010001

SOUTHWEST RESEARCH INSTITUTE
NUCLEAR PROJECT
CLIENT: Division 20
TASK ORDER: 040713-4, 040714-12, 040720-10
SRR: 26167, 26177, 26225
SDG: 247357, 247433, 248204
CASE: CNWRA
VTSR: July 12, 14, 20, 2004
PROJECT#: 10542.02.002

FINAL REPORT

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET

010002

Sample ID
4-4C

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/12/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 247357

SRR: 26167

TO: 040713-4

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	<0.1	0.1
Antimony	<0.05	0.05
Arsenic	<0.2	0.2
Barium	0.422	0.01
Beryllium	<0.01	0.01
Bismuth	<0.2	0.2
Boron	2782	10
Cadmium	<0.01	0.01
Calcium	0.329	0.1
Chromium	<0.01	0.01
Cobalt	<0.02	0.02
Copper	<0.01	0.01
Iron	<0.1	0.1
Lanthanum	<0.02	0.02
Lead	<0.02	0.02
Lithium	<0.01	0.01
Magnesium	<0.1	0.1
Manganese	<0.01	0.01
Molybdenum	<0.01	0.01
Nickel	<0.01	0.01
Palladium	<0.02	0.02
Phosphorus	<0.08	0.08
Potassium	1.93	0.4
Selenium	<0.02	0.02
Silicon	0.549	0.05
Silver	<0.02	0.02
Sodium	3729	20
Strontium	0.020	0.01
Sulfur	0.227	0.1
Thallium	<0.02	0.02
Thorium	<0.03	0.03
Tin	<0.05	0.05
Titanium	<0.01	0.01
Tungsten	<0.02	0.02
Uranium	<0.2	0.2
Vanadium	<0.01	0.01
Yttrium	<0.01	0.01
Zinc	1.44	0.01
Zirconium	<0.01	0.01

SOUTHWEST RESEARCH INSTITUTE

DUPLICATE SUMMARY

010003

Sample ID
4-4C

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/12/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 247357

SRR: 26167

TO: 040713-4

Analysis	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD
Aluminum	<0.1	<0.1	0.00%
Antimony	<0.05	<0.05	0.00%
Arsenic	<0.2	<0.2	0.00%
Barium	0.422	0.421	0.15%
Beryllium	<0.01	<0.01	0.00%
Bismuth	<0.2	<0.2	0.00%
Boron	2782	2783	0.02%
Cadmium	<0.01	<0.01	0.00%
Calcium	0.329	0.319	2.91%
Chromium	<0.01	<0.01	0.00%
Cobalt	<0.02	<0.02	0.00%
Copper	<0.01	<0.01	0.00%
Iron	<0.1	<0.1	0.00%
Lanthanum	<0.02	<0.02	0.00%
Lead	<0.02	<0.02	0.00%
Lithium	<0.01	<0.01	0.00%
Magnesium	<0.1	<0.1	0.00%
Manganese	<0.01	<0.01	0.00%
Molybdenum	<0.01	<0.01	0.00%
Nickel	<0.01	<0.01	0.00%
Palladium	<0.02	<0.02	0.00%
Phosphorus	<0.08	<0.08	0.00%
Potassium	1.93	2.03	4.92%
Selenium	<0.02	<0.02	0.00%
Silicon	0.549	0.534	2.62%
Silver	<0.02	<0.02	0.00%
Sodium	3729	3709	0.54%
Strontium	0.020	0.020	0.61%
Sulfur	0.227	0.203	10.9%
Thallium	<0.02	<0.02	0.00%
Thorium	<0.03	<0.03	0.00%
Tin	<0.05	<0.05	0.00%
Titanium	<0.01	<0.01	0.00%
Tungsten	<0.02	<0.02	0.00%
Uranium	<0.2	<0.2	0.00%
Vanadium	<0.01	<0.01	0.00%
Yttrium	<0.01	<0.01	0.00%
Zinc	1.44	1.43	0.86%
Zirconium	<0.01	<0.01	0.00%

SOUTHWEST RESEARCH INSTITUTE

MATRIX SPIKE SUMMARY

010004

Sample ID
4-4C

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/12/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 247357

SRR: 26167

TO: 040713-4

Analysis	Sample Result (mg/L)	Spike Result (mg/L)	Spike Added (mg/L)	Recovery
Aluminum	<0.1	4.42	4.00	110.4%
Antimony	<0.05	1.01	1.00	100.6%
Arsenic	<0.2	4.45	4.00	111.1%
Barium	0.422	4.32	4.00	97.6%
Beryllium	<0.01	0.095	0.100	94.6%
Bismuth	NA	NA	NA	NA
Boron	2782	3222	400	109.9%
Cadmium	<0.01	0.100	0.100	99.7%
Calcium	0.329	41.0	40.0	101.7%
Chromium	<0.01	0.414	0.400	103.6%
Cobalt	<0.02	0.995	1.00	99.5%
Copper	<0.01	0.553	0.500	110.6%
Iron	<0.1	2.07	2.00	103.5%
Lanthanum	NA	NA	NA	NA
Lead	<0.02	1.04	1.00	104.0%
Lithium	NA	NA	NA	NA
Magnesium	<0.1	39.2	40.0	98.0%
Manganese	<0.01	1.02	1.00	102.2%
Molybdenum	NA	NA	NA	NA
Nickel	<0.01	0.986	1.00	98.6%
Palladium	NA	NA	NA	NA
Phosphorus	NA	NA	NA	NA
Potassium	1.93	52.6	40.0	126.6%
Selenium	<0.02	4.23	4.00	105.8%
Silicon	NA	NA	NA	NA
Silver	<0.02	0.094	0.100	93.9%
Sodium	3729	5752	2000	101.1%
Strontium	NA	NA	NA	NA
Sulfur	NA	NA	NA	NA
Thallium	<0.02	4.45	4.00	111.4%
Thorium	NA	NA	NA	NA
Tin	NA	NA	NA	NA
Titanium	NA	NA	NA	NA
Tungsten	NA	NA	NA	NA
Uranium	NA	NA	NA	NA
Vanadium	<0.01	0.999	1.00	99.9%
Yttrium	NA	NA	NA	NA
Zinc	1.44	2.46	1.00	101.4%
Zirconium	NA	NA	NA	NA

NA- Not Applicable.

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET

010005

Sample ID
4-4D

Lab Name: Southwest Research Institute

Lab Code: SwRI

Matrix: Liquid

Lab System ID: 247358

Client: Division 20

Date Received: 07/12/04

Project No.: 10542.02.002

SRR: 26167

TO: 040713-4

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	<0.1	0.1
Antimony	<0.05	0.05
Arsenic	<0.2	0.2
Barium	0.484	0.01
Beryllium	<0.01	0.01
Bismuth	<0.2	0.2
Boron	3072	10
Cadmium	<0.01	0.01
Calcium	0.369	0.1
Chromium	<0.01	0.01
Cobalt	<0.02	0.02
Copper	<0.01	0.01
Iron	<0.1	0.1
Lanthanum	<0.02	0.02
Lead	<0.02	0.02
Lithium	<0.01	0.01
Magnesium	<0.1	0.1
Manganese	<0.01	0.01
Molybdenum	<0.01	0.01
Nickel	<0.01	0.01
Palladium	<0.02	0.02
Phosphorus	0.084	0.08
Potassium	2.41	0.4
Selenium	<0.02	0.02
Silicon	0.872	0.05
Silver	<0.02	0.02
Sodium	4009	20
Strontium	0.021	0.01
Sulfur	0.306	0.1
Thallium	<0.02	0.02
Thorium	<0.03	0.03
Tin	<0.05	0.05
Titanium	<0.01	0.01
Tungsten	<0.02	0.02
Uranium	<0.2	0.2
Vanadium	<0.01	0.01
Yttrium	<0.01	0.01
Zinc	2.30	0.01
Zirconium	<0.01	0.01

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET

010006

Sample ID
5-4C

Lab Name: Southwest Research Institute

Lab Code: SwRI

Matrix: Liquid

Lab System ID: 247359

Client: Division 20

Date Received: 07/12/04

Project No.: 10542.02.002

SRR: 26167

TO: 040713-4

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	0.103	0.1
Antimony	<0.05	0.05
Arsenic	<0.2	0.2
Barium	0.692	0.01
Beryllium	<0.01	0.01
Bismuth	<0.2	0.2
Boron	2787	10
Cadmium	<0.01	0.01
Calcium	28.3	0.1
Chromium	<0.01	0.01
Cobalt	<0.02	0.02
Copper	<0.01	0.01
Iron	<0.1	0.1
Lanthanum	<0.02	0.02
Lead	<0.02	0.02
Lithium	<0.01	0.01
Magnesium	1.01	0.1
Manganese	<0.01	0.01
Molybdenum	<0.01	0.01
Nickel	<0.01	0.01
Palladium	<0.02	0.02
Phosphorus	<0.08	0.08
Potassium	2.56	0.4
Selenium	<0.02	0.02
Silicon	2.10	0.05
Silver	<0.02	0.02
Sodium	3679	20
Strontium	0.057	0.01
Sulfur	0.527	0.1
Thallium	<0.02	0.02
Thorium	<0.03	0.03
Tin	<0.05	0.05
Titanium	<0.01	0.01
Tungsten	<0.02	0.02
Uranium	<0.2	0.2
Vanadium	<0.01	0.01
Yttrium	<0.01	0.01
Zinc	0.097	0.01
Zirconium	<0.01	0.01

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET

010007

Sample ID
5-4D

Lab Name: Southwest Research Institute

Lab Code: SwRI

Matrix: Liquid

Lab System ID: 247360

Client: Division 20

Date Received: 07/12/04

Project No.: 10542.02.002

SRR: 26167

TO: 040713-4

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	<0.1	0.1
Antimony	<0.05	0.05
Arsenic	<0.2	0.2
Barium	0.500	0.01
Beryllium	<0.01	0.01
Bismuth	<0.2	0.2
Boron	3027	10
Cadmium	<0.01	0.01
Calcium	24.4	0.1
Chromium	<0.01	0.01
Cobalt	<0.02	0.02
Copper	<0.01	0.01
Iron	<0.1	0.1
Lanthanum	<0.02	0.02
Lead	<0.02	0.02
Lithium	<0.01	0.01
Magnesium	1.04	0.1
Manganese	<0.01	0.01
Molybdenum	<0.01	0.01
Nickel	<0.01	0.01
Palladium	<0.02	0.02
Phosphorus	<0.08	0.08
Potassium	2.36	0.4
Selenium	<0.02	0.02
Silicon	2.59	0.05
Silver	<0.02	0.02
Sodium	4046	20
Strontium	0.065	0.01
Sulfur	0.333	0.1
Thallium	<0.02	0.02
Thorium	<0.03	0.03
Tin	<0.05	0.05
Titanium	<0.01	0.01
Tungsten	<0.02	0.02
Uranium	<0.2	0.2
Vanadium	<0.01	0.01
Yttrium	<0.01	0.01
Zinc	0.131	0.01
Zirconium	<0.01	0.01

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET

010008

Sample ID
4-5C Filtered

Lab Name: Southwest Research Institute

Lab Code: SwRI

Matrix: Liquid

Lab System ID: 247433

Client: Division 20

Date Received: 07/14/04

Project No.: 10542.02.002

SRR: 26177

TO: 040714-12

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	0.182	0.1
Antimony	<0.05	0.05
Arsenic	<0.2	0.2
Barium	0.528	0.01
Beryllium	<0.01	0.01
Bismuth	<0.2	0.2
Boron	2776	10
Cadmium	<0.01	0.01
Calcium	1.02	0.1
Chromium	<0.01	0.01
Cobalt	<0.02	0.02
Copper	<0.01	0.01
Iron	<0.1	0.1
Lanthanum	<0.02	0.02
Lead	<0.02	0.02
Lithium	<0.01	0.01
Magnesium	<0.1	0.1
Manganese	<0.01	0.01
Molybdenum	<0.01	0.01
Nickel	<0.01	0.01
Palladium	<0.02	0.02
Phosphorus	<0.08	0.08
Potassium	2.56	0.4
Selenium	<0.02	0.02
Silicon	6.85	0.05
Silver	<0.02	0.02
Sodium	3695	20
Strontium	0.024	0.01
Sulfur	0.501	0.1
Thallium	<0.02	0.02
Thorium	<0.03	0.03
Tin	<0.05	0.05
Titanium	<0.01	0.01
Tungsten	<0.02	0.02
Uranium	<0.2	0.2
Vanadium	<0.01	0.01
Yttrium	<0.01	0.01
Zinc	1.15	0.01
Zirconium	<0.01	0.01

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET

010009

Sample ID
4-5C Not Filtered

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/14/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 247434

SRR: 26177

TO: 040714-12

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	0.269	0.2
Antimony	<0.1	0.1
Arsenic	<0.2	0.2
Barium	<0.02	0.02
Beryllium	<0.02	0.02
Bismuth	<0.2	0.2
Boron	2678	10
Cadmium	<0.02	0.02
Calcium	0.946	0.4
Chromium	<0.02	0.02
Cobalt	<0.02	0.02
Copper	<0.02	0.02
Iron	<0.2	0.2
Lanthanum	<0.02	0.02
Lead	<0.04	0.04
Lithium	<0.02	0.02
Magnesium	<0.2	0.2
Manganese	<0.02	0.02
Molybdenum	<0.02	0.02
Nickel	<0.02	0.02
Palladium	<0.04	0.04
Phosphorus	<0.16	0.16
Potassium	<0.8	0.8
Selenium	<0.04	0.04
Silicon	5.94	0.1
Silver	<0.06	0.06
Sodium	3631	20
Strontium	<0.02	0.02
Sulfur	0.348	0.2
Thallium	<0.04	0.04
Thorium	<0.06	0.06
Tin	<0.1	0.1
Titanium	<0.02	0.02
Tungsten	<0.04	0.04
Uranium	<0.4	0.4
Vanadium	<0.02	0.02
Yttrium	<0.02	0.02
Zinc	2.12	0.02
Zirconium	<0.02	0.02

