175
SDev	.0005858	.000005	.000425	.0003511	.000213	.006233	.0024191
%RSD	6.562782	5.132103	83.89455	16.57554	14.13806	295.9966	49.19253
#1	.0085120	-.000107	-.000807	.0018701	-.001656	-.006513	.0032070
#2	.0093404	-.000100	-.000206	.0023666	-.001355	.0023017	.0066281
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002266	.0000656	.0021129	-.001185	-.002490	-.001081	-.010387
SDev	.0000546	.0002800	.0000198	.000058	.001341	.000062	.000162
%RSD	24.07253	426.7921	.9386910	4.898733	53.87583	5.722702	1.558269
#1	.0001881	-.000132	.0021269	-.001144	-.001541	-.001125	-.010502
#2	.0002652	.0002636	.0020989	-.001226	L-.003438	-.001037	-.010273
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001368	.0000099	-.000144	.0017584	-.000533	.0000732	-.000607
SDev	.0006607	.0000238	.000111	.0005185	.000426	.0001237	.003854
%RSD	482.8484	241.2376	77.17306	29.48573	79.84216	168.8837	634.9560
#1	-.000330	-.000007	-.000222	.0021250	-.000834	-.000014	-.003332
#2	.0006040	.0000267	-.000065	.0013918	-.000232	.0001607	.0021183
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.003429	.0039039	-.003570
SDev	.003935	.0042046	.002006
%RSD	114.7459	107.7023	56.20905
#1	-.000647	.0009308	-.002151
#2	-.006212	.0068770	-.004988
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	308935	--	--	--	--	--	--
SDev	989.9495	--	--	--	--	--	--
%RSD	.3204394	--	--	--	--	--	--
#1	309635	--	--	--	--	--	--
#2	308235	--	--	--	--	--	--

Method: TRACE Sample Name: CN704B Operator: WGL
Run Time: 11/10/98 09:31:39
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.002106	-.004593	.0122517	-.002215	-.007136	-.000241	.0003437
SDev	.000258	.001484	.0013381	.001635	.000624	.000084	.0000128
%RSD	12.26730	32.30944	10.92176	73.80734	8.740327	34.79475	3.735674
#1	-.002289	-.005642	.0113055	-.003372	-.007577	-.000300	.0003346
#2	-.001924	-.003544	.0131979	-.001059	-.006695	-.000182	.0003528
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0125229	-.000458	-.001106	-.002193	-.002007	-.032862	-.009734
SDev	.0005314	.000088	.000231	.000213	.000149	.008667	.004020
%RSD	4.243231	19.20042	20.92089	9.693307	7.424299	26.37503	41.29962
#1	.0121472	-.000520	-.001270	-.002344	-.002113	-.038990	-.012577
#2	.0128987	-.000396	-.000943	-.002043	-.001902	-.026733	-.006891
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000263	-.001371	-.001341	.1445650	-.001276	.0000603	.0187149
SDev	.000052	.000520	.000382	.0006003	.003440	.0034645	.0009938
%RSD	19.92191	37.94498	28.51603	.4152586	269.4787	5741.698	5.310399
#1	-.000300	-.001739	-.001612	.1441405	.0011558	.0025101	.0180122
#2	-.000226	-.001003	-.001071	.1449895	L-.003709	-.002389	.0194177
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003758	-.000081	-.000497	-.000184	-.001273	.0000746	.0029081
SDev	.000018	.000032	.000088	.001441	.000429	.0001444	.0089467
%RSD	.4908327	39.74310	17.64743	783.0251	33.72811	193.7182	307.6498
#1	-.003771	-.000104	-.000560	-.001203	-.001577	-.000028	.0092343
#2	-.003745	-.000058	-.000435	.0008349	-.000969	.0001767	-.003418
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.003365	.0103992	-.005101
SDev	.000690	.0084411	.000980
%RSD	20.50729	81.17036	19.20799
#1	-.002877	.0163680	-.004408
#2	-.003854	.0044305	-.005794
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	307092	--	--	--	--	--	--
SDev	1703.420	--	--	--	--	--	--
%RSD	.5546929	--	--	--	--	--	--
#1	305888	--	--	--	--	--	--
#2	308297	--	--	--	--	--	--

Method: TRACE Sample Name: CN704C Operator: WGL
Run Time: 11/10/98 09:35:35
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0417477	.4690536	2.011852	2.001125	1.101109	2.013176	.0526383
SDev	.0007142	.0053172	.004911	.010846	.006892	.004691	.0005329
%RSD	1.710757	1.133598	.2441094	.5420027	.6259087	.2330373	1.012460
#1	.0412427	.4652937	2.008380	1.993456	1.096236	2.016493	.0522615
#2	.0422527	.4728134	2.015325	2.008795	1.105982	2.009858	.0530151
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0453560	.5950000	2.340000	2.200000	1.220000	2.280000	.0585000
Low	.0327350	.4050000	1.720000	1.620000	.8200000	1.720000	.0415000

OK PG 11-12-98

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.25409	.0517107	.5085792	.2016923	.2439759	H1.173234	52.83820
SDev	.59454	.0007131	.0045299	.0022795	.0001875	.042326	.58751
%RSD	1.137784	1.378964	.8907056	1.130198	.0768349	3.607632	1.111908
#1	51.83369	.0512065	.5053760	.2000804	.2438434	1.143305	52.42276
#2	52.67450	.0522149	.5117824	.2033041	.2441085	H1.203163	53.25363
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	56.00000	.0600000	.6000000	.2240000	.2875000	1.170000	57.00000
Low	44.00000	.0400000	.4000000	.1660000	.2100000	.8700000	42.00000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5128194	1.004665	.5091433	10.29291	.5165829	2.048406	23.02389
SDev	.0030320	.007973	.0031535	.08799	.0141604	.027420	.08688
%RSD	.5912335	.7936358	.6193677	.8548189	2.741162	1.338622	.3773377
#1	.5106755	.9990272	.5069135	10.23070	.5065699	2.029017	22.96246
#2	.5149633	1.010303	.5113732	10.35513	.5265957	2.067795	23.08532
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	.5650000	1.200000	.5600000		.5700000	2.220000	
Low	.4200000	.8000000	.4250000		.4150000	1.720000	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.885012	1.006295	.9959554	2.014810	.5055771	.5184466	.5103912
SDev	.020363	.001645	.0025575	.017350	.0027410	.0085407	.0166489
%RSD	1.080236	.1634784	.2567899	.8610986	.5421567	1.647368	3.261982
#1	1.870614	1.007459	.9941469	2.002541	.5036389	.5124074	.4986186
#2	1.899411	1.005132	.9977638	2.027077	.5075153	.5244858	.5221637
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	2.280000	1.200000	1.120000	2.400000	.5700000	.5650000	
Low	1.720000	.8000000	.8700000	1.600000	.4250000	.4100000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5196739	2.046790	2.049220
SDev	.0129180	.032815	.024727
%RSD	2.485783	1.603244	1.206657
#1	.5105396	2.023586	2.031735
#2	.5288084	2.069993	2.066705
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	298439	--	--	--	--	--	--
SDev	2784.586	--	--	--	--	--	--
%RSD	.9330504	--	--	--	--	--	--
#1	296470	--	--	--	--	--	--
#2	300408	--	--	--	--	--	--

Method: TRACE Sample Name: CN704L Operator: WGL
Run Time: 11/10/98 09:39:29
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0396278	.4607748	1.998806	1.965413	1.089620	2.024175	.0515336
SDev	.0008696	.0038248	.006399	.026076	.008745	.008011	.0008998
%RSD	2.194493	.8300905	.3201278	1.326736	.8025545	.3957796	1.746026
#1	.0402427	.4634793	2.003331	1.983851	1.095804	2.018511	.0521699
#2	.0390129	.4580702	1.994282	1.946974	1.083437	2.029840	.0508974
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0453560	.5950000	2.340000	2.200000	1.220000	2.280000	.0585000
Low	.0327350	.4050000	1.720000	1.620000	.8200000	1.720000	.0415000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.89088	.0498605	.4984637	.1967889	.2442607	1.109222	51.41286
SDev	1.07379	.0011749	.0078467	.0037427	.0009208	.021676	1.09519
%RSD	2.109992	2.356409	1.574166	1.901909	.3769929	1.954152	2.130186
#1	51.65017	.0506913	.5040122	.1994354	.2436096	1.124549	52.18728
#2	50.13160	.0490297	.4929153	.1941423	.2449118	1.093894	50.63845
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	56.00000	.0600000	.6000000	.2240000	.2875000	1.170000	57.00000
Low	44.00000	.0400000	.4000000	.1660000	.2100000	.8700000	42.00000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5051390	.9887102	.4979597	10.08344	.5176058	2.058619	22.81791
SDev	.0061737	.0129368	.0083634	.16073	.0101161	.017754	.17899
%RSD	1.222173	1.308453	1.679540	1.594046	1.954400	.8624445	.7844096
#1	.5095044	.9978579	.5038735	10.19709	.5247590	2.071173	22.94447
#2	.5007736	.9795625	.4920459	9.969781	.5104527	2.046064	22.69135
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	.5650000	1.200000	.5600000		.5700000	2.220000	
Low	.4200000	.8000000	.4250000		.4150000	1.720000	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.832180	1.008221	.9890612	1.989422	.4989102	.4967721	.5265740
SDev	.038862	.001634	.0064764	.026126	.0054061	.0160432	.0092597
%RSD	2.121098	.1621044	.6548039	1.313241	1.083576	3.229488	1.758473
#1	1.859660	1.007065	.9936407	2.007896	.5027329	.5081164	.5200265
#2	1.804701	1.009376	.9844817	1.970948	.4950876	.4854279	.5331216
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	2.280000	1.200000	1.120000	2.400000	.5700000	.5650000	
Low	1.720000	.8000000	.8700000	1.600000	.4250000	.4100000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5131285	2.091790	2.042065
SDev	.0197894	.014792	.034003
%RSD	3.856621	.7071388	1.665148
#1	.5271217	2.081330	2.066109
#2	.4991353	2.102249	2.018021
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	293534	--	--	--	--	--	--
SDev	2649.529	--	--	--	--	--	--
%RSD	.9026326	--	--	--	--	--	--
#1	295407	--	--	--	--	--	--
#2	291660	--	--	--	--	--	--

Method: TRACE Sample Name: CMVXM Operator: WGL
Run Time: 11/10/98 09:43:23
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.001956	-.002432	.0591241	-.001840	.0520503	.0221585	.0002358
SDev	.004669	.013562	.0201797	.005736	.0049834	.0006685	.0001836
%RSD	238.7257	557.6408	34.13116	311.6895	9.574230	3.016949	77.89063
#1	-.005257	L-.012022	.0448549	-.005896	.0485265	.0216858	.0001059
#2	.0013457	.0071577	.0733933	.0022157	.0555741	.0226312	.0003656
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	24.55183	-.000250	-.000362	-.001864	.0030218	.1728122	8.967993
SDev	.16093	.000851	.003296	.003334	.0032874	.0879036	.097038
%RSD	.6554520	340.3852	910.0160	178.8895	108.7921	50.86659	1.082043
#1	24.43803	-.000852	-.002693	-.004221	.0006972	.1106549	8.899377
#2	24.66562	.0003517	.0019687	.0004937	.0053463	.2349694	9.036609
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0040438	.0010112	-.000486	.1423609	.0045472	.0055170	6.370879
SDev	.0004489	.0045954	.003406	.0001627	.0036008	.0050044	.037453
%RSD	11.10185	454.4613	701.2147	.1142703	79.18758	90.70831	.5878840
#1	.0037264	-.002238	-.002894	.1424760	.0020010	.0019784	6.344395
#2	.0043613	.0042606	.0019229	.1422459	.0070934	.0090557	6.397362
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003124	.1849535	-.000117	.0016778	-.000621	.0841682	.0051556
SDev	.008043	.0000733	.001143	.0063700	.003416	.0025089	.0250771
%RSD	257.4837	.0396052	975.8616	379.6639	550.4691	2.980870	486.4070
#1	-.008811	.1850053	-.000926	-.002826	-.003036	.0823941	-.012577
#2	.0025636	.1849017	.0006913	.0061820	.0017948	.0859423	.0228878
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0042435	.0094901	.0035335
SDev	.0071213	.0289585	.0069547
%RSD	167.8176	305.1439	196.8212
#1	.0092789	-.010987	.0084512
#2	-.000792	.0299668	-.001384
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	299845	--	--	--	--	--	--
SDev	3157.939	--	--	--	--	--	--
%RSD	1.053190	--	--	--	--	--	--
#1	297612	--	--	--	--	--	--
#2	302078	--	--	--	--	--	--

Method: TRACE Sample Name: CMVXMP Operator: WGL
Run Time: 11/10/98 09:47:17
Comment: 8310203
Mode: CONC Corr. Factor: 5

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.011784	-.021553	.1183136	-.017371	.0183495	.0212432	.0029048
SDev	.012236	.035470	.0559354	.016199	.0152911	.0021084	.0007153
%RSD	103.8412	164.5700	47.27722	93.25127	83.33253	9.925197	24.62584
#1	-.003131	.0035280	.1578658	-.005917	.0291619	.0227341	.0034107
#2	-.020436	-.046635	.0787613	-.028825	.0075370	.0197523	.0023990
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	125.0000	250.0000	3000.000	100.0000	250.0000	150.0000	125.0000
Low	-.050000	-.050000	-1.00000	-.050000	-.500000	-1.00000	-.010000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.74250	-.002364	-.006421	-.009045	-.007614	.0628746	9.366365
SDev	.14455	.002677	.008720	.008457	.007963	.1809125	.134729
%RSD	.5615314	113.2138	135.8118	93.49975	104.5915	287.7355	1.438434
#1	25.84472	-.000472	-.000255	-.003065	-.001983	.1907990	9.461634
#2	25.64029	-.004257	-.012587	-.015025	-.013244	-.065050	9.271098
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	3000.000	50.00000	125.0000	250.0000	250.0000	5000.000	5000.000
Low	-1.00000	-.025000	-.050000	-.050000	-.050000	-.500000	-1.00000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0032899	-.005837	-.006153	.1349931	L-.022174	-.017957	6.255966
SDev	.0012820	.010469	.008333	.0119752	.010828	.017118	.086076
%RSD	38.96837	179.3491	135.4173	8.870981	48.82979	95.32374	1.375903
#1	.0041965	.0015655	-.000261	.1434609	L-.029831	L-.030061	6.316831
#2	.0023834	-.013240	-.012046	.1265254	-.014518	-.005853	6.195101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	250.0000	250.0000	125.0000	200.0000	125.0000	250.0000	2140.000
Low	-.050000	-.100000	-.200000	-1.50000	-.015000	-.025000	-2.50000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.017937	.1884126	-.002432	-.005940	-.005913	.0858773	-.074090
SDev	.019643	.0003655	.003150	.019086	.008766	.0045874	.062332
%RSD	109.5130	.1939823	129.5337	321.3414	148.2459	5.341833	84.13120
#1	-.004047	.1886710	-.000204	.0075565	.0002854	.0891211	-.118165
#2	-.031827	.1881541	-.004660	-.019436	-.012112	.0826335	-.030014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	250.0000	50.00000	50.00000	250.0000	200.0000	200.0000	
Low	-.500000	-.250000	-.075000	-.050000	-.050000	-.050000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0037445	-.059087	.0025765
SDev	.0148862	.082243	.0153960
%RSD	397.5438	139.1895	597.5527
#1	.0142706	-.117241	.0134632
#2	-.006782	-.000932	-.008310
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	307803	--	--	--	--	--	--
SDev	2248.600	--	--	--	--	--	--
%RSD	.7305320	--	--	--	--	--	--
#1	309393	--	--	--	--	--	--
#2	306213	--	--	--	--	--	--

Method: TRACE Sample Name: CMVXMS Operator: WGL
Run Time: 11/10/98 09:51:11
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0412580	.4708137	2.029325	1.995166	1.145836	2.033808	.0523934
SDev	.0005753	.0021846	.005561	.030173	.008646	.019811	.0010380
%RSD	1.394395	.4640001	.2740082	1.512281	.7545659	.9740697	1.981170
#1	.0408512	.4692690	2.025393	1.973831	1.139722	2.047816	.0516595
#2	.0416648	.4723585	2.033257	2.016501	1.151950	2.019799	.0531274
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	76.53357	.0507342	.5014890	.1989029	.2496995	1.326251	61.34906
SDev	1.83868	.0012736	.0084910	.0036320	.0016104	.036689	1.56127
%RSD	2.402451	2.510308	1.693160	1.826040	.6449224	2.766364	2.544897
#1	75.23342	.0498337	.4954850	.1963346	.2508382	1.300307	60.24507
#2	77.83371	.0516348	.5074931	.2014711	.2485608	1.352194	62.45305
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5111317	.9935127	.5026225	10.08933	.5190377	2.046601	29.34060
SDev	.0063986	.0155479	.0095680	.17424	.0042194	.001377	.32138
%RSD	1.251859	1.564945	1.903605	1.726964	.8129365	.0672587	1.095347
#1	.5066072	.9825187	.4958569	9.966124	.5160541	2.045627	29.11335
#2	.5156562	1.004507	.5093880	10.21254	.5220214	2.047574	29.56785
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.862982	1.176503	.9901875	1.995697	.5024238	.5888228	.5186882
SDev	.043709	.006438	.0045526	.026585	.0047820	.0227113	.0096737
%RSD	2.346179	.5471805	.4597691	1.332118	.9517866	3.857067	1.865026
#1	1.832075	1.181055	.9869684	1.976899	.4990424	.5727636	.5255285
#2	1.893889	1.171951	.9934067	2.014496	.5058052	.6048822	.5118479
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5192123	2.051647	2.044089
SDev	.0111556	.022497	.013296
%RSD	2.148562	1.096549	.6504436
#1	.5113241	2.067555	2.034687
#2	.5271004	2.035739	2.053490
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	296324	--	--	--	--	--	--
SDev	5763.627	--	--	--	--	--	--
%RSD	1.945039	--	--	--	--	--	--
#1	292249	--	--	--	--	--	--
#2	300400	--	--	--	--	--	--

Method: TRACE Sample Name: CMVXMD Operator: WGL
Run Time: 11/10/98 09:55:04
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0406560	.4716941	2.055863	2.010882	1.165408	2.068646	.0528603
SDev	.0047397	.0146404	.018974	.026161	.012681	.010533	.0008256
%RSD	11.65799	3.103792	.9229215	1.300970	1.088158	.5091818	1.561910
#1	.0440075	.4820464	2.069280	2.029381	1.174375	2.061199	.0534441
#2	.0373046	.4613418	2.042447	1.992384	1.156440	2.076095	.0522765
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	77.07400	.0511156	.5049747	.1997509	.2529610	1.298663	61.78149
SDev	1.21141	.0017808	.0085632	.0055981	.0022964	.145470	1.03987
%RSD	1.571745	3.483842	1.695778	2.802557	.9078133	11.20151	1.683135
#1	77.93060	.0523749	.5110298	.2037094	.2545848	1.401525	62.51679
#2	76.21742	.0498564	.4989195	.1957925	.2513371	1.195800	61.04620
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5158493	1.002554	.5071133	10.26572	.5143775	2.057787	29.57410
SDev	.0045107	.012055	.0072501	.10015	.0174354	.053875	.20135
%RSD	.8744268	1.202397	1.429689	.9755737	3.389610	2.618118	.6808460
#1	.5190389	1.011078	.5122399	10.33654	.5020488	2.019692	29.71647
#2	.5126597	.9940300	.5019867	10.19491	.5267062	2.095883	29.43172
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.868822	1.200058	.9972637	2.018294	.5067613	.5925130	.4865147
SDev	.035977	.004263	.0039271	.025151	.0063850	.0155069	.0101660
%RSD	1.925115	.3552597	.3937850	1.246137	1.259969	2.617145	2.089558
#1	1.894262	1.197043	1.000041	2.036078	.5112762	.6034780	.4937032
#2	1.843382	1.203072	.9944868	2.000510	.5022464	.5815479	.4793263
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5282879	1.997682	2.087802
SDev	.0312154	.001929	.081735
%RSD	5.908783	.0965397	3.914900
#1	.5062153	1.999046	2.030007
#2	.5503606	1.996318	2.145598
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	294030	--	--	--	--	--	--
SDev	4548.818	--	--	--	--	--	--
%RSD	1.547062	--	--	--	--	--	--
#1	297246	--	--	--	--	--	--
#2	290813	--	--	--	--	--	--

Method: TRACE Sample Name: CMVXR Operator: WGL
Run Time: 11/10/98 09:58:58
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003781	-.008533	.0722729	-.004926	.0371575	.0335295	.0003875
SDev	.001691	.003717	.0008504	.003150	.0010704	.0000863	.0002258
%RSD	44.72712	43.56327	1.176603	63.95712	2.880692	.2575296	58.26644
#1	-.004977	L-.011162	.0716716	-.007153	.0364006	.0335905	.0002278
#2	-.002585	-.005905	.0728742	-.002698	.0379144	.0334684	.0005471
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.70755	-.000754	-.002430	-.003366	-.000226	-.004819	8.189424
SDev	.73970	.000173	.001072	.001383	.001050	.035097	.246992
%RSD	2.877384	22.92872	44.09702	41.08577	464.8739	728.2829	3.015987
#1	25.18450	-.000876	-.003188	-.004344	-.000968	-.029636	8.014774
#2	26.23060	-.000632	-.001672	-.002388	.0005165	.0199980	8.364074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004345	-.000165	-.002107	.1475205	L-.005361	L-.006832	8.594788
SDev	.0001295	.000703	.001014	.0032136	.011176	.010015	.083694
%RSD	29.80165	425.4057	48.11956	2.178418	208.4699	146.6029	.9737786
#1	.0003429	-.000663	-.002824	.1452481	L-.013264	L-.013913	8.535607
#2	.0005260	.0003320	-.001390	.1497929	.0025418	.0002503	8.653969
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.006204	.2192775	-.000641	-.000467	-.001794	.0072835	-.006277
SDev	.002717	.0009148	.000301	.001973	.001034	.0011574	.005722
%RSD	43.80053	.4171774	46.90120	422.3029	57.63469	15.89025	91.15607
#1	-.008126	.2199243	-.000854	-.001862	-.002525	.0064652	-.002231
#2	-.004283	.2186307	-.000429	.0009278	-.001063	.0081019	-.010324
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.004904	-.003437	-.008526
SDev	.019613	.007969	.018994
%RSD	399.9685	231.8164	222.7721
#1	-.018772	.0021972	-.021957
#2	.0089648	-.009072	.0049045
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	300652	--	--	--	--	--	--
SDev	6900.655	--	--	--	--	--	--
%RSD	2.295226	--	--	--	--	--	--
#1	295773	--	--	--	--	--	--
#2	305532	--	--	--	--	--	--

Method: TRACE Sample Name: CMW00 Operator: WGL
Run Time: 11/10/98 10:02:52
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.001155	-.001056	.0746209	-.001610	.0545675	.0337369	.0008075
SDev	.000214	.000657	.0010349	.001318	.0001198	.0000494	.0000010
%RSD	18.48754	62.24745	1.386891	81.89059	.2196409	.1464860	.1261520
#1	-.001004	-.001520	.0753527	-.000678	.0546522	.0337718	.0008083
#2	-.001306	-.000591	.0738891	-.002542	.0544827	.0337019	.0008068
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	27.35962	-.000247	-.000482	-.001507	.0654406	.0525032	8.783962
SDev	.03086	.000017	.000019	.000253	.0002664	.0083163	.019091
%RSD	.1127826	6.678902	3.861179	16.76500	.4070943	15.83962	.2173374
#1	27.38143	-.000259	-.000469	-.001328	.0656290	.0583837	8.797462
#2	27.33780	-.000236	-.000495	-.001685	.0652522	.0466227	8.770463
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002852	.0012870	.0001060	.1504139	.0031110	.0003255	8.663075
SDev	.0000347	.0000077	.0003485	.0003516	.0002124	.0002412	.017997
%RSD	12.17530	.5956370	328.6832	.2337827	6.826911	74.11083	.2077443
#1	.0003097	.0012924	.0003524	.1506625	.0032612	.0001549	8.675800
#2	.0002606	.0012816	-.000140	.1501652	.0029609	.0004960	8.650349
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003343	.2259267	-.000119	.0008728	-.000178	.0875567	.0021549
SDev	.000535	.0002046	.000018	.0017720	.000041	.0000730	.0006130
%RSD	15.99613	.0905565	15.36145	203.0349	23.18907	.0833666	28.44567
#1	-.002965	.2260714	-.000106	.0021258	-.000207	.0875051	.0025883
#2	-.003721	.2257820	-.000132	-.000380	-.000149	.0876084	.0017214
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0035884	.0044966	-.001757
SDev	.0000124	.0013589	.001040
%RSD	.3454948	30.22001	59.19329
#1	.0035972	.0054575	-.002492
#2	.0035796	.0035358	-.001022
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	309535	--	--	--	--	--	--
SDev	53.74012	--	--	--	--	--	--
%RSD	.0173616	--	--	--	--	--	--
#1	309573	--	--	--	--	--	--
#2	309497	--	--	--	--	--	--

Method: TRACE Sample Name: CMW02 Operator: WGL
Run Time: 11/10/98 10:06:46
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003830	L-.010047	.0688311	-.004865	.0280694	.0330067	.0007067
SDev	.003783	.011726	.0150083	.006311	.0040388	.0004417	.0003039
%RSD	98.75364	116.7066	21.80453	129.7241	14.38851	1.338314	43.00317
#1	-.001156	-.001756	.0794436	-.000402	.0309252	.0333190	.0009216
#2	-.006505	L-.018338	.0582187	-.009327	.0252136	.0326943	.0004918
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.13281	-.000770	-.002703	-.003665	.0185136	-.018341	8.299441
SDev	.59246	.000602	.002906	.002797	.0029047	.074020	.246875
%RSD	2.267114	78.21139	107.5104	76.30849	15.68968	403.5785	2.974602
#1	26.55174	-.000344	-.000648	-.001687	.0205675	.0339990	8.474009
#2	25.71387	-.001196	-.004757	-.005643	.0164596	-.070681	8.124874
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002974	-.001468	-.002664	.1494847	L-.005125	L-.007567	8.526964
SDev	.0003925	.003389	.002265	.0075187	.008578	.007927	.097930
%RSD	131.9787	230.8370	85.01811	5.029726	167.3807	104.7507	1.148471
#1	.0005749	.0009283	-.001063	.1548012	.0009407	-.001962	8.596210
#2	.0000199	-.003865	-.004266	.1441682	L-.011191	L-.013172	8.457717
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Low	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.006905	.2194038	-.000884	-.004222	-.002090	.0072880	-.012770
SDev	.006506	.0007639	.001108	.005942	.002910	.0018734	.018272
%RSD	94.21310	.3481665	125.2826	140.7289	139.2222	25.70516	143.0859
#1	-.002305	.2188636	-.000101	-.000021	-.000033	.0086127	.0001503
#2	-.011506	.2199440	-.001668	-.008424	-.004149	.0059633	-.025690
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.001308	-.010953	-.005877
SDev	.003738	.018143	.002826
%RSD	285.7955	165.6389	48.09159
#1	.0013354	.0018757	-.003878
#2	-.003952	-.023782	-.007875
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	306456	--	--	--	--	--	--
SDev	6404.973	--	--	--	--	--	--
%RSD	2.090014	--	--	--	--	--	--
#1	310985	--	--	--	--	--	--
#2	301927	--	--	--	--	--	--

Method: TRACE Sample Name: CCV2 Operator: WGL
Run Time: 11/10/98 10:10:59
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4930406	.4874063	4.939233	.9860547	.4892798	.5053927	.5100838
SDev	.0006611	.0054447	.024310	.0040710	.0018584	.0018645	.0015070
%RSD	.1340809	1.117072	.4921878	.4128623	.3798326	.3689195	.2954339
#1	.4935080	.4912563	4.956423	.9889333	.4905939	.5040743	.5111494
#2	.4925731	.4835563	4.922043	.9831760	.4879656	.5067111	.5090182
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	5.520000	1.100000	.5520000	.5520000	.5520000
Low	.4480000	.4480000	4.480000	.9000000	.4480000	.4480000	.4480000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.55935	.5113944	.4980798	.5027901	.4948340	5.081823	20.29109
SDev	.15898	.0037034	.0033740	.0031329	.0001674	.065849	.21458
%RSD	.7732632	.7241688	.6774021	.6230949	.0338310	1.295773	1.057519
#1	20.67177	.5140131	.5004656	.5050054	.4947156	5.128385	20.44282
#2	20.44694	.5087758	.4956940	.5005748	.4949524	5.035261	20.13936
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00000	.5520000	.5520000	.5520000	.5520000	5.520000	22.00000
Low	18.00000	.4480000	.4480000	.4480000	.4480000	4.480000	17.92000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5024338	.4889281	.5097917	4.947063	.5009264	4.965324	105.0016
SDev	.0010995	.0022912	.0043456	.026276	.0073995	.018114	.4298
%RSD	.2188318	.4686100	.8524252	.5311440	1.477165	.3648176	.4093610
#1	.5032112	.4905482	.5128645	4.965643	.5061587	4.978133	105.3056
#2	.5016563	.4873080	.5067189	4.928483	.4956942	4.952516	104.6977
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	.5520000	5.520000	.5520000	5.520000	117.7000
Low	.4480000	.4480000	.4480000	4.480000	.4480000	4.480000	96.30000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.919280	.5054298	.5010946	4.988621	.5015517	.5073736	.5113891
SDev	.033014	.0021270	.0000149	.009293	.0011430	.0068608	.0169066
%RSD	.6711171	.4208266	.0029775	.1862882	.2278888	1.352217	3.306014
#1	4.942625	.5039258	.5010841	4.995192	.5023600	.5122249	.4994344
#2	4.895936	.5069338	.5011052	4.982049	.5007436	.5025223	.5233439
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520000	.5520000	.5520000	5.520000	.5520000	.5520000	
Low	4.480000	.4480000	.4480000	4.480000	.4480000	.4480000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.4957029	5.015424	4.940312
SDev	.0195343	.109188	.081670
%RSD	3.940729	2.177037	1.653130
#1	.5095157	4.938217	4.998062
#2	.4818900	5.092631	4.882563
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	295260	--	--	--	--	--	--
SDev	4472.450	--	--	--	--	--	--
%RSD	1.514752	--	--	--	--	--	--
#1	298422	--	--	--	--	--	--
#2	292097	--	--	--	--	--	--