SOUTHWEST RESEARCH INSTITUTE

DUPLICATE SUMMARY

010010

Sample ID
4-5C Not Filtered

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/14/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 247434

SRR: 26177

TO: 040714-12

Analysis	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD
Aluminum	0.269	0.291	8.04%
Antimony	<0.1	<0.1	0.00%
Arsenic	<0.2	<0.2	0.00%
Barium	<0.02	<0.02	0.00%
Beryllium	<0.02	<0.02	0.00%
Bismuth	<0.2	<0.2	0.00%
Boron	2678	2652	0.99%
Cadmium	<0.02	<0.02	0.00%
Calcium	0.946	0.930	1.66%
Chromium	<0.02	<0.02	0.00%
Cobalt	<0.02	<0.02	0.00%
Copper	<0.02	<0.02	0.00%
Iron	<0.2	<0.2	0.00%
Lanthanum	<0.02	<0.02	0.00%
Lead	<0.04	<0.04	0.00%
Lithium	<0.02	<0.02	0.00%
Magnesium	<0.2	<0.2	0.00%
Manganese	<0.02	<0.02	0.00%
Molybdenum	<0.02	<0.02	0.00%
Nickel	<0.02	<0.02	0.00%
Palladium	<0.04	<0.04	0.00%
Phosphorus	<0.16	<0.16	0.00%
Potassium	<0.8	1.05	200%
Selenium	<0.04	<0.04	0.00%
Silicon	5.94	5.98	0.62%
Silver	<0.06	<0.06	0.00%
Sodium	3631	3605	0.73%
Strontium	<0.02	<0.02	0.00%
Sulfur	0.348	0.294	16.6%
Thallium	<0.04	<0.04	0.00%
Thorium	<0.06	<0.06	0.00%
Tin	<0.1	<0.1	0.00%
Titanium	<0.02	<0.02	0.00%
Tungsten	<0.04	<0.04	0.00%
Uranium	<0.4	<0.4	0.00%
Vanadium	<0.02	<0.02	0.00%
Yttrium	<0.02	<0.02	0.00%
Zinc	2.12	2.16	1.58%
Zirconium	<0.02	<0.02	0.00%

SOUTHWEST RESEARCH INSTITUTE

MATRIX SPIKE SUMMARY

010011

Sample ID
4-5C Not Filtered

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/14/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 247434

SRR: 26177

TO: 040714-12

Analysis	Sample Result (mg/L)	Spike Result (mg/L)	Spike Added (mg/L)	Recovery
Aluminum	0.269	4.29	4.00	100.6%
Antimony	<0.1	0.917	1.00	91.7%
Arsenic	<0.2	4.08	4.00	101.9%
Barium	<0.02	3.80	4.00	94.9%
Beryllium	<0.02	0.091	0.100	91.4%
Bismuth	NA	NA	NA	NA
Boron	2678	2669	4.00	-225.4%
Cadmium	<0.02	0.094	0.100	94.4%
Calcium	0.946	39.6	40.0	96.6%
Chromium	<0.02	0.393	0.400	98.3%
Cobalt	<0.02	0.951	1.00	95.1%
Copper	<0.02	0.522	0.500	104.4%
Iron	<0.2	1.96	2.00	97.9%
Lanthanum	NA	NA	NA	NA
Lead	<0.04	1.01	1.00	101.4%
Lithium	NA	NA	NA	NA
Magnesium	<0.2	37.3	40.0	93.4%
Manganese	<0.02	0.979	1.00	97.9%
Molybdenum	NA	NA	NA	NA
Nickel	<0.02	0.934	1.00	93.4%
Palladium	NA	NA	NA	NA
Phosphorus	NA	NA	NA	NA
Potassium	<0.8	46.2	40.0	115.5%
Selenium	<0.04	3.86	4.00	96.6%
Silicon	NA	NA	NA	NA
Silver	<0.06	0.080	0.100	79.8%
Sodium	3631	3636	40.0	11.0%
Strontium	NA	NA	NA	NA
Sulfur	NA	NA	NA	NA
Thallium	<0.04	4.19	4.00	104.7%
Thorium	NA	NA	NA	NA
Tin	NA	NA	NA	NA
Titanium	NA	NA	NA	NA
Tungsten	NA	NA	NA	NA
Uranium	NA	NA	NA	NA
Vanadium	<0.02	0.960	1.00	96.0%
Yttrium	NA	NA	NA	NA
Zinc	2.12	3.19	1.00	106.5%
Zirconium	NA	NA	NA	NA

NA- Not Applicable.

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET **010012**

Sample ID
5-5C Filtered

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/14/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 247435

SRR: 26177

TO: 040714-12

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	0.304	0.1
Antimony	<0.05	0.05
Arsenic	<0.2	0.2
Barium	0.818	0.01
Beryllium	<0.01	0.01
Bismuth	<0.2	0.2
Boron	2810	10
Cadmium	<0.01	0.01
Calcium	21.5	0.1
Chromium	<0.01	0.01
Cobalt	<0.02	0.02
Copper	<0.01	0.01
Iron	<0.1	0.1
Lanthanum	<0.02	0.02
Lead	<0.02	0.02
Lithium	<0.01	0.01
Magnesium	1.07	0.1
Manganese	<0.01	0.01
Molybdenum	<0.01	0.01
Nickel	<0.01	0.01
Palladium	<0.02	0.02
Phosphorus	<0.08	0.08
Potassium	3.45	0.4
Selenium	<0.02	0.02
Silicon	20.3	0.05
Silver	<0.02	0.02
Sodium	3677	20
Strontium	0.070	0.01
Sulfur	1.05	0.1
Thallium	<0.02	0.02
Thorium	<0.03	0.03
Tin	<0.05	0.05
Titanium	<0.01	0.01
Tungsten	<0.02	0.02
Uranium	<0.2	0.2
Vanadium	<0.01	0.01
Yttrium	<0.01	0.01
Zinc	0.252	0.01
Zirconium	<0.01	0.01

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET

010013

Sample ID
5-5C Not Filtered

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/14/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 247436

SRR: 26177

TO: 040714-12

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	0.519	0.2
Antimony	<0.1	0.1
Arsenic	<0.2	0.2
Barium	<0.02	0.02
Beryllium	<0.02	0.02
Bismuth	<0.2	0.2
Boron	2711	10
Cadmium	<0.02	0.02
Calcium	21.7	0.4
Chromium	<0.02	0.02
Cobalt	<0.02	0.02
Copper	0.024	0.02
Iron	<0.2	0.2
Lanthanum	<0.02	0.02
Lead	<0.04	0.04
Lithium	<0.02	0.02
Magnesium	1.06	0.2
Manganese	<0.02	0.02
Molybdenum	<0.02	0.02
Nickel	<0.02	0.02
Palladium	<0.04	0.04
Phosphorus	<0.16	0.16
Potassium	1.34	0.8
Selenium	<0.04	0.04
Silicon	18.1	0.1
Silver	<0.06	0.06
Sodium	3538	20
Strontium	0.053	0.02
Sulfur	0.571	0.2
Thallium	<0.04	0.04
Thorium	<0.06	0.06
Tin	<0.1	0.1
Titanium	<0.02	0.02
Tungsten	<0.04	0.04
Uranium	<0.4	0.4
Vanadium	<0.02	0.02
Yttrium	<0.02	0.02
Zinc	<0.02	0.02
Zirconium	<0.02	0.02

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET **010014**

Sample ID
4-6 D

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/20/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 248204

SRR: 26225

TO: 040720-10

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	0.284	0.2
Antimony	<0.1	0.1
Arsenic	<0.2	0.2
Barium	<0.02	0.02
Beryllium	<0.02	0.02
Bismuth	<0.2	0.2
Boron	2394	10
Cadmium	<0.02	0.02
Calcium	1.21	0.4
Chromium	0.052	0.02
Cobalt	<0.02	0.02
Copper	0.085	0.02
Iron	<0.2	0.2
Lanthanum	<0.02	0.02
Lead	<0.04	0.04
Lithium	<0.02	0.02
Magnesium	<0.2	0.2
Manganese	<0.02	0.02
Molybdenum	<0.02	0.02
Nickel	<0.02	0.02
Palladium	<0.04	0.04
Phosphorus	<0.16	0.16
Potassium	<0.8	0.8
Selenium	<0.04	0.04
Silicon	0.225	0.1
Silver	<0.06	0.06
Sodium	3189	20
Strontium	<0.02	0.02
Sulfur	<0.2	0.2
Thallium	<0.04	0.04
Thorium	<0.06	0.06
Tin	<0.1	0.1
Titanium	<0.02	0.02
Tungsten	0.110	0.04
Uranium	<0.4	0.4
Vanadium	<0.02	0.02
Yttrium	<0.02	0.02
Zinc	14.6	0.02
Zirconium	<0.02	0.02

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET 010015

Sample ID
4-6 D Filtered

Lab Name: Southwest Research Institute

Lab Code: SwRI

Matrix: Liquid

Lab System ID: 248205

Client: Division 20

Date Received: 07/20/04

Project No.: 10542.02.002

SRR: 26225

TO: 040720-10

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	0.188	0.1
Antimony	<0.05	0.05
Arsenic	<0.2	0.2
Barium	0.056	0.01
Beryllium	<0.01	0.01
Bismuth	<0.2	0.2
Boron	2448	10
Cadmium	<0.01	0.01
Calcium	1.02	0.1
Chromium	0.057	0.01
Cobalt	<0.02	0.02
Copper	0.040	0.01
Iron	<0.1	0.1
Lanthanum	<0.02	0.02
Lead	<0.02	0.02
Lithium	<0.01	0.01
Magnesium	0.101	0.1
Manganese	<0.01	0.01
Molybdenum	0.057	0.01
Nickel	0.015	0.01
Palladium	<0.02	0.02
Phosphorus	<0.08	0.08
Potassium	1.50	0.4
Selenium	<0.02	0.02
Silicon	0.442	0.05
Silver	<0.02	0.02
Sodium	3228	20
Strontium	0.013	0.01
Sulfur	0.159	0.1
Thallium	<0.02	0.02
Thorium	<0.03	0.03
Tin	<0.05	0.05
Titanium	<0.01	0.01
Tungsten	0.032	0.02
Uranium	<0.2	0.2
Vanadium	<0.01	0.01
Yttrium	<0.01	0.01
Zinc	1.66	0.01
Zirconium	<0.01	0.01

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET

010016

Sample ID
5-6 D

Lab Name: Southwest Research Institute

Lab Code: SwRI

Matrix: Liquid

Lab System ID: 248206

Client: Division 20

Date Received: 07/20/04

Project No.: 10542.02.002

SRR: 26225

TO: 040720-10

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	0.236	0.2
Antimony	<0.1	0.1
Arsenic	<0.2	0.2
Barium	<0.02	0.02
Beryllium	<0.02	0.02
Bismuth	<0.2	0.2
Boron	2484	10
Cadmium	<0.02	0.02
Calcium	20.4	0.4
Chromium	0.094	0.02
Cobalt	<0.02	0.02
Copper	0.043	0.02
Iron	0.255	0.2
Lanthanum	<0.02	0.02
Lead	<0.04	0.04
Lithium	<0.02	0.02
Magnesium	0.289	0.2
Manganese	<0.02	0.02
Molybdenum	<0.02	0.02
Nickel	0.034	0.02
Palladium	<0.04	0.04
Phosphorus	<0.16	0.16
Potassium	<0.8	0.8
Selenium	<0.04	0.04
Silicon	0.652	0.1
Silver	<0.06	0.06
Sodium	3307	20
Strontium	0.078	0.02
Sulfur	0.305	0.2
Thallium	<0.04	0.04
Thorium	<0.06	0.06
Tin	<0.1	0.1
Titanium	<0.02	0.02
Tungsten	0.056	0.04
Uranium	<0.4	0.4
Vanadium	<0.02	0.02
Yttrium	<0.02	0.02
Zinc	1.95	0.02
Zirconium	<0.02	0.02

SOUTHWEST RESEARCH INSTITUTE

SAMPLE ANALYSIS DATA SHEET

010017

Sample ID
5-6 D Filtered

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: 07/20/04

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: 248207

SRR: 26225

TO: 040720-10

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	0.133	0.1
Antimony	<0.05	0.05
Arsenic	<0.2	0.2
Barium	0.107	0.01
Beryllium	<0.01	0.01
Bismuth	<0.2	0.2
Boron	2607	10
Cadmium	<0.01	0.01
Calcium	13.4	0.1
Chromium	0.040	0.01
Cobalt	<0.02	0.02
Copper	<0.01	0.01
Iron	<0.1	0.1
Lanthanum	<0.02	0.02
Lead	<0.02	0.02
Lithium	<0.01	0.01
Magnesium	0.251	0.1
Manganese	<0.01	0.01
Molybdenum	0.013	0.01
Nickel	<0.01	0.01
Palladium	<0.02	0.02
Phosphorus	<0.08	0.08
Potassium	1.55	0.4
Selenium	<0.02	0.02
Silicon	1.11	0.05
Silver	<0.02	0.02
Sodium	3410	20
Strontium	0.079	0.01
Sulfur	0.277	0.1
Thallium	<0.02	0.02
Thorium	<0.03	0.03
Tin	<0.05	0.05
Titanium	<0.01	0.01
Tungsten	<0.02	0.02
Uranium	<0.2	0.2
Vanadium	<0.01	0.01
Yttrium	<0.01	0.01
Zinc	1.26	0.01
Zirconium	<0.01	0.01

SOUTHWEST RESEARCH INSTITUTE

LABORATORY CONTROL SAMPLE

010018

Sample ID
LCSW - G22W1 / G22W2

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: NA

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: NA

SRR: 26167, 26177, 26225

TO: 040713-4, 040714-12, 040720-1

Analysis	Sample Result (mg/L)	True Value (mg/L)	Recovery
Aluminum	3.93	4.00	98.2%
Antimony	0.986	1.00	98.6%
Arsenic	4.08	4.00	101.9%
Barium	4.05	4.00	101.1%
Beryllium	0.099	0.100	98.6%
Bismuth	NA	NA	NA
Boron	8.15	8.00	101.8%
Cadmium	0.099	0.100	99.2%
Calcium	41.1	40.0	102.7%
Chromium	0.401	0.400	100.2%
Cobalt	0.989	1.00	98.9%
Copper	0.506	0.500	101.2%
Iron	2.16	2.00	107.8%
Lanthanum	NA	NA	NA
Lead	1.01	1.00	101.1%
Lithium	NA	NA	NA
Magnesium	40.8	40.0	102.1%
Manganese	1.01	1.00	100.8%
Molybdenum	NA	NA	NA
Nickel	0.984	1.00	98.4%
Palladium	NA	NA	NA
Phosphorus	NA	NA	NA
Potassium	39.8	40.0	99.5%
Selenium	4.18	4.00	104.5%
Silicon	NA	NA	NA
Silver	0.100	0.100	100.3%
Sodium	40.4	40.0	100.9%
Strontium	NA	NA	NA
Sulfur	NA	NA	NA
Thallium	4.21	4.00	105.3%
Thorium	NA	NA	NA
Tin	NA	NA	NA
Titanium	NA	NA	NA
Tungsten	NA	NA	NA
Uranium	NA	NA	NA
Vanadium	0.991	1.00	99.1%
Yttrium	NA	NA	NA
Zinc	0.984	1.00	98.4%
Zirconium	NA	NA	NA

NA- Not Applicable.