Method: TRACE Sample Name: CCB2 Operator: WGL
Run Time: 11/10/98 10:15:31
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000960	-.002094	.0369684	-.000927	-.006157	-.000120	.0009873
SDev	.000551	.000768	.0010683	.000364	.001098	.000116	.0000515
%RSD	57.34171	36.66116	2.889768	39.23463	17.83549	96.65095	5.211970
#1	-.000571	-.001551	.0377238	-.000670	-.005380	-.000038	.0010237
#2	-.001350	-.002637	.0362130	-.001184	-.006933	-.000201	.0009509
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.002524	-.000192	-.000679	-.000692	-.002637	-.013158	-.002389
SDev	.001038	.000021	.000225	.000642	.000043	.009154	.003180
%RSD	41.12215	11.18485	33.06493	92.83630	1.617930	69.56768	133.1076
#1	-.001790	-.000176	-.000521	-.000238	-.002607	-.006685	-.000140
#2	-.003258	-.000207	-.000838	-.001145	-.002667	-.019630	-.004637
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000064	-.000406	-.000521	.0004310	-.000446	-.000208	-.018206
SDev	.000096	.000146	.000030	.0008101	.002332	.001992	.008300
%RSD	149.1533	36.03459	5.691037	187.9646	523.3634	959.3585	45.59218
#1	.0000035	-.000303	-.000500	.0010038	.0012033	.0012008	-.012336
#2	-.000132	-.000509	-.000542	-.000142	-.002094	-.001616	-.024075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000031	.0000074	-.000170	.0009572	-.000407	-.000319	-.001646
SDev	.000336	.0000448	.000220	.0010975	.000528	.000181	.002322
%RSD	1077.688	602.8546	129.6150	114.6550	129.5954	56.57067	141.0854
#1	.0002063	.0000391	-.000014	.0017332	-.000034	-.000192	-.000004
#2	-.000269	-.000024	-.000325	.0001812	-.000780	-.000447	-.003287
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0001536	-.001700	.0005376
SDev	.0023368	.000888	.0025430
%RSD	1521.521	52.20573	473.0505
#1	.0018060	-.001073	.0023358
#2	-.001499	-.002328	-.001261
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	308423	--	--	--	--	--	--
SDev	517.6022	--	--	--	--	--	--
%RSD	.1678222	--	--	--	--	--	--
#1	308789	--	--	--	--	--	--
#2	308057	--	--	--	--	--	--

Method: TRACE Sample Name: CMX06 Operator: WGL
Run Time: 11/10/98 10:19:25
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008813	.0036326	.0976944	.0019130	.0615191	.0325477	.0010319
SDev	.0006427	.0031012	.0056229	.0012735	.0007327	.0001539	.0000099
%RSD	72.92812	85.37061	5.755613	66.57320	1.191058	.4728177	.9576471
#1	.0013358	.0058254	.1016704	.0028135	.0620372	.0326565	.0010389
#2	.0004268	.0014397	.0937184	.0010125	.0610010	.0324389	.0010249
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.84483	.0002629	.0010087	-.000049	.0099333	.3619166	8.205448
SDev	.01308	.0001646	.0006467	.000728	.0007968	.0190250	.000022
%RSD	.0506033	62.62710	64.11395	1474.120	8.021637	5.256731	.0002630
#1	25.83558	.0003793	.0014660	.0004652	.0104967	.3753693	8.205463
#2	25.85408	.0001465	.0005514	-.000564	.0093699	.3484639	8.205433
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0086928	.0027215	.0021498	.1517041	-.002779	-.002471	8.381476
SDev	.0001005	.0005553	.0007339	.0027317	.007747	.008792	.027647
%RSD	1.156243	20.40521	34.13878	1.800680	278.7366	355.8731	.3298582
#1	.0087639	.0031142	.0026687	.1536357	.0026986	.0037463	8.401026
#2	.0086217	.0023288	.0016308	.1497725	L-.008257	L-.008687	8.361927
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006657	.2119311	.0005058	.0037946	.0013889	.2306588	.0057509
SDev	.0012190	.0001142	.0002526	.0012854	.0005466	.0001722	.0031134
%RSD	183.1303	.0538840	49.93736	33.87371	39.35123	.0746609	54.13801
#1	.0015276	.2120118	.0006844	.0047035	.0017754	.2307806	.0079524
#2	-.000196	.2118503	.0003272	.0028857	.0010024	.2305370	.0035494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.007038	.0115082	-.009449
SDev	.010060	.0074577	.009458
%RSD	142.9426	64.80351	100.0906
#1	.0000757	.0167817	-.002762
#2	-.014152	.0062348	-.016137
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	311564	--	--	--	--	--	--
SDev	897.3185	--	--	--	--	--	--
%RSD	.2880041	--	--	--	--	--	--
#1	310930	--	--	--	--	--	--
#2	312199	--	--	--	--	--	--

Method: TRACE Sample Name: CMW08 Operator: WGL
Run Time: 11/10/98 10:23:19
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.001733	-.003628	.0861860	-.002070	.0325307	.0332716	.0008365
SDev	.001402	.004406	.0001322	.000343	.0021751	.0000907	.0000530
%RSD	80.90622	121.4521	.1534184	16.58794	6.686177	.2727159	6.336031
#1	-.002725	-.006744	.0862795	-.002313	.0309927	.0332074	.0007990
#2	-.000742	-.000512	.0860925	-.001827	.0340687	.0333357	.0008740
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.98939	-.000297	-.000959	-.001986	.0083535	.0549476	8.113335
SDev	.37593	.000241	.000873	.001108	.0007449	.0216409	.127059
%RSD	1.446458	81.22167	91.11289	55.78110	8.916814	39.38462	1.566051
#1	25.72357	-.000468	-.001576	-.002769	.0078268	.0396452	8.023491
#2	26.25521	-.000126	-.000341	-.001202	.0088802	.0702500	8.203179
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010084	.0008114	-.000452	.1622020	-.001041	-.000757	8.708660
SDev	.0001321	.0011289	.001326	.0026528	.000915	.002986	.036865
%RSD	13.10351	139.1305	293.3760	1.635463	87.87188	394.3460	.4233105
#1	.0009149	.0000131	-.001390	.1603263	-.001688	-.002868	8.682592
#2	.0011018	.0016097	.0004858	.1640778	-.000394	.0013541	8.734727
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003612	.2191497	-.000221	-.000513	-.000361	.0269745	.0002493
SDev	.000527	.0005089	.000415	.002586	.001077	.0012033	.0025784
%RSD	14.59777	.2322359	187.7502	503.9515	298.6522	4.460946	1034.402
#1	-.003984	.2195096	-.000514	-.002342	-.001123	.0261236	-.001574
#2	-.003239	.2187898	.0000724	.0013154	.0004011	.0278254	.0020725
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.001685	.0061511	-.004206
SDev	.000084	.0036563	.002651
%RSD	5.006372	59.44089	63.02774
#1	-.001745	.0035657	-.006081
#2	-.001626	.0087364	-.002332
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	305607	--	--	--	--	--	--
SDev	2623.366	--	--	--	--	--	--
%RSD	.8584117	--	--	--	--	--	--
#1	303752	--	--	--	--	--	--
#2	307462	--	--	--	--	--	--

Method: TRACE Sample Name: CNOFD Operator: WGL
Run Time: 11/10/98 10:27:14
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.004660	L-.010325	.4468191	-.004594	.0152699	.0384662	.0018951
SDev	.002811	.006554	.0083167	.004804	.0030730	.0003100	.0001509
%RSD	60.31124	63.47648	1.861320	104.5590	20.12434	.8059859	7.961112
#1	-.002673	-.005691	.4526999	-.001197	.0174428	.0386854	.0020018
#2	-.006648	L-.014959	.4409383	-.007991	.0130970	.0382470	.0017884
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.045891	-.000741	-.003025	-.001873	-.004806	1.363162	.5786553
SDev	.041657	.000538	.001767	.001809	.001901	.041717	.0186413
%RSD	.6890179	72.61544	58.41816	96.54842	39.54440	3.060326	3.221486
#1	6.075347	-.000361	-.001775	-.000594	-.003462	1.392661	.5918367
#2	6.016435	-.001122	-.004275	-.003152	-.006150	1.333663	.5654739
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0154606	-.003397	-.002607	.9665692	-.002766	-.001668	24.24126
SDev	.0003308	.002525	.002193	.0113437	.004643	.003198	.04553
%RSD	2.139677	74.31750	84.13553	1.173609	167.8649	191.6911	.1878344
#1	.0156945	-.001612	-.001056	.9745904	L-.006049	-.003930	24.27345
#2	.0152267	-.005182	-.004158	.9585480	.0005172	.0005931	24.20906
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.008138	.0751406	.0055272	-.005472	-.000800	.0050507	-.009398
SDev	.003708	.0001014	.0008222	.005399	.001668	.0011580	.014291
%RSD	45.56079	.1348980	14.87605	98.67297	208.3779	22.92748	152.0685
#1	-.005517	.0750689	.0061086	-.001654	.0003789	.0058695	.0007075
#2	-.010760	.0752123	.0049458	-.009290	-.001980	.0042318	-.019503
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0005449	-.003260	-.000874
SDev	.0140961	.015990	.012778
%RSD	2587.027	490.5328	1461.905
#1	-.009423	.0080468	-.009909
#2	.0105124	-.014566	.0081613
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	313126	--	--	--	--	--	--
SDev	2617.709	--	--	--	--	--	--
%RSD	.8359923	--	--	--	--	--	--
#1	314977	--	--	--	--	--	--
#2	311275	--	--	--	--	--	--

Method: TRACE Sample Name: CN0G6 Operator: WGL
Run Time: 11/10/98 10:31:09
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003016	-.005692	1.058181	-.003919	.0310729	.1015040	.0010185
SDev	.002115	.006569	.005055	.004153	.0022907	.0005374	.0001755
%RSD	70.13609	115.4134	.4777155	105.9684	7.372081	.5294461	17.22927
#1	-.004511	L-.010336	1.054606	-.006855	.0294531	.1018841	.0008944
#2	-.001520	-.001047	1.061755	-.000982	.0326927	.1011240	.0011426
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.375532	-.000506	-.001932	-.001762	-.003445	1.338948	1.533220
SDev	.058965	.000425	.001589	.001339	.001544	.059313	.055533
%RSD	2.482194	84.14906	82.26881	76.01276	44.80116	4.429848	3.622009
#1	2.333837	-.000806	-.003056	-.002709	-.004537	1.297007	1.493952
#2	2.417227	-.000205	-.000808	-.000815	-.002354	1.380889	1.572488
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0225550	-.002518	-.001071	.0420668	L-.003306	-.002947	15.73237
SDev	.0004973	.001961	.001858	.0006779	.002979	.003942	.11630
%RSD	2.204715	77.89053	173.4498	1.611597	90.12401	133.7779	.7392251
#1	.0222033	-.003905	-.002386	.0415874	L-.005412	L-.005734	15.65014
#2	.0229066	-.001131	.0002427	.0425462	-.001199	-.000159	15.81461
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.005596	.0393115	.0025412	-.002168	-.000518	-.000081	-.004471
SDev	.003975	.0000523	.0004757	.003264	.001509	.001002	.001436
%RSD	71.02643	.1330440	18.71955	150.5424	291.2337	1242.443	32.11607
#1	-.008406	.0393485	.0022048	-.004476	-.001585	-.000789	-.005487
#2	-.002785	.0392745	.0028776	.0001398	.0005487	.0006281	-.003456
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.002724	.0014556	-.005145
SDev	.003750	.0049606	.003434
%RSD	137.6634	340.8033	66.74403
#1	-.005375	-.002052	-.007573
#2	-.000072	.0049632	-.002717
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	307462	--	--	--	--	--	--
SDev	5972.931	--	--	--	--	--	--
%RSD	1.942654	--	--	--	--	--	--
#1	303239	--	--	--	--	--	--
#2	311686	--	--	--	--	--	--

Method: TRACE Sample Name: CM19G Operator: WGL
Run Time: 11/10/98 10:35:03
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000794	-.000345	2.195036	.0007745	.0374885	.1988580	.0010951
SDev	.001184	.002007	.004817	.0008042	.0007761	.0006505	.0000202
%RSD	149.0326	582.1078	.2194596	103.8402	2.070355	.3271310	1.843601
#1	.0000428	.0010744	2.198442	.0013431	.0380373	.1993179	.0011094
#2	-.001632	-.001764	2.191630	.0002058	.0369397	.1983980	.0010809
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	62.89818	.0003090	.0005352	.0085032	-.001020	6.876496	4.163317
SDev	.06353	.0000816	.0007286	.0007667	.000679	.014925	.010533
%RSD	.1010031	26.41002	136.1392	9.017011	66.60490	.2170443	.2529955
#1	62.94310	.0003667	.0010503	.0090453	-.000540	6.887050	4.170765
#2	62.85326	.0002513	.0000200	.0079610	-.001500	6.865943	4.155869
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1081061	-.000047	.0027107	.4289048	.0009378	-.000501	40.37768
SDev	.0002445	.000161	.0003920	.0018292	.0017051	.001965	.02008
%RSD	.2261367	340.8694	14.46044	.4264705	181.8177	392.4068	.0497290
#1	.1082789	-.000162	.0029879	.4276114	.0021434	.0008889	40.39188
#2	.1079332	.0000668	.0024335	.4301982	-.000268	-.001891	40.36348
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003179	.2833908	.0426690	.0001860	.0051945	.0106578	.0010870
SDev	.002040	.0003025	.0003401	.0013949	.0009960	.0002398	.0052047
%RSD	64.18653	.1067388	.7970881	750.0712	19.17393	2.249601	478.8111
#1	-.001736	.2836047	.0429095	.0011723	.0058988	.0108273	.0047673
#2	-.004621	.2831769	.0424285	-.000800	.0044902	.0104883	-.002593
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0008633	.0057066	-.003600
SDev	.0000422	.0061178	.000108
%RSD	4.882299	107.2057	2.992135
#1	.0008335	.0100326	-.003676
#2	.0008931	.0013807	-.003524
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	307366	--	--	--	--	--	--
SDev	717.7134	--	--	--	--	--	--
%RSD	.2335041	--	--	--	--	--	--
#1	306859	--	--	--	--	--	--
#2	307874	--	--	--	--	--	--

Method: TRACE Sample Name: CN19H Operator: WGL
Run Time: 11/10/98 10:38:57
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000898	-.001225	2.571430	-.000370	.0199127	.0586153	.0011130
SDev	.000318	.000801	.003187	.000924	.0000696	.0001358	.0000050
%RSD	35.40867	65.40370	.1239576	249.8706	.3493352	.2316080	.4467046
#1	-.000673	-.000659	2.573684	.0002835	.0198635	.0587113	.0011095
#2	-.001122	-.001792	2.569176	-.001023	.0199619	.0585193	.0011166
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	37.96978	-.000260	-.000046	.0016494	-.002087	3.936315	1.707570
SDev	.19458	.000044	.000110	.0000149	.000358	.017646	.007239
%RSD	.5124589	17.03257	242.0571	.9002655	17.17050	.4482755	.4239343
#1	37.83219	-.000228	.0000325	.0016389	-.001834	3.923838	1.702451
#2	38.10737	-.000291	-.000124	.0016599	-.002341	3.948792	1.712689
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0247244	-.000611	.0010398	.2312850	-.000388	-.000653	21.95599
SDev	.0000032	.000122	.0000337	.0011499	.000679	.000138	.03066
%RSD	.0128543	19.94896	3.240542	.4971800	174.8803	21.13368	.1396490
#1	.0247221	-.000697	.0010636	.2320982	-.000868	-.000751	21.93430
#2	.0247266	-.000525	.0010160	.2304719	.0000918	-.000556	21.97767
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.002051	.0739415	.0189927	.0011445	.0024297	.0023073	.0005536
SDev	.000398	.0001579	.0000304	.0003466	.0000749	.0001546	.0008731
%RSD	19.42283	.2136015	.1599283	30.28421	3.082453	6.701528	157.7100
#1	-.002333	.0740531	.0189712	.0013896	.0023767	.0021980	.0011709
#2	-.001769	.0738298	.0190142	.0008994	.0024826	.0024166	-.000064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.000858	.0058449	-.003897
SDev	.001454	.0005420	.000064
%RSD	169.3514	9.273337	1.632886
#1	-.001886	.0054617	-.003852
#2	.0001695	.0062282	-.003942
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	307179	--	--	--	--	--	--
SDev	2285.369	--	--	--	--	--	--
%RSD	.7439861	--	--	--	--	--	--
#1	305563	--	--	--	--	--	--
#2	308795	--	--	--	--	--	--

Method: TRACE Sample Name: CN19J Operator: WGL
Run Time: 11/10/98 10:42:52
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008278	.0039999	.7964252	.0025801	.0242975	.1166283	.0012007
SDev	.0034065	.0097560	.0226627	.0062248	.0035520	.0013619	.0000769
%RSD	411.5350	243.9071	2.845552	241.2575	14.61890	1.167714	6.408469
#1	.0032366	.0108984	.8124502	.0069817	.0268091	.1175913	.0012551
#2	-.001581	-.002899	.7804003	-.001821	.0217858	.1156653	.0011462
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.038611	.0000767	.0015107	.0000954	-.001381	2.879402	3.368458
SDev	.016471	.0006806	.0025178	.0026058	.002542	.048816	.005684
%RSD	.4078380	887.8247	166.6617	2730.420	184.1459	1.695370	.1687296
#1	4.026964	.0005580	.0032911	.0019380	.0004171	2.913920	3.372477
#2	4.050258	-.000405	-.000270	-.001747	-.003178	2.844883	3.364440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0075590	.0008298	.0009843	.1135229	.0011570	.0008839	6.910158
SDev	.0003495	.0029177	.0023068	.0029839	.0055642	.0055520	.011256
%RSD	4.624051	351.5956	234.3521	2.628441	480.9017	628.1310	.1628942
#1	.0078061	.0028929	.0026154	.1156328	.0050915	.0048097	6.918117
#2	.0073118	-.001233	-.000647	.1114129	-.002777	-.003042	6.902198
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003929	.0515357	.0005738	.0028611	.0012936	.0014141	.0071866
SDev	.0062871	.0003632	.0009426	.0056290	.0024396	.0012589	.0185913
%RSD	1599.978	.7048109	164.2748	196.7399	188.5860	89.02419	258.6933
#1	.0048386	.0517926	.0012403	.0068414	.0030186	.0023043	.0203326
#2	-.004053	.0512789	-.000093	-.001119	-.000431	.0005239	-.005959
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.001853	.0133204	-.005325
SDev	.000940	.0164413	.000115
%RSD	50.70077	123.4299	2.168705
#1	-.002518	.0249461	-.005243
#2	-.001189	.0016946	-.005407
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	313334	--	--	--	--	--	--
SDev	2345.473	--	--	--	--	--	--
%RSD	.7485525	--	--	--	--	--	--
#1	311676	--	--	--	--	--	--
#2	314993	--	--	--	--	--	--

Method: TRACE Sample Name: CN19K Operator: WGL
Run Time: 11/10/98 10:46:46
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.003638	-.008763	6.562132	-.004214	.0233435	.0901389	.0008781
SDev	.002743	.008175	.021220	.002800	.0028704	.0002033	.0002473
%RSD	75.39933	93.29385	.3233668	66.44062	12.29622	.2255589	28.15760
#1	-.001699	-.002982	6.577137	-.002234	.0253731	.0902827	.0010530
#2	-.005578	L-.014544	6.547128	-.006194	.0213138	.0899952	.0007033
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.647618	-.000783	-.001678	.0006216	-.003683	2.365109	1.335028
SDev	.029199	.000510	.002120	.0017124	.001760	.060926	.041307
%RSD	1.772174	65.12188	126.3241	275.4835	47.77660	2.576054	3.094081
#1	1.668265	-.000422	-.000179	.0018324	-.002439	2.408190	1.364237
#2	1.626972	-.001143	-.003177	-.000589	-.004927	2.322027	1.305820
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0212235	-.002145	-.000833	.1550879	.0022036	.0010500	36.92275
SDev	.0004020	.001523	.001887	.0029746	.0010785	.0014641	.15835
%RSD	1.894346	71.00384	226.5805	1.917994	48.94228	139.4334	.4288631
#1	.0215078	-.001068	.0005016	.1571912	.0029662	.0020853	37.03472
#2	.0209392	-.003221	-.002168	.1529845	.0014410	.0000148	36.81078
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.007395	.0343373	.0234399	-.003842	.0026862	.0052674	-.013010
SDev	.003916	.0000440	.0006863	.002506	.0020366	.0011322	.013460
%RSD	52.95064	.1281827	2.927781	65.23090	75.81514	21.49514	103.4602
#1	-.004626	.0343684	.0239251	-.002070	.0041263	.0060681	-.003492
#2	-.010164	.0343062	.0229546	-.005614	.0012462	.0044668	-.022527
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0097989	-.010470	.0068014
SDev	.0051029	.015665	.0056256
%RSD	52.07648	149.6177	82.71236
#1	.0061906	.0006068	.0028235
#2	.0134072	-.021547	.0107793
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	303849	--	--	--	--	--	--
SDev	4006.467	--	--	--	--	--	--
%RSD	1.318572	--	--	--	--	--	--
#1	306682	--	--	--	--	--	--
#2	301016	--	--	--	--	--	--

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Method: TRACE Sample Name: CN0N6 Operator: WGL
Run Time: 11/10/98 10:50:40
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.002384	-.005672	.7236212	.0012793	.2507996	.1803449	.0000233
SDev	.004226	.013637	.0146106	.0089561	.0067062	.0003359	.0002154
%RSD	177.2988	240.4307	2.019099	700.0638	2.673913	.1862307	924.0380
#1	.0006047	.0039709	.7339525	.0076122	.2555416	.1801074	.0001756
#2	-.005372	L-.015315	.7132900	-.005054	.2460576	.1805824	-.000129
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H920.2279	.0001178	.0018529	.0299653	.0027264	8.664991	571.9770
SDev	25.3159	.0008712	.0035291	.0044132	.0030233	.292676	12.0419
%RSD	2.751045	739.8804	190.4674	14.72775	110.8908	3.377689	2.105315
#1	H938.1289	.0007338	.0043483	.0330860	.0048642	8.871944	580.4919
#2	H902.3268	-.000498	-.000643	.0268447	.0005886	8.458037	563.4621
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

ok *

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5989748	.0449236	.0939856	.5599761	-.000197	-.001683	16.23130
SDev	.0074586	.0039222	.0053329	.0045044	.001929	.001064	.12530
%RSD	1.245228	8.730861	5.674167	.8043843	976.9275	63.21862	.7719623
#1	.6042489	.0476970	.0977565	.5631612	.0011663	-.000931	16.31990
#2	.5937008	.0421501	.0902146	.5567911	-.001561	-.002435	16.14270
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.002841	8.036270	.0136166	-.001147	.0015629	.0055748	-.003082
SDev	.008672	.023499	.0017365	.010059	.0037230	.0019262	.012719
%RSD	305.2296	.2924125	12.75255	876.6448	238.2166	34.55191	412.6331
#1	.0032908	8.019653	.0148445	.0059656	.0041955	.0069368	.0059111
#2	-.008973	8.052886	.0123887	-.008261	-.001070	.0042127	-.012076
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

* Ca NO I&C Affect on CR/NI vl 11/10/98

Units	ppm	ppm	ppm
Avge	.0012429	.0065638	-.005800
SDev	.0034583	.0138413	.005315
%RSD	278.2493	210.8743	91.63891
#1	-.001203	.0163510	-.009558
#2	.0036882	-.003223	-.002042
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	255478	--	--	--	--	--	--
SDev	2766.909	--	--	--	--	--	--
%RSD	1.083030	--	--	--	--	--	--
#1	257435	--	--	--	--	--	--
#2	253522	--	--	--	--	--	--

Method: TRACE Sample Name: CN0NR Operator: WGL
Run Time: 11/10/98 10:54:34
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000769	-.001858	.0450863	-.003125	-.004131	-.000103	.0011860
SDev	.000639	.000674	.0029832	.000136	.001213	.000112	.0000056
%RSD	83.15736	36.24879	6.616652	4.362704	29.35574	108.9698	.4732186
#1	-.000317	-.001382	.0471958	-.003222	-.003273	-.000024	.0011899
#2	-.001221	-.002335	.0429769	-.003029	-.004988	-.000183	.0011820
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00000	50.00000	600.0000	20.00000	50.00000	25.00000	25.00000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.200000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0950201	-.000230	-.000461	-.001429	-.002469	-.016608	.0439269
SDev	.0351770	.000204	.000234	.000442	.000616	.007940	.0209143
%RSD	37.02058	88.89002	50.67854	30.90259	24.95670	47.80650	47.61162
#1	.1198940	-.000085	-.000296	-.001117	-.002033	-.010994	.0587155
#2	.0701462	-.000374	-.000626	-.001742	-.002905	-.022222	.0291382
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	10.00000	50.00000	50.00000	50.00000	1000.000	1000.000
Low	-.200000	-.005000	-.010000	-.010000	-.010000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000086	-.000934	-.000920	.1490724	-.001385	-.002177	.0729541
SDev	.000102	.000388	.000589	.0008724	.000360	.001079	.0083805
%RSD	119.0195	41.48553	64.04423	.5852102	25.98493	49.54959	11.48739
#1	-.000014	-.000660	-.000503	.1496893	-.001130	-.001414	.0788800
#2	-.000159	-.001208	-.001337	.1484556	-.001639	-.002940	.0670281
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00000	20.00000	50.00000	50.00000	25.00000	50.00000	428.0000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.002819	.0006517	-.000137	.0003148	-.000613	.0008380	-.002000
SDev	.000727	.0003070	.000156	.0011362	.000470	.0002928	.004545
%RSD	25.77406	47.10320	114.1687	360.9157	76.64028	34.93644	227.2665
#1	-.002305	.0008688	-.000026	.0011182	-.000281	.0010450	.0012140
#2	-.003333	.0004346	-.000247	-.000489	-.000946	.0006310	-.005214
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00000	10.00000	10.00000	50.00000	50.00000	50.00000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.001077	.0034622	-.004993
SDev	.001730	.0057083	.001233
%RSD	160.5511	164.8748	24.68711
#1	-.002301	.0074986	-.005864
#2	.0001457	-.000574	-.004121
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	317902	--	--	--	--	--	--
SDev	436.9920	--	--	--	--	--	--
%RSD	.1374612	--	--	--	--	--	--
#1	317593	--	--	--	--	--	--
#2	318211	--	--	--	--	--	--

Method: TRACE Sample Name: CCV3 Operator: WGL
Run Time: 11/10/98 10:58:46
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4940773	.4942242	4.938472	.9955962	.4924614	.5036609	.5142759
SDev	.0026677	.0062465	.021085	.0037919	.0029889	.0026601	.0003226
%RSD	.5399284	1.263891	.4269517	.3808683	.6069237	.5281442	.0627274
#1	.4959636	.4986411	4.953381	.9982775	.4945748	.5055419	.5140478
#2	.4921910	.4898073	4.923563	.9929149	.4903479	.5017800	.5145040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	5.520000	1.100000	.5520000	.5520000	.5520000
Low	.4480000	.4480000	4.480000	.9000000	.4480000	.4480000	.4480000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.74454	.5190224	.5016478	.5069145	.4932944	5.182478	20.52928
SDev	.02759	.0000186	.0011052	.0011378	.0036447	.043386	.00198
%RSD	.1329810	.0035892	.2203089	.2244470	.7388512	.8371729	.0096574
#1	20.72503	.5190092	.5024293	.5077190	.4958716	5.213157	20.52788
#2	20.76404	.5190356	.5008663	.5061100	.4907172	5.151799	20.53068
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00000	.5520000	.5520000	.5520000	.5520000	5.520000	22.00000
Low	18.00000	.4480000	.4480000	.4480000	.4480000	4.480000	17.92000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5032129	.4893715	.5167145	4.996924	.5128053	5.024486	105.2061
SDev	.0002298	.0017134	.0016580	.001613	.0025564	.009247	.0537
%RSD	.0456719	.3501217	.3208683	.0322875	.4985161	.1840324	.0510374
#1	.5030505	.4905831	.5178868	4.995783	.5146130	5.017948	105.1681
#2	.5033755	.4881600	.5155421	4.998065	.5109976	5.031025	105.2441
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520000	.5520000	.5520000	5.520000	.5520000	5.520000	117.7000
Low	.4480000	.4480000	.4480000	4.480000	.4480000	4.480000	96.30000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.932981	.5027758	.5031343	5.014481	.5048105	.5161691	.5001828
SDev	.004829	.0011784	.0011982	.002772	.0018014	.0014022	.0036779
%RSD	.0978857	.2343840	.2381457	.0552782	.3568465	.2716519	.7353075
#1	4.929566	.5036091	.5039815	5.012521	.5060842	.5151776	.5027835
#2	4.936395	.5019425	.5022870	5.016441	.5035366	.5171606	.4975822
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520000	.5520000	.5520000	5.520000	.5520000	.5520000	
Low	4.480000	.4480000	.4480000	4.480000	.4480000	.4480000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5191071	4.921418	5.075943
SDev	.0019965	.025943	.000911
%RSD	.3846101	.5271497	.0179483
#1	.5205188	4.903073	5.075299
#2	.5176953	4.939763	5.076587
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	302254	--	--	--	--	--	--
SDev	579.1205	--	--	--	--	--	--
%RSD	.1916009	--	--	--	--	--	--
#1	302663	--	--	--	--	--	--
#2	301844	--	--	--	--	--	--

Method: TRACE Sample Name: CCB3 Operator: WGL
Run Time: 11/10/98 11:03:18
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.002266	-.002772	.0402306	-.003091	-.007906	-.000354	.0012188
SDev	.002155	.006814	.0082776	.003784	.002513	.000416	.0001386
%RSD	95.09749	245.8566	20.57528	122.4152	31.78523	117.3950	11.36765
#1	-.000742	.0020468	.0460837	-.000415	-.006129	-.000060	.0013168
#2	-.003790	-.007590	.0343775	-.005767	-.009683	-.000648	.0011209
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.005941	-.000463	-.001461	-.001364	-.003653	-.033663	-.009688
SDev	.001562	.000562	.001823	.001547	.001555	.039220	.014927
%RSD	26.29555	121.3871	124.7630	113.4088	42.55502	116.5098	154.0866
#1	-.004836	-.000066	-.000472	-.000270	-.002554	-.005930	.0008676
#2	-.007046	-.000860	-.002450	-.002458	-.004753	-.061396	-.020243
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000210	-.001210	-.001275	-.002601	L-.003663	-.003046	-.032156
SDev	.000224	.002151	.001716	.002650	.002099	.003652	.018399
%RSD	106.6860	177.6926	134.5545	101.8694	57.30845	119.9032	57.21697
#1	-.000052	.0003104	-.000062	-.000727	-.002179	-.000463	-.019146
#2	-.000369	-.002731	-.002489	-.004475	L-.005148	L-.005628	-.045166
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.001369	-.000091	-.000472	-.000068	-.001369	-.000995	-.005613
SDev	.003098	.000118	.000565	.001982	.001553	.000594	.011069
%RSD	226.3480	130.0092	119.6547	2924.400	113.3789	59.66117	197.2120
#1	.0008219	-.000007	-.000073	.0013337	-.000272	-.000575	.0022142
#2	-.003559	-.000175	-.000872	-.001469	-.002467	-.001415	-.013439
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.002690	-.002410	-.003363
SDev	.002378	.011076	.000055
%RSD	88.40826	459.6011	1.623761
#1	-.004372	.0054219	-.003402
#2	-.001008	-.010242	-.003324
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	313026	--	--	--	--	--	--
SDev	1660.994	--	--	--	--	--	--
%RSD	.5306240	--	--	--	--	--	--
#1	314201	--	--	--	--	--	--
#2	311852	--	--	--	--	--	--

11-10-98

Method: TRACE Sample Name: CCB3 Operator: WGL
Run Time: 11/10/98 11:07:32
Comment: 8310203
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.001325	-.002235	.0494722	-.001303	-.007436	-.000159	.0011418
SDev	.001517	.005720	.0082611	.001474	.001838	.000318	.0000908
%RSD	114.5179	255.9016	16.69853	113.1640	24.71527	199.2939	7.951827
#1	-.000252	.0018095	.0553137	-.000260	-.006136	.0000652	.0012060
#2	-.002397	-.006280	.0436307	-.002345	-.008735	-.000384	.0010776
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0100000	.1000000	.0100000	.1000000	.0100000	.0020000
Low	-.010000	-.010000	-.100000	-.010000	-.100000	-.010000	-.002000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.006024	-.000289	-.000768	-.000766	-.002953	-.018621	-.002978
SDev	.002161	.000214	.001021	.001027	.001266	.025664	.010297
%RSD	35.87483	74.17059	132.9130	134.0586	42.85574	137.8217	345.7553
#1	-.004496	-.000137	-.000046	-.000040	-.002058	-.000474	.0043030
#2	-.007552	-.000440	-.001491	-.001492	-.003848	-.036768	-.010259
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000000	.0050000	.0100000	.0100000	.0200000	.1000000	.2000000
Low	-.200000	-.005000	-.010000	-.010000	-.020000	-.100000	-.200000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000119	-.001093	-.000570	-.000962	-.000259	-.001903	-.024973
SDev	.000196	.001647	.001174	.001219	.000046	.001360	.012861
%RSD	165.3285	150.7383	205.9063	126.7870	17.68154	71.47203	51.49960
#1	.0000201	.0000720	.0002601	-.000100	-.000227	-.000941	-.015879
#2	-.000257	-.002257	-.001401	-.001824	-.000292	-.002864	-.034067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100000	.0200000	.0400000	.3000000	.0030000	.0050000	.5000000
Low	-.010000	-.020000	-.040000	-.300000	-.003000	-.005000	-.500000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.000771	-.000041	-.000246	-.001400	-.000638	-.000616	-.005692
SDev	.002712	.000100	.000424	.003897	.001198	.000655	.016342
%RSD	351.7840	243.1303	172.7519	278.3572	187.7716	106.3233	287.0932
#1	.0011468	.0000296	.0000544	.0013556	.0002091	-.000153	.0058635
#2	-.002689	-.000112	-.000546	-.004156	-.001485	-.001078	-.017248
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000000	.0500000	.0150000	.0100000	.0100000	.0200000	
Low	-.100000	-.050000	-.015000	-.010000	-.010000	-.020000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0024532	-.004653	-.000529
SDev	.0080902	.020001	.007947
%RSD	329.7860	429.8239	1501.672
#1	-.003267	.0094895	-.006148
#2	.0081738	-.018796	.0050901
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	309784	--	--	--	--	--	--
SDev	939.7449	--	--	--	--	--	--
%RSD	.3033544	--	--	--	--	--	--
#1	310449	--	--	--	--	--	--
#2	309120	--	--	--	--	--	--

RQC057 Quanterra Incorporated Run Date: 11/17/98
METALS PREP LOG/BATCH SUMMARY Time: 10:49:55

BATCH NUMBER: 8321237 PREP DATE: 11/17/98
DUE DATE 11/10/98 INITIALS: SS

****
* RE-PREP BATCH *
****

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J280164	CMVVL	01	X 10.0 g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/10/98					
	CMVVLX		_____g	_____g	_____g	_____g
D8K070197	CN88F	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/18/98					
D8K040207	CN4V2	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/20/98					
	CN4V2S		_____g	_____g	_____g	_____g
	CN4V2D		_____g	_____g	_____g	_____g
D8K080103	CN8CT	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/20/98					
D8K080103	CN8CV	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/20/98					
D8K040184	CN4M4	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/23/98					
D8K040184	CN4P0	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/23/98					
D8K050153	CN5K2	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/23/98					
D8K050153	CN5K7	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/23/98					
D8K050153	CN5K8	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/23/98					
D8K050153	CN5K9	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/23/98					
D8K050153	CN5KC	01	X V g	_____g	_____g	_____g
WATER	TO DUE DATE: 11/23/98					

RQC057 Quanterra Incorporated Run Date: 11/17/98
METALS PREP LOG/BATCH SUMMARY Time: 10:49:55

BATCH NUMBER: 8321237 PREP DATE: 11/17/98
DUE DATE 11/10/98 INITIALS: JS

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8K050153	CN5KD	01	X 10.0 g	_____g	_____g	_____g
WATER	TO DUE DATE:		11/23/98			
D8K050153	CN6FF	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE:		11/23/98			
D8K050153	CN6FG	01	X _____g	_____g	_____g	_____g
WATER	TO DUE DATE:		11/23/98			
D8K170000	CNHJNB	01	X _____g	_____g	_____g	_____g
WATER	DUE DATE:		0/00/00			
	CNHJNC		_____g	_____g	_____g	_____g
	CNHJNL		_____g	_____g	_____g	_____g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG —
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG JS

ORIGINAL BATCH: _____

COMMENTS: Resolumed To 50.0 g

B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS

SPIKING WITNESSED BY _____

RQC057 Quanterra Incorporated Run Date: 11/18/98
METALS PREP LOG/BATCH SUMMARY Time: 9:58:36

BATCH NUMBER: 8319136 PREP DATE: 11/18/98
DUE DATE 11/17/98 INITIALS: KJ

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J220136	CMMWM	01	X 50.0 g	g	g	g
WATER	DI DUE DATE:		11/19/98			
D8J260105	CMR67	01	X 50.0 g	g	g	g
WATER	DI DUE DATE:		11/19/98			
D8J260105	CMR6L	01	X 50.0 g	g	g	g
WATER	DI DUE DATE:		11/19/98			
D8J260105	CMR6N	01	X 50.0 g	g	g	g
WATER	DI DUE DATE:		11/19/98			
D8K150000	CNGFKB	01	X 50.0 g	g	g	g
WATER	DUE DATE:		0/00/00			
	CNGFKC		50.0 g	g	g	g
	CNGFKL		50.0 g	g	g	g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG ✓
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG ✓

COMMENTS: Sample weight to 50.0g

B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS

SPIKING WITNESSED BY _____

RQC057 Quanterra Incorporated Run Date: 11/18/98
METALS PREP LOG/BATCH SUMMARY Time: 9:58:36

BATCH NUMBER: 8319136 PREP DATE: 11/18/98
DUE DATE 11/17/98 INITIALS: AJ

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8J300184	CN0N6	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/17/98					
	CN0N6S		50.0 g	____g	____g	____g
	CN0N6D		50.0 g	____g	____g	____g
D8J300184	CN0NW	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/17/98					
D8K020188	CN2JP	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/17/98					
D8K020188	CN2JQ	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/17/98					
D8K020188	CN2JR	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/17/98					
D8K030136	CN32K	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/17/98					
D8K030136	CN33W	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/17/98					
D8J240117	CMQA2	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/18/98					
D8J280219	CMWAF	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/18/98					
D8J280219	CMWAJ	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/18/98					
D8J280219	CMWAL	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/18/98					
D8J280219	CMWAQ	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/18/98					
D8J220136	CMMVR	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/19/98					
D8J220136	CMMWG	01	X 50.0 g	____g	____g	____g
WATER	DI DUE DATE: 11/19/98					

RQC057

Quanterra Incorporated
METALS PREP LOG/BATCH SUMMARY

Run Date: 11/16/98
Time: 15:17:06

BATCH NUMBER: 8320318

PREP DATE: 11/16/98
DUE DATE 11/18/98

INITIALS: [signature]

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGH	FLA/WEIGH
D8K040105	CN3XR	3A	X 50 g	____g	____g	____g
WATER	TO DUE DATE:		11/18/98			
D8J230138	CMP34	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
D8J230138	CMP38	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
D8J230138	CMP3D	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
D8J230138	CMP3H	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
D8J230138	CMP3J	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
D8J230138	CMP3L	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
D8J230138	CMP3N	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
	CMP3NS		50 g	____g	____g	____g
	CMP3ND		50 g	____g	____g	____g
D8J280135	CMVMA	01	X ____g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
D8J230138	CN4LW	01	X ____g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
	CN4LWS		____g	____g	____g	____g
	CN4LWD		____g	____g	____g	____g
D8K070204	CN8AG	01	X 50 g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			
	CN8AGS		50 g	____g	____g	____g
	CN8AGD		50 g	____g	____g	____g
D8K070204	CN8AJ	01	X 54 g	____g	____g	____g
WATER	TO DUE DATE:		11/20/98			

RQC057 Quanterra Incorporated Run Date: 11/16/98
METALS PREP LOG/BATCH SUMMARY Time: 15:17:06

BATCH NUMBER: 8320318 PREP DATE: 11/16/98
DUE DATE 11/18/98 INITIALS: MD

LOT NUMBER	WORK ORDER	QC	ICP/WEIGHT	HG/WEIGHT	GFA/WEIGHT	FLA/WEIGH
D8K120126	CND9T	01	X 50 g	____ g	____ g	____ g
WATER	TO DUE DATE:		11/23/98			
D8K020120	CN1WK	01	X 50 g	____ g	____ g	____ g
WATER	TO DUE DATE:		11/24/98			
D8K020120	CN1XL	01	X 50 g	____ g	____ g	____ g
WATER	TO DUE DATE:		11/24/98			
D8K020120	CN203	01	X 50 g	____ g	____ g	____ g
WATER	TO DUE DATE:		11/24/98			
D8K020120	CN207	01	X 50 g	____ g	____ g	____ g
WATER	TO DUE DATE:		11/24/98			
D8K160000	CNH2LB	01	X 50 g	____ g	____ g	____ g
WATER	DUE DATE:		0/00/00			
	CNH2LC		50 g	____ g	____ g	____ g
	CNH2LL		50 g	____ g	____ g	____ g

LEVEL 2
BLANK AND CHECK STANDARD ON BATCH ✓
MS/MSD AND PDS ON BATCH ✓
CURVE PREPPED FOR HG ____
CORRECT SPIKES ADDED ✓
SPIKING SOLUTIONS DOCUMENTED ON BATCH LOG ✓

COMMENTS: Redol to 50ml

B-BLANK/C-LCS/D-MSD/I-REANALYSIS/L-LCSD/P-SERIAL DLTN/S-MS/X-SAMP DUP/Y-SAMP CONF/Z-PDS

SPIKING WITNESSED BY ____

QUANTERRA-DENVER

SUPER TRACE IDL -1998-qt 4

Effective 10-15-98

All units are mg/L

ANALYTE	IDL Super Trace	MDL aqueous	MDL soil	QRL	CRDL	LINEAR RANGE Super Trace
Aluminum	0.0286	0.0134	2.47	0.1	0.2	600
Antimony	0.0026	0.00194	0.135	0.01	0.06	50
Arsenic	0.00157	0.000975	0.197	0.01	0.01	20
Barium	0.0012	0.00642	0.134	0.01	0.2	25
Beryllium	0.000386	0.000321	0.0576	0.002	0.005	25
Boron	0.00153	0.00111	1.64	0.1		50
Cadmium	0.000501	0.000236	0.0465	0.005	0.005	10
Calcium	0.0101	0.0107		0.2	5	600
Chromium	0.001	0.00104	0.405	0.01	0.01	50
Cobalt	0.00111	0.000642	1.08	0.01	0.05	50
Copper	0.00189	0.00142	0.4	0.02	0.025	50
Iron	0.0131	0.036	1.56	0.1	0.1	1000
Lead	0.00161	0.00147	0.0765	0.003	0.003	25
Magnesium	0.0132	0.00738	1.905	0.2	5	1000
Manganese	0.000962	0.0036	0.088	0.01	0.015	50
Molybdenum	0.00112	0.000702	0.086	0.02		20
Nickel	0.00114	0.000486	1.42	0.04	0.04	50
Phosphorus	0.00154	0.0309	0.48	0.3		50
Selenium	0.00259	0.0019	0.348	0.005	0.005	50
Silica (SiO_2)	0.0569	0.03	16.11	0.5		428
Silver	0.00109	0.000504	0.072	0.01	0.01	25
Strontium	0.000936	0.000345	0.084	0.05		10
Thallium	0.00266	0.0017	0.164	0.01	0.01	50
Tin	0.00163	0.00171	0.333	0.1		50
Titanium	0.0009	0.000345	0.0834	0.015		10
Vanadium	0.00105	0.000531	0.096	0.01	0.05	50
Zinc	0.00153	0.00194	0.366	0.02	0.02	50

Instrument Upload — Run Log - Page 1

Started Mon Nov 23 21:39:21 1998 by OXELSONJ

Data File: UPL$DEN_DATA_ROOT:<TJA>11190.ASP;1

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
1	CAL BLK	1	19-NOV-1998	22:00:00			016
2	CAL STD	1	19-NOV-1998	22:04:00			016
3	HIGH STD	1	19-NOV-1998	22:08:00			016
4	ICV	1	19-NOV-1998	22:12:00			016
5	ICB	1	19-NOV-1998	22:21:00			016
6	CRI	1	19-NOV-1998	22:25:00			016
7	ICSA	1	19-NOV-1998	22:29:00			016
8	ICSAB	1	19-NOV-1998	22:33:00			016
9	CCV1	1	19-NOV-1998	22:37:00			016
10	CCB1	1	19-NOV-1998	22:43:00			016
11	CNHGGC	NOT USED	19-NOV-1998	22:51:00	8321228	D8K170000	016
12	CNHGGL	NOT USED	19-NOV-1998	22:55:00	8321228	D8K170000	016
13	CN4V2	2	19-NOV-1998	23:00:00	8321237	W899	016
14	CN4V2P	1	19-NOV-1998	23:04:00			016
15	CN4V2S	2	19-NOV-1998	23:09:00	8321237	W899	016
16	CN4V2D	2	19-NOV-1998	23:13:00	8321237	W899	016
17	CNH2LB	1	19-NOV-1998	23:18:00	8320318	D8K160000	016
18	CNH2LC	1	19-NOV-1998	23:22:00	8320318	D8K160000	016
19	CNH2LL	1	19-NOV-1998	23:26:00	8320318	D8K160000	016
20	CN3XR	1	19-NOV-1998	23:31:00	8320318	D8K040105	016
21	CCV2	1	19-NOV-1998	23:36:00			016
22	CCB2	1	19-NOV-1998	23:41:00			016
23	CMP34	1	19-NOV-1998	23:45:00	8320318	D8J230138	016
24	CMP38	1	19-NOV-1998	23:49:00	8320318	D8J230138	016
25	CMP3D	1	19-NOV-1998	23:53:00	8320318	D8J230138	016
26	CMP3H	1	19-NOV-1998	23:57:00	8320318	D8J230138	016
27	CMP3J	1	20-NOV-1998	00:02:00	8320318	D8J230138	016
28	CMP3L	1	20-NOV-1998	00:06:00	8320318	D8J230138	016
29	CMP3N	1	20-NOV-1998	00:10:00	8320318	D8J230138	016
30	CMP3NS	1	20-NOV-1998	00:14:00	8320318	D8J230138	016
31	CMP3ND	1	20-NOV-1998	00:18:00	8320318	D8J230138	016
32	CCV3	1	20-NOV-1998	00:24:00			016
33	CCB3	1	20-NOV-1998	00:28:00			016
34	CN8AG	1	20-NOV-1998	00:33:00	8320318	D8K070204	016
35	CN8AGP	1	20-NOV-1998	00:37:00			016
36	CN8AGS	1	20-NOV-1998	00:41:00	8320318	D8K070204	016
37	CN8AGD	1	20-NOV-1998	00:45:00	8320318	D8K070204	016
38	CN8AJ	1	20-NOV-1998	00:50:00	8320318	D8K070204	016
39	CND9T	1	20-NOV-1998	00:54:00			016
40	CN1WK	1	20-NOV-1998	00:58:00			016
41	CCV4	1	20-NOV-1998	01:03:00			016
42	CCB4	1	20-NOV-1998	01:07:00			016
43	CN1XL	1	20-NOV-1998	01:12:00			016
44	CN203	1	20-NOV-1998	01:16:00			016

(continued)

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
45	CN207	1	20-NOV-1998	01:20:00			016
46	ICSA	1	20-NOV-1998	01:25:00			016
47	ICSAB	1	20-NOV-1998	01:29:00			016
48	CCV5	1	20-NOV-1998	01:35:00			016
49	CCB5	1	20-NOV-1998	01:40:00			016
50	CNGFKFB	1	20-NOV-1998	01:44:00	8319136	D8K150000	016
51	CNGFKFC	1	20-NOV-1998	01:49:00	8319136	D8K150000	016
52	CNGFKFL	1	20-NOV-1998	01:53:00	8319136	D8K150000	016
53	CN0N6F	1	20-NOV-1998	01:58:00	8319136	W945	016
54	CN0N6FP	1	20-NOV-1998	02:02:00			016
55	CN0N6FS	1	20-NOV-1998	02:06:00	8319136	W945	016
56	CN0N6FD	1	20-NOV-1998	02:10:00	8319136	W945	016
57	CN0NWF	1	20-NOV-1998	02:15:00			016
58	CN2JPF	1	20-NOV-1998	02:19:00	8319136	D8K020188	016
59	CN2JQF	1	20-NOV-1998	02:23:00	8319136	D8K020188	016
60	CCV6	1	20-NOV-1998	02:28:00			016
61	CCB6	1	20-NOV-1998	02:33:00			016
62	CN2JRF	1	20-NOV-1998	02:37:00	8319136	D8K020188	016
63	CN32KF	1	20-NOV-1998	02:41:00			016
64	CN33WF	1	20-NOV-1998	02:45:00			016
65	CMQA2F	1	20-NOV-1998	02:50:00			016
66	CMWAFF	1	20-NOV-1998	02:54:00	8319136	W520	016
67	CMWAJF	1	20-NOV-1998	02:58:00	8319136	W520	016
68	CMWALF	1	20-NOV-1998	03:02:00	8319136	W520	016
69	CMWAQF	1	20-NOV-1998	03:06:00	8319136	W520	016
70	CMMVRF	1	20-NOV-1998	03:11:00			016
71	CMMWGF	1	20-NOV-1998	03:15:00			016
72	CCV7	1	20-NOV-1998	03:20:00			016
73	CCB7	1	20-NOV-1998	03:24:00			016
74	CMMWMF	1	20-NOV-1998	03:28:00			016
75	CMR67F	1	20-NOV-1998	03:33:00			016
76	CMR6LF	1	20-NOV-1998	03:37:00			016
77	CMR6NF	1	20-NOV-1998	03:41:00			016
78	ICSA	1	20-NOV-1998	03:46:00			016
79	ICSAB	1	20-NOV-1998	03:50:00			016
80	CCV8	1	20-NOV-1998	03:55:00			016
81	CCB8	1	20-NOV-1998	04:00:00			016

End of Report

Method: TRACE Standard: STD1-Blank
Run Time: 11/19/98 22:00:18

Elem	Ag	Sb	Al	As	B	Ba	Be
Avge	.0001	.0007	.0030	-.0008	.0005	.0001	-.0070
SDev	.0002	.0003	.0001	.0001	.0001	.0000	.0000
%RSD	167.1	44.88	1.527	8.651	22.22	42.06	.2368
#1	.0003	.0010	.0030	-.0007	.0006	.0001	-.0070
#2	-.0000	.0005	.0029	-.0008	.0005	.0001	-.0070

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Avge	.0030	.0004	-.0000	.0003	.0018	.0001	.0000
SDev	.0000	.0001	.0000	.0001	.0001	.0000	.0000
%RSD	1.374	25.42	124.7	20.58	3.145	33.09	70.84
#1	.0030	.0004	-.0000	.0004	.0019	.0002	.0000
#2	.0029	.0003	-.0001	.0003	.0018	.0001	.0000

Elem	Mn	Mo	Ni	P	SiO2	Sn	Sr
Avge	.0002	.0004	.0006	.0011	.0148	.0004	.0001
SDev	.0000	.0001	.0001	.0000	.0003	.0000	.0000
%RSD	19.75	17.49	20.26	3.100	2.194	3.973	26.35
#1	.0002	.0005	.0007	.0011	.0150	.0004	.0001
#2	.0002	.0004	.0005	.0011	.0145	.0004	.0001

Elem	Ti	Tl	V	Zn	Pb/1	Pb/2	Se/1
Avge	.0002	-.0014	.0001	.0002	.0173	-.0013	-.0018
SDev	.0000	.0001	.0001	.0000	.0056	.0010	.0010
%RSD	14.18	7.936	88.90	11.76	32.47	71.19	56.61
#1	.0002	-.0014	.0001	.0002	.0213	-.0020	-.0011
#2	.0002	-.0015	.0000	.0002	.0133	-.0007	-.0025

Elem	Se/2
Avge	.0010
SDev	.0002
%RSD	18.84
#1	.0011
#2	.0008

J. OXELSON 11/23/98
ICP-ST
SOP #: CORP-MT-0001 DEN

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	298034	--	--	--	--	--	--
SDev	504.1671	--	--	--	--	--	--
%RSD	.1691640	--	--	--	--	--	--
#1	297678	--	--	--	--	--	--
#2	298391	--	--	--	--	--	--

Method: TRACE Standard: HISTD
Run Time: 11/19/98 22:04:30

Elem	Ag	Sb	Al	As	B	Ba	Be
Avge	.2578	.1583	.1828	.6034	.1462	.3874	.8147
SDev	.0002	.0001	.0001	.0010	.0002	.0002	.0002
%RSD	.0761	.0897	.0552	.1652	.1172	.0410	.0264
#1	.2577	.1582	.1827	.6027	.1460	.3876	.8145
#2	.2580	.1584	.1829	.6041	.1463	.3873	.8148

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Avge	2.342	.9149	.1095	.1939	.1280	.0404	.1082
SDev	.003	.0018	.0001	.0002	.0001	.0001	.0001
%RSD	.1357	.1968	.0895	.0918	.0792	.1230	.1162
#1	2.340	.9136	.1094	.1938	.1281	.0403	.1081
#2	2.345	.9161	.1096	.1941	.1279	.0404	.1083

Elem	Mn	Mo	Ni	P	SiO2	Sn	Sr
Avge	.4606	.2441	.2600	.8966	13.35	1.274	.8708
SDev	.0001	.0003	.0000	.0003	.04	.001	.0005
%RSD	.0177	.1245	.0137	.0341	.2754	.0478	.0550
#1	.4606	.2438	.2599	.8968	13.32	1.273	.8712
#2	.4607	.2443	.2600	.8964	13.38	1.274	.8705

Elem	Ti	Tl	V	Zn	Pb/1	Pb/2	Se/1
Avge	.4317	3.738	.1367	.0756	2.120	1.102	4.011
SDev	.0001	.006	.0000	.0002	.010	.004	.012
%RSD	.0182	.1532	.0134	.2384	.4835	.3826	.2957
#1	.4317	3.734	.1367	.0755	2.113	1.105	4.003
#2	.4318	3.742	.1367	.0758	2.127	1.099	4.020

Elem	Se/2
Avge	2.125
SDev	.005
%RSD	.2221
#1	2.128
#2	2.122

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	289976	--	--	--	--	--	--
SDev	1290.470	--	--	--	--	--	--
%RSD	.4450257	--	--	--	--	--	--
#1	289064	--	--	--	--	--	--
#2	290889	--	--	--	--	--	--

Standardization Report Thu 11-19-98 10:08:34 PM page 1

Method: TRACE Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	HISTD	STD1-Blank	3.88038	-.000502	11/19/98 10:04:30
Sb	206.838	HISTD	STD1-Blank	6.39744	-.004617	11/19/98 10:04:30
Al	308.215	HISTD	STD1-Blank	55.7271	-.165575	11/19/98 10:04:30
As	189.042	HISTD	STD1-Blank	3.31005	.002582	11/19/98 10:04:30
B	249.678	HISTD	STD1-Blank	6.86769	-.003768	11/19/98 10:04:30
Ba	493.409	HISTD	STD1-Blank	2.58161	-.000234	11/19/98 10:04:30
Be	313.042	HISTD	STD1-Blank	1.20812	.008480	11/19/98 10:04:30
Ca	317.933	HISTD	STD1-Blank	17.0989	-.050517	11/19/98 10:04:30
Cd	226.502	HISTD	STD1-Blank	1.09437	-.000411	11/19/98 10:04:30
Co	228.616	HISTD	STD1-Blank	9.13939	.000260	11/19/98 10:04:30
Cr	267.716	HISTD	STD1-Blank	5.16416	-.001681	11/19/98 10:04:30
Cu	324.753	HISTD	STD1-Blank	7.92387	-.014530	11/19/98 10:04:30
Fe	271.441	HISTD	STD1-Blank	236.452	-.028966	11/19/98 10:04:30
Mg	279.078	HISTD	STD1-Blank	369.778	-.007449	11/19/98 10:04:30
Mn	257.610	HISTD	STD1-Blank	2.17294	-.000474	11/19/98 10:04:30
Mo	202.030	HISTD	STD1-Blank	4.10466	-.001742	11/19/98 10:04:30
Ni	231.604	HISTD	STD1-Blank	3.85607	-.002413	11/19/98 10:04:30
P	178.287	HISTD	STD1-Blank	11.1667	-.012158	11/19/98 10:04:30
Pb	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SiO2	288.158	HISTD	STD1-Blank	16.0475	-.236866	11/19/98 10:04:30
Sn	189.989	HISTD	STD1-Blank	7.85448	-.003149	11/19/98 10:04:30
Sr	421.552	HISTD	STD1-Blank	1.15063	-.000104	11/19/98 10:04:30
Ti	334.941	HISTD	STD1-Blank	2.31738	-.000422	11/19/98 10:04:30
Tl	190.864	HISTD	STD1-Blank	2.67340	.003834	11/19/98 10:04:30
V	292.402	HISTD	STD1-Blank	7.28799	-.000526	11/19/98 10:04:30
Zn	206.200	HISTD	STD1-Blank	13.1777	-.002697	11/19/98 10:04:30
Pb/1	220.351	HISTD	STD1-Blank	.477755	-.008257	11/19/98 10:04:30
Pb/2	220.352	HISTD	STD1-Blank	.90369?	.001220	11/19/98 10:04:30
Se/1	196.021	HISTD	STD1-Blank	2.49191	.004425	11/19/98 10:04:30
Se/2	196.022	HISTD	STD1-Blank	4.70722	-.004605	11/19/98 10:04:30