SOUTHWEST RESEARCH INSTITUTE

LABORATORY CONTROL SAMPLE

010019

Sample ID
LCSW - G22W3

Lab Name: Southwest Research Institute

Lab Code: SwRI

Matrix: Liquid

Lab System ID: NA

Client: Division 20

Date Received: NA

Project No.: 10542.02.002

SRR: 26167, 26177, 26225

TO: 040713-4, 040714-12, 040720-1

Analysis	Sample Result (mg/L)	True Value (mg/L)	Recovery
Aluminum	3.70	4.00	92.6%
Antimony	0.932	1.00	93.2%
Arsenic	3.74	4.00	93.4%
Barium	3.90	4.00	97.6%
Beryllium	0.090	0.100	89.8%
Bismuth	NA	NA	NA
Boron	3.77	4.00	94.1%
Cadmium	0.094	0.100	93.9%
Calcium	38.6	40.0	96.4%
Chromium	0.384	0.400	96.0%
Cobalt	0.938	1.00	93.8%
Copper	0.476	0.500	95.3%
Iron	2.11	2.00	105.5%
Lanthanum	NA	NA	NA
Lead	0.974	1.00	97.4%
Lithium	NA	NA	NA
Magnesium	37.9	40.0	94.9%
Manganese	0.964	1.00	96.4%
Molybdenum	NA	NA	NA
Nickel	0.936	1.00	93.6%
Palladium	NA	NA	NA
Phosphorus	NA	NA	NA
Potassium	37.9	40.0	94.8%
Selenium	3.53	4.00	88.1%
Silicon	NA	NA	NA
Silver	0.096	0.100	96.3%
Sodium	38.4	40.0	95.9%
Strontium	NA	NA	NA
Sulfur	NA	NA	NA
Thallium	3.97	4.00	99.3%
Thorium	NA	NA	NA
Tin	NA	NA	NA
Titanium	NA	NA	NA
Tungsten	NA	NA	NA
Uranium	NA	NA	NA
Vanadium	0.96	1.00	95.6%
Yttrium	NA	NA	NA
Zinc	0.936	1.00	93.6%
Zirconium	NA	NA	NA

NA- Not Applicable.

SOUTHWEST RESEARCH INSTITUTE

BLANK SUMMARY

010020

Sample ID

PBW - G22W1 / G22W2

Lab Name: Southwest Research Institute

Client: Division 20

Lab Code: SwRI

Date Received: NA

Matrix: Liquid

Project No.: 10542.02.002

Lab System ID: NA

SRR: 26167, 26177, 26225

TO: 040713-4, 040714-12, 040720-1

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	<0.1	0.1
Antimony	<0.05	0.05
Arsenic	<0.2	0.2
Barium	<0.01	0.01
Beryllium	<0.01	0.01
Bismuth	<0.2	0.2
Boron	<0.2	0.2
Cadmium	<0.01	0.01
Calcium	<0.1	0.1
Chromium	<0.01	0.01
Cobalt	<0.02	0.02
Copper	<0.01	0.01
Iron	<0.1	0.1
Lanthanum	<0.02	0.02
Lead	<0.02	0.02
Lithium	<0.01	0.01
Magnesium	<0.1	0.1
Manganese	<0.01	0.01
Molybdenum	<0.01	0.01
Nickel	<0.01	0.01
Palladium	<0.02	0.02
Phosphorus	<0.08	0.08
Potassium	<0.4	0.4
Selenium	<0.02	0.02
Silicon	<0.05	0.05
Silver	<0.02	0.02
Sodium	<0.4	0.4
Strontium	<0.01	0.01
Sulfur	<0.1	0.1
Thallium	<0.02	0.02
Thorium	<0.03	0.03
Tin	<0.05	0.05
Titanium	<0.01	0.01
Tungsten	<0.02	0.02
Uranium	<0.2	0.2
Vanadium	<0.01	0.01
Yttrium	<0.01	0.01
Zinc	<0.01	0.01
Zirconium	<0.01	0.01

NA- Not Applicable.

SOUTHWEST RESEARCH INSTITUTE

BLANK SUMMARY

010021

Sample ID

PBW - G22W3

Lab Name: Southwest Research Institute

Lab Code: SwRI

Matrix: Liquid

Lab System ID: NA

Client: Division 20

Date Received: NA

Project No.: 10542.02.002

SRR: 26167, 26177, 26225

TO: 040713-4, 040714-12, 040720-1

Analysis	Sample Result (mg/L)	Reporting Limit (mg/L)
Aluminum	<0.2	0.2
Antimony	<0.1	0.1
Arsenic	<0.2	0.2
Barium	<0.02	0.02
Beryllium	<0.02	0.02
Bismuth	<0.2	0.2
Boron	<0.4	0.4
Cadmium	<0.02	0.02
Calcium	<0.4	0.4
Chromium	<0.02	0.02
Cobalt	<0.02	0.02
Copper	<0.02	0.02
Iron	<0.2	0.2
Lanthanum	<0.02	0.02
Lead	<0.04	0.04
Lithium	<0.02	0.02
Magnesium	<0.2	0.2
Manganese	<0.02	0.02
Molybdenum	<0.02	0.02
Nickel	<0.02	0.02
Palladium	<0.04	0.04
Phosphorus	<0.16	0.16
Potassium	<0.8	0.8
Selenium	<0.04	0.04
Silicon	<0.1	0.1
Silver	<0.06	0.06
Sodium	<0.8	0.8
Strontium	<0.02	0.02
Sulfur	<0.2	0.2
Thallium	<0.04	0.04
Thorium	<0.06	0.06
Tin	<0.1	0.1
Titanium	<0.02	0.02
Tungsten	<0.04	0.04
Uranium	<0.4	0.4
Vanadium	<0.02	0.02
Yttrium	<0.02	0.02
Zinc	<0.02	0.02
Zirconium	<0.02	0.02

NA- Not Applicable.

010022

SOUTHWEST RESEARCH INSTITUTE
NUCLEAR PROJECT
CLIENT: Division 20
TASK ORDER: 040713-4, 040714-12, 040720-10
SRR: 26167, 26177, 26225
SDG: 247357, 247433, 248204
CASE: CNWRA
VTSR: July 12, 14, 20, 2004
PROJECT#: 10542.02.002

Task Orders/01-QPP-015

Southwest Research Institute

Laboratory Task Order

TO #: 040713-4 Revision: 2

010023

Project(s): 10542.02.002
Manager(s): DAMMANN, MIKE
To PM: 07/29/04
To QA: 07/29/04
To Client: 07/30/04

SDG: 247357
VTSR: 07/12/04
CASE: CNWRA

SRR #'s: 26167
Client(s): Div. 20

Instructions

DIVISION 20 - CNWRA. 7-day TAT. Using 7-day TAT for report/PM, QAU, 10-day TAT for hardcopy (subject to change). Point of Contact is Ken Chiang (x2308). Analysis for Total ICP. Per COC note, "all solutions .45mm filtered." Work is 10 CFR 50, Appendix B, 10 CFR, Part 21. CONTACT Charlie Butcher (ext. 5928, pager 271-5172) BEFORE STARTING ANY WORK ON THIS TASK ORDER. CONTACT PM WITH ANY QUESTIONS.
REVISION 1, 2: Updated task order. (dramirez072804)

Documents Related to this task order: 11936[COC 26167]

Test: DIL-DILUTION
Section: METALPREP

Holding: 28 days from CED
Prep, Dilution
Cnt: 4

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
247357		1	Liquid	4-4C	12 Jul 04	09 Aug 04
247358		1	Liquid	4-4D	12 Jul 04	09 Aug 04
247359		1	Liquid	5-4C	12 Jul 04	09 Aug 04
247360		1	Liquid	5-4D	12 Jul 04	09 Aug 04

Test: ICP-SWRI
Section: METALS

Holding: 180 days from CED
ICP Analysis by SwRI Method
Cnt: 4

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
247357		1	Liquid	4-4C	12 Jul 04	08 Jan 05
247358		1	Liquid	4-4D	12 Jul 04	08 Jan 05
247359		1	Liquid	5-4C	12 Jul 04	08 Jan 05
247360		1	Liquid	5-4D	12 Jul 04	08 Jan 05

Southwest Research Institute

Laboratory Task Order

TO #: 040714-12 Revision: 1

010024

Project(s): 10542.02.002
Manager(s): DAMMANN, MIKE
To PM: 07/29/04
To QA: 07/29/04
To Client: 07/30/04

SDG: 247433
VTSR: 07/14/04
CASE: CNWRA

SRR #'s: 26177
Client(s): Div. 20

Instructions

DIVISION 20 - CNWRA. 7-day TAT. Using 6-day TAT for report/PM, QAU, 13-day TAT for hardcopy (subject to change). Point of Contact is Ken Chiang (x2308). Analysis for Total ICP. Per COC note, "please do NOT filter samples that are marked NOT FILTERED." Work is 10 CFR 50, Appendix B, 10 CFR Part 21. CONTACT Charlie Butcher (ext. 5928, pager 271-5172) BEFORE STARTING ANY WORK ON THIS TASK ORDER.
CONTACT PM WITH ANY QUESTIONS.
REVISION 1: Updated task order. (dramirez072804)

Documents Related to this task order: 11982[COC 26177]

Test: DIL-DILUTION
Section: METALPREP

Holding: 28 days from CED

Prep, Dilution

Cnt: 4

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
247433		1	Liquid	4-5C Filtered	13 Jul 04	10 Aug 04
247434		1	Liquid	4-5C Not Filtered	13 Jul 04	10 Aug 04
247435		1	Liquid	5-5C Filtered	13 Jul 04	10 Aug 04
247436		1	Liquid	5-5C Not Filtered	13 Jul 04	10 Aug 04

Test: ICP-SWRI
Section: METALS

Holding: 180 days from CED

ICP Analysis by SwRI Method

Cnt: 4

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
247433		1	Liquid	4-5C Filtered	13 Jul 04	09 Jan 05
247434		1	Liquid	4-5C Not Filtered	13 Jul 04	09 Jan 05
247435		1	Liquid	5-5C Filtered	13 Jul 04	09 Jan 05
247436		1	Liquid	5-5C Not Filtered	13 Jul 04	09 Jan 05

Southwest Research Institute

Laboratory Task Order

TO #: 040720-10 Revision: 1

010025

SDG: 248204
VTSR: 07/20/04
CASE: CNWRA

SRR #'s: 26225
Client(s): Div. 20

Project(s): 10542.02.002
Manager(s): DAMMANN, MIKE
To PM: 07/29/04
To QA: 07/29/04
To Client: 07/30/04

Instructions

DIVISION 20 - CNWRA. ASAP TAT. Using 7-day TAT for report/PM, QAU, 10-day TAT for hardcopy (subject to change). Point of Contact is Ken Chiang (x2308). Analysis for Total ICP. Per COC note, "2 solutions filtered .45 um. Please do not filter the other two. Please do not filter samples that are marked none Filtered." Work is 10 CFR 50, Appendix B, 10 CFR Part 21. CONTACT Charlie Butcher (ext. 5928, pager 271-5172) BEFORE STARTING ANY WORK ON THIS TASK ORDER. CONTACT PM WITH ANY QUESTIONS.
REVISION 1: Updated task order. (dramirez072804)

Documents Related to this task order: 12069[COC 26225]

Test: DIL-DILUTION
Section: METALPREP

Holding: 28 days from CED
Prep, Dilution
Cnt: 4

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
248204		1	Liquid	4-6 D	20 Jul 04	17 Aug 04
248205		1	Liquid	4-6 D Filtered	20 Jul 04	17 Aug 04
248206		1	Liquid	5-6 D	20 Jul 04	17 Aug 04
248207		1	Liquid	5-6 D Filtered	20 Jul 04	17 Aug 04

Test: ICP-SWRI
Section: METALS

Holding: 180 days from CED
ICP Analysis by SwRI Method
Cnt: 4

System ID	Type	Cont	Matrix	Customer ID	CED	Method Date
248204		1	Liquid	4-6 D	20 Jul 04	16 Jan 05
248205		1	Liquid	4-6 D Filtered	20 Jul 04	16 Jan 05
248206		1	Liquid	5-6 D	20 Jul 04	16 Jan 05
248207		1	Liquid	5-6 D Filtered	20 Jul 04	16 Jan 05

ver 7/31/2004

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01-QPP-015 **010026**
Division 01
Revision 4
November 2002

Document No. 3

Division 01

Chemistry and Chemical
Engineering Division

QUALITY PROJECT PLAN FOR

PERFORMANCE OF CHEMICAL ANALYSES FOR COMMERCIAL NUCLEAR POWER PLANTS WITHIN THE DEPARTMENT OF ANALYTICAL AND ENVIRONMENTAL CHEMISTRY