Method: TRACE Sample Name: HIGH STD Operator:
Run Time: 11/19/98 22:08:38
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.004	1.002	10.02	2.007	1.004	1.007	.9997
SDev	.000	.002	.00	.001	.002	.000	.0004
%RSD	.0163	.1542	.0007	.0729	.1729	.0032	.0376
#1	1.004	1.003	10.02	2.008	1.006	1.007	1.0000
#2	1.003	1.000	10.02	2.006	1.003	1.007	.9994
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.050	1.050	10.50	2.100	1.050	1.050	1.050
Low	.9500	.9500	9.500	1.900	.9500	.9500	.9500

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.05	1.002	.9999	1.001	1.004	10.00	39.99
SDev	.02	.000	.0015	.000	.000	.00	.02
%RSD	.0382	.0044	.1521	.0482	.0072	.0409	.0491
#1	40.06	1.002	1.001	1.001	1.004	10.01	40.00
#2	40.04	1.002	.9988	1.001	1.004	10.000	39.98
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	42.00	1.050	1.050	1.050	1.050	10.50	42.00
Low	38.00	.9500	.9500	.9500	.9500	9.500	38.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9989	1.002	1.001	10.03	1.004	10.05	214.8
SDev	.0003	.000	.000	.01	.002	.01	.1
%RSD	.0354	.0204	.0291	.0662	.2062	.1147	.0359
#1	.9986	1.002	1.001	10.04	1.002	10.06	214.7
#2	.9991	1.002	1.001	10.03	1.005	10.05	214.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1.050	1.050	1.050	10.50	1.050	10.50	
Low	.9500	.9500	.9500	9.500	.9500	9.500	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.997	1.002	1.002	9.999	1.001	.9979	.9969
SDev	.008	.000	.000	.011	.000	.0017	.0010
%RSD	.0799	.0411	.0240	.1054	.0017	.1662	.0996
#1	10.00	1.002	1.002	10.01	1.001	.9991	.9962
#2	9.991	1.003	1.002	9.992	1.001	.9967	.9976
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.50	1.050	1.050	10.50	1.050	1.050	
Low	9.500	.9500	.9500	9.500	.9500	.9500	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	1.007	10.00	10.08
SDev	.003	.02	.01
%RSD	.2589	.2000	.0724
#1	1.005	10.02	10.09
#2	1.009	9.989	10.08
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	291714	--	--	--	--	--	--
SDev	391.7371	--	--	--	--	--	--
%RSD	.1342881	--	--	--	--	--	--
#1	291437	--	--	--	--	--	--
#2	291991	--	--	--	--	--	--

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Method: TRACE Sample Name: ICV Operator:
Run Time: 11/19/98 22:12:44
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4937	.4844	4.890	.4836	.5300	.5089	.5018
SDev	.0002	.0004	.010	.0018	.0019	.0003	.0003
%RSD	.0463	.0822	.2012	.3601	.3634	.0511	.0704
#1	.4939	.4847	4.897	.4898	.5314	.5091	.5015
#2	.4935	.4841	4.883	.4873	.5287	.5087	.5020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	5.520	.5520	.5520	.5520	.5520
Low	.4480	.4480	4.480	.4480	.4480	.4480	.4480

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.92	.5082	.4974	.5034	.5033	5.025	20.13
SDev	.01	.0009	.0003	.0004	.0006	.017	.00
%RSD	.0462	.1689	.0616	.0775	.1146	.3332	.0135
#1	19.91	.5076	.4972	.5037	.5037	5.013	20.13
#2	19.92	.5088	.4976	.5031	.5029	5.037	20.13
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.10	.5520	.5520	.5520	.5520	5.520	22.10
Low	17.92	.4480	.4480	.4480	.4480	4.480	17.92

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4987	.5007	.5050	1.983	.5039	4.948	109.0
SDev	.0003	.0006	.0007	.002	.0004	.000	.1
%RSD	.0511	.1160	.1335	.1007	.0775	.0005	.1011
#1	.4985	.5003	.5045	1.984	.5036	4.948	109.1
#2	.4988	.5011	.5055	1.981	.5042	4.948	108.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	.5520	2.210	.5520	5.520	117.7
Low	.4480	.4480	.4480	1.792	.4480	4.480	96.30

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.968	.5014	.5042	4.962	.5007	.5031	.5005
SDev	.004	.0001	.0004	.004	.0001	.0007	.0019
%RSD	.0842	.0220	.0934	.0841	.0238	.1346	.3821
#1	4.965	.5014	.5039	4.959	.5008	.5027	.5018
#2	4.971	.5015	.5045	4.965	.5006	.5036	.4991
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.519	.5520	.5520	5.520	.5520	.5520	
Low	4.481	.4480	.4480	4.480	.4480	.4480	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5056	4.934	4.956
SDev	.0015	.003	.001
%RSD	.3046	.0508	.0244
#1	.5045	4.935	4.955
#2	.5067	4.932	4.957
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	297716	--	--	--	--	--	--
SDev	765.0895	--	--	--	--	--	--
%RSD	.2569864	--	--	--	--	--	--
#1	297175	--	--	--	--	--	--
#2	298257	--	--	--	--	--	--

Method: TRACE Sample Name: ICB Operator:
Run Time: 11/19/98 22:21:07
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	.0018	.0215	.0003	.0030	-.0000	.0005
SDev	.0017	.0050	.0078	.0028	.0022	.0004	.0000
%RSD	445.2	283.7	36.53	801.2	72.59	6187.	3.764
#1	.0016	.0053	.0270	.0023	.0045	.0002	.0005
#2	-.0008	-.0018	.0159	-.0016	.0014	-.0003	.0005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0100	.1000	.0100	.1000	.0100	.0020
Low	-.0100	-.0100	-.1000	-.0100	-.1000	-.0100	-.0020

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0088	-.0001	.0001	.0003	-.0005	-.0044	-.0032
SDev	.0028	.0004	.0013	.0012	.0015	.0253	.0111
%RSD	31.87	690.4	1875.	411.9	303.7	573.3	346.5
#1	-.0068	.0002	.0009	.0011	.0006	.0135	.0047
#2	-.0108	-.0004	-.0008	-.0005	-.0016	-.0223	-.0111
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0050	.0100	.0100	.0200	.1000	.2000
Low	-.2000	-.0050	-.0100	-.0100	-.0200	-.1000	-.2000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	.0001	-.0007	-.0008	-.0001	-.0001	.0028
SDev	.0002	.0011	.0013	.0016	.0014	.0035	.0173
%RSD	327.0	876.7	194.0	210.3	2137.	4070.	618.9
#1	.0001	.0009	.0002	.0004	.0009	.0024	.0151
#2	-.0002	-.0007	-.0016	-.0019	-.0011	-.0025	-.0095
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0200	.0400	.3000	.0030	.0050	.5000
Low	-.0100	-.0200	-.0400	-.3000	-.0030	-.0050	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	-.0000	.0000	-.0004	.0003	-.0015	.0017
SDev	.0022	.0001	.0005	.0041	.0013	.0005	.0067
%RSD	379.0	2153.	1590.	1162.	418.6	33.29	394.2
#1	.0022	.0001	.0004	.0026	.0012	-.0011	.0064
#2	-.0010	-.0001	-.0003	-.0033	-.0006	-.0018	-.0030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0150	.0100	.0100	.0200	
Low	-.1000	-.0500	-.0150	-.0100	-.0100	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.0009	-.0004	.0001
SDev	.0012	.0100	.0002
%RSD	129.6	2365.	232.4
#1	-.0018	.0066	.0002
#2	-.0001	-.0075	-.0001
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	305670	--	--	--	--	--	--
SDev	224.1529	--	--	--	--	--	--
%RSD	.0733315	--	--	--	--	--	--
#1	305512	--	--	--	--	--	--
#2	305829	--	--	--	--	--	--

Method: TRACE Sample Name: CRI Operator:
Run Time: 11/19/98 22:25:12
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0184	.1109	.0220	.0189	.0011	-.0001	.0104
SDev	.0007	.0001	.0058	.0016	.0003	.0001	.0000
%RSD	4.017	.1095	26.52	8.267	29.07	126.0	.0994
#1	.0189	.1108	.0261	.0200	.0013	-.0000	.0104
#2	.0179	.1110	.0179	.0178	.0009	-.0001	.0104
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.0300	.1800		.0300			.0150
Low	.0100	.0600		.0100			.0050

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0047	.0100	.0960	.0196	.0470	-.0085	-.0008
SDev	.0006	.0001	.0003	.0002	.0002	.0045	.0026
%RSD	12.44	.5208	.3621	1.210	.4886	52.96	317.0
#1	-.0043	.0101	.0962	.0198	.0471	-.0053	.0010
#2	-.0051	.0100	.0957	.0195	.0468	-.0117	-.0026
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High		.0150	.1500	.0300	.0750		
Low		.0050	.0500	.0100	.0250		

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0302	-.0009	.0797	-.0002	.0053	.0092	.0112
SDev	.0000	.0009	.0000	.0013	.0008	.0003	.0068
%RSD	.0344	12120.	.0134	899.0	14.86	3.399	60.83
#1	.0302	.0006	.0797	.0011	.0058	.0090	.0160
#2	.0302	-.0006	.0797	-.0015	.0047	.0095	.0064
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	.0450		.1200		.0090	.0150	
Low	.0150		.0400		.0030	.0050	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	.0000	-.0001	.0173	.0973	.0384	.0024
SDev	.0007	.0000	.0000	.0014	.0004	.0002	.0016
%RSD	57.24	102.8	21.35	7.813	.3918	.4547	66.44
#1	.0018	.0001	-.0001	.0182	.0976	.0382	.0035
#2	.0007	.0000	-.0001	.0163	.0971	.0385	.0013
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK
High				.0300	.1500	.0600	
Low				.0100	.0500	.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0067	.0021	.0128
SDev	.0004	.0007	.0008
%RSD	5.818	35.00	6.559
#1	.0070	.0026	.0122
#2	.0065	.0016	.0134
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	306407	--	--	--	--	--	--
SDev	504.8742	--	--	--	--	--	--
%RSD	.164[illegible]24	--	--	--	--	--	--
#1	306050	--	--	--	--	--	--
#2	306764	--	--	--	--	--	--

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Method: TRACE Sample Name: ICSA Operator:
Run Time: 11/19/98 22:29:17
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0025	464.3	.0028	-.0025	.0010	-.0002
SDev	.0002	.0042	.9	.0015	.0006	.0001	.0000
%RSD	107.5	167.4	.1885	52.65	24.64	5.942	25.06
#1	-.0000	.0055	463.7	.0038	-.0020	.0011	-.0002
#2	-.0003	-.0005	464.9	.0017	-.0029	.0010	-.0002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200	.0200	600.0	.0200	.1000	.0200	.0040
Low	-.0200	-.0200	400.0	-.0200	-.1000	-.0200	-.0040

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	490.2	.0002	-.0001	.0129	-.0007	186.8	534.6
SDev	4.0	.0001	.0002	.0005	.0005	1.1	4.1
%RSD	.8164	62.81	365.7	3.885	63.12	.5915	.7740
#1	487.4	.0003	.0001	.0132	-.0004	186.0	531.7
#2	493.0	.0001	-.0002	.0125	-.0010	187.6	537.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0	.0100	.0200	.0200	.0200	240.0	600.0
Low	400.0	-.0100	-.0200	-.0200	-.0200	160.0	400.0

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0023	-.0001	.0018	.0168	-.0048	-.0062	.0007
SDev	.0001	.0009	.0002	.0005	.0031	.0005	.0024
%RSD	5.979	695.6	13.23	2.850	64.91	7.630	346.7
#1	-.0022	.0005	.0020	.0172	L-.0070	-.0066	.0024
#2	-.0024	-.0008	.0016	.0165	-.0026	-.0059	-.0010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200	.0200	.0400	.3000	.0060	.0100	.5000
Low	-.0200	-.0200	-.0400	-.3000	-.0060	-.0100	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	-.0020	.0029	-.0130	-.0013	.0071	.0150
SDev	.0030	.0002	.0001	.0030	.0007	.0002	.0052
%RSD	376.9	9.001	2.874	23.30	54.62	3.154	34.87
#1	.0030	-.0019	.0030	-.0108	-.0008	.0072	.0187
#2	-.0013	-.0022	.0028	-.0151	-.0017	.0069	.0113
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0200	2.000	.0200	.0200	
Low	-.1000	-.0500	-.0200	-2.000	-.0200	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.0147	.0007	-.0097
SDev	.0073	.0055	.0035
%RSD	49.61	752.1	35.53
#1	-.0198	.0046	-.0122
#2	-.0095	-.0032	-.0073
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	273278	--	--	--	--	--	--
SDev	436.2849	--	--	--	--	--	--
%RSD	.1596484	--	--	--	--	--	--
#1	272970	--	--	--	--	--	--
#2	273587	--	--	--	--	--	--

Method: TRACE Sample Name: ICSAB Operator:
Run Time: 11/19/98 22:33:21
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.091	.9946	464.2	2.009	2.178	.5574	.5219
SDev	.000	.0026	.4	.001	.003	.0002	.0008
%RSD	.0234	.2563	.0763	.0536	.1308	.0335	.1629
#1	1.091	.9964	464.0	2.009	2.176	.5575	.5213
#2	1.091	.9928	464.5	2.010	2.180	.5572	.5225
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.200	1.200	600.0	2.400	2.400	.6000	.6000
Low	.8000	.8000	400.0	1.590	1.590	.4000	.4000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	484.9	1.003	.4857	.5168	.5566	185.9	527.8
SDev	1.4	.002	.0003	.0011	.0005	.3	1.4
%RSD	.2793	.2046	.0505	.2137	.0962	.1627	.2577
#1	484.0	1.002	.4855	.5160	.5570	185.7	526.8
#2	485.9	1.004	.4858	.5176	.5562	186.1	528.7
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0	1.200	.6000	.6000	.6000	240.0	600.0
Low	400.0	.8000	.4000	.4000	.4000	160.0	400.0

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5031	.9842	.9875	2.020	1.013	5.022	21.83
SDev	.0007	.0010	.0006	.000	.001	.016	.04
%RSD	.1377	.0987	.0608	.0028	.1418	.3136	.1666
#1	.5026	.9835	.9871	2.019	1.012	5.011	21.80
#2	.5036	.9849	.9879	2.020	1.014	5.033	21.85
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.6000	1.200	1.200		1.200	6.000	25.68
Low	.4000	.8000	.8000		.8000	4.000	17.12

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.689	1.039	1.019	9.678	.5086	.9534	1.025
SDev	.021	.000	.000	.035	.0004	.0029	.009
%RSD	.2211	.0009	.0421	.3602	.0836	.3051	.9059
#1	9.667	1.039	1.019	9.653	.5083	.9513	1.019
#2	9.711	1.039	1.019	9.703	.5089	.9555	1.032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	12.00	1.200	1.200	12.00	.6000	1.200	
Low	8.000	.8000	.8000	8.000	.4000	.8000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	1.007	4.975	5.046
SDev	.002	.036	.005
%RSD	.2463	.7292	.1089
#1	1.009	4.950	5.042
#2	1.005	5.001	5.049
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	269340	--	--	--	--	--	--
SDev	135.7645	--	--	--	--	--	--
%RSD	.0504064	--	--	--	--	--	--
#1	269436	--	--	--	--	--	--
#2	269244	--	--	--	--	--	--

Method: TRACE Sample Name: CCV1 Operator:
Run Time: 11/19/98 22:37:56
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4810	.4860	4.971	.9576	.4997	.5106	.4903
SDev	.0013	.0041	.021	.0051	.0027	.0016	.0005
%RSD	.2720	.8500	.4228	.5325	.5372	.3094	.0938
#1	.4819	.4889	4.986	.9612	.5016	.5117	.4906
#2	.4801	.4831	4.956	.9540	.4978	.5094	.4899
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	5.520	1.100	.5520	.5520	.5520
Low	.4480	.4480	4.480	.9000	.4480	.4480	.4480

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.61	.4879	.4829	.4844	.4946	4.950	19.41
SDev	.01	.0009	.0002	.0004	.0010	.036	.01
%RSD	.0564	.1842	.0359	.0929	.2060	.7236	.0767
#1	19.62	.4885	.4828	.4847	.4954	4.976	19.42
#2	19.61	.4873	.4830	.4841	.4939	4.925	19.39
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	.5520	.5520	.5520	.5520	5.520	22.00
Low	18.00	.4480	.4480	.4480	.4480	4.480	17.92

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4863	.4834	.4901	4.817	.4824	4.863	103.8
SDev	.0002	.0009	.0017	.003	.0010	.005	.1
%RSD	.0364	.1840	.3513	.0682	.2043	.1108	.1208
#1	.4864	.4840	.4913	4.819	.4831	4.866	103.7
#2	.4862	.4828	.4888	4.814	.4817	4.859	103.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	.5520	5.520	.5520	5.520	117.7
Low	.4480	.4480	.4480	4.480	.4480	4.480	96.30

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.783	.5025	.4922	4.874	.4876	.4762	.4746
SDev	.006	.0005	.0005	.001	.0011	.0005	.0064
%RSD	.1194	.1000	.1083	.0295	.2327	.1091	1.342
#1	4.787	.5029	.4925	4.873	.4884	.4766	.4791
#2	4.779	.5022	.4918	4.875	.4868	.4758	.4701
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520	.5520	.5520	5.520	.5520	.5520	
Low	4.480	.4480	.4480	4.480	.4480	.4480	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.4863	4.825	4.881
SDev	.0017	.006	.005
%RSD	.3500	.1332	.0998
#1	.4851	4.829	4.885
#2	.4875	4.820	4.878
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	296060	--	--	--	--	--	--
SDev	536.6940	--	--	--	--	--	--
%RSD	.1812791	--	--	--	--	--	--
#1	295680	--	--	--	--	--	--
#2	296439	--	--	--	--	--	--

Analysis Report Thu 11-19-98 10:47:02 PM page 1

Method: TRACE Sample Name: CCB1 Operator:
Run Time: 11/19/98 22:43:01
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	-.0007	.0730	-.0008	.0034	.0001	.0005
SDev	.0006	.0027	.0038	.0003	.0005	.0001	.0001
%RSD	223.1	403.4	5.206	39.84	13.80	107.9	10.22
#1	-.0002	-.0026	.0757	-.0006	.0037	.0000	.0006
#2	.0007	.0012	.0703	-.0010	.0031	.0001	.0005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0100	.1000	.0100	.1000	.0100	.0020
Low	-.0100	-.0100	-.1000	-.0100	-.1000	-.0100	-.0020

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0328	.0001	-.0000	.0001	-.0011	.0129	.0388
SDev	.0009	.0001	.0001	.0003	.0006	.0034	.0008
%RSD	2.650	111.3	224.0	223.4	49.92	26.25	1.994
#1	.0322	.0000	-.0001	-.0001	-.0015	.0105	.0382
#2	.0334	.0002	.0000	.0003	-.0007	.0153	.0393
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0050	.0100	.0100	.0200	.1000	.2000
Low	-.2000	-.0050	-.0100	-.0100	-.0200	-.1000	-.2000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0006	-.0006	.0009	.0005	.0029	.0262
SDev	.0000	.0008	.0004	.0009	.0007	.0008	.0008
%RSD	84.81	138.6	62.99	97.74	145.3	28.86	2.872
#1	.0000	.0000	-.0003	.0003	.0010	.0023	.0268
#2	.0000	.0011	-.0008	.0016	-.0000	.0035	.0257
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0200	.0400	.3000	.0030	.0050	.5000
Low	-.0100	-.0200	-.0400	-.3000	-.0030	-.0050	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0025	.0001	.0000	.0025	.0002	-.0014	-.0009
SDev	.0021	.0000	.0001	.0003	.0002	.0002	.0015
%RSD	82.66	15.08	735.2	13.76	131.8	11.36	156.0
#1	.0010	.0001	-.0001	.0023	.0000	-.0015	-.0020
#2	.0040	.0001	.0001	.0027	.0003	-.0012	.0001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0150	.0100	.0100	.0200	
Low	-.1000	-.0500	-.0150	-.0100	-.0100	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0012	-.0038	.0062
SDev	.0018	.0031	.0003
%RSD	149.6	82.82	4.983
#1	.0024	-.0060	.0065
#2	-.0001	-.0016	.0060
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	300063	--	--	--	--	--	--
SDev	643.4672	--	--	--	--	--	--
%RSD	.2144440	--	--	--	--	--	--
#1	299608	--	--	--	--	--	--
#2	300518	--	--	--	--	--	--

Analysis Report Thu 11-19-98 10:55:13 PM page 1

Method: TRACE Sample Name: CNHGGC Operator: JO
Run Time: 11/19/98 22:51:06
Comment: 8321278
Mode: CONC Corr. Factor: 100

NOT USED
11/19/98 JO

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.925	42.13	216.7	L175.3	101.1	193.8	4.892
SDev	.053	.16	.6	.9	.1	.7	.021
%RSD	1.360	.3709	.2744	.4873	.1366	.3483	.4362
#1	3.963	42.24	217.1	L174.7	101.0	194.3	4.877
#2	3.887	42.02	216.3	L175.9	101.2	193.3	4.907
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	4.536	56.50	240.0	216.0	125.0	224.0	5.900
Low	3.155	41.00	176.0	176.0	85.00	170.0	4.000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4737.	4.699	46.32	18.92	23.27	H144.4	4651.
SDev	21.	.001	.22	.06	.07	.6	22.
%RSD	.4465	.0231	.4810	.3109	.2883	.4446	.4830
#1	4722.	4.698	46.16	18.88	23.32	H144.0	4636.
#2	4752.	4.700	46.47	18.96	23.23	H144.9	4667.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	5700.	6.000	58.00	22.40	28.75	117.0	5650.
Low	4250.	4.000	40.00	16.60	21.00	87.00	4200.

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	47.63	92.82	46.58	879.9	46.56	167.9	2034.
SDev	.20	.56	.05	1.8	.20	.4	4.
%RSD	.4200	.5984	.1167	.2030	.4220	.2141	.1832
#1	47.49	92.43	46.54	878.6	46.42	167.7	2031.
#2	47.77	93.22	46.62	881.1	46.70	168.2	2036.
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	57.00	120.0	56.00		57.00	240.0	2568.
Low	42.00	80.00	42.00		41.00	160.0	1712.

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	171.8	95.02	92.73	180.9	46.99	47.13	46.81
SDev	1.5	.04	.24	1.3	.16	.39	.06
%RSD	.8554	.0421	.2572	.7109	.3490	.8176	.1322
#1	170.7	95.05	92.57	180.0	46.87	46.86	46.76
#2	172.8	94.99	92.90	181.8	47.10	47.40	46.85
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	240.0	120.0	120.0	240.0	58.00	60.00	
Low	160.0	80.00	80.00	160.0	42.50	40.00	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	46.44	165.2	169.3
SDev	.26	.4	.3
%RSD	.5679	.2367	.2030
#1	46.25	164.9	169.1
#2	46.62	165.4	169.6
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	294299	--	--	--	--	--	--
SDev	776.4033	--	--	--	--	--	--
%RSD	.2638144	--	--	--	--	--	--
#1	293750	--	--	--	--	--	--
#2	294848	--	--	--	--	--	--

11/19/98 JD

Analysis Report Thu 11-19-98 10:59:24 PM page 1

Method: TRACE Sample Name: CNHGGL Operator: JO
Run Time: 11/19/98 22:55:17
Comment: 8321228
Mode: CONC Corr. Factor: 100

NOT USED
11/19/98 JO

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.592	L38.05	L166.2	L157.5	101.1	176.0	4.413
SDev	.174	.26	1.2	.2	.2	.3	.007
%RSD	4.835	.6834	.7108	.1250	.2156	.1545	.1574
#1	3.715	L38.23	L167.0	L157.7	101.3	176.2	4.408
#2	3.469	L37.87	L165.4	L157.4	100.9	175.8	4.418
Errors	LC Pass	LC Low	LC Low	LC Low	LC Pass	LC Pass	LC Pass
High	4.536	56.50	240.0	216.0	125.0	224.0	5.900
Low	3.155	41.00	176.0	176.0	85.00	170.0	4.000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4261.	4.223	41.80	17.05	21.11	108.9	L4175.
SDev	8.	.036	.02	.07	.10	2.7	1.
%RSD	.1885	.8636	.0484	.4206	.4857	2.460	.0203
#1	4255.	4.249	41.78	17.11	21.19	110.8	L4174.
#2	4266.	4.197	41.81	17.01	21.04	107.0	L4175.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	5700.	6.000	58.00	22.40	28.75	117.0	5650.
Low	4250.	4.000	40.00	16.60	21.00	87.00	4200.

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	42.80	83.72	L41.93	887.9	41.72	L151.0	2049.
SDev	.02	.18	.04	.5	.07	.9	1.
%RSD	.0544	.2202	.0993	.0604	.1613	.5641	.0591
#1	42.78	83.85	L41.96	887.5	41.76	L151.6	2050.
#2	42.81	83.59	L41.90	888.3	41.67	L150.4	2048.
Errors	LC Pass	LC Pass	LC Low	NOCHECK	LC Pass	LC Low	LC Pass
High	57.00	120.0	56.00		57.00	240.0	2568.
Low	42.00	80.00	42.00		41.00	160.0	1712.

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	172.2	97.15	94.39	163.6	L42.39	41.37	41.70
SDev	.1	.01	.07	.5	.05	.05	1.49
%RSD	.0803	.0097	.0748	.3141	.1199	.1203	3.569
#1	172.3	97.16	94.34	164.0	L42.42	41.41	42.54
#2	172.1	97.14	94.44	163.2	L42.36	41.34	40.86
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	NOCHECK
High	240.0	120.0	120.0	240.0	58.00	60.00	
Low	160.0	80.00	80.00	160.0	42.50	40.00	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	41.72	147.2	152.9
SDev	.49	2.3	.1
%RSD	1.185	1.596	.0683
#1	41.37	148.8	153.0
#2	42.07	145.5	152.8
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	292784	--	--	--	--	--	--
SDev	1155.412	--	--	--	--	--	--
%RSD	.3946297	--	--	--	--	--	--
#1	291967	--	--	--	--	--	--
#2	293601	--	--	--	--	--	--

11/19/98 JD

Analysis Report Thu 11-19-98 11:04:46 PM page 1

Method: TRACE Sample Name: CN4V2 Operator: JO
Run Time: 11/19/98 23:00:39
Comment: 8321237
Mode: CONC Corr. Factor: 2

2X FOR HIGH Mg
11/19/98 JO

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0055	.0174	.1907	.0127	3.706	2.472	.0002
SDev	.0093	.0295	.0529	.0157	.021	.010	.0002
%RSD	167.8	169.8	27.74	124.2	.5617	.3903	100.7
#1	.0121	.0383	.2282	.0238	3.720	2.479	.0004
#2	-.0010	-.0035	.1533	.0015	3.691	2.465	.0001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00	100.0	1200.	40.00	100.0	50.00	50.00
Low	-.0200	-.0200	-.4000	-.0200	-.2000	-.4000	-.0040

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	242.0	.0005	.0171	.0213	.0062	9.828	1189.
SDev	.2	.0017	.0076	.0081	.0075	.284	1.
%RSD	.0718	310.9	44.21	38.19	122.0	2.886	.0685
#1	241.8	.0017	.0225	.0271	.0115	10.03	1189.
#2	242.1	-.0007	.0118	.0156	.0008	9.627	1190.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1200.	20.00	50.00	100.0	100.0	2000.	2000.
Low	-.4000	-.0100	-.0200	-.0200	-.0200	-.2000	-.4000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.001	.0087	.2060	.7247	.0032	.0036	98.92
SDev	.002	.0092	.0071	.0441	.0032	.0080	.02
%RSD	.1089	105.8	3.441	6.083	100.1	218.6	.0172
#1	1.999	.0152	.2110	.7559	.0054	.0093	93.93
#2	2.002	.0022	.2010	.6935	.0009	-.0020	98.91
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.0	100.0	50.00	100.0	50.00	100.0	856.0
Low	-.0200	-.0400	-.0800	-.6000	-.0060	-.0100	-1.000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0099	4.682	.0384	.0110	.0260	.0450	.0231
SDev	.0142	.004	.0028	.0159	.0073	.0034	.0476
%RSD	143.3	.0916	7.284	144.2	28.01	7.497	206.0
#1	.0200	4.685	.0404	.0223	.0311	.0474	.0568
#2	-.0001	4.679	.0365	-.0002	.0208	.0426	-.0106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	100.0	20.00	20.00	100.0	100.0	100.0	
Low	-.2000	-.1000	-.0300	-.0200	-.0200	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.0068	.0232	-.0061
SDev	.0190	.0493	.0127
%RSD	280.3	212.3	206.7
#1	-.0202	.0584	-.0151
#2	.0067	-.0116	.0028
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	290065	--	--	--	--	--	--
SDev	647.7098	--	--	--	--	--	--
%RSD	.2232982	--	--	--	--	--	--
#1	289607	--	--	--	--	--	--
#2	290523	--	--	--	--	--	--

Analysis Report Thu 11-19-98 11:08:57 PM page 1

Method: TRACE Sample Name: CN4V2P Operator: JO
Run Time: 11/19/98 23:04:50
Comment: S321237
Mode: CONC Corr. Factor: 10

Elem	Ag CN4V2	Sb NR	Al CN4V2	As CN4V2	B NR	Ba 99%	Be NR
Units	ppm<SDx1DL	ppm	ppm<SDx1DL	ppm<SDx1DL	ppm	ppm	ppm
Avge	.0049	-.0012	.3827	-.0038	3.635	2.485	.0049
SDev	.0019	.0019	.0221	.0061	.012	.008	.0003
%RSD	38.52	156.6	5.765	163.3	.3190	.3372	6.940
#1	.0036	-.0025	.3983	-.0081	3.643	2.491	.0052
#2	.0062	.0001	.3671	.0006	3.627	2.479	.0047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	250.0	500.0	6000.	500.0	500.0	300.0	250.0
Low	-.1000	-.1000	-2.000	-.1000	-1.000	-2.000	-.0200

Elem	Ca 95%	Cd CN4V2	Co CN4V2	Cr CN4V2	Cu CN4V2	Fe NR	Mg 98%
Units	ppm	ppm<SDx1DL	ppm<SDx1DL	ppm<SDx1DL	ppm<SDx1DL	ppm	ppm
Avge	254.6	-.0012	.0115	.0187	-.0089	12.66	1213.
SDev	.4	.0016	.0002	.0006	.0004	.07	3.
%RSD	.1732	140.7	1.911	2.992	4.372	.5580	.2293
#1	254.3	-.0023	.0117	.0183	-.0092	12.61	1211.
#2	255.0	-.0000	.0113	.0191	-.0086	12.71	1215.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.	100.0	250.0	500.0	500.0	5000.	6000.
Low	-2.000	-.0500	-.1000	-.1000	-.1000	-1.000	-2.000

Elem	Mn 96%	Mo CN4V2	Ni 100%	P NR	Pb CN4V2	Se CN4V2	SiO2 NR
Units	ppm	ppm<SDx1DL	ppm	ppm	ppm<SDx1DL	ppm<SDx1DL	ppm
Avge	2.078	.0052	.2060	.6279	-.0012	.0160	99.29
SDev	.002	.0108	.0003	.0080	.0050	.0005	.06
%RSD	.1028	206.6	.1382	1.268	432.7	3.183	.0557
#1	2.077	.0128	.2062	.6336	-.0047	.0164	99.33
#2	2.080	-.0024	.2058	.6223	.0024	.0157	99.26
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	500.0	250.0	1000.	250.0	500.0	4280.
Low	-.1000	-.2000	-.4000	-3.000	-.0300	-.0500	-5.000

Elem	Sn NR	Sr NR	Ti NR	Tl NR	V CN4V2	Zn CN4V2	Pb/1
Units	ppm	ppm	ppm	ppm	ppm<SDx1DL	ppm<SDx1DL	ppm
Avge	-.0022	4.808	.0384	-.0089	.0275	.0506	-.0151
SDev	.0077	.006	.0006	.0154	.0013	.0018	.0119
%RSD	348.1	.1239	1.693	172.1	4.879	3.467	78.38
#1	-.0076	4.812	.0379	-.0198	.0266	.0493	-.0067
#2	.0032	4.804	.0389	.0019	.0285	.0518	-.0235
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	500.0	100.0	100.0	500.0	1000.	500.0	
Low	-1.000	-.5000	-.1500	-.1000	-.1000	-.1000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0058	-.0440	.0460
SDev	.0135	.0196	.0090
%RSD	231.2	44.53	19.60
#1	-.0037	-.0302	.0396
#2	.0153	-.0579	.0524
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	302965	--	--	--	--	--	--
SDev	374.7666	--	--	--	--	--	--
%RSD	.1236996	--	--	--	--	--	--
#1	302700	--	--	--	--	--	--
#2	303230	--	--	--	--	--	--

Analysis Report Thu 11-19-98 11:13:07 PM page 1

Method: TRACE Sample Name: CN4V2S Operator: JO
Run Time: 11/19/98 23:09:00
Comment: 8321237
Mode: CONC Corr. Factor: 2

2K FOR HIGH Mg
11/19/98 JO

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0481	.5151	2.380	2.132	5.033	4.814	.0545
SDev	.0005	.0005	.003	.004	.000	.010	.0000
%RSD	1.057	.0914	.1321	.2100	.0093	.1993	.0130
#1	.0484	.5148	2.382	2.129	5.033	4.821	.0545
#2	.0477	.5154	2.378	2.135	5.032	4.807	.0545
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00	100.0	1200.	40.00	100.0	50.00	50.00
Low	-.0200	-.0200	-.4000	-.0200	-.2000	-.4000	-.0040

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	301.8	.0519	.5351	.2251	.2806	10.04	1280.
SDev	.5	.0000	.0004	.0002	.0007	.04	2.
%RSD	.1651	.0003	.0702	.0721	.2377	.3528	.1872
#1	301.4	.0519	.5348	.2252	.2811	10.01	1279.
#2	302.1	.0519	.5354	.2250	.2801	10.06	1282.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1200.	20.00	50.00	100.0	100.0	2000.	2000.
Low	-.4000	-.0100	-.0200	-.0200	-.0200	-.2000	-.4000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.587	1.067	.7276	11.53	.5268	2.172	126.0
SDev	.003	.002	.0019	.01	.0002	.001	.2
%RSD	.1001	.1531	.2605	.1283	.0401	.0318	.1666
#1	2.585	1.065	.7263	11.54	.5266	2.171	125.9
#2	2.588	1.068	.7290	11.52	.5269	2.172	126.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.0	100.0	50.00	100.0	50.00	100.0	856.0
Low	-.0200	-.0400	-.0800	-.6000	-.0060	-.0100	-1.000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.936	5.920	1.097	2.090	.5532	.5429	.5170
SDev	.003	.002	.001	.004	.0003	.0001	.0019
%RSD	.1591	.0414	.0824	.1931	.0524	.0094	.3649
#1	1.934	5.922	1.097	2.087	.5530	.5429	.5184
#2	1.938	5.918	1.098	2.093	.5534	.5429	.5157
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	100.0	20.00	20.00	100.0	100.0	100.0	
Low	-.2000	-.1000	-.0300	-.0200	-.0200	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5316	2.140	2.188
SDev	.0013	.005	.002
%RSD	.2368	.2560	.0777
#1	.5307	2.136	2.189
#2	.5325	2.144	2.187
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	-
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	286868	--	--	--	--	--	--
SDev	620.1326	--	--	--	--	--	--
%RSD	.2161739	--	--	--	--	--	--
#1	286429	--	--	--	--	--	--
#2	287306	--	--	--	--	--	--

Analysis Report Thu 11-19-98 11:17:18 PM page 1

Method: TRACE Sample Name: CN4V2D Operator: JO
Run Time: 11/19/98 23:13:11
Comment: 8321237
Mode: CONC Corr. Factor: 2

2x FOR HIGH Mg
11/19/98 JO

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0465	.5012	2.317	2.074	4.885	4.661	.0531
SDev	.0011	.0038	.015	.003	.009	.009	.0001
%RSD	2.398	.7567	.6325	.1378	.1876	.2039	.1012
#1	.0473	.5039	2.327	2.076	4.891	4.668	.0531
#2	.0457	.4985	2.307	2.072	4.878	4.654	.0531
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00	100.0	1200.	40.00	100.0	50.00	50.00
Low	-.0200	-.0200	-.4000	-.0200	-.2000	-.4000	-.0040

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	293.1	.0504	.5208	.2180	.2724	9.765	1240.
SDev	.4	.0003	.0001	.0001	.0015	.033	2.
%RSD	.1309	.5121	.0160	.0605	.5692	.3391	.1651
#1	292.8	.0506	.5207	.2181	.2735	9.788	1239.
#2	293.3	.0502	.5209	.2179	.2713	9.741	1242.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1200.	20.00	50.00	100.0	100.0	2000.	2000.
Low	-.4000	-.0100	-.0200	-.0200	-.0200	-.2000	-.4000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.510	1.036	.7069	11.22	.5117	2.107	122.2
SDev	.003	.002	.0001	.01	.0000	.002	.0
%RSD	.1189	.2277	.0067	.1009	.0033	.1166	.0369
#1	2.508	1.038	.7069	11.23	.5117	2.109	122.2
#2	2.512	1.034	.7070	11.21	.5117	2.105	122.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.0	100.0	50.00	100.0	50.00	100.0	856.0
Low	-.0200	-.0400	-.0800	-.6000	-.0060	-.0100	-1.000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.880	5.724	1.064	2.042	.5369	.5294	.5026
SDev	.002	.003	.000	.002	.0003	.0003	.0079
%RSD	.0999	.0478	.0029	.0843	.0542	.0546	1.569
#1	1.881	5.726	1.064	2.044	.5371	.5292	.5081
#2	1.879	5.722	1.064	2.041	.5366	.5296	.4970
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	100.0	20.00	20.00	100.0	100.0	100.0	
Low	-.2000	-.1000	-.0300	-.0200	-.0200	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5162	2.082	2.120
SDev	.0039	.008	.001
%RSD	.7570	.4033	.0240
#1	.5135	2.088	2.119
#2	.5190	2.076	2.120
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	288000	--	--	--	--	--	--
SDev	402.3438	--	--	--	--	--	--
%RSD	.1397029	--	--	--	--	--	--
#1	287715	--	--	--	--	--	--
#2	288284	--	--	--	--	--	--

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Method: TRACE Sample Name: CNH2LB Operator: JO
Run Time: 11/19/98 23:18:32
Comment: 8320318
Mode: CONC Corr. Factor: 1

REPREP FOR Al

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0005	-.0019	H1.090	-.0011	.0048	.0006	.0009
SDev	.0010	.0043	.009	.0002	.001[illegible]	.0002	.0000
%RSD	203.4	225.[illegible]	.[illegible]830	15.09	34.99	36.[illegible]3	1.458
			11/19/98 JO				
#1	.0002	.0011	H1.096	-.0012	.0060	.000[illegible]	.0009
#2	-.0012	-.0049	H1.084	-.0009	.0036	.0004	.0009
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0100	.1000	.0100	.1000	.0100	.0020
Low	-.0100	-.0100	-.1000	-.0100	-.1000	-.0100	-.0020

REPREP FOR Fe 11/19/98 JO

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	-.0002	-.0003	.0036	-.0009	H1.36[illegible]	.00[illegible]3
SDev	.0033	.0001	.0005	.0006	.0009	.011	.0120
%RSD	283.0	5[illegible].4[illegible]	181.6	17.03	103.0	.[illegible]843	163.6
#1	.0035	-.0001	.0001	.0040	-.0002	H1.3[illegible]5	.0159
#2	-.0012	-.0003	-.000[illegible]	.0031	-.0015	H1.359	-.0012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	.2000	.0050	.0100	.0100	.0200	.1000	.2000
Low	-.2000	-.0050	-.0100	-.0100	-.0200	-.1000	-.2000

REPREP FOR Mn 11/19/98 JO

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H.0226	.0004	-.000[illegible]	-.005[illegible]	-.001[illegible]	-.0012	.0458
SDev	.0000	.0008	.0004	.0026	.0012	.0000	.0106
%RSD	.1462	208.[illegible]	60.86	45.54	63.25	2.[illegible]85	23.2[illegible]
#1	H.0227	.0009	-.0004	-.007[illegible]	-.0026	-.0012	.0533
#2	H.0226	-.0002	-.0010	-.0039	-.0010	-.0012	.0382
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0200	.0400	.3000	.0030	.0050	.5000
Low	-.0100	-.0200	-.0400	-.3000	-.0030	-.0050	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0020	.0001	.0014	-.0004	-.0003	.0055	.0002
SDev	.000[illegible]	.0001	.0003	.0020	.0006	.0002	.0085
%RSD	35.[illegible]7	168.2	25.01	505.1	21[illegible].3	3.238	4[illegible]85.
#1	-.0015	.0001	.001[illegible]	.0010	.0002	.0056	.0062
#2	-.0025	-.0000	.0012	-.001[illegible]	-.000[illegible]	.0054	-.0059
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0150	.0100	.0100	.0200	
Low	-.1000	-.0500	-.0150	-.0100	-.0100	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.0028	.0026	-.0031
SDev	.0060	.0067	.0033
%RSD	211.9	254.4	104.6
#1	-.0071	.0073	-.0054
#2	.0014	-.0021	-.0008
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	-
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	308833	--	--	--	--	--	--
SDev	3169.960	--	--	--	--	--	--
%RSD	1.026417	--	--	--	--	--	--
#1	306596	--	--	--	--	--	--
#2	311070	--	--	--	--	--	--

Analysis Report Thu 11-19-98 11:26:49 PM page 1

Method: TRACE Sample Name: CNH2LC Operator: JO
Run Time: 11/19/98 23:22:42
Comment: S320318
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0431	.4754	2.155	1.999	1.141	2.112	.0533
SDev	.0000	.0002	.000	.001	.001	.003	.0001
%RSD	.0335	.0441	.0192	.0438	.0791	.1397	.2212
#1	.0431	.4756	2.155	2.000	1.141	2.114	.0534
#2	.0431	.4753	2.155	1.999	1.140	2.110	.0533
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0454	.5950	2.340	2.200	1.220	2.280	.0585
Low	.0327	.4050	1.720	1.620	.8200	1.720	.0415

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.70	.0515	.5067	.2017	.2495	H1.314	51.73
SDev	.04	.0000	.0000	.0002	.0002	.009	.04
%RSD	.0788	.0059	.0025	.0934	.0746	.6676	.0809
#1	51.67	.0515	.5067	.2016	.2497	H1.320	51.70
#2	51.72	.0515	.5067	.2018	.2494	H1.308	51.76
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	56.00	.0600	.6000	.2240	.2875	1.170	57.00
Low	44.00	.0400	.4000	.1660	.2100	.8700	42.00

NR 11/19/98 JO

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5128	1.012	.5090	10.22	.5136	2.041	24.01
SDev	.0004	.002	.0019	.02	.0028	.005	.01
%RSD	.0736	.2323	.3650	.2367	.5436	.2386	.0212
#1	.5126	1.010	.5077	10.23	.5117	2.038	24.01
#2	.5131	1.014	.5103	10.20	.5156	2.045	24.00
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	.5650	1.200	.5600		.5700	2.220	
Low	.4200	.8000	.4250		.4150	1.720	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.892	1.042	1.013	2.027	.5092	.5087	.5055
SDev	.004	.000	.000	.003	.0001	.0005	.0012
%RSD	.2322	.0407	.0152	.1433	.0165	.0970	.2315
#1	1.889	1.042	1.013	2.025	.5092	.5083	.5047
#2	1.895	1.042	1.013	2.029	.5091	.5090	.5063
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	2.280	1.200	1.120	2.400	.5700	.5650	
Low	1.720	.8000	.9700	1.600	.4250	.4100	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5177	2.033	2.046
SDev	.0036	.002	.007
%RSD	.6957	.0782	.3182
#1	.5152	2.032	2.041
#2	.5202	2.034	2.050
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	301428	--	--	--	--	--	--
SDev	403.0509	--	--	--	--	--	--
%RSD	.1337138	--	--	--	--	--	--
#1	301143	--	--	--	--	--	--
#2	301713	--	--	--	--	--	--

Analysis Report Thu 11-19-98 11:30:59 PM page 1

Method: TRACE Sample Name: CNH2LL Operator: JO
Run Time: 11/19/98 23:26:53
Comment: 832031S
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0430	.4785	2.190	2.020	1.121	2.135	.0538
SDev	.0007	.0023	.005	.003	.003	.003	.0001
%RSD	1.528	.4869	.2499	.1523	.2603	.1567	.1063
#1	.0434	.4801	2.194	2.022	1.123	2.138	.0539
#2	.0425	.4768	2.186	2.018	1.119	2.133	.0538
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0454	.5950	2.340	2.200	1.220	2.280	.0585
Low	.0327	.4050	1.720	1.620	.8200	1.720	.0415

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.17	.0520	.5109	.2030	.2516	H1.218	52.19
SDev	.01	.0002	.0000	.0003	.0008	.012	.00
%RSD	.0156	.4569	.0068	.1323	.3284	.9646	.0089
#1	52.16	.0522	.5109	.2028	.2522	H1.227	52.19
#2	52.17	.0518	.5109	.2032	.2510	H1.210	52.20
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	56.00	.0600	.6000	.2240	.2875	1.170	57.00
Low	44.00	.0400	.4000	.1660	.2100	.8700	42.00

NR 11/19/98 JO

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5168	1.021	.5145	9.836	.5165	2.063	24.92
SDev	.0000	.001	.0006	.014	.0004	.002	.03
%RSD	.0085	.1244	.1117	.1389	.0786	.0918	.1042
#1	.5168	1.020	.5141	9.846	.5168	2.064	24.94
#2	.5169	1.022	.5149	9.827	.5162	2.061	24.90
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	.5650	1.200	.5600		.5700	2.220	
Low	.4200	.8000	.4250		.4150	1.720	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.894	1.005	1.015	2.026	.5136	.5124	.5089
SDev	.002	.001	.000	.001	.0001	.0003	.0030
%RSD	.1076	.0671	.0169	.0401	.0112	.0585	.5812
#1	1.896	1.006	1.015	2.026	.5136	.5122	.5109
#2	1.893	1.005	1.015	2.025	.5136	.5126	.5068
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	2.280	1.200	1.120	2.400	.5700	.5650	
Low	1.720	.8000	.8700	1.600	.4250	.4100	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.5204	2.047	2.071
SDev	.0009	.007	.001
%RSD	.1668	.3440	.0326
#1	.5197	2.052	2.070
#2	.5210	2.042	2.071
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	-
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	301350	--	--	--	--	--	--
SDev	514.0666	--	--	--	--	--	--
%RSD	.1705882	--	--	--	--	--	--
#1	300986	--	--	--	--	--	--
#2	301713	--	--	--	--	--	--

Method: TRACE Sample Name: CN3XR Operator: JO
Run Time: 11/19/98 23:31:38
Comment: 8320318
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0004	.0086	1.604	.0033	1.357	.0687	.0004
SDev	.0000	.0014	.002	.0000	.001	.0001	.0001
%RSD	10.34	16.36	.0999	.7522	.0843	.0983	28.10
#1	-.0004	.0096	1.603	.0033	1.358	.0687	.0005
#2	-.0005	.0076	1.605	.0033	1.356	.0687	.0003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25.00	50.00	600.0	20.00	50.00	25.00	25.00
Low	-.0100	-.0100	-.1000	-.0100	-.1000	-.2000	-.0020

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	36.76	.0085	.0103	.0742	.0905	3.637	13.92
SDev	.02	.0000	.0001	.0001	.0003	.004	.03
%RSD	.0556	.2346	.7211	.1051	.3123	.1187	.2146
#1	36.74	.0085	.0104	.0743	.0907	3.640	13.90
#2	36.77	.0084	.0103	.0742	.0903	3.634	13.94
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0	10.00	50.00	50.00	50.00	1000.	1000.
Low	-.2000	-.0050	-.0100	-.0100	-.0100	-.1000	-.2000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1212	.0256	.0131	8.807	.2050	.0036	40.29
SDev	.0001	.0006	.0000	.003	.0001	.0008	.12
%RSD	.0509	2.363	.1776	.0292	.0378	22.80	.3034
#1	.1211	.0261	.0131	8.809	.2051	.0041	40.21
#2	.1212	.0252	.0130	8.805	.2050	.0030	40.38
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	50.00	20.00	50.00	50.00	25.00	50.00	428.0
Low	-.0100	-.0200	-.0400	-.3000	-.0030	-.0050	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0031	.6921	.0212	.0010	.0060	.7586	.1997
SDev	.0006	.0001	.0001	.0014	.0002	.0011	.0002
%RSD	18.63	.0186	.2777	134.0	2.818	.1513	.0967
#1	.0035	.6920	.0212	.0001	.0061	.7578	.1996
#2	.0027	.6922	.0211	.0020	.0059	.7594	.1998
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	50.00	10.00	10.00	50.00	50.00	50.00	
Low	-.1000	-.0500	-.0150	-.0100	-.0100	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.2077	.0034	.0036
SDev	.0002	.0004	.0010
%RSD	.1023	12.08	27.87
#1	.2078	.0037	.0043
#2	.2075	.0031	.0029
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	308302	--	--	--	--	--	--
SDev	990.6566	--	--	--	--	--	--
%RSD	.3213272	--	--	--	--	--	--
#1	307601	--	--	--	--	--	--
#2	309002	--	--	--	--	--	--

Method: TRACE Sample Name: CCV2 Operator: JO
Run Time: 11/19/98 23:36:24
Comment: 8320318
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4820	.4882	4.893	.9758	.5030	.5034	.5008
SDev	.0013	.0017	.009	.0013	.0017	.0022	.0008
%RSD	.2628	.3559	.1932	.1313	.3453	.4291	.1536
#1	.4829	.4894	4.900	.9749	.5042	.5049	.5002
#2	.4811	.4869	4.886	.9767	.5017	.5018	.5013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	5.520	1.100	.5520	.5520	.5520
Low	.4480	.4480	4.480	.9000	.4480	.4480	.4480

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.25	.5048	.4935	.4940	.4892	5.030	20.08
SDev	.05	.0014	.0005	.0002	.0015	.017	.06
%RSD	.2685	.2773	.1094	.0428	.3134	.3406	.2797
#1	20.21	.5039	.4931	.4939	.4903	5.042	20.04
#2	20.28	.5058	.4938	.4942	.4881	5.018	20.12
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	.5520	.5520	.5520	.5520	5.520	22.00
Low	18.00	.4480	.4480	.4480	.4480	4.480	17.92

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4933	.4900	.5025	4.903	.4984	4.947	104.7
SDev	.0008	.0002	.0000	.009	.0003	.013	.2
%RSD	.1587	.0339	.0019	.1808	.0675	.2623	.2170
#1	.4928	.4899	.5025	4.897	.4987	4.938	104.5
#2	.4939	.4901	.5025	4.909	.4982	4.956	104.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	.5520	5.520	.5520	5.520	117.7
Low	.4480	.4480	.4480	4.480	.4480	4.480	96.30

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.937	.4974	.4938	4.969	.4928	.5015	.4956
SDev	.021	.0009	.0005	.005	.0001	.0027	.0074
%RSD	.4304	.1767	.0949	.1002	.0163	.5378	1.501
#1	4.922	.4980	.4935	4.965	.4928	.4996	.5009
#2	4.952	.4968	.4941	4.972	.4927	.5035	.4904
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520	.5520	.5520	5.520	.5520	.5520	
Low	4.480	.4480	.4480	4.480	.4480	.4480	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.4998	4.927	4.957
SDev	.0032	.006	.023
%RSD	.6422	.1272	.4556
#1	.4975	4.931	4.941
#2	.5021	4.923	4.973
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	301869	--	--	--	--	--	--
SDev	718.4205	--	--	--	--	--	--
%RSD	.2379908	--	--	--	--	--	--
#1	301361	--	--	--	--	--	--
#2	302377	--	--	--	--	--	--

Method: TRACE Sample Name: CCB2 Operator: JO
Run Time: 11/19/98 23:41:10
Comment: 8320318
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0008	.0364	-.0005	.0032	.0000	.0008
SDev	.0002	.0014	.0086	.0001	.0011	.0001	.0000
%RSD	[illegible]	173.0	23.66	15.55	35.59	[illegible]	3.679
#1	.0004	.0018	.0425	-.0005	.0040	.0001	.0008
#2	.0001	-.0002	.0303	-.0006	.0024	-.0001	.0008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0100	.1000	.0100	.1000	.0100	.0020
Low	-.0100	-.0100	-.1000	-.0100	-.1000	-.0100	-.0020

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0091	-.0000	-.0002	.0001	-.0018	-.0011	-.0038
SDev	.0007	.0001	.0005	.0003	.0004	.0034	.0034
%RSD	7.822	303.6	323.1	232.5	20.89	313.7	90.03
#1	-.0086	-.0001	.0002	.0003	-.0021	.0013	-.0014
#2	-.0096	.0000	-.0005	-.0001	-.0016	-.0035	-.0062
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0050	.0100	.0100	.0200	.1000	.2000
Low	-.2000	-.0050	-.0100	-.0100	-.0200	-.1000	-.2000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	.0008	-.0009	-.0020	-.0008	.0013	.0011
SDev	.0000	.0008	.0007	.0009	.0001	.0019	.0088
%RSD	25.60	97.32	78.75	46.28	14.92	144.8	822.6
#1	-.0000	.0014	-.0004	-.0013	-.0008	.0027	.0073
#2	-.0000	.0003	-.0014	-.0026	-.0009	-.0000	-.0052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0200	.0400	.3000	.0030	.0050	.5000
Low	-.0100	-.0200	-.0400	-.3000	-.0030	-.0050	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	-.0000	-.0001	.0010	.0001	-.0014	-.0001
SDev	.0005	.0000	.0001	.0000	.0000	.0002	.0055
%RSD	103.0	8398.	112.9	3.935	20.30	11.64	4405.
#1	.0009	.0000	-.0000	.0011	.0001	-.0013	.0037
#2	.0001	-.0000	-.0001	.0010	.0001	-.0015	-.0040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0150	.0100	.0100	.0200	
Low	-.1000	-.0500	-.0150	-.0100	-.0100	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.0012	-.0000	.0020
SDev	.0025	.0034	.0012
%RSD	211.9	11870.	60.70
#1	-.0030	.0023	.0029
#2	.0006	-.0024	.0012
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	306264	--	--	--	--	--	--
SDev	1752.918	--	--	--	--	--	--
%RSD	.5723561	--	--	--	--	--	--
#1	305024	--	--	--	--	--	--
#2	307503	--	--	--	--	--	--

QUANTERRA-DENVER

SUPER TRACE IDL -1998-qt 4

Effective 10-15-98

All units are mg/L

ANALYTE	IDL Super Trace	MDL aqueous	MDL soil	QRL	CRDL	LINEAR RANGE Super Trace
Aluminum	0.0286	0.0134	2.47	0.1	0.2	600
Antimony	0.0026	0.00194	0.135	0.01	0.06	50
Arsenic	0.00157	0.000975	0.197	0.01	0.01	20
Barium	0.0012	0.00642	0.134	0.01	0.2	25
Beryllium	0.000386	0.000321	0.0576	0.002	0.005	25
Boron	0.00153	0.00111	1.64	0.1		50
Cadmium	0.000501	0.000236	0.0465	0.005	0.005	10
Calcium	0.0101	0.0107		0.2	5	600
Chromium	0.001	0.00104	0.405	0.01	0.01	50
Cobalt	0.00111	0.000642	1.08	0.01	0.05	50
Copper	0.00189	0.00142	0.4	0.02	0.025	50
Iron	0.0131	0.036	1.56	0.1	0.1	1000
Lead	0.00161	0.00147	0.0765	0.003	0.003	25
Magnesium	0.0132	0.00738	1.905	0.2	5	1000
Manganese	0.000962	0.0036	0.088	0.01	0.015	50
Molybdenum	0.00112	0.000702	0.086	0.02		20
Nickel	0.00114	0.000486	1.42	0.04	0.04	50
Phosphorus	0.00154	0.0309	0.48	0.3		50
Selenium	0.00259	0.0019	0.348	0.005	0.005	50
Silica (SiO_2)	0.0569	0.03	16.11	0.5		428
Silver	0.00109	0.000504	0.072	0.01	0.01	25
Strontium	0.000936	0.000345	0.084	0.05		10
Thallium	0.00266	0.0017	0.164	0.01	0.01	50
Tin	0.00163	0.00171	0.333	0.1		50
Titanium	0.0009	0.000345	0.0834	0.015		10
Vanadium	0.00105	0.000531	0.096	0.01	0.05	50
Zinc	0.00153	0.00194	0.366	0.02	0.02	50