SOUTHWEST RESEARCH INSTITUTE
Chemistry and Chemical Engineering Division
6220 CULEBRA ROAD, SAN ANTONIO, TEXAS 78238

QUALITY PROJECT PLAN FOR PERFORMANCE OF CHEMICAL ANALYSES FOR COMMERCIAL NUCLEAR POWER PLANTS WITHIN THE DEPARTMENT OF ANALYTICAL AND ENVIONMENTAL CHEMISTRY

SwRI AUTHORIZATION SIGNATORIES

This is to certify that this Quality Project Plan of Southwest Research Institute (SwRI) has been reviewed and approved by the following personnel:

JoAnn Boyd — 10/30/02
JOANN BOYD (210) 522-2169 — **DATE**
Quality Assurance Manager

R. Karimi — 10/30/02
REZA KARIMI (210) 522-2412 — **DATE**
Director, Department of Analytical and Environmental Chemistry

for — 10/30/02
MICHAEL G. MACNAUGHTON (210) 522-5162 — **DATE**
Vice President, Chemistry and Chemical Engineering Division

Christopher Hobson — 10/30/02
CHRISTOPHER HOBSON (210) 522-5838 — **DATE**
Quality Assurance Engineer

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PERFORMANCE OF CHEMICAL ANALYSES FOR COMMERCIAL NUCLEAR POWER PLANTS WITHIN THE DEPARTMENT OF ANALYTICAL AND ENVIRONMENTAL CHEMISTRY

1.0 INTRODUCTION

This Quality Project Plan (QPP) defines the Quality Assurance (QA) program requirements for personnel providing the chemical analyses for commercial nuclear power plants. Southwest Research Institute (SwRI) ***Program Quality Plan (PQP-Nuclear)***, *Nuclear Services* shall implement the QA requirements. Project activities controlled by the PQP-Nuclear shall be accomplished as specified by the appropriate sections of **01-QAP-004**, *Quality Assurance Plan for Analytical and Environmental Services* and/or nationally recognized testing methods as specified on individual purchase orders. This QPP shall be applied to all projects initiated for nuclear utilities in the Department of Analytical and Environmental Chemistry. If, as a result of complexity, duration, or other factors, it is determined that a unique, project-specific quality plan is required, the project QAE shall notify the Project Manager and a project-specific quality plan shall be generated in accordance with **SOP-01-4.2.1**, *Preparation and Revision of Documented Procedures*.

2.0 SCOPE

This Quality Project Plan shall be applied to the chemical analyses performed for commercial nuclear power plants by the Department of Analytical and Environmental Chemistry within the Chemistry and Chemical Engineering Division. Although the majority of the work performed for nuclear facilities resides within the Department of Analytical and Environmental Chemistry, other departments within the division may utilize this Quality Project Plan as deemed necessary when nuclear projects are conducted.

3.0 REFERENCES

3.1 *SwRI Quality System Manual – 2000*

3.2 *10 CFR 50, Appendix B, ASME NQA-1*

3.3 *SwRI Program Quality Plan (PQP-Nuclear), Nuclear Services*

3.4 01-QAP-004, *Quality Assurance Plan for Analytical and Environmental Services*

4.0 APPLICABLE SECTIONS OF SwRI PROGRAM QUALITY PLAN (PQP-NUCLEAR)

4.1 Indoctrination and Training

4.1.1 Personnel performing duties affecting quality shall receive quality training to the *SwRI Program Quality Plan (PQP-Nuclear), Nuclear Services* prior to performing any work on projects for nuclear utilities. Institute Quality Systems (IQS) personnel shall perform this training and documentation shall be evident in the personnel training files maintained in Division Quality Assurance.

4.1.2 Indoctrination and training of personnel shall be conducted in accordance with **SOP-01-6.2.1**, *Qualification and Training.*

4.2 Qualification of Personnel

4.2.1 Testing personnel shall be designated as qualified to perform applicable project activities as specified in **SOP-01-6.2.1**, *Qualification and Training*.

4.2.2 During the performance of each testing process, testing personnel shall have access to the necessary documented procedures, i.e., QPP, QAP, Work Order, Division Quality System Standard Operating Procedures (SOPs), and applicable test/analytical procedures (TAPs) available for ready reference.

4.2.3 Any person who has not performed testing activities associated with any particular method being used for nuclear utilities projects for a period of one year shall be reevaluated prior to the conduct of the test.

4.2.4 Quality Assurance personnel witnessing the testing process for nuclear utilities shall have documented evidence of qualifications maintained by Institute Quality Systems.

4.3 Design Control

Not applicable to activities conducted within the Department of Analytical and Environmental Chemistry.

4.4 Right of Access

4.4.1 Procurement documents shall provide for access to the suppliers' facilities and records for surveillance, inspection, or audit by SwRI and clients.

4.4.2 Where appropriate, quality clause **Q32** shall be noted on the procurement documents to indicate that right of access for inspection and surveillance of activities associated with the order shall be afforded to SwRI and clients.

4.5 Control of Supplier-Generated Documents

4.5.1 Client documents shall be controlled in accordance with **SOP-01-4.2.1**, *Preparation and Revision of Documented Procedures*. These procedures provide the requirements for the preparation, review, approval, issue, distribution, and revision of documents controlled by the Chemistry and Chemical Engineering Division.

4.5.2 Documents may be controlled as Plans or Work Instructions and shall be accessible through the Division Intranet link, ***Contract Requirements*** as PDF files.

4.5.3 Nationally recognized test methods shall be of the most current issue or as specified in the purchase order. Work orders shall identify the applicable test methods to be used on the nuclear project.

4.6 Acceptance of Services Only

Not applicable to activities conducted within the Department of Analytical and Environmental Chemistry.

4.7 Commercial Grade Items

4.7.1 Where an item is to be incorporated into a test or deliverable to a client, and that item is not subject to design or specification requirements that are unique to nuclear facilities, used in applications other then nuclear facilities, and procured from the supplier on the specifications set forth in the manufacturers' published product and description, the item shall be considered "commercial grade".

4.7.2 Chemical reagents and standards used for testing purposes shall be ordered to specific chemical grades and certificates of analysis shall be required with each lot.

4.7.3 Controls for procurement planning, supplier selection, supplier performance evaluation, and acceptance of procured items and services other than chemical reagents and standards shall be as identified in **SOP-01-7.4.1**, *Purchasing*, and any referenced document within that procedure.

4.7.4 Receipt inspection of chemical reagents, standards, and test items for use on nuclear safety-related projects shall be performed by department personnel and documented on the *SwRI Receipt Traveler* or **FRM-109**, *Item Receipt Report*, as specified in **SOP-01-8.2.4**, *Monitoring and Measurement*. Any discrepancy such as a damaged container or container label shall be documented on the form and the client shall be contacted for disposition.

4.7.5 Prior or acceptance of a commercial grade item, the receipt inspection shall determine the following:

(a) Damage was not sustained during shipment;

(b) The item has satisfied the specified acceptance criteria; and

(c) Specified documentation, as applicable to the item, was received and is acceptable.

4.7.6 Receipt inspection of chemical reagents and standards shall also consist of verification of chemical type, grade, container integrity, certificate of analysis, and shelf life, where applicable. Upon acceptance of chemical reagents and standards, the containers shall be labeled with the following:

(a) Chemical name;

(b) Chemical grade;

(c) Lot code;

(d) Date received; and

(e) Shelf life, when applicable.

4.7.7 Expired shelf life items shall not be used for testing purposes.

4.7.8 Lot codes of chemical reagents and standards used during equipment standardization and testing shall be recorded on the individual testing data sheets to provide traceability.

4.7.9 Samples supplied to SwRI for testing shall be received by the Sample Custodian and logged into the laboratory logbook. Sample documentation and sample custody shall be maintained in accordance with **TAP-01-0407-001**, *Sample Receipt Inspection*, and **TAP-01-0407-035**, *Organic and Inorganic Sample Security.*

4.7.10 Samples supplied to SwRI for testing shall be labeled with the following:

(a) Sample control number;

(b) Purchase order number;

(c) Purchase order line item number, as applicable;

(d) Work order number;

(e) Nuclear QA label; and

(f) Sample retention date, when applicable.

4.7.11 In the event that samples are damaged upon receipt, a ***Sample Discrepancy Record*** shall be generated from the Division Intranet.

4.7.12 The testing work order shall list the project number, tests required, test methods required, and shall be labeled *Nuclear Quality.*

4.7.13 Identification and traceability shall be maintained in accordance with **SOP-01-7.5.1**, *Item Identification and Traceability.*

4.8 Inspection

4.8.1 Inspection for acceptance shall be performed by qualified persons other than those who conduct or directly supervise the work being inspected.

4.8.2 Institute Quality System (IQS) personnel shall perform surveillance activities as required to ensure compliance with the contract and this Quality Project Plan. Specific areas in which IQS may perform surveillance activities include, but are not limited to, the following:

(a) Receiving inspection and labeling of chemical reagents, standards, and testing samples;

(b) Testing processes;

(c) Calibration and major equipment;

(d) Sample and record retention; and

(e) Test records.

4.9 Inspection and Testing

4.9.1 Required tests for acceptance shall be conducted under appropriate environmental conditions using the tools and equipment necessary to conduct the test in a manner to fulfill test requirements and acceptance criteria.

4.9.2 Tests shall be conducted, controlled, and verified in accordance with **SOP-01-8.2.4**, *Monitoring and Measurement*.

4.9.3 Controls for measuring and test equipment shall be as specified in **SOP-01-7.6.1**, *Control of Measuring and Test Equipment*.

4.9.4 Controls for identification, segregation, reporting, and resolution of nonconforming items and conditions shall be as specified in **SOP-01-8.3.1**, *Nonconformance Reporting*.

4.10 Handling, Storage, Packaging, Preservation, and Delivery

4.10.1 Controls for handling, storage, packaging, preservation, and delivery of items are identified in **SOP-01-7.5.3**, *Handling, Storage, Packaging, Protection, and Delivery of Items*.

4.10.2 Samples specified on the purchase order to be returned to the client shall be prepared and packaged as specified on the purchase order. Each package shall be marked legibly and indelibly with the purchase order/release number and line item number(s) relevant to the package.

4.11 Quality Assurance Records

4.11.1 Quality assurance records shall furnish documentary evidence that items or activities meet specified quality requirements. Documents that ensure this evidence include **TAP-01-0407-014**, *Inventory of Case File Purges*, and **SOP-01-4.2.4**, *Storage and Maintenance of Quality Records*. These documents and this QPP ensure that QA records shall be legible, identifiable, retrievable, and maintained in dual storage.

4.11.2 Records shall be traceable to associated items and activities and shall accurately reflect the work accomplished or information required.

4.11.3 Documents shall be considered valid records only if stamped, initialed or signed and dated by authorized personnel or otherwise authenticated.

4.11.4 Records of test analyses performed by the Department of Analytical and Environmental Chemistry are classified as *nonpermanent* and shall be retained for a minimum of five years. Nonpermanent records are those required to show evidence that an activity was performed in accordance with the applicable requirements, but need not be retained for the life of the item. Based on the use of the final data, the client shall be responsible for determining and implementing permanent storage requirements.

4.11.5 In order to satisfy duplicate storage requirements, one copy of the QA record shall maintained by the Project Manager in Building 70 and a separate copy shall be maintained in the Division Quality Assurance Archives in Building 201. Storage requirements shall be as stated in **SOP-01-4.2.4**, *Storage and Maintenance of Quality Records*, to ensure protection against the risk of damage or destruction.

4.12 10 CFR, Part 21

4.12.1 SwRI procurement documents shall include requirements for reporting and approving disposition of supplier nonconformances and, when required, compliance to 10 CFR, Part 21.

4.12.2 The Manager of Institute Quality Assurance or Director of Institute Quality Systems shall determine if a nonconforming condition is reportable under 10 CFR, Part 21, and initiate reporting and condition in accordance with the SwRI Operating Policies and Procedures (OPP). Safety hazards or defects that could create a substantial safety hazard shall be reported. Substantial safety hazard means a loss of safety function to the extent that there is a major reduction in the degree of protection provided to public health and safety.

4.13 Certified Test Report

The Project Manager and Institute Quality Assurance Manager as complying with all contractual requirements shall certify test reports. The certified test report shall reference the purchase order/release number, the test methods performed, and the purchase order/release line item number.

4.14 Valid Documents List

The Department of Analytical and Environmental Chemistry work order shall specify all applicable documents and appropriate document revision level for each document. The work order shall then serve as the Valid Documents List (VDL) for each individual project.

5.0 HISTORY OF REVISIONS

Revision 4
Title of document changed from the Standard Project Quality Plan *SPQP-CH/AN* to Quality Project Plan, *QPP-015*
Extensive revision to comply with Project Quality Plan PQP-Nuclear, *Nuclear Services*, which replaces SwRI NQAPM, *Nuclear Quality Assurance Program Manual.*

010035

SOUTHWEST RESEARCH INSTITUTE
NUCLEAR PROJECT
CLIENT: Division 20
TASK ORDER: 040713-4, 040714-12, 040720-10
SRR: 26167, 26177, 26225
SDG: 247357, 247433, 248204
CASE: CNWRA
VTSR: July 12, 14, 20, 2004
PROJECT#: 10542.02.002

Chain of Custody/Login Paperwork

11936

SAMPLE LIST/CHAIN OF CUSTODY

Southwest Research Institute
Chemistry and Chemical Engineering Division
6220 Culebra Road
San Antonio, Texas 78238-5166

Shipper Name/Address:

Client: Ken Chiang CNWRA D.020

Client Purchase Order/Other ID:

Site/Zone ID:

Requested Turnaround:
- ☐ 2 Weeks
- ☐ 3 Weeks
- ☒ Other: 1 wk. Please Thanks

SwRI Contact: Ken Chiang x 2306

Analyses Requested

Sample ID	Sample Collection Date (mm/dd/yy)	Sample Collection Time	Matrix Type	Sample Type	# of Containers	ICP Analysis Total ICP										REMARKS
4-4C ✓	7/12/04	2:30	L		1											Inlet
4-4D ✓	7/12/04	2:30	L		1											
5-4C ✓	7/12/04	2:30	L		1											
5-4D ✓	7/12/04	2:30	L		1											

Client: DIV. 20
SRR #26167
Project #10542.02.002
Case: CNWRA
VTSR: 07/12/04 1555

Preservation
- **a** = HCl to pH <2
- **b** = HNO_3 to pH <2
- **c** = H_2SO_4 to pH <2
- **d** = NaOH to pH >12
- **e** = Cool (4°C±2°C)
- **f** = Other (specify)

Matrix Types:
- **A** – Air
- **B** – Biota
- **D** - Dust
- **E** – Emission/Stack
- **L** - Liquid
- **P** – Product
- **Sd** - Solid
- **S** – Soil
- **SED** – Sediment
- **T** - Tissue
- **W** - Water
- **WP** - Wipe

Sample Types:
- **D** - Duplicate
- **ER** – Equipment Rinsate
- **ES** – Environmental Sample
- **FB** – Field Blank
- **FD** – Field Duplicate
- **MS** – Matrix Spike
- **MSD** – Matrix Spike Dup
- **TB** – Trip Blank

Temp: 22.0°C

Therm #: 027

Comments: All Solutions .45µm filtered

Relinquished by (Print/Signature)	Date	Time
Brian K. Dealy / [signature]	7/12/04	3:28
Received by (Print/Signature)	Date	Time
Relinquished by (Print/Signature)	Date	Time
Received by (Print/Signature)	Date	Time
Relinquished by (Print/Signature)	Date	Time

SwRI Project#: 20.10542.02.002

Received by SwRI Lab: (Signature) [signature]

Date: 7/12/04 Time: 1555

Samples Disposed: Date | Time

Samples Disposed by:

Div 01 COC Form 01-01-001, Rev 8/02

11982

SAMPLE LIST/CHAIN OF CUSTODY

Southwest Research Institute
Chemistry and Chemical Engineering Division
6220 Culebra Road
San Antonio, Texas 78238-5166

Shipper Name/Address:

Client: Ken Chiang CNWRA Div20

Client Purchase Order/Other ID:

Site/Zone ID:

Requested Turnaround:
- ☐ 2 Weeks
- ☐ 3 Weeks
- ☒ Other: ASAP thanks Bam

SwRI Contact: Ken Chiang x 2388

Analyses Requested

Sample ID	Sample Collection Date (mm/dd/yy)	Sample Collection Time	Matrix Type	Sample Type	# of Containers	ICP Analysis Total ICP									REMARKS
4-5C Filtered	7/13/04	5:36	L		1	X									INTACT
4-5C Not Filtered			L		1	X									INTACT
5-5C Filtered			L		1	X									INTACT
5-5C Not Filtered			L		1	X									INTACT

Client: DIV. 20
SRR #26177
Project #10542.02.002
Case: DIV. 20
VTSR: 07/14/04 0845

Preservation
- **a** = HCl to pH <2
- **b** = HNO_3 to pH <2
- **c** = H_2SO_4 to pH <2
- **d** = NaOH to pH >12
- **e** = Cool (4°C±2°C)
- **f** = Other (specify)

Matrix Types:
- **A** – Air
- **B** – Biota
- **D** - Dust
- **E** – Emission/Stack
- **L** - Liquid
- **P** – Product
- **Sd** - Solid
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- **ES** – Environmental Sample
- **FB** – Field Blank
- **FD** – Field Duplicate
- **MS** – Matrix Spike
- **MSD** – Matrix Spike Dup
- **TB** – Trip Blank

Temp: 22.0°C Therm #: 027

Comments: Please Do Not Filter Samples that Are Marked Not Filtered

Relinquished by (Print/Signature)	Date	Time
Brian K Debby / Brian K Debby	7/14/04	8:20
Received by (Print/Signature)	Date	Time
Relinquished by (Print/Signature)	Date	Time
Received by (Print/Signature)	Date	Time
Relinquished by (Print/Signature)	Date	Time

SwRI Project#: 20.10542.02.002

Received by SwRI Lab: (Signature)

Date	Time
07/14/04	08:45AM

Samples Disposed:

Date	Time

Samples Disposed by:

010037

Div 01 COC Form 01-01-001, Rev 8/02

12069

SAMPLE LIST/CHAIN OF CUSTODY

Southwest Research Institute
Chemistry and Chemical Engineering Division
6220 Culebra Road
San Antonio, Texas 78238-5166

Shipper Name/Address:

Client: Ken Chiang CNWRA Div20

Client Purchase Order/Other ID:

Site/Zone ID:

Requested Turnaround:
- ☐ 2 Weeks
- ☐ 3 Weeks
- ☑ Other: ASAP Thanks Brian

SwRI Contact: Ken Chiang x 2308

Analyses Requested

Sample ID	Sample Collection Date (mm/dd/yy)	Sample Collection Time	Matrix Type	Sample Type	# of Containers	ICP Analysis Total ICP									REMARKS
4-6 D ✓	7/20	2:30pm	L		1	✓									Inlet
4-6 D Filtered ✓	↓	↓	L		1	✓									↓
5-6 D ✓	↓	↓	L		1	✓									↓
5-6 D Filtered ✓	↓	↓	L		1	✓									↓

Preservation
- **a** = HCl to pH <2
- **b** = HNO_3 to pH <2
- **c** = H_2SO_4 to pH <2
- **d** = NaOH to pH >12
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Matrix Types:
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Sample Types:
- **D** - Duplicate
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- **ES** – Environmental Sample
- **FB** – Field Blank
- **FD** – Field Duplicate
- **MS** – Matrix Spike
- **MSD** – Matrix Spike Dup
- **TB** – Trip Blank

Temp: 22.0°C

Therm #: 027

Comments: Please do not Filter samples that Are marked None F. Heated

Relinquished by (Print/Signature)	Date	Time
Brian K. Derby / [signature]	7/20/04	3:25pm
Received by (Print/Signature)	Date	Time
Relinquished by (Print/Signature)	Date	Time
Received by (Print/Signature)	Date	Time
Relinquished by (Print/Signature)	Date	Time

SwRI Project#: 20.10542.02.002

Received by ~~SwRI Lab~~: (Signature) [signature]

Date: 7/20/04 Time: 1535

Samples Disposed: Date: Time:

Samples Disposed by:

010038

Div 01 COC Form 01-01-001, Rev 8/02

SAMPLE LOG-IN SHEET

010039

Lab Name: Southwest Research Institute

Page 1 of 1

Received By (Print Name): DINO ROMAN

Log-in Date: 07/13/2004

Received By (Signature): DRom

Case Number: CNWRA

Sample Delivery Group No.:

SAS Number: N/A

Remarks: 10542.02.002

			EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc
1.	Custody Seal(s)	Present/Absent* Intact/Broken	4-4C	None	247357	Intact
2.	Custody Seal Nos.	N/A	4-4D	None	247358	Intact
			5-4C	None	247359	Intact
3.	Chain-of Custody Records	Present/Absent*	5-4D	None	247360	Intact
4.	Traffic Reports or Packing Lists	Present/Absent*				
5.	Airbill	Airbill/Sticker Present/Absent*				
6.	Airbill No.	HAND DELIVERED				
7.	Sample Tags	Present/Absent*				
	Sample Tag Numbers	Listed/Not listed on Chain of Custody				
8.	Sample Condition	Intact/Broken*/Leaking				
9.	Cooler Temperature	22.0C				
10.	Does Information on custody records, traffic reports, and sample tags agree?	Yes/No*				
11.	Date Received at Lab	07/12/2004				
12.	Time Received	15:55:00				

Sample Transfer

Fraction	Inorg	Fraction	
Area #	Inorg #1	Area #	
By	DINO ROMAN	By	
On	07/12/2004	On	

07/13/2004

* Contact SMO and attach record of resolution

Reviewed By: CYNTHIA A. SANCEDA

Date: 07/13/2004

Logbook No.: Sample Receipt (26167)

Logbook Page No.: 5131 (SECTION 1 OF 4)

2 07/13/2004

FORM DC-1

OLMO4.2

SAMPLE LOG-IN SHEET

010040

Lab Name: Southwest Research Institute	Page 1 of 1
Received By (Print Name): ROGER PRESAS	Log-in Date: 07/14/2004
Received By (Signature):	
Case Number: CNWRA	Sample Delivery Group No. / SAS Number: N/A

Remarks: 10542.02.002

1.	Custody Seal(s)	Present/Absent* Intact/Broken
2.	Custody Seal Nos.	N/A
3.	Chain-of Custody Records	Present/Absent*
4.	Traffic Reports or Packing Lists	Present/Absent*
5.	Airbill	Airbill/Sticker Present/Absent*
6.	Airbill No.	HAND CARRIED
7.	Sample Tags	Present/Absent*
	Sample Tag Numbers	Listed/Not listed on Chain of Custody
8.	Sample Condition	Intact/Broken*/Leaking
9.	Cooler Temperature	22C
10.	Does Information on custody records, traffic reports, and sample tags agree?	Yes/No*
11.	Date Received at Lab	07/14/2004
12.	Time Received	08:45:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc
4-5C Filtered	None	247433	Intact
4-5C Not Filtered	None	247434	Intact
5-5C Filtered	None	247435	Intact
5-5C Not Filtered	None	247436	Intact

Sample Transfer

Fraction: Inorg	Fraction:
Area #: Inorg #2	Area #:
By: ROGER PRESAS	By:
On: 07/14/2004	On:

07/15/2004

* Contact SMO and attach record of resolution

Reviewed By: CYNTHIA A. SALICEDA	Logbook No.: Sample Receipt (26177)
Date: 07/15/2004	Logbook Page No.: 5133 (SECTION 1 OF 7)

SAMPLE LOG-IN SHEET

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Lab Name: Southwest Research Institute

Page 1 of 1

Received By (Print Name): DINO ROMAN

Log-in Date: 07/20/2004

Received By (Signature): DR

Case Number: CNWRA

Sample Delivery Group No.

SAS Number: N/A

Remarks: 10542.02.002

1.	Custody Seal(s)	Present/Absent* Intact/Broken
2.	Custody Seal Nos.	N/A
3.	Chain-of Custody Records	Present/Absent*
4.	Traffic Reports or Packing Lists	Present/Absent*
5.	Airbill	Airbill/Sticker Present/Absent*
6.	Airbill No.	HAND DELIVERED
7.	Sample Tags	Present/Absent*
	Sample Tag Numbers	Listed/Not listed on Chain of Custody
8.	Sample Condition	Intact/Broken*/Leaking
9.	Cooler Temperature	22.0C
10.	Does Information on custody records, traffic reports, and sample tags agree?	Yes/No*
11.	Date Received at Lab	07/20/2004
12.	Time Received	15:35:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc
4-6 D	None	248204	Intact
4-6 D Filtered	None	248205	Intact
5-6 D	None	248206	Intact
5-6 D Filtered	None	248207	Intact

Sample Transfer

Fraction: Inorg	Fraction:
Area #: Inorg #2	Area #:
By: DINO ROMAN	By:
On: 07/20/2004	On:

07/26/2004

* Contact SMO and attach record of resolution

Reviewed By: CYNTHIA A. SALLEGOS

Date: 07/26/2004

Logbook No.: Sample Receipt (26225)

Logbook Page No.: 5139 (SECTION 4 OF 4)

FORM DC-1

OLMO4.2

010042

SOUTHWEST RESEARCH INSTITUTE
NUCLEAR PROJECT
CLIENT: Division 20
TASK ORDER: 040713-4, 040714-12, 040720-10
SRR: 26167, 26177, 26225
SDG: 247357, 247433, 248204
CASE: CNWRA
VTSR: July 12, 14, 20, 2004
PROJECT#: 10542.02.002

Copies of Login Book

Sample Login Book

Jul 13, 2004

SwRI Login Area
Division 1

Sample Receipt: 26166 | Project: 03162.20.10X | Client: HEB
VTSR Date: Jul 13, 2004 | VTSR Time: 08:04:00 | Manager: SCHATTENBERG, HERB

System ID	Customer Sample ID	Matrix
247346	(AOB-A)White Flesh Nectarines	PRODUCE
247347	(29-A)Grapes, Red (Chilean)	PRODUCE
247348	(WY-A)Strawberries	PRODUCE
247349	(ARJ-A)Mango Nectarine	PRODUCE
247350	(ARK-A)Nectacotum Pluot	PRODUCE
247351	(IL-A)Lettuce, Iceburg	PRODUCE
247352	(IL-B)Lettuce, Iceburg	PRODUCE
247353	(OS-A)Oranges, Small	PRODUCE
247354	(AHG-A)Peaches	PRODUCE
247355	(AKG-A)Nectarines	PRODUCE

Sample Receipt: 26167 | Project: 10542.02.002 | Client: Div. 20
VTSR Date: Jul 12, 2004 | VTSR Time: 15:55:00 | Manager: DAMMANN, MIKE

System ID	Customer Sample ID	Matrix
247357	4-4C	Liquid
247358	4-4D	Liquid
247359	5-4C	Liquid
247360	5-4D	Liquid

Sample Receipt: 26168 | Project: 10203.04.4XX | Client: WASHINGTON DEMIL
VTSR Date: Jul 13, 2004 | VTSR Time: 08:30:00 | Manager: HARDING, JAC

System ID	Customer Sample ID	Matrix
247368	404101I	Invertebrate
247369	404102I	Invertebrate
247370	404103I	Invertebrate
247371	404105I	Invertebrate
247372	404106I	Invertebrate
247373	404107I	Invertebrate
247374	404108I	Invertebrate

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Sample Login Book

Jul 14, 2004

SwRI Login Area
Division 1

Sample Receipt: 26175 | Project: 05748.01.001 | Client: EGLIN A.F.B.
VTSR Date: Jul 13, 2004 | VTSR Time: 13:00:00 | Manager: SCOTT, JIM

System ID	Customer Sample ID	Matrix
247421	DG060404TB12/	Water
247422	DG060404TB2/	Water
247423	DG060404TBIMPINGER13	Water
247424	DG060404TBIMPINGER16	Water
247425	DG060404TBIMPINGER9	Water