Instrument Upload Run Log - Page 1

Started Tue Nov 24 19:54:29 1998 by LOGANW

Data File: UPL$DEN_DATA_ROOT:<TJA>981124W.ASP;1

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
1	STD1	1	24-NOV-1998	08:59:00			016
2	HISTD	1	24-NOV-1998	09:03:00			016
3	HIGH	1	24-NOV-1998	09:07:00			016
4	ICV	1	24-NOV-1998	09:11:00			016
5	ICB	1	24-NOV-1998	09:16:00			016
6	CRI	1	24-NOV-1998	09:20:00			016
7	ICSA	1	24-NOV-1998	09:24:00			016
8	ICSAB	1	24-NOV-1998	09:29:00			016
9	CCV1	1	24-NOV-1998	09:33:00			016
10	CCB1	1	24-NOV-1998	09:38:00			016
11	CNHGGL	1	24-NOV-1998	09:48:00	8321228	D8K170000	016
12	CNHGGC	1	24-NOV-1998	09:52:00	8321228	D8K170000	016
13	CNHGGB	1	24-NOV-1998	09:56:00	8321228	D8K170000	016
14	CMW23	1	24-NOV-1998	10:00:00	8307276	D8J280164	016
15	CMW23X	1	24-NOV-1998	10:04:00	8321228	D8J280164	016
16	CN5GW	1	24-NOV-1998	10:08:00	8321228	D8K050145	016
17	CN5J4	1	24-NOV-1998	10:12:00	8321228	D8K050145	016
18	CN3T8	1	24-NOV-1998	10:16:00	8321228	D8K030194	016
19	CN3T8P	5	24-NOV-1998	10:20:00			016
20	CN3T8S	1	24-NOV-1998	10:24:00	8321228	D8K030194	016
21	CCV2	1	24-NOV-1998	10:29:00			016
22	CCB2	1	24-NOV-1998	10:33:00			016
23	CN3T8S	1	24-NOV-1998	10:37:00	8321228	D8K030194	016
24	CN3TA	1	24-NOV-1998	10:41:00	8321228	D8K030194	016
25	CN3TG	1	24-NOV-1998	10:45:00	8321228	D8K030194	016
26	CN3TJ	1	24-NOV-1998	10:49:00	8321228	D8K030194	016
27	CN3TM	1	24-NOV-1998	10:53:00	8321228	D8K030194	016
28	CN3TP	1	24-NOV-1998	10:57:00	8321228	D8K030194	016
29	CN3TR	1	24-NOV-1998	11:01:00	8321228	D8K030194	016
30	CN3V0	1	24-NOV-1998	11:05:00	8321228	D8K030194	016
31	CN9FE	1	24-NOV-1998	11:09:00	8321228	D8K100113	016
32	CN9GL	1	24-NOV-1998	11:13:00	8321228	D8K100113	016
33	CNP28C	CCV3	24-NOV-1998	11:18:00	8326135	D8K220000	016
34	CCB3	CCB3	24-NOV-1998	11:22:00			016
35	CN9H0	1	24-NOV-1998	11:26:00	8321228	D8K100113	016
36	CN9H7	1	24-NOV-1998	11:30:00	8321228	D8K100113	016
37	CN9HD	1	24-NOV-1998	11:34:00	8321228	D8K100113	016
38	CN9HT	1	24-NOV-1998	11:38:00	8321228	D8K100113	016
39	CN9J3	1	24-NOV-1998	11:42:00	8321228	D8K100113	016
40	CN9J6	1	24-NOV-1998	11:46:00	8321228	D8K100113	016
41	CNP28L	CCV4	24-NOV-1998	11:50:00	8326135	D8K220000	016
42	CCB4	CCB4	24-NOV-1998	11:55:00			016
43	CNP28B	1	24-NOV-1998	12:10:00	8326135	D8K220000	016
44	CNDPE	1	24-NOV-1998	12:14:00	8326135	D8K120164	016

(continued)

#	WorkOrder	Dilution	Date	Time	Batch	Lot	Instrument
45	CNDPEP	5	24-NOV-1998	12:18:00			016
46	CNNFFC	CCV5	24-NOV-1998	12:22:00	8325114	D8K210000	016
47	CCB5	NOT USED	24-NOV-1998	12:26:00			016
48	CCB5	CCB5	24-NOV-1998	12:39:00			016
49	CNNFFB	1	24-NOV-1998	12:45:00	8325114	D8K210000	016
50	CN84W	1	24-NOV-1998	12:49:00	8325114	D8K070188	016
51	CN84WP	5	24-NOV-1998	12:53:00			016
52	CN857	1.08	24-NOV-1998	12:57:00	8325114	D8K070188	016
53	CN6RN	1	24-NOV-1998	13:01:00	8325114	D8K060123	016
54	CN6RT	1.04	24-NOV-1998	13:05:00	8325114	D8K060123	016
55	CNNFFL	CCV6	24-NOV-1998	13:09:00	8325114	D8K210000	016
56	CCB6	CCB6	24-NOV-1998	13:18:00			016
57	CNL5AB	1	24-NOV-1998	13:24:00	8323261	D8K190000	016
58	CNL5AC	1	24-NOV-1998	13:28:00	8323261	D8K190000	016
59	CNL5AL	1	24-NOV-1998	13:32:00	8323261	D8K190000	016
60	CN9J9	1	24-NOV-1998	13:36:00	8323261	D8K100113	016
61	CN9JD	1	24-NOV-1998	13:40:00	8323261	D8K100113	016
62	CN9JJ	1	24-NOV-1998	13:44:00	8323261	D8K100113	016
63	CN9L5	1	24-NOV-1998	13:48:00	8323261	D8K100135	016
64	CN9LD	1	24-NOV-1998	13:52:00	8323261	D8K100135	016
65	CN9LH	1	24-NOV-1998	13:56:00	8323261	D8K100135	016
66	CN9LL	1	24-NOV-1998	14:00:00	8323261	D8K100135	016
67	CCV7	1	24-NOV-1998	14:04:00			016
68	CCB7	1	24-NOV-1998	14:08:00			016
69	CN9LR	1	24-NOV-1998	14:12:00	8323261	D8K100135	016
70	CN9LX	1	24-NOV-1998	14:16:00	8323261	D8K100135	016
71	CN9M1	1	24-NOV-1998	14:20:00	8323261	D8K100135	016
72	CN9M2	1	24-NOV-1998	14:24:00	8323261	D8K100135	016
73	CN9M5	1	24-NOV-1998	14:28:00	8323261	D8K100135	016
74	CNA6W	1	24-NOV-1998	14:32:00	8323261	D8K100192	016
75	CNA6X	1	24-NOV-1998	14:36:00	8323261	D8K100192	016
76	CNA6XP	5	24-NOV-1998	14:40:00			016
77	CNA6XS	1	24-NOV-1998	14:44:00	8323261	D8K100192	016
78	CNA6XD	1	24-NOV-1998	14:48:00	8323261	D8K100192	016
79	CCV8	1	24-NOV-1998	14:53:00			016
80	CCB8	1	24-NOV-1998	14:57:00			016

End of Report

Standardization Rpt. Tue 11-24-98 09:03:22 AM page 1

Method: TRACE Standard: STD1-Blank
Run Time: 11/24/98 08:59:16

Elem	Ag	Sb	Al	As	B	Ba	Be
Avge	.0000	.0005	.0033	-.0010	.0003	.0000	-.0080
SDev	.0000	.0000	.0000	.0000	.0001	.0000	.0000
%RSD	106.1	1.957	.2946	4.870	25.42	60.72	.2264
#1	.0000	.0005	.0033	-.0010	.0002	.0000	-.0080
#2	.0000	.0004	.0033	-.0010	.0003	.0000	-.0080

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Avge	.0025	.0001	-.0001	.0003	.0019	.0001	.0000
SDev	.0000	.0001	.0000	.0000	.0000	.0001	.0000
%RSD	.8099	81.57	12.08	5.860	.2269	73.43	141.4
#1	.0025	.0002	-.0001	.0003	.0020	.0000	.0000
#2	.0025	.0001	-.0001	.0003	.0019	.0001	.0000

Elem	Mn	Mo	Ni	P	SiO2	Sn	Sr
Avge	.0001	.0002	.0004	.0010	.0157	.0004	.0000
SDev	.0000	.0001	.0001	.0001	.0000	.0000	.0000
%RSD	1.974	26.82	11.97	9.184	.1781	9.401	15.58
#1	.0001	.0001	.0003	.0009	.0158	.0004	.0000
#2	.0001	.0002	.0004	.0011	.0157	.0004	.0000

Elem	Ti	Tl	V	Zn	Pb/1	Pb/2	Se/1
Avge	.0001	-.0024	-.0000	.0001	.0098	.0002	-.0029
SDev	.0000	.0004	.0000	.0000	.0027	.0003	.0015
%RSD	28.42	18.04	12.99	7.328	27.09	154.5	52.77
#1	.0001	-.0021	-.0000	.0001	.0117	-.0000	-.0039
#2	.0001	-.0027	-.0000	.0001	.0079	.0004	-.0018

Elem	Se/2
Avge	.0013
SDev	.0002
%RSD	12.49
#1	.0014
#2	.0012

WLOgan
11-24-98
ST.1CP
SOP#CORP.MT-0001DEN

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	298538	--	--	--	--	--	--
SDev	411.5361	--	--	--	--	--	--
%RSD	.1378505	--	--	--	--	--	--
#1	298829	--	--	--	--	--	--
#2	298247	--	--	--	--	--	--

Method: TRACE Standard: HISTD
Run Time: 11/24/98 09:03:28

Elem	Ag	Sb	Al	As	B	Ba	Be
Avge	.2565	.1569	.1725	.5982	.1481	.4047	.8258
SDev	.0004	.0005	.0004	.0005	.0003	.0012	.0009
%RSD	.1599	.3351	.2320	.0896	.1876	.3016	.1057
#1	.2568	.1572	.1728	.5986	.1483	.4056	.8264
#2	.2562	.1565	.1723	.5978	.1479	.4039	.8252

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Avge	2.403	.9430	.1102	.1989	.1280	.0411	.1108
SDev	.000	.0003	.0002	.0003	.0001	.0001	.0001
%RSD	.0059	.0339	.2112	.1365	.0615	.1453	.0454
#1	2.403	.9432	.1103	.1991	.1281	.0411	.1108
#2	2.403	.9428	.1100	.1987	.1279	.0410	.1107

Elem	Mn	Mo	Ni	P	SiO2	Sn	Sr
Avge	.4684	.2508	.2659	.8880	13.07	1.310	.8916
SDev	.0006	.0001	.0001	.0009	.02	.001	.0021
%RSD	.1351	.0504	.0454	.0982	.1542	.0906	.2363
#1	.4688	.2507	.2659	.8886	13.05	1.311	.8930
#2	.4679	.2509	.2660	.8874	13.08	1.309	.8901

Elem	Ti	Tl	V	Zn	Pb/1	Pb/2	Se/1
Avge	.4349	3.774	.1382	.0802	2.184	1.134	3.986
SDev	.0007	.009	.0002	.0000	.007	.002	.013
%RSD	.1665	.2269	.1442	.0325	.3410	.1832	.3151
#1	.4354	3.780	.1383	.0802	2.190	1.132	3.995
#2	.4344	3.768	.1380	.0802	2.179	1.135	3.977

Elem	Se/2
Avge	2.076
SDev	.003
%RSD	.1599
#1	2.074
#2	2.078

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	289324	--	--	--	--	--	--
SDev	437.6991	--	--	--	--	--	--
%RSD	.1512831	--	--	--	--	--	--
#1	289015	--	--	--	--	--	--
#2	289634	--	--	--	--	--	--

Standardization Report Tue 11-24-98 09:07:32 AM page 1

Method: TRACE Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	HISTD	STD1-Blank	3.89942	-.000052	11/24/98 09:03:28
Sb	206.838	HISTD	STD1-Blank	6.44298	-.002914	11/24/98 09:03:28
Al	308.215	HISTD	STD1-Blank	59.2044	-.194546	11/24/98 09:03:28
As	189.042	HISTD	STD1-Blank	3.33758	.003315	11/24/98 09:03:28
B	249.678	HISTD	STD1-Blank	6.76420	-.001711	11/24/98 09:03:28
Ba	493.409	HISTD	STD1-Blank	2.47076	-.000029	11/24/98 09:03:28
Be	313.042	HISTD	STD1-Blank	1.19052	.009557	11/24/98 09:03:28
Ca	317.933	HISTD	STD1-Blank	16.6625	-.041107	11/24/98 09:03:28
Cd	226.502	HISTD	STD1-Blank	1.06143	-.000126	11/24/98 09:03:28
Co	228.616	HISTD	STD1-Blank	9.07267	.001231	11/24/98 09:03:28
Cr	267.716	HISTD	STD1-Blank	5.03452	-.001459	11/24/98 09:03:28
Cu	324.753	HISTD	STD1-Blank	7.93019	-.015447	11/24/98 09:03:28
Fe	271.441	HISTD	STD1-Blank	232.044	-.020997	11/24/98 09:03:28
Mg	279.078	HISTD	STD1-Blank	361.051	-.000605	11/24/98 09:03:28
Mn	257.610	HISTD	STD1-Blank	2.13656	-.000276	11/24/98 09:03:28
Mo	202.030	HISTD	STD1-Blank	3.99007	-.000708	11/24/98 09:03:28
Ni	231.604	HISTD	STD1-Blank	3.76553	-.001432	11/24/98 09:03:28
P	178.287	HISTD	STD1-Blank	11.2743	-.011217	11/24/98 09:03:28
Pb	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SiO2	288.158	HISTD	STD1-Blank	16.3954	-.258092	11/24/98 09:03:28
Sn	189.989	HISTD	STD1-Blank	7.63567	-.002929	11/24/98 09:03:28
Sr	421.552	HISTD	STD1-Blank	1.12377	-.000017	11/24/98 09:03:28
Ti	334.941	HISTD	STD1-Blank	2.29995	-.000270	11/24/98 09:03:28
Tl	190.864	HISTD	STD1-Blank	2.64707	.006305	11/24/98 09:03:28
V	292.402	HISTD	STD1-Blank	7.20652	.000133	11/24/98 09:03:28
Zn	206.200	HISTD	STD1-Blank	12.4099	-.001226	11/24/98 09:03:28
Pb/1	220.351	HISTD	STD1-Blank	.461967	-.004537	11/24/98 09:03:28
Pb/2	220.352	HISTD	STD1-Blank	.879479	-.000159	11/24/98 09:03:28
Se/1	196.021	HISTD	STD1-Blank	2.50713	.007161	11/24/98 09:03:28
Se/2	196.022	HISTD	STD1-Blank	4.81920	-.006416	11/24/98 09:03:28

Method: TRACE Sample Name: HIGH STD Operator:
Run Time: 11/24/98 09:07:35
Comment: CALIBRATION Not Needed 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9985	.9992	10.01	1.991	.9996	1.004	.9949
SDev	.0018	.0012	.00	.000	.0016	.001	.0013
%RSD	.1792	.1235	.0394	.0138	.1642	.0519	.1307
#1	.9998	1.000	10.00	1.991	1.001	1.004	.9958
#2	.9973	.9983	10.01	1.990	.9985	1.003	.9940
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.050	1.050	10.50	2.100	1.050	1.050	1.050
Low	.9500	.9500	9.500	1.900	.9500	.9500	.9500

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	39.92	.9963	.9945	.9964	1.002	9.961	39.81
SDev	.08	.0021	.0027	.0021	.000	.021	.10
%RSD	.1932	.2105	.2769	.2110	.0267	.2122	.2516
#1	39.97	.9978	.9965	.9979	1.002	9.976	39.88
#2	39.86	.9948	.9926	.9950	1.001	9.946	39.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	42.00	1.050	1.050	1.050	1.050	10.50	42.00
Low	38.00	.9500	.9500	.9500	.9500	9.500	38.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9957	.9971	.9970	9.966	.9943	9.936	214.4
SDev	.0017	.0000	.0029	.026	.0055	.057	.0
%RSD	.1734	.0038	.2883	.2625	.5501	.5749	.0135
#1	.9969	.9972	.9990	9.985	.9982	9.977	214.5
#2	.9945	.9971	.9950	9.948	.9904	9.896	214.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1.050	1.050	1.050	10.50	1.050	10.50	
Low	.9500	.9500	.9500	9.500	.9500	9.500	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.942	.9998	.9974	9.943	.9982	.9917	.9896
SDev	.030	.0002	.0013	.010	.0012	.0027	.0042

%RSD	.2969	.0236	.1301	.0994	.1202	.2728	.4248
#1	9.963	1.0000	.9983	9.950	.9990	.9936	.9925
#2	9.921	.9996	.9965	9.936	.9973	.9898	.9866
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10.50	1.050	1.050	10.50	1.050	1.050	
Low	9.500	.9500	.9500	9.500	.9500	.9500	
Elem	Pb/2	Se/1	Se/2				

Units	ppm	ppm	ppm
Avge	.9966	9.913	9.948
SDev	.0061	.048	.062
%RSD	.6122	.4869	.6187
#1	1.001	9.947	9.992
#2	.9923	9.878	9.905
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	289704	--	--	--	--	--	--
SDev	1306.026	--	--	--	--	--	--
%RSD	.4508132	--	--	--	--	--	--
#1	288781	--	--	--	--	--	--
#2	290628	--	--	--	--	--	--

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Method: TRACE Sample Name: ICV Operator:
Run Time: 11/24/98 09:11:42
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4900	.4752	4.778	.4828	.5168	.4974	.4925
SDev	.0000	.0017	.003	.0003	.0005	.0010	.0001
%RSD	.0009	.3578	.0693	.0536	.0921	.1941	.0222
#1	.4900	.4764	4.780	.4830	.5165	.4981	.4926
#2	.4900	.4740	4.775	.4826	.5171	.4967	.4924
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	5.520	.5520	.5520	.5520	.5520
Low	.4480	.4480	4.480	.4480	.4480	.4480	.4480

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.56	.4975	.4897	.4954	.4909	4.938	19.74
SDev	.01	.0002	.0003	.0006	.0003	.005	.00
%RSD	.0437	.0489	.0682	.1255	.0648	.0926	.0164
#1	19.56	.4977	.4900	.4959	.4911	4.935	19.74
#2	19.55	.4974	.4895	.4950	.4907	4.941	19.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.10	.5520	.5520	.5520	.5520	5.520	22.10
Low	17.92	.4480	.4480	.4480	.4480	4.480	17.92

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4905	.4928	.4949	1.956	.4933	4.850	107.2
SDev	.0002	.0001	.0013	.002	.0001	.002	.1
%RSD	.0339	.0281	.2712	.0928	.0142	.0349	.1078
#1	.4906	.4927	.4958	1.955	.4934	4.851	107.3
#2	.4904	.4929	.4939	1.957	.4933	4.849	107.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	.5520	2.210	.5520	5.520	117.7
Low	.4480	.4480	.4480	1.792	.4480	4.480	96.30

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.886	.4918	.4971	4.887	.4934	.4930	.4923
SDev	.008	.0004	.0001	.003	.0002	.0000	.0005

SDev	.0008	.0001	.0001	.0008	.0002	.0001	.0008
%RSD	.1623	.0776	.0119	.0513	.0470	.0087	.1078
#1	4.892	.4920	.4970	4.888	.4935	.4930	.4927
#2	4.880	.4915	.4971	4.885	.4932	.4929	.4919
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.519	.5520	.5520	5.520	.5520	.5520	
Low	4.481	.4480	.4480	4.480	.4480	.4480	
Elem	Pb/2	Se/1	Se/2				

Units	ppm	ppm	ppm
Avge	.4938	4.845	4.852
SDev	.0002	.002	.002
%RSD	.0324	.0351	.0348
#1	.4937	4.847	4.853
#2	.4939	4.844	4.851
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	293707	--	--	--	--	--	--
SDev	48.08326	--	--	--	--	--	--
%RSD	.0163712	--	--	--	--	--	--
#1	293741	--	--	--	--	--	--
#2	293673	--	--	--	--	--	--

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Method: TRACE Sample Name: ICB Operator:
Run Time: 11/24/98 09:16:47
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0018	.0199	.0002	.0020	.0001	.0003
SDev	.0007	.0008	.0061	.0002	.0014	.0002	.0000
%RSD	356.9	47.99	30.39	70.67	70.51	145.9	7.171
#1	.0007	.0024	.0242	.0003	.0030	.0003	.0003
#2	-.0003	.0012	.0156	.0001	.0010	-.0000	.0003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0100	.1000	.0100	.1000	.0100	.0020
Low	-.0100	-.0100	-.1000	-.0100	-.1000	-.0100	-.0020

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	.0002	.0007	.0001	-.0002	.0048	.0025
SDev	.0004	.0001	.0002	.0004	.0005	.0163	.0043
%RSD	106.3	68.04	22.90	427.4	227.5	342.4	176.5
#1	.0007	.0003	.0009	.0004	.0001	.0163	.0055
#2	.0001	.0001	.0006	-.0002	-.0006	-.0068	-.0006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0050	.0100	.0100	.0200	.1000	.2000
Low	-.2000	-.0050	-.0100	-.0100	-.0200	-.1000	-.2000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0012	-.0001	-.0013	.0001	.0008	.0282
SDev	.0001	.0001	.0006	.0030	.0001	.0012	.0167
%RSD	104.5	7.781	475.5	233.3	250.6	148.6	59.17
#1	.0001	.0013	.0003	.0008	-.0000	.0017	.0400
#2	.0000	.0012	-.0005	-.0034	.0001	-.0000	.0164
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0200	.0400	.3000	.0030	.0050	.5000
Low	-.0100	-.0200	-.0400	-.3000	-.0030	-.0050	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0000	.0001	.0048	.0006	-.0002	-.0001
SDev	.0006	.0000	.0001	.0002	.0002	.0002	.0014

%RSD	442.4	90.86	265.3	3.733	37.94	103.5	1154.
#1	.0006	.0001	.0002	.0047	.0008	-.0000	.0009
#2	-.0003	.0000	-.0000	.0049	.0004	-.0003	-.0012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0150	.0100	.0100	.0200	
Low	-.1000	-.0500	-.0150	-.0100	-.0100	-.0200	
Elem	Pb/2	Se/1	Se/2				

Units	ppm	ppm	ppm
Avge	.0001	-.0015	.0020
SDev	.0009	.0009	.0022
%RSD	650.7	58.58	114.4
#1	-.0005	-.0021	.0036
#2	.0008	-.0009	.0004
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	296748	--	--	--	--	--	--
SDev	1751.504	--	--	--	--	--	--
%RSD	.5902316	--	--	--	--	--	--
#1	295510	--	--	--	--	--	--
#2	297987	--	--	--	--	--	--

Method: TRACE Sample Name: CRI Operator:
Run Time: 11/24/98 09:20:52
Comment: CALIBRATION Not Needed 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0187	.1144	.0185	.0184	.0003	-.0001	.0102
SDev	.0003	.0003	.0002	.0005	.0006	.0001	.0000
%RSD	1.398	.2374	1.187	2.769	196.1	131.3	.3139
#1	.0189	.1142	.0183	.0187	.0008	-.0000	.0102
#2	.0185	.1146	.0186	.0180	-.0001	-.0001	.0102
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.0300	.1800		.0300			.0150
Low	.0100	.0600		.0100			.0050

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0018	.0101	.0975	.0196	.0472	-.0067	-.0024
SDev	.0004	.0000	.0005	.0001	.0002	.0032	.0009
%RSD	21.39	.3654	.5165	.7522	.5100	48.66	35.32
#1	-.0015	.0101	.0979	.0197	.0474	-.0090	-.0018
#2	-.0021	.0101	.0972	.0195	.0471	-.0044	-.0030
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High		.0150	.1500	.0300	.0750		
Low		.0050	.0500	.0100	.0250		

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0303	-.0001	.0792	-.0014	.0053	.0089	.0053
SDev	.0000	.0001	.0002	.0016	.0008	.0010	.0038
%RSD	.0191	87.67	.2049	112.2	15.93	11.68	71.97
#1	.0303	-.0001	.0791	-.0025	.0047	.0081	.0080
#2	.0304	-.0002	.0794	-.0003	.0059	.0096	.0026
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	.0450		.1200		.0090	.0150	
Low	.0150		.0400		.0030	.0050	

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0019	.0000	-.0001	.0208	.0981	.0392	.0049
SDev	.0005	.0000	.0001	.0022	.0001	.0002	.0001

%RSD	26.16	68.25	106.2	10.82	.1383	.4157	2.886
#1	-.0015	.0000	-.0000	.0223	.0982	.0394	.0048
#2	-.0022	.0000	-.0002	.0192	.0980	.0391	.0050
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK
High				.0300	.1500	.0600	
Low				.0100	.0500	.0200	
Elem	Pb/2	Se/1	Se/2				

Units	ppm	ppm	ppm
Avge	.0054	.0036	.0115
SDev	.0012	.0024	.0004
%RSD	21.85	66.79	3.143
#1	.0046	.0019	.0112
#2	.0063	.0053	.0117
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	298292	--	--	--	--	--	--
SDev	105.3589	--	--	--	--	--	--
%RSD	.0353208	--	--	--	--	--	--
#1	298366	--	--	--	--	--	--
#2	298217	--	--	--	--	--	--

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Method: TRACE Sample Name: ICSA Operator:
Run Time: 11/24/98 09:24:57
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0039	459.1	.0020	-.0032	.0012	-.0002
SDev	.0004	.0016	.6	.0008	.0011	.0000	.0000
%RSD	798.5	40.60	.1221	39.36	33.73	.1001	1.003
#1	.0003	.0050	459.5	.0026	-.0025	.0012	-.0002
#2	-.0002	.0028	458.7	.0015	-.0040	.0012	-.0002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200	.0200	600.0	.0200	.1000	.0200	.0040
Low	-.0200	-.0200	400.0	-.0200	-.1000	-.0200	-.0040

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	481.5	-.0013	.0008	.0126	-.0003	182.7	524.6
SDev	.3	.0001	.0003	.0001	.0001	.1	.4
%RSD	.0555	11.14	37.04	.8261	41.68	.0486	.0741
#1	481.7	-.0012	.0010	.0127	-.0002	182.8	524.9
#2	481.3	-.0014	.0006	.0126	-.0004	182.6	524.3
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0	.0100	.0200	.0200	.0200	240.0	600.0
Low	400.0	-.0100	-.0200	-.0200	-.0200	160.0	400.0

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0018	.0010	.0016	.0152	.0006	-.0010	.0003
SDev	.0000	.0002	.0001	.0048	.0015	.0040	.0013
%RSD	1.760	15.27	3.343	31.55	249.1	380.5	429.8
#1	-.0018	.0011	.0016	.0118	-.0005	-.0039	.0012
#2	-.0019	.0009	.0015	.0186	.0017	.0018	-.0006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0200	.0200	.0400	.3000	.0060	.0100	.5000
Low	-.0200	-.0200	-.0400	-.3000	-.0060	-.0100	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0014	-.0022	.0028	-.0109	-.0004	.0061	.0117
SDev	.0011	.0000	.0000	.0030	.0001	.0001	.0031

%RSD	75.33	.9961	.9434	27.81	31.84	2.508	26.74
#1	-.0007	-.0022	.0028	-.0130	-.0003	.0060	.0139
#2	-.0021	-.0022	.0029	-.0087	-.0005	.0062	.0094
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0200	2.000	.0200	.0200	
Low	-.1000	-.0500	-.0200	-2.000	-.0200	-.0200	
Elem	Pb/2	Se/1	Se/2				

Units	ppm	ppm	ppm
Avge	-.0049	.0053	-.0042
SDev	.0038	.0024	.0048
%RSD	78.46	45.13	112.7
#1	-.0076	.0036	-.0076
#2	-.0022	.0070	-.0009
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	%Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	272022	--	--	--	--	--	--
SDev	265.8722	--	--	--	--	--	--
%RSD	.0977392	--	--	--	--	--	--
#1	271834	--	--	--	--	--	--
#2	272210	--	--	--	--	--	--

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Method: TRACE Sample Name: ICSAB Operator:
Run Time: 11/24/98 09:29:02
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.065	.9705	461.1	1.981	2.146	.5306	.5111
SDev	.000	.0015	.2	.005	.004	.0006	.0003
%RSD	.0255	.1500	.0331	.2769	.2094	.1187	.0491
#1	1.066	.9716	461.0	1.977	2.143	.5310	.5110
#2	1.065	.9695	461.2	1.985	2.149	.5301	.5113
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.200	1.200	600.0	2.400	2.400	.6000	.6000
Low	.8000	.8000	400.0	1.590	1.590	.4000	.4000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	483.1	.9792	.4754	.5053	.5364	183.2	524.3
SDev	1.0	.0005	.0006	.0001	.0000	.0	.4
%RSD	.2023	.0466	.1224	.0268	.0075	.0235	.0844
#1	482.5	.9789	.4750	.5052	.5364	183.2	523.9
#2	483.8	.9796	.4758	.5054	.5364	183.2	524.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0	1.200	.6000	.6000	.6000	240.0	600.0
Low	400.0	.8000	.4000	.4000	.4000	160.0	400.0

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4914	.9696	.9623	2.001	.9894	4.968	21.72
SDev	.0000	.0018	.0018	.006	.0010	.006	.01
%RSD	.0065	.1815	.1915	.2954	.1009	.1257	.0253
#1	.4913	.9684	.9610	2.005	.9901	4.973	21.72
#2	.4914	.9708	.9636	1.997	.9887	4.964	21.71
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.6000	1.200	1.200		1.200	6.000	25.68
Low	.4000	.8000	.8000		.8000	4.000	17.12

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.608	1.007	1.002	9.523	.4964	.9396	.9971
SDev	.003	.001	.000	.003	.0002	.0001	.0037

%RSD	.0286	.0495	.0296	.0337	.0353	.0141	.3715
#1	9.610	1.008	1.002	9.525	.4962	.9395	.9997
#2	9.606	1.007	1.002	9.521	.4965	.9397	.9945
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	12.00	1.200	1.200	12.00	.6000	1.200	
Low	8.000	.8000	.8000	8.000	.4000	.8000	
Elem	Pb/2	Se/1	Se/2				

Units	ppm	ppm	ppm
Avge	.9856	4.937	4.984
SDev	.0003	.010	.004
%RSD	.0357	.1984	.0897
#1	.9854	4.944	4.987
#2	.9859	4.930	4.980
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	270384	--	--	--	--	--	--
SDev	195.8686	--	--	--	--	--	--
%RSD	.0724410	--	--	--	--	--	--
#1	270245	--	--	--	--	--	--
#2	270522	--	--	--	--	--	--

Method: TRACE Sample Name: CCV1 Operator:
Run Time: 11/24/98 09:33:37
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4794	.4831	4.810	.9601	.4894	.4997	.4913
SDev	.0000	.0013	.007	.0005	.0012	.0007	.0001
%RSD	.0047	.2579	.1406	.0558	.2453	.1436	.0213
#1	.4793	.4822	4.815	.9597	.4902	.5002	.4913
#2	.4794	.4840	4.806	.9605	.4885	.4992	.4912
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	5.520	1.100	.5520	.5520	.5520
Low	.4480	.4480	4.480	.9000	.4480	.4480	.4480