Sample Receipt: 26176 | Project: 06355.30.00X | Client: Bechtel BWXT Ida
VTSR Date: Jul 14, 2004 | VTSR Time: 08:30:00 | Manager: DAMMANN, MIKE

System ID	Customer Sample ID	Matrix
247426	NPT15401VA	Water
247427	NPT15402VA	Water
247428	NPT15501VE	Water
247429	NPT15801VA	Water
247430	NPT15901VA	Water

Sample Receipt: 26177 | Project: 10542.02.002 | Client: Div. 20
VTSR Date: Jul 14, 2004 | VTSR Time: 08:45:00 | Manager: DAMMANN, MIKE

System ID	Customer Sample ID	Matrix
247433	4-5C Filtered	Liquid
247434	4-5C Not Filtered	Liquid
247435	5-5C Filtered	Liquid
247436	5-5C Not Filtered	Liquid

Sample Receipt: 26178 | Project: 10153.01.004 | Client: SwRI
VTSR Date: Jul 14, 2004 | VTSR Time: 09:30:00 | Manager: DAMMANN, MIKE

System ID	Customer Sample ID	Matrix
247437	D-70	Liquid

Sample Login Book

010045

Jul 20, 2004

SwRI Login Area
Division 1

Sample Receipt: 26225	Project: 10542.02.002	Client: Div. 20
VTSR Date: Jul 20, 2004	VTSR Time: 15:35:00	Manager: DAMMANN, MIKE

System ID	Customer Sample ID	Matrix
248204	4-6 D	Liquid
248205	4-6 D Filtered	Liquid
248206	5-6 D	Liquid
248207	5-6 D Filtered	Liquid

Number of samples for today: 72

Number of Containers for today: 72

010046

SOUTHWEST RESEARCH INSTITUTE
NUCLEAR PROJECT
CLIENT: Division 20
TASK ORDER: 040713-4, 040714-12, 040720-10
SRR: 26167, 26177, 26225
SDG: 247357, 247433, 248204
CASE: CNWRA
VTSR: July 12, 14, 20, 2004
PROJECT#: 10542.02.002

RAW DATA

TRACE METALS PREPARATORY LABORATORY DIGESTION LOG

SOUTHWEST RESEARCH INSTITUTE
SAN ANTONIO, TEXAS 78228

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010047

CLIENT(S): DIV 20
TASK ORDER(S): 040713-4/040714-2 SDG(S): 247357/247433
PROJECT NO(S): 10542.02.002
METHOD: 3005A___3050B___3050B-7.5___3010A___3020A___7760A___7740A___$HClO_4$___H_2SO_4 Sb___
Microwave___Fusion___Teflon___Rock___OTHER df 2 and df 100 dilution
MATRIX: Water___Soil___Biota___Solid___Liquid ✓ TCLP Ext___OTHER___
INSTRUMENT: GFAA___ICP ✓ ICP-MS___IC___FLAA___HYDRIDE___OTHER "ICP"
ACID INORG #: HNO_3# ** HCl# ** H_2SO_4#___ $HClO_4$#___ HF#___
INTERNAL STD: Sc @ 10 PPM ✓ Be @ 10 PPM___ SOURCE: IV INORG# 4629 EXP: 8/05 AMT: 50 uL
Oven/Hotplate ID: — Temperature (°C): Ambient

SAMPLE IDENTIFICATION	pH	WT (g)	I.V. (mL)	F.V. (mL)	
PBLW-G19W1				5	
LCSW-G19W1 *					
247357 df 2			5.5		
7357d					
7357③ *					
7358					
7359					
7360					
7433					
7435					
7357 df 100			50 uL		
7357d					
7357③ *					
7358					
7359					
7360					
7433					
7435					
* Spike 50 uL Spike 1		Spx# 4607	Exp. 6/05		
20 uL I-CAL	7-19-04	Spx# ~~4445~~	4514 Exp 3/05		
20 uL B @ 1 ppm		IV# 4466	Exp 3/05		
** - RLB-02042-04		1% HNO_3/5% HCL	Exp 10/04		
		7-19-04			
					LOCATION: N/A

PREPARED BY: John Wills DATE: 7-19-04
REVIEWED BY: Ordeena DATE: 7/19/04
DISPOSAL INT/DATE/LOC: ___

FRM-191 (Rev 2/Mar 03)

TRACE METALS PREPARATORY LABORATORY DIGESTION LOG

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010048

CLIENT(S): DIU 20
TASK ORDER(S): 0407/4-12 SDG(S): 247433
PROJECT NO(S): 10542.02.002
METHOD: 3005A___3050B___3050B-7.5___3010A___3020A___7760A___7740A___$HClO_4$___H_2SO_4 Sb___
Microwave___Fusion___Teflon___Rock___OTHER Acid dissolution
MATRIX: Water___Soil___Biota___Solid___Liquid ✓ TCLP Ext___OTHER___
INSTRUMENT: GFAA___ICP ✓ ICP-MS___IC___FLAA___HYDRIDE___OTHER___
ACID INORG #: HNO_3# 4584 HCl#___ H_2SO_4#___ $HClO_4$#___ HF#___
INTERNAL STD: Sc @ 10 PPM___Be @ 10 PPM___SOURCE:___INORG#___EXP:___AMT:___
Oven/Hotplate ID: Block Temperature (°C): 95

SAMPLE IDENTIFICATION	pH	WT (g)	I.V. (mL)	F.V. (mL)	
PBW-G19W03				10	
LCSW-G19W03 *				↓	
247434			5	↓	
7434d			↓	↓	
7434(S) *			↓	↓	
7436			↓	↓	
* Spike 100uL Spike1		Spex#4607	Exp. 6/05		
40uL I-CAL1		Spex#4514	Exp. 3/05		
20uL B @ 1kppm		NW#4466	Exp. 3/05		
aliquot 5mls sample into a centrifuge tube, add 0.5mL					
HNO_3 slowly, heat on digestion block for 30 min,					
cool, F.V. to 10mls with di water.					
					LOCATION:

7-19-04

PREPARED BY: John Wilks DATE: 7-19-04
REVIEWED BY: Ordruna DATE: 7/19/04
DISPOSAL INT/DATE/LOC: ___

FRM-191 (Rev 2/Mar 03)

TRACE METALS PREPARATORY LABORATORY DIGESTION LOG

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BOOK / PAGE: 57 164 · 010049

CLIENT(S): DIV 20
TASK ORDER(S): 040713-4 / 040714-12 / ~~040721-1~~ 040720-10 SDG(S): 247357 / 247433 / 248204
PROJECT NO(S): 10542.02.002 gw 7-22-04
METHOD: 3005A ___ 3050B ___ 3050B-7.5 ___ 3010A ___ 3020A ___ 7760A ___ 7740A ___ $HClO_4$ ___ H_2SO_4 Sb ___
Microwave ___ Fusion ___ Teflon ___ Rock ___ OTHER df 2 and df 100 Dilution
MATRIX: Water ___ Soil ___ Biota ___ Solid ___ Liquid ✓ TCLP Ext ___ OTHER ___
INSTRUMENT: GFAA ___ ICP ✓ ICP-MS ___ IC ___ FLAA ___ HYDRIDE ___ OTHER ___
ACID INORG #: HNO_3# ** HCl# ** H_2SO_4# ___ $HClO_4$# ___ HF# ___
INTERNAL STD: Sc @ 10 PPM ✓ Be @ 10 PPM ___ SOURCE: IV INORG# 4629 EXP: 8/05 AMT: 50 uL
Oven/Hotplate ID: — Temperature (°C): Ambient

SAMPLE IDENTIFICATION	pH	WT (g)	I.V. (mL)	F.V. (mL)	
PBW-G22W1				5	
LCSW-G22W1 *					
247357r df 100			50 uL		
7357dr					
7357Sr *					
7358r					
7359r					
7360r					
7433r					
7435r					
8205					
8207 gw 7-22-04					
7357r df 2			2.5		
7357dr					
7357Sr *					
7358r					
7359r					
7360r					
7433r					
7435r					
8205					
8207					
* Spike 50 uL Spike 1		Spex #4607	Exp. 6/05		
20 uL I-CAL 1		Spex #4514	Exp. 3/05		
20 uL B @ 1 kppm		IV # 4466	Exp. 3/05		
** - RLB-02-043-01	1%	HNO_3 / 5%	HCL	Exp. 10/04	
					LOCATION: N/A

PREPARED BY: John Wells DATE: 7-22-04
REVIEWED BY: JDL DATE: 7-22-04
DISPOSAL INT/DATE/LOC: ___

FRM-191 (Rev 2/Mar 03)

TRACE METALS PREPARATORY LABORATORY DIGESTION LOG

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010050

CLIENT(S): DIV 30
TASK ORDER(S): 040713-4 / 040714-12 / 040720-10 SDG(S): 247357 / 247438 / 248204
PROJECT NO(S): 10543.03.002
METHOD: 3005A ___ 3050B ___ 3050B-7.5 ___ 3010A ___ 3020A ___ 7760A ___ 7740A ___ $HClO_4$ ___ H_2SO_4 Sb ___
Microwave ___ Fusion ___ Teflon ___ Rock ___ OTHER df 2 and df 100 dilution
MATRIX: Water ___ Soil ___ Biota ___ Solid ___ Liquid ✓ TCLP Ext ___ OTHER ___
INSTRUMENT: GFAA ___ ICP ✓ ICP-MS ___ IC ___ FLAA ___ HYDRIDE ___ OTHER ___
ACID INORG #: HNO_3# ** HCl# ** H_2SO_4# ___ $HClO_4$# ___ HF# ___
INTERNAL STD: Sc @ 10 PPM ✓ Be @ 10 PPM ___ SOURCE: IV INORG# 4629 EXP: 8/05 AMT: 50uL
Oven/Hotplate ID: — Temperature (°C): Ambient

SAMPLE IDENTIFICATION	pH	WT (g)	I.V. (mL)	F.V. (mL)	
PBLW-G22W2				5	
LCSW-G22W2*					
247357r df 100			50uL		
7357dr					
7357Dr*					
7358r					
7359r					
7360r					
7433r					
7435r					
8205*					
8207* 7-22-04					
7357r df 2			2.5		
7357dr					
7357Dr*					
7358r					
7359r					
7360r					
7433r					
7435r					
8205					
8207					
*Spike 50uL Spike 1		Spex #4607	Exp. 6/05		
20uL I-CAL1		Spex # 4514	Exp. 3/05		
20uL Be 1kppm		IV # 4466	Exp. 3/05		
** - RLB-02-043-01	1%	HNO_3 / 5%	HCL	Exp. 10/04	
					LOCATION: N/A

PREPARED BY: John Wilhs DATE: 7-22-04
REVIEWED BY: DL DATE: 7-22-04
DISPOSAL INT/DATE/LOC: ___

FRM-191 (Rev 2/Mar 03)

TRACE METALS PREPARATORY LABORATORY DIGESTION LOG

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010051

CLIENT(S): DIV 20
TASK ORDER(S): 040713-4 / 040714-12 / 040720-10 SDG(S): 247357 / 247433 / 248204
PROJECT NO(S): 10542.02.002
METHOD: 3005A ___ 3050B ___ 3050B-7.5 ___ 3010A ___ 3020A ___ 7760A ___ 7740A ___ $HClO_4$ ___ H_2SO_4 Sb ___
Microwave ___ Fusion ___ Teflon ___ Rock ___ OTHER Acid dissolution
MATRIX: Water ___ Soil ___ Biota ___ Solid ___ Liquid ✓ TCLP Ext ___ OTHER ___
INSTRUMENT: GFAA ___ ICP ✓ ICP-MS ___ IC ___ FLAA ___ HYDRIDE ___ OTHER ___
ACID INORG #: HNO_3# 4585 HCl# ___ H_2SO_4# ___ $HClO_4$# ___ HF# ___
INTERNAL STD: Sc @ 10 PPM ___ Be @ 10 PPM ___ SOURCE: ___ INORG# ___ EXP: ___ AMT: ___
Oven/Hotplate ID: #21 Temperature (°C): 95

SAMPLE IDENTIFICATION	pH	WT (g)	I.V. (mL)	F.V. (mL)	
PBW-G22W3				10	
LCSW-G22W3 *					
247434r			5		
7434dr					
7434(5)r*					
7436r					
8204					
8206					
* Spike 100 uL Spike 1		Spx# 4607	Exp. 6/05		
40 uL T-CAL1		Spx# 4514	Exp. 3/05		
20 uL B @ 1Kppm		IV# 4466	Exp. 3/05		
aliquot 5 mLs sample into a centrifuge tube, add 0.5 mL HNO3 slowly, heat on digestion in oven (forced air) for 30 mins, cool, F.V. to 10 mLs with di water. JW 7-22-04 x2					
					LOCATION: 57 B1

JW 7-22-04

PREPARED BY: John Wilke DATE: 7-22-04
REVIEWED BY: [illegible] DATE: 7-22-04
DISPOSAL INT/DATE/LOC: ___

FRM-191 (Rev 2/Mar 03)

Trace Metals Reagent Logbook

010052

SOUTHWEST RESEARCH INSTITUTE
SAN ANTONIO, TEXAS 78228

BOOK / PAGE: 02 042

Reagent I.D.:	Preparation Description:	Prep Date:	Exp Date:	Initials:
RLB 02-042-01	50% HNO3 # 4562	6-10-04	9-10-04	KE
	50% HCL # 4586			
	Dilute 50ml Each to 1.0L			
RLB-02-042-02	1% HNO3 # 4580 (1ml)	6-14-04	9-14-04	KE
	5% HCL # 4586 (5ml)			
	dilute to 100~~%~~ ml Di-water KE 6/14/04			
RLB-02-042-03	EFB#1 TCLP ~1311			
	66.8g NaOH # 4207, exp. 8/13			
	148.2mL Acetic Acid # 0707 exp. 4/50	6-22-04	9-22-04	KE
	dilute to 2.6L Di-water	6-22-04	9-22-04	KE
RLB-02-042-04	1% HNO3 / 5% HCL	7-7-04	10-7-04	JCD
	2.5 HNO3 inog # 4583			
	12.5 HCL inog # 4587			
	F.V. to 250 mL w/di water			
RLB-02-042-5	12% Hydroxylamine Hydrochloride	7-12-04	7-12-05	BV
	Add 366g of HAH # 4503 to 3.0L			
	of reag water.			
RLB-02-042-06	Dilute 50ml HCL 4588	7/16/04	10/16/04	KE
	50ml HNO3 4585			
	to 1L Di-water			