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.64	.4901	.4842	.4846	.4868	4.894	19.41
SDev	.01	.0005	.0002	.0003	.0004	.007	.01
%RSD	.0323	.0973	.0430	.0706	.0761	.1394	.0526
#1	19.64	.4905	.4843	.4848	.4870	4.899	19.42
#2	19.64	.4898	.4840	.4844	.4865	4.889	19.40
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	.5520	.5520	.5520	.5520	5.520	22.00
Low	18.00	.4480	.4480	.4480	.4480	4.480	17.92

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4862	.4799	.4905	4.812	.4835	4.850	103.2
SDev	.0000	.0017	.0015	.016	.0005	.002	.1
%RSD	.0033	.3551	.3062	.3330	.1086	.0450	.0526
#1	.4862	.4787	.4916	4.823	.4831	4.852	103.1
#2	.4862	.4811	.4895	4.801	.4839	4.849	103.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	.5520	5.520	.5520	5.520	117.7
Low	.4480	.4480	.4480	4.480	.4480	4.480	96.30

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.784	.4946	.4861	4.846	.4865	.4830	.4812
SDev	.001	.0000	.0005	.005	.0005	.0006	.0023
%RSD	.0258	.0088	.1078	.0954	.0998	.1164	.4860
#1	4.783	.4946	.4857	4.842	.4868	.4826	.4828
#2	4.785	.4946	.4864	4.849	.4861	.4834	.4795
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520	.5520	.5520	5.520	.5520	.5520	
Low	4.480	.4480	.4480	4.480	.4480	.4480	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.4847	4.834	4.859
SDev	.0019	.020	.007
%RSD	.4033	.4092	.1359
#1	.4833	4.848	4.854
#2	.4860	4.820	4.863
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	295282	--	--	--	--	--	--
SDev	273.6503	--	--	--	--	--	--
%RSD	.0926741	--	--	--	--	--	--
#1	295089	--	--	--	--	--	--
#2	295476	--	--	--	--	--	--

Method: TRACE Sample Name: CCB1 Operator:
Run Time: 11/24/98 09:38:42
Comment: CALIBRATION
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0006	.0477	.0015	.0010	.0000	.0008
SDev	.0003	.0017	.0072	.0009	.0003	.0001	.0001
%RSD	454.3	283.4	14.99	64.07	23.72	105.9	13.69
#1	.0002	.0018	.0527	.0021	.0012	.0000	.0008
#2	-.0001	-.0006	.0426	.0008	.0009	.0001	.0007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0100	.1000	.0100	.1000	.0100	.0020
Low	-.0100	-.0100	-.1000	-.0100	-.1000	-.0100	-.0020

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0011	.0000	.0005	-.0001	-.0013	-.0053	.0018
SDev	.0000	.0003	.0002	.0004	.0000	.0046	.0000
%RSD	1.385	645.7	39.33	391.4	3.188	87.60	.3819
#1	-.0011	.0003	.0006	.0002	-.0013	-.0020	.0018
#2	-.0011	-.0002	.0004	-.0004	-.0013	-.0086	.0018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0050	.0100	.0100	.0200	.1000	.2000
Low	-.2000	-.0050	-.0100	-.0100	-.0200	-.1000	-.2000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0010	-.0005	.0000	-.0002	-.0005	-.0032
SDev	.0000	.0009	.0003	.0014	.0004	.0004	.0072
%RSD	75.30	88.53	64.45	13980.	225.8	71.03	224.3
#1	.0000	.0017	-.0003	.0010	.0001	-.0003	.0019
#2	.0000	.0004	-.0007	-.0010	-.0005	-.0008	-.0083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0200	.0400	.3000	.0030	.0050	.5000
Low	-.0100	-.0200	-.0400	-.3000	-.0030	-.0050	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0000	-.0000	.0037	.0003	-.0003	-.0005
SDev	.0003	.0000	.0001	.0004	.0004	.0001	.0001
%RSD	88.97	179.7	762.2	10.14	108.3	19.85	16.52
#1	.0001	.0000	.0001	.0039	.0006	-.0003	-.0005
#2	.0005	-.0000	-.0001	.0034	.0001	-.0002	-.0004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0150	.0100	.0100	.0200	
Low	-.1000	-.0500	-.0150	-.0100	-.0100	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.0000	-.0002	-.0007
SDev	.0007	.0009	.0010
%RSD	2038.	489.4	147.5
#1	.0004	-.0008	.0000
#2	-.0005	.0005	-.0014
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	298801	--	--	--	--	--	--
SDev	705.6926	--	--	--	--	--	--
%RSD	.2361748	--	--	--	--	--	--
#1	298302	--	--	--	--	--	--
#2	299300	--	--	--	--	--	--

Method: TRACE Sample Name: CNHGGBL Operator: WGL
Run Time: 11/24/98 09:48:59
Comment: 8321228 11/24 GV
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H4.376	H46.45	H206.7	H191.8	H105.8	H215.1	H5.291
SDev	.029	.26	1.0	.1	.1	.7	.012
%RSD	.6722	.5542	.4717	.0674	.0658	.3132	.2273
#1	H4.396	H46.63	H207.4	H191.7	H105.8	H215.6	H5.282
#2	H4.355	H46.26	H206.0	H191.9	H105.7	H214.6	H5.299
Errors	LC High	LC High	LC High	LC High	LC High	LC High	LC High
High	1.000	1.000	10.00	1.000	10.00	1.000	.2000
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H5102.	H5.087	H50.44	H20.58	H25.75	H134.0	H5021.
SDev	7.	.023	.08	.04	.10	1.4	9.
%RSD	.1457	.4496	.1557	.1702	.3806	1.060	.1757
#1	H5097.	H5.103	H50.38	H20.60	H25.81	H135.0	H5015.
#2	H5108.	H5.071	H50.49	H20.55	H25.68	H133.0	H5027.
Errors	LC High	LC High	LC High	LC High	LC High	LC High	LC High
High	20.00	.5000	1.000	1.000	2.000	10.00	20.00
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H51.72	H101.4	H50.60	H975.6	H50.34	H184.9	H1944.
SDev	.08	.5	.01	.9	.22	.2	1.
%RSD	.1624	.4810	.0177	.0911	.4416	.1324	.0284
#1	H51.66	H101.0	H50.60	H976.2	H50.18	H185.1	H1945.
#2	H51.78	H101.7	H50.59	H974.9	H50.49	H184.8	H1944.
Errors	LC High	LC High	LC High	LC High	LC High	LC High	LC High
High	1.000	2.000	4.000	30.00	.3000	.5000	50.00
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H185.9	H105.2	H102.6	H197.8	H51.65	H49.16	50.68
SDev	.7	.1	.1	.2	.01	.14	.05
%RSD	.3881	.1107	.0980	.0960	.0253	.2777	.0992
#1	H185.4	H105.3	H102.6	H197.6	H51.64	H49.07	50.65
#2	H186.4	H105.1	H102.7	H197.9	H51.66	H49.26	50.72
Errors	LC High	LC High	LC High	LC High	LC High	LC High	NOCHECK
High	10.00	5.000	1.500	1.000	1.000	2.000	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	50.16	183.3	185.7
SDev	.31	.3	.2
%RSD	.6144	.1639	.1168
#1	49.95	183.5	185.9
#2	50.38	183.1	185.6
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	290576	--	--	--	--	--	--
SDev	1762.110	--	--	--	--	--	--
%RSD	.6064197	--	--	--	--	--	--
#1	289330	--	--	--	--	--	--
#2	291822	--	--	--	--	--	--

Method: TRACE Sample Name: CNHGG BC Operator: WGL
Run Time: 11/24/98 09:52:59 11-24-98
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.333	46.28	202.2	190.7	106.3	215.1	5.323
SDev	.033	.14	.5	.2	.0	.3	.001
%RSD	.7664	.3116	.2360	.1007	.0166	.1549	.0185
#1	4.357	46.38	202.5	190.5	106.3	215.3	5.322
#2	4.310	46.18	201.8	190.8	106.3	214.9	5.324
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	4.536	56.50	240.0	216.0	125.0	224.0	5.900
Low	3.155	41.00	176.0	176.0	85.00	170.0	4.000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5109.	5.096	50.36	20.49	25.62	H128.9	5021.
SDev	1.	.007	.07	.02	.13	1.9	4.
%RSD	.0100	.1296	.1336	.1127	.4947	1.436	.0752
#1	5109.	5.091	50.41	20.51	25.71	H130.2	5018.
#2	5108.	5.100	50.32	20.48	25.53	H127.6	5024.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	5700.	6.000	58.00	22.40	28.75	117.0	5650.
Low	4250.	4.000	40.00	16.60	21.00	87.00	4200.

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.58	101.6	50.68	974.1	50.24	184.3	1984.
SDev	.03	.0	.07	1.7	.24	.3	2.
%RSD	.0634	.0032	.1287	.1764	.4704	.1653	.0962
#1	51.60	101.6	50.73	975.3	50.07	184.1	1986.
#2	51.55	101.6	50.64	972.9	50.41	184.5	1983.
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	57.00	120.0	56.00		57.00	240.0	2568.
Low	42.00	80.00	42.00		41.00	160.0	1712.

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	186.1	105.5	102.6	198.1	51.62	49.20	50.34
SDev	.3	.1	.1	.3	.06	.14	.25
%RSD	.1381	.1058	.0587	.1373	.1200	.2879	.5007
#1	185.9	105.6	102.6	198.3	51.67	49.10	50.52
#2	186.2	105.4	102.5	198.0	51.58	49.30	50.16
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	240.0	120.0	120.0	240.0	58.00	60.00	
Low	160.0	80.00	80.00	160.0	42.50	40.00	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	50.19	181.1	185.9
SDev	.48	.2	.6
%RSD	.9566	.1274	.3076
#1	49.85	181.2	185.5
#2	50.53	180.9	186.3
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	289988	--	--	--	--	--	--
SDev	1393.707	--	--	--	--	--	--
%RSD	.4806095	--	--	--	--	--	--
#1	289002	--	--	--	--	--	--
#2	290973	--	--	--	--	--	--

Method: TRACE Sample Name: CNHGGLB Operator: WGL
Run Time: 11/24/98 09:56:59
Comment: 8321228
Mode: CONC Corr. Factor: 100 ✓ 11-24-98

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0379	L.2386	L7.237	L.0018	L.3490	L.2011	L.1146
SDev	.0185	.0342	.090	.0012	.0760	.0043	.0042
%RSD	48.90	14.34	1.240	66.29	21.76	2.163	3.629
#1	L.0510	L.2628	L7.301	L.0026	L.4027	L.2042	L.1175
#2	L.0248	L.2145	L7.174	L.0009	L.2953	L.1980	L.1117
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
High	4.536	56.50	240.0	216.0	125.0	224.0	5.900
Low	3.155	41.00	176.0	176.0	85.00	170.0	4.000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L4.574	L.0162	L.0074	L.1097	L-.2017	L3.968	L2.904
SDev	.311	.0071	.0173	.0039	.0265	.278	.082
%RSD	6.794	43.74	234.2	3.549	13.14	7.006	2.821
#1	L4.794	L.0212	L-.0049	L.1124	L-.2205	L3.771	L2.846
#2	L4.355	L.0112	L.0197	L.1069	L-.1830	L4.164	L2.961
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
High	5700.	6.000	58.00	22.40	28.75	117.0	5650.
Low	4250.	4.000	40.00	16.60	21.00	87.00	4200.

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0977	L.2827	L-.0101	7.901	L.1779	L.1042	L4.545
SDev	.0032	.0562	.0046	.257	.0469	.1285	.084
%RSD	3.266	19.88	45.81	3.252	26.40	123.3	1.857
#1	L.1000	L.3224	L-.0068	8.082	L.2111	L.1950	L4.605
#2	L.0954	L.2430	L-.0134	7.719	L.1447	L.0134	L4.486
Errors	LC Low	LC Low	LC Low	NOCHECK	LC Low	LC Low	LC Low
High	57.00	120.0	56.00		57.00	240.0	2568.
Low	42.00	80.00	42.00		41.00	160.0	1712.

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.6842	L.0600	L.1680	L.3296	L.0772	L.0381	.5722
SDev	.0205	.0030	.0046	.0697	.0205	.0032	.0282
%RSD	2.994	4.983	2.740	21.16	26.51	8.309	4.930
#1	L.6697	L.0621	L.1712	L.3790	L.0627	L.0403	.5922
#2	L.6987	L.0579	L.1647	L.2803	L.0917	L.0358	.5523
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	NOCHECK
High	240.0	120.0	120.0	240.0	58.00	60.00	
Low	160.0	80.00	80.00	160.0	42.50	40.00	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	-.0190	-.7871	.5491
SDev	.0563	.1064	.2457
%RSD	296.0	13.52	44.74
#1	.0208	-.8623	.7229
#2	-.0588	-.7118	.3754
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	298532	--	--	--	--	--	--
SDev	371.9382	--	--	--	--	--	--
%RSD	.1245891	--	--	--	--	--	--
#1	298269	--	--	--	--	--	--
#2	298795	--	--	--	--	--	--

Method: TRACE Sample Name: CMW23 Operator: WGL
Run Time: 11/24/98 10:00:59
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.1316	.4942	6945.	3.955	3.459	110.7	.5736
SDev	.0177	.0995	1.	.001	.040	.0	.0024
%RSD	13.47	20.13	.0084	.0311	1.142	.0113	.4172
#1	-.1441	.4238	6945.	3.954	3.487	110.7	.5753
#2	-.1190	.5645	6946.	3.956	3.431	110.7	.5719
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3164.	.2512	4.019	10.83	13.07	11250.	1793.
SDev	2.	.0162	.038	.03	.01	8.	.
%RSD	.0576	6.433	.9515	.2899	.0805	.0691	.0003
#1	3162.	.2626	4.046	10.85	13.08	11240.	1793.
#2	3165.	.2398	3.992	10.81	13.06	11250.	1793.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	214.4	.4499	6.091	667.7	37.10	-.1006	619.9
SDev	.1	.0335	.025	1.1	.17	.1329	1.8
%RSD	.0664	7.447	.4041	.1706	.4535	132.0	.2869
#1	214.3	.4736	6.108	666.9	37.22	-.1946	621.2
#2	214.5	.4262	6.073	668.5	36.98	-.0067	618.7
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.526	46.46	316.0	-.5958	23.67	57.88	37.21
SDev	.010	.03	.2	.1334	.01	.04	.26
%RSD	.6428	.0686	.0725	22.40	.0536	.0752	.7036
#1	1.519	46.44	315.8	-.5014	23.68	57.85	37.40
#2	1.533	46.48	316.2	-.6901	23.66	57.91	37.03
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	37.04	-.8243	.2607
SDev	.12	.1051	.2517
%RSD	.3281	12.75	96.56
#1	37.13	-.7500	.0827
#2	36.95	-.8987	.4386
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	318010	--	--	--	--	--	--
SDev	956.7155	--	--	--	--	--	--
%RSD	.3008440	--	--	--	--	--	--
#1	317334	--	--	--	--	--	--
#2	318687	--	--	--	--	--	--

Method: TRACE Sample Name: CMW23X Operator: WGL
Run Time: 11/24/98 10:04:59
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.1581	.4114	6469.	4.481	3.071	88.98	.5876
SDev	.0272	.0569	4.	.048	.068	.12	.0057
%RSD	17.21	13.83	.0627	1.075	2.205	.1370	.9711
#1	-.1389	.3712	6472.	4.515	3.119	89.06	.5836
#2	-.1773	.4516	6467.	4.447	3.023	88.89	.5916
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2779.	.2062	3.723	10.33	14.34	12120.	1661.
SDev	1.	.0249	.037	.03	.05	.	1.
%RSD	.0250	12.06	.9919	.2812	.3157	.0009	.0655
#1	2778.	.2238	3.749	10.35	14.37	12120.	1660.
#2	2779.	.1886	3.697	10.31	14.31	12120.	1661.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	193.4	.5545	6.655	612.3	43.20	.0109	654.9
SDev	.1	.0055	.034	1.4	.07	.0963	1.8
%RSD	.0397	.9966	.5033	.2221	.1721	884.4	.2764
#1	193.4	.5584	6.679	613.2	43.25	-.0572	656.2
#2	193.3	.5505	6.632	611.3	43.15	.0790	653.7
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.648	43.22	286.6	-.5161	23.94	67.24	43.33
SDev	.151	.04	.2	.1503	.07	.00	.24
%RSD	9.137	.0942	.0641	29.12	.2832	.0022	.5524
#1	1.754	43.25	286.7	-.4098	23.99	67.24	43.50
#2	1.541	43.20	286.4	-.6224	23.90	67.24	43.16
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	43.13	-.9982	.5147
SDev	.01	.1174	.2029
%RSD	.0187	11.76	39.43
#1	43.12	-.9152	.3712
#2	43.14	-1.081	.6582
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	316188	--	--	--	--	--	--
SDev	1440.377	--	--	--	--	--	--
%RSD	.4555450	--	--	--	--	--	--
#1	315169	--	--	--	--	--	--
#2	317206	--	--	--	--	--	--

Method: TRACE Sample Name: CN5GW Operator: WGL
Run Time: 11/24/98 10:08:58
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0326	.5662	3031.	1.581	2.403	48.92	.3139
SDev	.0408	.1172	.	.150	.023	.03	.0025
%RSD	125.1	20.70	.0156	9.457	.9711	.0639	.8057
#1	.0615	.6491	3031.	1.475	2.419	48.94	.3157
#2	.0038	.4833	3032.	1.687	2.386	48.90	.3121
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1730.	-.0002	4.010	6.602	3.312	4998.	960.4
SDev	2.	.0209	.000	.011	.045	8.	1.0
%RSD	.1197	9226.	.0118	.1728	1.368	.1639	.0991
#1	1729.	-.0150	4.010	6.594	3.344	4992.	959.7
#2	1732.	.0145	4.010	6.610	3.280	5004.	961.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	313.6	.4192	7.841	139.7	21.78	.1408	654.7
SDev	.4	.0148	.012	.1	.05	.0430	1.3
%RSD	.1415	3.532	.1570	.0899	.2480	30.54	.2043
#1	313.3	.4297	7.832	139.8	21.82	.1712	653.8
#2	313.9	.4087	7.850	139.7	21.74	.1104	655.7
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7656	6.829	138.1	-.1524	10.73	22.50	22.19
SDev	.0250	.004	.0	.0884	.01	.07	.01
%RSD	3.267	.0512	.0320	57.98	.0606	.3071	.0640
#1	.7479	6.832	138.0	-.2149	10.73	22.45	22.18
#2	.7833	6.827	138.1	-.0899	10.74	22.55	22.20
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	21.58	-.5417	.4816
SDev	.09	.0317	.0803
%RSD	.4082	5.846	16.67
#1	21.64	-.5641	.5383
#2	21.51	-.5193	.4248
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	303698	--	--	--	--	--	--
SDev	34.64823	--	--	--	--	--	--
%RSD	.0114088	--	--	--	--	--	--
#1	303722	--	--	--	--	--	--
#2	303673	--	--	--	--	--	--

Method: TRACE Sample Name: CN5J4 Operator: WGL
Run Time: 11/24/98 10:12:58
Comment: 8321228
Mode: CONC Corr. Factor: 100 ✓

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9343	14.97	5776.	1.892	3.311	74.49	.4301
SDev	.0085	.05	16.	.224	.023	.11	.0026
%RSD	.9077	.3486	.2741	11.82	.6898	.1468	.5996
#1	.9403	14.94	5764.	1.734	3.327	74.41	.4319
#2	.9283	15.01	5787.	2.050	3.295	74.57	.4283
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1825.	-.0219	6.499	8.651	7.244	7154.	1201.
SDev	6.	.0033	.012	.040	.037	21.	4.
%RSD	.3251	14.99	.1800	.4634	.5169	.2934	.3034
#1	1821.	-.0196	6.491	8.623	7.217	7139.	1198.
#2	1830.	-.0242	6.507	8.679	7.270	7169.	1204.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	265.1	.1855	11.50	195.7	7.088	-.1703	588.6
SDev	.9	.0953	.05	.5	.045	.1742	1.2
%RSD	.3327	51.39	.3942	.2472	.6369	102.3	.2048
#1	264.5	.2529	11.47	195.4	7.056	-.0471	587.7
#2	265.7	.1181	11.53	196.1	7.120	-.2935	589.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7247	12.01	201.2	-.4685	15.06	23.59	7.406
SDev	.0777	.03	.6	.1689	.00	.09	.119
%RSD	10.73	.2422	.2814	36.05	.0243	.3826	1.608
#1	.7797	11.99	200.8	-.3491	15.06	23.53	7.322
#2	.6697	12.03	201.6	-.5879	15.06	23.66	7.491
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	6.929	-1.001	.2445
SDev	.008	.136	.1934
%RSD	.1185	13.56	79.10
#1	6.923	-.9051	.3812
#2	6.935	-1.097	.1077
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	306514	--	--	--	--	--	--
SDev	461.7407	--	--	--	--	--	--
%RSD	.1506424	--	--	--	--	--	--
#1	306841	--	--	--	--	--	--
#2	306188	--	--	--	--	--	--

Method: TRACE Sample Name: CN3T8 Operator: WGL
Run Time: 11/24/98 10:16:57
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.3736	.4025	6931.	2.406	1.342	113.0	.5775
SDev	.0622	.2640	2.	.097	.084	.1	.0005
%RSD	16.65	65.59	.0255	4.038	6.267	.1184	.0851
#1	-.3296	.5892	6930.	2.474	1.402	113.1	.5772
#2	-.4176	.2158	6933.	2.337	1.283	112.9	.5779
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2024.	-.1994	6.851	17.02	10.15	16550.	3654.
SDev	1.	.0008	.008	.04	.07	10.	2.
%RSD	.0356	.3791	.1124	.2588	.6682	.0583	.0478
#1	2025.	-.1999	6.856	17.05	10.20	16550.	3656.
#2	2024.	-.1989	6.845	16.99	10.10	16540.	3653.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	293.0	.5609	11.67	422.3	9.949	.0990	658.5
SDev	.1	.0276	.05	1.1	.046	.2605	.7
%RSD	.0340	4.916	.3932	.2559	.4615	263.0	.1074
#1	293.0	.5804	11.64	423.1	9.917	-.0852	659.0
#2	292.9	.5414	11.70	421.6	9.982	.2832	658.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.393	11.72	869.9	L-1.001	31.34	51.51	10.16
SDev	.120	.01	.9	.047	.03	.02	.22
%RSD	8.642	.0851	.1050	4.687	.0973	.0462	2.168
#1	1.478	11.73	870.6	-.9679	31.36	51.53	10.32
#2	1.308	11.71	869.3	L-1.034	31.32	51.50	10.01
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	9.842	-.9708	.6332
SDev	.179	.0426	.4118
%RSD	1.817	4.385	65.04
#1	9.715	-.9407	.3420
#2	9.968	-1.001	.9243
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	318038	--	--	--	--	--	--
SDev	928.4312	--	--	--	--	--	--
%RSD	.2919241	--	--	--	--	--	--
#1	317382	--	--	--	--	--	--
#2	318695	--	--	--	--	--	--

Method: TRACE Sample Name: CN3T8P Operator: WGL
Run Time: 11/24/98 10:20:57
Comment: 8321228
Mode: CONC Corr. Factor: 500

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.4017	.2681	7343.	2.437	1.466	120.1	1.263
SDev	.1469	.1569	5.	.198	.235	.1	.027
%RSD	36.56	58.52	.0696	8.128	16.03	.0631	2.136
#1	-.2978	.3791	7340.	2.297	1.632	120.1	1.282
#2	-.5055	.1572	7347.	2.577	1.300	120.0	1.244

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2206.	-.2460	7.608	18.25	9.175	18070.	3995.
SDev	2.	.0129	.112	.07	.047	9.	2.
%RSD	.1123	5.256	1.474	.4054	.5072	.0487	.0484
#1	2208.	-.2368	7.687	18.30	9.208	18080.	3994.
#2	2205.	-.2551	7.528	18.19	9.142	18070.	3997.

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	318.4	.8732	12.57	464.1	10.91	-.8270	716.0
SDev	.3	.2572	.08	.0	.19	.7224	.3
%RSD	.1042	29.46	.6041	.0065	1.709	87.35	.0387
#1	318.7	1.055	12.62	464.1	11.04	-.3162	716.2
#2	318.2	.6914	12.51	464.1	10.78	-1.338	715.8

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.688	12.48	922.6	-1.418	33.49	57.20	11.19
SDev	.224	.02	.2	.316	.19	.08	.56
%RSD	13.25	.1483	.0239	22.28	.5761	.1439	5.040
#1	1.530	12.50	922.8	-1.641	33.62	57.26	11.59
#2	1.846	12.47	922.5	-1.194	33.35	57.15	10.80

Elem	Pb/2	Se/1	Se/2
Units	ppm	ppm	ppm
Avge	10.77	-3.496	.5057
SDev	.00	.342	1.254
%RSD	.0208	9.786	247.9
#1	10.76	-3.738	1.392
#2	10.77	-3.254	-.3809

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	308844	--	--	--	--	--	--
SDev	362.0387	--	--	--	--	--	--
%RSD	.1172238	--	--	--	--	--	--
#1	308588	--	--	--	--	--	--
#2	309100	--	--	--	--	--	--

Method: TRACE Sample Name: CN3T8S Operator: WGL
Run Time: 11/24/98 10:24:56
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.554	32.36	10070.	171.1	97.11	333.9	5.187
SDev	.061	.12	6.	.2	.38	.5	.001
%RSD	1.725	.3643	.0637	.1204	.3951	.1397	.0157
#1	3.598	32.45	10070.	170.9	97.38	334.2	5.188
#2	3.511	32.28	10080.	171.2	96.84	333.5	5.187
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6534.	4.257	52.16	39.16	38.25	19270.	9034.
SDev	1.	.002	.09	.02	.07	4.	4.
%RSD	.0209	.0352	.1650	.0484	.1936	.0218	.0395
#1	6533.	4.256	52.22	39.18	38.30	19260.	9032.
#2	6535.	4.258	52.10	39.15	38.20	19270.	9037.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	351.2	87.65	58.68	1208.	57.79	163.8	1559.
SDev	.1	.24	.04	1.	.06	.4	2.
%RSD	.0264	.2712	.0748	.0459	.1027	.2708	.1066
#1	351.1	87.48	58.65	1208.	57.84	164.1	1558.
#2	351.3	87.82	58.71	1207.	57.75	163.5	1560.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	158.6	106.4	H1149.	171.3	85.08	112.7	57.88
SDev	.1	.1	.	.1	.02	.0	.41
%RSD	.0488	.0734	.0045	.0379	.0215	.0332	.7059
#1	158.6	106.5	H1149.	171.2	85.07	112.7	58.17
#2	158.5	106.4	H1149.	171.3	85.10	112.7	57.60
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

NO ICAL 06/13/98

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	57.75	161.3	165.1
SDev	.11	.9	.2
%RSD	.1991	.5769	.1216
#1	57.67	161.9	165.2
#2	57.83	160.6	164.9
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	309173	--	--	--	--	--	--
SDev	2227.387	--	--	--	--	--	--
%RSD	.7204337	--	--	--	--	--	--
#1	307598	--	--	--	--	--	--
#2	310748	--	--	--	--	--	--

Method: TRACE Sample Name: CCV2 Operator: WGL
Run Time: 11/24/98 10:29:20
Comment: 8321228
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4753	.4728	4.805	.9351	.4889	.5145	.4868
SDev	.0011	.0005	.001	.0010	.0010	.0007	.0007
%RSD	.2310	.0997	.0130	.1080	.2041	.1287	.1449
#1	.4761	.4724	4.804	.9344	.4896	.5150	.4873
#2	.4745	.4731	4.805	.9358	.4882	.5141	.4863
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	5.520	1.100	.5520	.5520	.5520
Low	.4480	.4480	4.480	.9000	.4480	.4480	.4480

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.53	.4845	.4721	.4754	.4839	4.806	19.22
SDev	.03	.0009	.0001	.0002	.0007	.007	.01
%RSD	.1334	.1918	.0231	.0443	.1418	.1388	.0747
#1	19.55	.4851	.4722	.4753	.4844	4.811	19.23
#2	19.51	.4838	.4720	.4756	.4834	4.801	19.21
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	.5520	.5520	.5520	.5520	5.520	22.00
Low	18.00	.4480	.4480	.4480	.4480	4.480	17.92

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4759	.4678	.4875	4.721	.4732	4.758	101.4
SDev	.0002	.0004	.0003	.001	.0012	.005	.1
%RSD	.0477	.0890	.0507	.0277	.2524	.1149	.0902
#1	.4760	.4681	.4874	4.720	.4740	4.762	101.4
#2	.4757	.4675	.4877	4.722	.4723	4.754	101.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	.5520	5.520	.5520	5.520	117.7
Low	.4480	.4480	.4480	4.480	.4480	4.480	96.30

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.679	.4981	.4778	4.740	.4799	.4727	.4659
SDev	.008	.0003	.0002	.004	.0007	.0001	.0005
%RSD	.1742	.0533	.0483	.0741	.1381	.0327	.1065
#1	4.673	.4983	.4779	4.738	.4804	.4728	.4656
#2	4.685	.4979	.4776	4.743	.4794	.4725	.4663
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520	.5520	.5520	5.520	.5520	.5520	
Low	4.480	.4480	.4480	4.480	.4480	.4480	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.4768	4.713	4.780
SDev	.0020	.010	.013
%RSD	.4276	.2142	.2770
#1	.4782	4.706	4.790
#2	.4753	4.720	4.771
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	299012	--	--	--	--	--	--
SDev	161.9275	--	--	--	--	--	--
%RSD	.0541543	--	--	--	--	--	--
#1	299126	--	--	--	--	--	--
#2	298897	--	--	--	--	--	--

Method: TRACE Sample Name: CCB2 Operator: WGL
Run Time: 11/24/98 10:33:44
Comment: 8321228
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	.0013	.0965	.0015	.0010	.0001	.0017
SDev	.0004	.0021	.0014	.0006	.0001	.0001	.0001
%RSD	542.1	163.4	1.451	36.50	13.12	63.50	6.938
#1	.0002	.0028	.0975	.0011	.0011	.0001	.0018
#2	-.0003	-.0002	.0955	.0019	.0009	.0000	.0016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0100	.1000	.0100	.1000	.0100	.0020
Low	-.0100	-.0100	-.1000	-.0100	-.1000	-.0100	-.0020

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0067	-.0000	.0006	.0001	-.0030	-.0054	.0006
SDev	.0012	.0001	.0001	.0001	.0003	.0011	.0000
%RSD	17.83	493.4	19.57	88.45	8.289	19.97	.7139
#1	-.0059	.0000	.0006	.0001	-.0032	-.0046	.0006
#2	-.0076	-.0001	.0005	.0000	-.0028	-.0062	.0006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0050	.0100	.0100	.0200	.1000	.2000
Low	-.2000	-.0050	-.0100	-.0100	-.0200	-.1000	-.2000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0010	-.0004	-.0022	-.0004	.0004	-.0100
SDev	.0001	.0000	.0004	.0016	.0002	.0011	.0061
%RSD	45.81	2.061	99.43	75.76	62.79	286.1	61.09
#1	.0001	.0011	-.0008	-.0033	-.0005	.0012	-.0057
#2	.0001	.0010	-.0001	-.0010	-.0002	-.0004	-.0143
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0200	.0400	.3000	.0030	.0050	.5000
Low	-.0100	-.0200	-.0400	-.3000	-.0030	-.0050	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0005	.0001	.0001	.0031	.0005	-.0002	-.0011
SDev	.0002	.0000	.0000	.0024	.0001	.0000	.0002
%RSD	51.90	54.90	54.06	76.69	20.49	11.65	15.42
#1	-.0006	.0001	.0001	.0048	.0006	-.0002	-.0010
#2	-.0003	.0000	.0000	.0014	.0004	-.0002	-.0013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0150	.0100	.0100	.0200	
Low	-.1000	-.0500	-.0150	-.0100	-.0100	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0000	-.0006	.0009
SDev	.0004	.0010	.0012
%RSD	1251.	186.8	134.7
#1	-.0003	.0002	.0017
#2	.0003	-.0013	.0000
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	302257	--	--	--	--	--	--
SDev	1132.785	--	--	--	--	--	--
%RSD	.3747755	--	--	--	--	--	--
#1	303058	--	--	--	--	--	--
#2	301456	--	--	--	--	--	--

Method: TRACE Sample Name: CN3T8 8P Operator: WGL
Run Time: 11/24/98 10:37:44
Comment: 8321228 11/24/98 MP
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.689	34.88	8101.	171.2	97.31	314.7	5.165
SDev	.025	.06	5.	.1	.19	.5	.002
%RSD	.6681	.1672	.0630	.0426	.1925	.1671	.0438
#1	3.706	34.93	8097.	171.2	97.44	315.1	5.167
#2	3.671	34.84	8104.	171.3	97.18	314.3	5.163
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6166.	4.322	51.01	33.41	34.85	16640.	8449.
SDev	10.	.016	.02	.04	.03	13.	14.
%RSD	.1562	.3739	.0487	.1147	.0739	.0763	.1665
#1	6160.	4.333	50.99	33.38	34.87	16630.	8439.
#2	6173.	4.310	51.02	33.43	34.83	16650.	8459.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	327.3	88.15	56.51	1198.	58.90	164.6	1496.
SDev	.4	.04	.02	.	.07	.1	9.
%RSD	.1136	.0398	.0318	.0117	.1175	.0478	.5737
#1	327.1	88.12	56.50	1198.	58.85	164.6	1490.
#2	327.6	88.17	56.53	1198.	58.95	164.5	1502.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	160.1	105.9	950.5	172.1	75.42	103.9	58.95
SDev	.3	.0	.4	.7	.11	.3	.10
%RSD	.2040	.0417	.0376	.3930	.1437	.2895	.1644
#1	159.9	106.0	950.3	171.6	75.35	103.7	59.02
#2	160.4	105.9	950.8	172.6	75.50	104.2	58.89
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	58.87	161.3	166.2
SDev	.15	.3	.0
%RSD	.2584	.1591	.0061
#1	58.77	161.5	166.2
#2	58.98	161.2	166.2
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	307077	--	--	--	--	--	--
SDev	555.7859	--	--	--	--	--	--
%RSD	.1809924	--	--	--	--	--	--
#1	306684	--	--	--	--	--	--
#2	307470	--	--	--	--	--	--

Method: TRACE Sample Name: CN3TA Operator: WGL
Run Time: 11/24/98 10:41:45
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.2282	.6460	15430.	5.317	8.892	130.2	1.150
SDev	.0043	.3485	68.	.127	.172	.6	.008
%RSD	1.874	53.94	.4413	2.394	1.933	.4589	.6691
#1	-.2251	.8924	15470.	5.407	9.013	130.6	1.155
#2	-.2312	.3996	15380.	5.227	8.770	129.8	1.145
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7223.	-.3456	7.537	17.38	32.57	19100.	4596.
SDev	21.	.0117	.060	.04	.17	59.	12.
%RSD	.2872	3.385	.7980	.2545	.5274	.3064	.2515
#1	7237.	-.3373	7.579	17.41	32.69	19140.	4605.
#2	7208.	-.3539	7.494	17.35	32.45	19050.	4588.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	293.0	.6216	14.45	487.1	13.00	-.1826	550.4
SDev	.7	.1113	.12	1.8	.12	.0374	3.2
%RSD	.2522	17.91	.8021	.3655	.9134	20.48	.5872
#1	293.5	.7003	14.54	488.3	13.09	-.1562	552.6
#2	292.4	.5429	14.37	485.8	12.92	-.2091	548.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.826	45.71	346.1	-.2441	40.81	51.88	13.27
SDev	.240	.17	.9	.5708	.23	.11	.35
%RSD	8.508	.3635	.2655	233.8	.5518	.2062	2.623
#1	2.996	45.83	346.7	.1595	40.97	51.96	13.52
#2	2.656	45.59	345.4	-.6477	40.65	51.80	13.03
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	12.87	-.8622	.1567
SDev	.00	.1717	.0297
%RSD	.0333	19.92	18.94
#1	12.87	-.7408	.1357
#2	12.87	-.9837	.1776
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	328823	--	--	--	--	--	--
SDev	1115.814	--	--	--	--	--	--
%RSD	.3393359	--	--	--	--	--	--
#1	328034	--	--	--	--	--	--
#2	329612	--	--	--	--	--	--

Method: TRACE Sample Name: CN3TG Operator: WGL
Run Time: 11/24/98 10:45:45
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.2320	.7059	4893.	4.247	2.403	60.13	.6198
SDev	.0589	.0521	14.	.048	.053	.12	.0008
%RSD	25.40	7.382	.2771	1.138	2.208	.1952	.1338
#1	-.1903	.7428	4884.	4.281	2.441	60.05	.6193
#2	-.2736	.6691	4903.	4.213	2.366	60.21	.6204
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1552.	-.0707	3.507	9.872	7.633	9692.	2665.
SDev	1.	.0273	.038	.038	.005	10.	3.
%RSD	.0381	38.69	1.088	.3813	.0635	.0985	.1146
#1	1552.	-.0513	3.534	9.898	7.637	9685.	2663.
#2	1553.	-.0900	3.480	9.845	7.630	9698.	2667.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	207.3	1.142	8.287	298.7	4.496	.0105	779.0
SDev	.3	.082	.016	.3	.006	.1146	1.8
%RSD	.1266	7.206	.1959	.1051	.1334	1092.	.2332
#1	207.1	1.201	8.276	298.5	4.501	-.0705	777.7
#2	207.5	1.084	8.299	298.9	4.492	.0915	780.3
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9608	9.571	266.4	-.5397	17.25	28.11	4.746
SDev	.0468	.004	.5	.0454	.02	.02	.012
%RSD	4.873	.0398	.1898	8.419	.1000	.0752	.2445
#1	.9940	9.568	266.0	-.5075	17.26	28.09	4.738
#2	.9277	9.574	266.7	-.5718	17.24	28.12	4.754
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	4.372	-.6961	.3633
SDev	.015	.0176	.1630
%RSD	.3382	2.531	44.87
#1	4.382	-.7086	.2480
#2	4.361	-.6837	.4786
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	310322	--	--	--	--	--	--
SDev	823.7794	--	--	--	--	--	--
%RSD	.2654591	--	--	--	--	--	--
#1	309740	--	--	--	--	--	--
#2	310905	--	--	--	--	--	--

Method: TRACE Sample Name: CN3TJ Operator: WGL
Run Time: 11/24/98 10:49:46
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.3285	.7096	7419.	3.203	3.047	83.09	.7719
SDev	.0011	.1898	8.	.040	.031	.03	.0073
%RSD	.3273	26.74	.1020	1.261	1.019	.0390	.9524
#1	-.3277	.8438	7413.	3.231	3.069	83.12	.7771
#2	-.3292	.5754	7424.	3.174	3.025	83.07	.7667
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6746.	-.2701	3.741	9.954	6.174	12460.	2405.
SDev	6.	.0023	.004	.029	.015	9.	3.
%RSD	.0883	.8437	.0967	.2876	.2383	.0733	.1147
#1	6742.	-.2685	3.743	9.975	6.185	12460.	2403.
#2	6750.	-.2717	3.738	9.934	6.164	12470.	2407.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	167.0	.8365	6.996	344.7	5.293	.1158	619.3
SDev	.2	.0124	.003	.5	.061	.2006	2.2
%RSD	.1074	1.487	.0403	.1448	1.145	173.2	.3480
#1	166.9	.8277	6.994	344.3	5.336	-.0260	617.8
#2	167.2	.8452	6.998	345.0	5.250	.2576	620.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.248	21.84	337.4	-.4156	23.58	26.93	5.560
SDev	.016	.00	.2	.0116	.05	.01	.131
%RSD	1.253	.0001	.0734	2.787	.1994	.0380	2.348
#1	1.237	21.84	337.2	-.4238	23.61	26.92	5.652
#2	1.259	21.84	337.6	-.4074	23.54	26.93	5.468
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	5.160	-.7128	.5295
SDev	.026	.1842	.3927
%RSD	.4984	25.84	74.16
#1	5.178	-.5826	.2518
#2	5.142	-.8431	.8072
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	314873	--	--	--	--	--	--
SDev	659.0235	--	--	--	--	--	--
%RSD	.2092982	--	--	--	--	--	--
#1	314407	--	--	--	--	--	--
#2	315339	--	--	--	--	--	--

Method: TRACE Sample Name: CN3TM Operator: WGL
Run Time: 11/24/98 10:53:46
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.1955	.6729	7408.	5.757	4.516	104.0	.8093
SDev	.0355	.1220	6.	.054	.034	.1	.0093
%RSD	18.18	18.13	.0850	.9439	.7599	.0700	1.145
#1	-.1703	.7591	7404.	5.796	4.540	104.1	.8159
#2	-.2206	.5866	7413.	5.719	4.491	104.0	.8028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2402.	-.2395	4.262	11.62	14.01	18710.	2109.
SDev	3.	.0238	.034	.03	.03	29.	4.
%RSD	.1338	9.957	.7984	.2739	.2193	.1538	.1806
#1	2400.	-.2563	4.286	11.60	13.99	18690.	2106.
#2	2404.	-.2226	4.238	11.65	14.03	18730.	2112.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	206.3	1.083	10.42	494.9	6.170	-.0506	701.3
SDev	.3	.101	.05	.8	.127	.1680	1.3
%RSD	.1658	9.304	.4356	.1569	2.053	332.1	.1797
#1	206.1	1.155	10.46	495.5	6.081	-.1694	700.4
#2	206.6	1.012	10.39	494.4	6.260	.0682	702.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.288	21.49	165.9	-.2076	32.29	39.20	6.363
SDev	.088	.00	.2	.1801	.00	.06	.108
%RSD	6.860	.0070	.1311	86.74	.0125	.1602	1.698
#1	1.350	21.49	165.7	-.0803	32.30	39.16	6.287
#2	1.225	21.49	166.0	-.3349	32.29	39.25	6.440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	6.074	-.4656	.1566
SDev	.136	.1302	.1868
%RSD	2.239	27.97	119.3
#1	5.977	-.5577	.0245
#2	6.170	-.3735	.2887
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	316657	--	--	--	--	--	--
SDev	277.1859	--	--	--	--	--	--
%RSD	.0875351	--	--	--	--	--	--
#1	316461	--	--	--	--	--	--
#2	316853	--	--	--	--	--	--

Method: TRACE Sample Name: CN3TP Operator: WGL
Run Time: 11/24/98 10:57:46
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.2890	.6391	6591.	2.665	2.817	117.5	.8002
SDev	.0431	.1077	7.	.034	.005	.2	.0069
%RSD	14.92	16.86	.1056	1.262	.1836	.1604	.8605
#1	-.2585	.5629	6586.	2.641	2.820	117.6	.8051
#2	-.3194	.7153	6596.	2.689	2.813	117.4	.7954
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14470.	-.2304	4.482	10.21	7.842	14570.	3179.
SDev	16.	.0137	.027	.03	.021	15.	5.
%RSD	.1132	5.963	.6060	.2939	.2670	.1036	.1545
#1	14460.	-.2207	4.501	10.23	7.827	14550.	3175.
#2	14480.	-.2402	4.463	10.19	7.857	14580.	3182.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	226.0	.6757	7.759	426.3	5.991	-.1051	706.5
SDev	.3	.0175	.053	1.0	.009	.2229	.5
%RSD	.1429	2.588	.6879	.2389	.1435	212.2	.0736
#1	225.7	.6881	7.797	425.6	5.985	.0526	706.2
#2	226.2	.6633	7.721	427.0	5.997	-.2627	706.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.139	30.33	540.6	-.6568	27.23	31.90	6.287
SDev	.095	.01	.3	.2176	.04	.07	.098
%RSD	8.338	.0375	.0535	33.13	.1512	.2155	1.563
#1	1.072	30.34	540.4	-.5030	27.26	31.85	6.356
#2	1.206	30.32	540.8	-.8107	27.21	31.95	6.217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	5.843	-.9896	.3365
SDev	.062	.4578	.1056
%RSD	1.060	46.27	31.39
#1	5.799	-.6658	.4112
#2	5.887	-1.313	.2618
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	323625	--	--	--	--	--	--
SDev	400.2224	--	--	--	--	--	--
%RSD	.1236686	--	--	--	--	--	--
#1	323342	--	--	--	--	--	--
#2	323908	--	--	--	--	--	--

Method: TRACE Sample Name: CN3TR Operator: WGL
Run Time: 11/24/98 11:01:45
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.3207	.5977	6225.	3.101	2.454	186.0	.6409
SDev	.0090	.2485	5.	.077	.027	.4	.0068
%RSD	2.816	41.58	.0809	2.494	1.104	.2331	1.068
#1	-.3143	.7734	6221.	3.047	2.473	186.3	.6457
#2	-.3271	.4220	6228.	3.156	2.435	185.7	.6360
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2626.	-.1616	4.512	8.197	10.83	13280.	3237.
SDev	3.	.0019	.024	.003	.05	16.	3.
%RSD	.1067	1.148	.5216	.0383	.4243	.1178	.0992
#1	2624.	-.1603	4.528	8.194	10.87	13270.	3235.
#2	2628.	-.1629	4.495	8.199	10.80	13290.	3240.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	224.8	.7528	7.974	626.7	4.526	.0882	662.6
SDev	.4	.0112	.023	1.2	.073	.1295	1.6
%RSD	.1562	1.486	.2906	.1879	1.608	146.8	.2381
#1	224.6	.7607	7.958	625.8	4.578	-.0034	663.8
#2	225.1	.7449	7.991	627.5	4.475	.1797	661.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.009	18.47	615.0	-.7253	25.53	36.22	4.936
SDev	.065	.01	.5	.0417	.04	.11	.190
%RSD	6.464	.0685	.0843	5.755	.1384	.3114	3.856
#1	1.055	18.48	614.6	-.7548	25.55	36.14	5.070
#2	.9627	18.46	615.3	-.6958	25.50	36.30	4.801
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	4.322	-.6745	.4689
SDev	.014	.1644	.2762
%RSD	.3265	24.37	58.89
#1	4.332	-.5582	.2737
#2	4.312	-.7907	.6642
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	317060	--	--	--	--	--	--
SDev	538.1083	--	--	--	--	--	--
%RSD	.1697184	--	--	--	--	--	--
#1	316679	--	--	--	--	--	--
#2	317440	--	--	--	--	--	--

Method: TRACE Sample Name: CN3V0 Operator: WGL
Run Time: 11/24/98 11:05:45
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.2380	.6145	4785.	5.396	2.643	373.1	.6855
SDev	.0114	.0749	8.	.130	.008	1.1	.0021
%RSD	4.796	12.18	.1672	2.411	.3152	.2976	.3086
#1	-.2299	.5616	4791.	5.304	2.637	373.9	.6870
#2	-.2461	.6675	4779.	5.488	2.648	372.3	.6840
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2140.	-.0495	2.817	8.317	10.89	14420.	1379.
SDev	2.	.0105	.023	.028	.01	10.	.
%RSD	.0956	21.27	.8033	.3401	.1300	.0725	.0199
#1	2139.	-.0420	2.833	8.297	10.90	14420.	1379.
#2	2142.	-.0569	2.801	8.337	10.88	14430.	1379.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	513.4	1.173	10.02	519.4	5.225	-.0609	707.5
SDev	.3	.043	.05	1.3	.062	.1402	2.1
%RSD	.0532	3.703	.4650	.2437	1.182	230.4	.2939
#1	513.3	1.204	9.984	518.5	5.269	-.1600	708.9
#2	513.6	1.142	10.05	520.3	5.181	.0383	706.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8122	19.89	126.4	-.3876	23.47	23.22	5.438
SDev	.0584	.03	.0	.0958	.02	.05	.008
%RSD	7.194	.1316	.0191	24.72	.0759	.2072	.1452
#1	.7709	19.91	126.4	-.4553	23.49	23.18	5.433
#2	.8535	19.88	126.4	-.3198	23.46	23.25	5.444
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	5.118	-.7950	.3057
SDev	.097	.2470	.0869
%RSD	1.886	31.07	28.44
#1	5.186	-.9697	.2442
#2	5.050	-.6204	.3672
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	315773	--	--	--	--	--	--
SDev	84.85281	--	--	--	--	--	--
%RSD	.0268715	--	--	--	--	--	--
#1	315833	--	--	--	--	--	--
#2	315713	--	--	--	--	--	--

Method: TRACE Sample Name: CN9FE Operator: WGL
Run Time: 11/24/98 11:09:45
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0858	.5803	8442.	3.634	9.408	47.69	.7186
SDev	.0330	.2018	8.	.051	.167	.07	.0041
%RSD	38.51	34.77	.0916	1.391	1.774	.1450	.5699
#1	-.0625	.7230	8447.	3.598	9.526	47.74	.7215
#2	-.1092	.4376	8436.	3.670	9.290	47.64	.7157
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10940.	-.1874	5.050	11.13	12.38	14250.	6932.
SDev	2.	.0087	.000	.00	.04	.	3.
%RSD	.0169	4.636	.0027	.0157	.3487	.0017	.0401
#1	10940.	-.1812	5.050	11.13	12.41	14250.	6934.
#2	10940.	-.1935	5.050	11.13	12.35	14250.	6930.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	177.0	.5001	13.46	358.2	11.48	.2658	875.1
SDev	.1	.0585	.00	1.1	.02	.1217	1.7
%RSD	.0566	11.70	.0220	.3070	.1552	45.80	.1937
#1	177.0	.4588	13.46	357.4	11.47	.3519	876.3
#2	177.1	.5415	13.46	359.0	11.49	.1797	873.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8671	42.38	97.18	-.3553	20.18	57.27	11.60
SDev	.0781	.02	.03	.0548	.04	.02	.13
%RSD	9.005	.0492	.0299	15.43	.1757	.0301	1.134
#1	.9223	42.39	97.16	-.3165	20.20	57.25	11.69
#2	.8119	42.36	97.20	-.3941	20.15	57.28	11.50
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	11.42	-.6474	.7217
SDev	.09	.3199	.0228
%RSD	.8088	49.41	3.163
#1	11.36	-.4212	.7379
#2	11.49	-.8736	.7056
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	307097	--	--	--	--	--	--
SDev	657.6093	--	--	--	--	--	--
%RSD	.2141373	--	--	--	--	--	--
#1	306632	--	--	--	--	--	--
#2	307562	--	--	--	--	--	--

Method: TRACE Sample Name: CN9GL Operator: WGL
Run Time: 11/24/98 11:13:44
Comment: 8321228
Mode: CONC Corr. Factor: 100

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.1146	.5889	9372.	3.814	10.93	116.6	.7320
SDev	.0225	.0457	8.	.008	.11	.2	.0081
%RSD	19.61	7.754	.0901	.1983	.9907	.1773	1.114
#1	-.0987	.5566	9378.	3.809	11.01	116.7	.7378
#2	-.1305	.6212	9366.	3.819	10.86	116.4	.7262
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2500.	5000.	60000.	2000.	5000.	2500.	2500.
Low	-1.000	-1.000	-10.00	-1.000	-10.00	-1.000	-.2000

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11100.	-.1893	5.794	12.72	12.98	13860.	7400.
SDev	8.	.0083	.002	.01	.02	6.	5.
%RSD	.0688	4.397	.0273	.0415	.1523	.0469	.0622
#1	11090.	-.1952	5.795	12.71	12.96	13850.	7397.
#2	11100.	-.1835	5.793	12.72	12.99	13860.	7403.
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	60000.	1000.	5000.	5000.	5000.	100000.	100000.
Low	-20.00	-.5000	-1.000	-1.000	-2.000	-10.00	-20.00

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	116.0	.3515	14.08	391.9	13.19	.0657	899.1
SDev	.1	.0023	.03	.0	.10	.0665	1.5
%RSD	.0921	.6441	.2129	.0040	.7860	101.2	.1664
#1	115.9	.3531	14.06	392.0	13.12	.0187	900.2
#2	116.1	.3499	14.10	391.9	13.26	.1128	898.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5000.	5000.	2500.	5000.	2500.	5000.	42800.
Low	-1.000	-2.000	-4.000	-30.00	-.3000	-.5000	-50.00

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9942	38.53	99.30	-.3573	22.43	59.52	13.29
SDev	.0085	.02	.02	.2029	.08	.14	.02
%RSD	.8513	.0515	.0187	56.79	.3755	.2333	.1800
#1	.9882	38.54	99.28	-.2138	22.49	59.42	13.28
#2	1.000	38.52	99.31	-.5008	22.37	59.62	13.31
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5000.	1000.	1000.	5000.	5000.	5000.	
Low	-10.00	-5.000	-1.500	-1.000	-1.000	-2.000	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	13.14	-.7097	.4529
SDev	.14	.0729	.1361
%RSD	1.092	10.27	30.06
#1	13.04	-.6582	.3566
#2	13.24	-.7612	.5491
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	308488	--	--	--	--	--	--
SDev	350.7250	--	--	--	--	--	--
%RSD	.1136916	--	--	--	--	--	--
#1	308736	--	--	--	--	--	--
#2	308240	--	--	--	--	--	--

Method: TRACE Sample Name: CCV3 Operator: WGL
Run Time: 11/24/98 11:18:08
Comment: 8321228
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4760	.4702	4.798	.9330	.4898	.5185	.4869
SDev	.0010	.0019	.005	.0038	.0013	.0007	.0007
%RSD	.2189	.4009	.0991	.4028	.2585	.1322	.1348
#1	.4767	.4688	4.795	.9357	.4907	.5190	.4873
#2	.4753	.4715	4.802	.9304	.4889	.5180	.4864
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	5.520	1.100	.5520	.5520	.5520
Low	.4480	.4480	4.480	.9000	.4480	.4480	.4480

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.51	.4842	.4716	.4755	.4843	4.793	19.23
SDev	.03	.0012	.0003	.0008	.0013	.015	.03
%RSD	.1360	.2543	.0718	.1683	.2615	.3172	.1459
#1	19.53	.4850	.4713	.4761	.4852	4.803	19.25
#2	19.50	.4833	.4718	.4750	.4834	4.782	19.21
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	.5520	.5520	.5520	.5520	5.520	22.00
Low	18.00	.4480	.4480	.4480	.4480	4.480	17.92

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4755	.4687	.4873	4.701	.4705	4.729	101.4
SDev	.0003	.0006	.0006	.001	.0014	.008	.1
%RSD	.0706	.1175	.1339	.0247	.2900	.1726	.1279
#1	.4757	.4690	.4878	4.701	.4715	4.734	101.3
#2	.4752	.4683	.4869	4.702	.4695	4.723	101.5
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.5520	.5520	.5520	5.520	.5520	5.520	117.7
Low	.4480	.4480	.4480	4.480	.4480	4.480	96.30

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.681	.4996	.4787	4.727	.4793	.4730	.4648
SDev	.003	.0002	.0002	.002	.0008	.0013	.0003
%RSD	.0719	.0391	.0335	.0523	.1640	.2662	.0712
#1	4.684	.4998	.4788	4.729	.4799	.4739	.4650
#2	4.679	.4995	.4786	4.725	.4788	.4721	.4645
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.520	.5520	.5520	5.520	.5520	.5520	
Low	4.480	.4480	.4480	4.480	.4480	.4480	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.4734	4.709	4.738
SDev	.0019	.021	.002
%RSD	.3973	.4515	.0342
#1	.4747	4.724	4.740
#2	.4721	4.694	4.737
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	300187	--	--	--	--	--	--
SDev	929.1383	--	--	--	--	--	--
%RSD	.3095198	--	--	--	--	--	--
#1	299530	--	--	--	--	--	--
#2	300844	--	--	--	--	--	--

Method: TRACE Sample Name: CCB3 Operator: WGL
Run Time: 11/24/98 11:22:32
Comment: 8321228
Mode: CONC Corr. Factor: 1

Elem	Ag	Sb	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0005	.0011	.0947	-.0015	.0004	.0001	.0017
SDev	.0005	.0012	.0015	.0011	.0001	.0000	.0001
%RSD	105.9	105.2	1.603	71.56	29.83	7.982	3.948
#1	-.0009	.0019	.0958	-.0022	.0005	.0001	.0018
#2	-.0001	.0003	.0936	-.0007	.0003	.0001	.0017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0100	.1000	.0100	.1000	.0100	.0020
Low	-.0100	-.0100	-.1000	-.0100	-.1000	-.0100	-.0020

Elem	Ca	Cd	Co	Cr	Cu	Fe	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0070	.0000	.0004	.0001	-.0032	-.0101	.0012
SDev	.0014	.0002	.0001	.0002	.0001	.0054	.0025
%RSD	19.68	532.9	23.01	166.4	2.103	53.54	214.5
#1	-.0060	-.0001	.0004	-.0000	-.0033	-.0139	.0030
#2	-.0080	.0001	.0003	.0002	-.0032	-.0063	-.0006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0050	.0100	.0100	.0200	.1000	.2000
Low	-.2000	-.0050	-.0100	-.0100	-.0200	-.1000	-.2000

Elem	Mn	Mo	Ni	P	Pb	Se	SiO2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0009	-.0004	-.0041	-.0002	.0005	-.0127
SDev	.0000	.0004	.0001	.0010	.0006	.0007	.0057
%RSD	40.29	41.02	21.19	24.43	259.7	146.9	44.59
#1	.0000	.0007	-.0004	-.0034	-.0007	-.0000	-.0087
#2	.0000	.0012	-.0005	-.0048	.0002	.0010	-.0167
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0200	.0400	.3000	.0030	.0050	.5000
Low	-.0100	-.0200	-.0400	-.3000	-.0030	-.0050	-.5000

Elem	Sn	Sr	Ti	Tl	V	Zn	Pb/1
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0000	.0000	.0022	.0005	-.0004	-.0011
SDev	.0004	.0000	.0000	.0018	.0000	.0001	.0018
%RSD	358.2	52.91	36.54	81.13	3.394	37.00	170.9
#1	-.0002	.0001	.0001	.0035	.0005	-.0003	-.0024
#2	.0004	.0000	.0000	.0009	.0004	-.0005	.0002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.1000	.0500	.0150	.0100	.0100	.0200	
Low	-.1000	-.0500	-.0150	-.0100	-.0100	-.0200	

Elem	Pb/2	Se/1	Se/2

Units	ppm	ppm	ppm
Avge	.0002	-.0012	.0013
SDev	.0000	.0010	.0006
%RSD	4.259	81.93	44.06
#1	.0002	-.0019	.0009
#2	.0002	-.0005	.0018
Errors	NOCHECK	NOCHECK	NOCHECK
High			
Low			

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	303935	--	--	--	--	--	--
SDev	148.4924	--	--	--	--	--	--
%RSD	.0488566	--	--	--	--	--	--
#1	303830	--	--	--	--	--	--
#2	304040	--	--	--	--	--	--