Trace Metals Reagent Logbook 010053

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BOOK / PAGE: 02 043

Reagent I.D.:	Preparation Description:	Prep Date:	Exp Date:	Initials:
RUB02043-01	1% HNO_3 / 5% HCL	7-22-04	10-22-04	JC
↓	2.5mls HNO_3 inorg# 4585	↓	↓	↓
	12.5 mls HCL inorg# 4589 in a			
	250mL Nalgene bottle, F.V. to 250mls			

FRM-304 (Rev 0/May 02)

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6220 Culebra Rd
San Antonio, Texas 78228

TJA TRACE ICP DAILY LOG

ANALYST DL DATE 7-20-04

As 189.042 Profile Line As Intensity: 294.062

PEAK POSITION 103952
VERNIER POSITION 313
AUTOSAMPLER Yes X No

STDs PREP DATE:	
CLP_STD1_SC	04G01
CLP_STD2_SC	04G08
CLP_STD3_SC	04G08
CLP_STD4_SC	04G01
CLP_STD5_SC	04G08
CLP_STD6_SC	04G01
BLK_SC	04G09

QC PREP DATE:	
CCV/ICV	04G01
CRI	DL 7-20-04
ICSA	
ICSAB	

COMMENTS	FILE	CLIENT	TO#	PROJECT NO.	METHOD
A040720	Y04JU1	DIV20	040713-4 040714-12	10542.02.002	SW7 57158
A040720	Y04JU1	DIV20	040714-12		57160

DL 7-20-04

COMMENTS:

MAINTENANCE: Changed pump tubing

REVIEWED BY: Oduña DATE: 7/26/04

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010055

SOUTHWEST RESEARCH INSTITUTE®

6220 Culebra Rd
San Antonio, Texas 78228

TJA_2 TRACE ICP DAILY LOG

ANALYST DL

DATE 7-22-04

As 189.042 Profile Line

As Intensity: 379.481

PEAK POSITION .045959

VERNIER POSITION 748

STDs PREP DATE:	
CLP_STD1_SC	04G01
CLP_STD2_SC	04G08
CLP_STD3_SC	04G08
CLP_STD4_SC	04G01
CLP_STD5_SC	04G08
CLP_STD6_SC	04G01
BLK_SC	04G09

QC PREP DATE:	
CCV/ICV	04G01
CRI	
ICSA	
ICSAB	

DL 7-22-04

COMMENTS	FILE	CLIENT	TO#	PROJECT NO.	METHOD
B040722	Y04 JUL	DIV 20	040713-4 040714-12	10542.02.002	SW-6 57165
B040722	Y04 JUL	DIV 20	040720-10	10542.02.002	57165

DL 7-22-04

COMMENTS:

MAINTENANCE:

REVIEWED BY: [illegible]

DATE: 7/22/04

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SOUTHWEST RESEARCH INSTITUTE
6220 Culebra Rd
San Antonio, Texas 78228

010056

SPECTRO ICP DAILY LOG

ANALYST [illegible]

DATE 7-22-04

POWER: 1200

FLOWS:
Aux 40
Coolant 60
Mass Flow Controller 1054

CURRENT	PROPOSED	
5029	5019	Na
4779	4773	Fe
4927	4924	Sr

QC PREP DATE:	7-22-04
CCV/ICV	~~03G01~~ ~~04AG08~~ 04AG01
CRI	~~04AG16~~ ~~04AG08~~ 7-22-04
ICSA	04F02
ICSAB	~~04D20~~ 04F02

CLP_STD1_SC	~~03~~ 04AG01
CLP_STD2_SC	04G08
CLP_STD3_SC	
CLP_STD4_SC	7-22-04
CLP_STD5_SC	
BLK_SC	04G09

FILE	CLIENT	TO#	PROJECT NO.	METHOD	PREP PAGE
040722	Kaiser Hill	040720-4	04756.09.006	Beryllium	56 264
040722A	DIV 20	040713-4 040714-12	10542.02.002	LiKMA	~~56~~ 57 165
	DIV 20	040720-10	10542.02.002	LiKMA	57 166

7-22-04

COMMENTS:

MAINTENANCE:

Cleaned Torch: _____ YES
Changed Pump Tubing: X YES
Cleaned Optics: _____ YES
Polished Optics: _____ YES

OTHER:

REVIEWED BY: Orduña

DATE: 7/26/04

ICP Calibration Blank/ICB/CCB Solution

ID: BLK- 04E21

Date Prepared: 5-21-04 Prepared By: DL 010057

Make up as needed in 1000ml volumetric flask.

Added ✓ 10 ml HNO3 INORG #: 4561

Added ✓ 50 ml HCL INORG #: 4554

Added ✓ 1000ul of 10000ppm Sc (INORG. VENT.) EXP. Date: 10-1-04 INORG #: 4262

ICP Calibration Blank/ICB/CCB Solution

ID: BLK- 04F21

Date Prepared: 6-21-04 Prepared By: DH

Make up as needed in 1000ml volumetric flask.

Added ✓ 10 ml HNO3 INORG #: 4582

Added ✓ 50 ml HCL INORG #: 4556

Added ✓ 1000ul of 10000ppm Sc (INORG. VENT.) EXP. Date: ~~4262~~ DH 10-1-04 6-21-04 INORG #: 4262

ICP Calibration Blank/ICB/CCB Solution

ID: BLK- 04G09

Date Prepared: 7-9-04 Prepared By: DL

Make up as needed in 1000ml volumetric flask.

Added ✓ 10 ml HNO3 INORG #: 4583

Added ✓ 50 ml HCL INORG #: 4587

Added ✓ 1000ul of 10000ppm Sc (INORG. VENT.) EXP. Date: 10-1-04 INORG #: 4262

ICP Calibration Blank/ICB/CCB Solution

ID: BLK-

Date Prepared:_____ Prepared By:_____

Make up as needed in 1000ml volumetric flask.

Added_____ 10 ml HNO3 INORG #:_____

Added_____ 50 ml HCL INORG #:_____

Added_____ 1000ul of 10000ppm Sc (INORG. VENT.) EXP. Date: _____ INORG #:_____

ICP ICV/CCV SOLUTION

010058

CCV- 04G01

Date Prepared: 7-1-04 Prepared By: [illegible]

HNO3 INORG #: 4583 HCl INORG #: 4587

Make up as needed in 1000ml volumetric flask in 1% HNO3 AND 5% HCl.

Element	Std Conc (ppm)	Amt added	Check	Source	Inorg #	Stock Conc (ppm)	Exp Date
Sc	10	1ml	✓	INORGVENT	4262	10000	10-1-04
B	5	5ml	✓	SPEX	4564	1000	4-30-05
Li	5	5ml	✓	SPEX	4439	1000	1-30-05
Mo	5	5ml	✓	SPEX	4440	1000	1-30-05
P	5	5ml	✓	SPEX	4307	1000	10-30-04
Si	5	5ml	✓	SPEX	4232	1000	8-30-04
Ti	5	5ml	✓	SPEX	4234	1000	8-30-04
Sr	5	5ml	✓	SPEX	4308	1000	10-30-04
Sn	5	5ml	✓	SPEX	4565	1000	4-30-05
Bi	5	5ml	✓	SPEX	4475	1000	2-28-05
La	5	5ml	✓	SPEX	4438	1000	1-30-05
Y	5	5ml	✓	SPEX	4441	1000	1-30-05
Pd	1	1ml	✓	SPEX	4417	1000	1-15-05
S	1	1ml	✓	SPEX	4617	1000	6-30-05 PH
Th	1	1ml	✓	SPEX	4233	1000	8-30-04
U	1	1ml	✓	SPEX	4619	1000	6-30-05
W	1	1ml	✓	SPEX	4212	1000	8-15-04
Zr	5	5ml	✓	SPEX	4566	1000	4-30-05
Na	10	1ml	✓	SPEX	4443	10000	1-30-05
ICV-2A	vary	10ml	✓	SPEX	4328	mix	11-30-04
ICV-2B	vary	1ml	✓	SPEX	4329	mix	11-30-04
ICV-2C	vary	10ml	✓	SPEX	4330	mix	11-30-04

Expiration Date: 8-15-04

ICP Calibration Standards

010059

Date Prepared: 7-1-04 Prepared By: DL

HNO3 INORG #: 4583 HCl INORG #: 4587

Make up as needed in 500 ml volumetric flasks in 1% HNO3 and 5% HCl.

Prepared	Standard Name	Element	Std Conc (ppm)	Added ml	Check	Source	INORG #	Stock Conc (ppm)	Exp Date
7-1-04	STD1- 04G01	Al	50	2.50	✓	INORVENT	4220	10000	9-1-04
		Ca	50	2.50	✓	INORVENT	4436	10000	2-1-05
		Fe	50	2.50	✓	INORVENT	4470	10000	3-1-05
		K	50	2.50	✓	INORVENT	4320	10000	12-1-04
		Mg	25	1.25	✓	INORVENT	4204	10000	8-1-04
		Na	50	2.50	✓	INORVENT	4205	10000	8-1-04
		Li	10	5.00	✓	INORVENT	4628	1000	8-1-05
		Sc	10	0.500	✓	INORVENT	4262	10000	10-1-04
7-8-04	STD2- 04G04	Ba	10	5.00	✓	INORVENT	4465	1000	3-1-05
		Be	5	2.50	✓	INORVENT	4592	1000	6-1-05
		Cr	10	5.00	✓	INORVENT	4318	1000	12-1-04
		Cu	10	5.00	✓	INORVENT	4469	1000	3-1-05
		Ni	10	5.00	✓	INORVENT	4472	1000	3-1-05
		Sc	10	0.500	✓	INORVENT	4262	10000	10-1-04
7-8-04	STD3- 04G04	Cd	10	5.00	✓	INORVENT	4467	1000	3-1-05
		Co	10	5.00	✓	INORVENT	4468	1000	3-1-05
		Mn	10	5.00	✓	INORVENT	4434	1000	2-1-05
		V	10	5.00	✓	INORVENT	4321	1000	12-1-04
		Zn	10	5.00	✓	INORVENT	4319	1000	12-1-04
		Sc	10	0.500	✓	INORVENT	4262	10000	10-1-04
7-1-04	STD4- 04G01	Ag	2	1.00	✓	INORVENT	4222	1000	9-1-04
		As	10	5.00	✓	INORVENT	4433	1000	2-1-05
		Pb	10	5.00	✓	INORVENT	4313	1000	11-1-04
		Sb	10	5.00	✓	INORVENT	4464	1000	3-1-05
		Se	10	5.00	✓	INORVENT	4630	1000	8-1-05
		TL	10	5.00	✓	INORVENT	4435	1000	2-1-05
		Sc	10	0.500	✓	INORVENT	4262	10000	10-1-04
7-8-04	STD5- 04G08	B	10	5.00	✓	INORVENT	4201	1000	8-1-04
		Mo	10	5.00	✓	INORVENT	4471	1000	3-1-05
		P	10	5.00	✓	INORVENT	4593	1000	6-1-05
		Si	10	5.00	✓	INORVENT	4437	1000	2-1-05
		Ti	10	5.00	✓	INORVENT	4332	1000	12-1-04
		Sr	10	5.00	✓	INORVENT	4635	1000	8-1-05
		Sn	10	5.00	✓	INORVENT	4512	1000	4-1-05
		Bi	5	2.50	✓	INORVENT	4200	1000	8-1-04
		Sc	10	0.500	✓	INORVENT	4262	10000	10-1-04
7-1-04	STD6- 04G01	La	10	5.00	✓	INORVENT	4221	1000	9-1-04
		Na	1	0.05	✓	INORVENT	4205	10000	8-1-04
		Pd	10	5.00	✓	INORVENT	4477	1000	3-1-05
		S	10	5.00	✓	INORVENT	4317	1000	12-1-04
		Th	10	5.00	✓	INORVENT	4283	1000	11-1-04
		U	10	5.00	✓	INORVENT	4473	1000	3-1-05
		W	5	2.50	✓	INORVENT	4203	1000	8-1-04
		Y	10	5.00	✓	INORVENT	4513	1000	4-1-05
		Zr	10	5.00	✓	INORVENT	4442	1000	8-1-05
		SC	10	0.500	✓	INORVENT	4262	10000	10-1-04

Expiration Dates:

STD1: 8-1-04 **STD4:** 9-1-04

STD2: **STD5:**

STD3: **STD6:** 8-1-04

Div 20
to#040713-4, 040714-12, 040720-10
10542.02.002

The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec	ug/ml	rl	date	time	df&prep	mg/L
247357	Y_3710	0.01	U	mg/L	0.01			0.00006	0.005	07/22/04	15:26	2	0.00012
247357	Zn2062	1.44		mg/L	0.01			0.72195	0.005	07/22/04	15:26	2	1.4439
247357	Zr3496	0.01	U	mg/L	0.01			-0.00116	0.005	07/22/04	15:26	2	-0.00232
247357d	Ag3280	0.02	U	mg/L	0.02			-0.00647	0.01	07/22/04	15:31	2	-0.01294
247357d	Al3082	0.1	U	mg/L	0.1			0.02287	0.05	07/22/04	15:31	2	0.04574
247357d	As1890	0.2	U	mg/L	0.2			0.04131	0.1	07/22/04	15:31	2	0.08262
247357d	B_2496	2783		mg/L	10			27.82934	0.1	07/22/04	11:36	100	2782.934
247357d	Ba4934	0.421		mg/L	0.01			0.21051	0.005	07/22/04	15:31	2	0.42102
247357d	Be3130	0.01	U	mg/L	0.01			0.00018	0.005	07/22/04	15:31	2	0.00036
247357d	Bi2230	0.2	U	mg/L	0.2			0.03928	0.1	07/22/04	15:31	2	0.07856
247357d	Ca3179	0.319		mg/L	0.1			0.15968	0.05	07/22/04	15:31	2	0.31936
247357d	Cd2265	0.01	U	mg/L	0.01			0.00076	0.005	07/22/04	15:31	2	0.00152
247357d	Co2286	0.02	U	mg/L	0.02			-0.00901	0.01	07/22/04	15:31	2	-0.01802
247357d	Cr2677	0.01	U	mg/L	0.01			0.00317	0.005	07/22/04	15:31	2	0.00634
247357d	Cu3247	0.01	U	mg/L	0.01			0.00360	0.005	07/22/04	15:31	2	0.0072
247357d	Fe2714	0.1	U	mg/L	0.1			-0.03542	0.05	07/22/04	15:31	2	-0.07084
247357d	K_766	2.03		mg/L	0.4			1.0161	0.2	07/22/04	14:29:12	2	2.0322
247357d	La3988	0.02	U	mg/L	0.02			-0.01323	0.01	07/22/04	15:31	2	-0.02646
247357d	Li6707	0.01	U	mg/L	0.01			0.00186	0.005	07/22/04	15:31	2	0.00372
247357d	Mg2790	0.1	U	mg/L	0.1			-0.00605	0.05	07/22/04	15:31	2	-0.0121
247357d	Mn2576	0.01	U	mg/L	0.01			0.00041	0.005	07/22/04	15:31	2	0.00082
247357d	Mo2020	0.01	U	mg/L	0.01			-0.00256	0.005	07/22/04	15:31	2	-0.00512
247357d	Na589	3709		mg/L	20			37.0874	0.2	07/22/04	12:08:20	100	3708.74
247357d	Ni2316	0.01	U	mg/L	0.01			0.00079	0.005	07/22/04	15:31	2	0.00158
247357d	P_1782	0.08	U	mg/L	0.08			0.02297	0.04	07/22/04	15:31	2	0.04594
247357d	Pb220	0.02	U	mg/L	0.02			0.00348	0.01	07/22/04	15:31	2	0.00696
247357d	Pd3404	0.02	U	mg/L	0.02			-0.01423	0.01	07/22/04	15:31	2	-0.02846
247357d	S_1820	0.203		mg/L	0.1			0.10157	0.05	07/22/04	15:31	2	0.20314
247357d	Sb2068	0.05	U	mg/L	0.05			-0.03728	0.025	07/22/04	15:31	2	-0.07456
247357d	Se196	0.02	U	mg/L	0.02			-0.00606	0.01	07/22/04	15:31	2	-0.01212
247357d	Si2881	0.534		mg/L	0.05			0.26722	0.025	07/22/04	15:31	2	0.53444
247357d	Sn1899	0.05	U	mg/L	0.05			0.01541	0.025	07/22/04	15:31	2	0.03082
247357d	Sr4215	0.020		mg/L	0.01			0.00984	0.005	07/22/04	15:31	2	0.01968
247357d	Th2837	0.03	U	mg/L	0.03			0.00199	0.015	07/22/04	15:31	2	0.00398
247357d	Ti3349	0.01	U	mg/L	0.01			-0.00099	0.005	07/22/04	15:31	2	-0.00198
247357d	Tl1908	0.02	U	mg/L	0.02			-0.00612	0.01	07/22/04	15:31	2	-0.01224

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10542.02.002

The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
247357d	U_4090	0.2	U	mg/L	0.2				0.03862	0.1	07/22/04	15:31	2	0.07724
247357d	V_2924	0.01	U	mg/L	0.01				-0.00234	0.005	07/22/04	15:31	2	-0.00468
247357d	W_2079	0.02	U	mg/L	0.02				0.00178	0.01	07/22/04	15:31	2	0.00356
247357d	Y_3710	0.01	U	mg/L	0.01				0.00002	0.005	07/22/04	15:31	2	4E-05
247357d	Zn2062	1.43		mg/L	0.01				0.71579	0.005	07/22/04	15:31	2	1.43158
247357d	Zr3496	0.01	U	mg/L	0.01				-0.00164	0.005	07/22/04	15:31	2	-0.00328
247357s	Ag3280	0.094		mg/L	0.02	0.1	93.9%		0.04693	0.01	07/22/04	15:35	2	0.09386
247357s	Al3082	4.42		mg/L	0.1	4	110.4%		2.20808	0.05	07/22/04	15:35	2	4.41616
247357s	As1890	4.45		mg/L	0.2	4	111.1%		2.22279	0.1	07/22/04	15:35	2	4.44558
247357s	B_2496	3222		mg/L	10	400	110.0%		32.22143	0.1	07/22/04	11:42	100	3222.143
247357s	Ba4934	4.32		mg/L	0.01	4	97.6%		2.16236	0.005	07/22/04	15:35	2	4.32472
247357s	Be3130	0.095		mg/L	0.01	0.1	94.6%		0.04732	0.005	07/22/04	15:35	2	0.09464
247357s	Bi2230	0.2	U	mg/L	0.2				0.03810	0.1	07/22/04	15:35	2	0.0762
247357s	Ca3179	41.0		mg/L	0.1	40	101.7%		20.50250	0.05	07/22/04	15:35	2	41.005
247357s	Cd2265	0.100		mg/L	0.01	0.1	99.7%		0.04985	0.005	07/22/04	15:35	2	0.0997
247357s	Co2286	0.995		mg/L	0.02	1	99.5%		0.49774	0.01	07/22/04	15:35	2	0.99548
247357s	Cr2677	0.414		mg/L	0.01	0.4	103.6%		0.20724	0.005	07/22/04	15:35	2	0.41448
247357s	Cu3247	0.553		mg/L	0.01	0.5	110.6%		0.27645	0.005	07/22/04	15:35	2	0.5529
247357s	Fe2714	2.07		mg/L	0.1	2	103.5%		1.03484	0.05	07/22/04	15:35	2	2.06968
247357s	K_766	52.6		mg/L	0.4	40	126.6%		26.2824	0.2	07/22/04	14:32:16	2	52.5648
247357s	La3988	0.02	U	mg/L	0.02				-0.01323	0.01	07/22/04	15:35	2	-0.02646
247357s	Li6707	0.01	U	mg/L	0.01				0.00199	0.005	07/22/04	15:35	2	0.00398
247357s	Mg2790	39.2		mg/L	0.1	40	98.0%		19.60624	0.05	07/22/04	15:35	2	39.21248
247357s	Mn2576	1.02		mg/L	0.01	1	102.2%		0.51098	0.005	07/22/04	15:35	2	1.02196
247357s	Mo2020	0.01	U	mg/L	0.01				-0.00319	0.005	07/22/04	15:35	2	-0.00638
247357s	Na589	5752		mg/L	20	2000	101.1%		57.5160	0.2	07/22/04	12:11:24	100	5751.6
247357s	Ni2316	0.986		mg/L	0.01	1	98.6%		0.49288	0.005	07/22/04	15:35	2	0.98576
247357s	P_1782	0.089		mg/L	0.08				0.04426	0.04	07/22/04	15:35	2	0.08852
247357s	Pb220	1.04		mg/L	0.02	1	104.0%		0.52023	0.01	07/22/04	15:35	2	1.04046
247357s	Pd3404	0.02	U	mg/L	0.02				-0.01364	0.01	07/22/04	15:35	2	-0.02728
247357s	S_1820	0.244		mg/L	0.1				0.12198	0.05	07/22/04	15:35	2	0.24396
247357s	Sb2068	1.01		mg/L	0.05	1	100.6%		0.50310	0.025	07/22/04	15:35	2	1.0062
247357s	Se196	4.23		mg/L	0.02	4	105.8%		2.11616	0.01	07/22/04	15:35	2	4.23232
247357s	Si2881	0.569		mg/L	0.05				0.28460	0.025	07/22/04	15:35	2	0.5692
247357s	Sn1899	0.05	U	mg/L	0.05				0.01495	0.025	07/22/04	15:35	2	0.0299
247357s	Sr4215	0.021		mg/L	0.01				0.01067	0.005	07/22/04	15:35	2	0.02134

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10542.02.002

The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec	ug/ml	rl	date	time	df&prep	mg/L
247357s	Th2837	0.03	U	mg/L	0.03			-0.01191	0.015	07/22/04	15:35	2	-0.02382
247357s	Ti3349	0.01	U	mg/L	0.01			-0.00112	0.005	07/22/04	15:35	2	-0.00224
247357s	Tl1908	4.45		mg/L	0.02	4	111.4%	2.22721	0.01	07/22/04	15:35	2	4.45442
247357s	U_4090	0.2	U	mg/L	0.2			0.03220	0.1	07/22/04	15:35	2	0.0644
247357s	V_2924	0.999		mg/L	0.01	1	99.9%	0.49948	0.005	07/22/04	15:35	2	0.99896
247357s	W_2079	0.02	U	mg/L	0.02			0.00335	0.01	07/22/04	15:35	2	0.0067
247357s	Y_3710	0.01	U	mg/L	0.01			-0.00004	0.005	07/22/04	15:35	2	-8E-05
247357s	Zn2062	2.46		mg/L	0.01	1	101.8%	1.22879	0.005	07/22/04	15:35	2	2.45758
247357s	Zr3496	0.01	U	mg/L	0.01			-0.00131	0.005	07/22/04	15:35	2	-0.00262
247358	Cu3247	0.01	U	mg/L	0.01			0.00402	0.005	07/20/04	12:29	2	0.00804
247358	Ag3280	0.02	U	mg/L	0.02			-0.00736	0.01	07/22/04	15:40	2	-0.01472
247358	Al3082	0.1	U	mg/L	0.1			0.02890	0.05	07/22/04	15:40	2	0.0578
247358	As1890	0.2	U	mg/L	0.2			0.04868	0.1	07/22/04	15:40	2	0.09736
247358	B_2496	3072		mg/L	10			30.72014	0.1	07/22/04	11:47	100	3072.014
247358	Ba4934	0.484		mg/L	0.01			0.24188	0.005	07/22/04	15:40	2	0.48376
247358	Be3130	0.01	U	mg/L	0.01			0.00023	0.005	07/22/04	15:40	2	0.00046
247358	Bi2230	0.2	U	mg/L	0.2			0.04267	0.1	07/22/04	15:40	2	0.08534
247358	Ca3179	0.369		mg/L	0.1			0.18442	0.05	07/22/04	15:40	2	0.36884
247358	Cd2265	0.01	U	mg/L	0.01			0.00137	0.005	07/22/04	15:40	2	0.00274
247358	Co2286	0.02	U	mg/L	0.02			-0.00965	0.01	07/22/04	15:40	2	-0.0193
247358	Cr2677	0.01	U	mg/L	0.01			0.00479	0.005	07/22/04	15:40	2	0.00958
247358	Fe2714	0.1	U	mg/L	0.1			-0.02103	0.05	07/22/04	15:40	2	-0.04206
247358	K_766	2.41		mg/L	0.4			1.2045	0.2	07/22/04	14:35:20	2	2.409
247358	La3988	0.02	U	mg/L	0.02			-0.01476	0.01	07/22/04	15:40	2	-0.02952
247358	Li6707	0.01	U	mg/L	0.01			0.00213	0.005	07/22/04	15:40	2	0.00426
247358	Mg2790	0.1	U	mg/L	0.1			-0.01096	0.05	07/22/04	15:40	2	-0.02192
247358	Mn2576	0.01	U	mg/L	0.01			0.00053	0.005	07/22/04	15:40	2	0.00106
247358	Mo2020	0.01	U	mg/L	0.01			-0.00350	0.005	07/22/04	15:40	2	-0.007
247358	Na589	4009		mg/L	20			40.0868	0.2	07/22/04	12:14:28	100	4008.68
247358	Ni2316	0.01	U	mg/L	0.01			0.00122	0.005	07/22/04	15:40	2	0.00244
247358	P_1782	0.084		mg/L	0.08			0.04218	0.04	07/22/04	15:40	2	0.08436
247358	Pb220	0.02	U	mg/L	0.02			0.00301	0.01	07/22/04	15:40	2	0.00602
247358	Pd3404	0.02	U	mg/L	0.02			-0.01262	0.01	07/22/04	15:40	2	-0.02524
247358	S_1820	0.306		mg/L	0.1			0.15301	0.05	07/22/04	15:40	2	0.30602
247358	Sb2068	0.05	U	mg/L	0.05			-0.04183	0.025	07/22/04	15:40	2	-0.08366
247358	Se196	0.02	U	mg/L	0.02			-0.00280	0.01	07/22/04	15:40	2	-0.0056

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10542.02.002

The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
247358	Si2881	0.872		mg/L	0.05				0.43588	0.025	07/22/04	15:40	2	0.87176
247358	Sn1899	0.05	U	mg/L	0.05				0.02199	0.025	07/22/04	15:40	2	0.04398
247358	Sr4215	0.021		mg/L	0.01				0.01063	0.005	07/22/04	15:40	2	0.02126
247358	Th2837	0.03	U	mg/L	0.03				0.00155	0.015	07/22/04	15:40	2	0.0031
247358	Ti3349	0.01	U	mg/L	0.01				-0.00115	0.005	07/22/04	15:40	2	-0.0023
247358	Tl1908	0.02	U	mg/L	0.02				-0.00649	0.01	07/22/04	15:40	2	-0.01298
247358	U_4090	0.2	U	mg/L	0.2				0.05748	0.1	07/22/04	15:40	2	0.11496
247358	V_2924	0.01	U	mg/L	0.01				-0.00352	0.005	07/22/04	15:40	2	-0.00704
247358	W_2079	0.02	U	mg/L	0.02				0.00986	0.01	07/22/04	15:40	2	0.01972
247358	Y_3710	0.01	U	mg/L	0.01				-0.00007	0.005	07/22/04	15:40	2	-0.00014
247358	Zn2062	2.30		mg/L	0.01				1.15095	0.005	07/22/04	15:40	2	2.3019
247358	Zr3496	0.01	U	mg/L	0.01				-0.00142	0.005	07/22/04	15:40	2	-0.00284
247359	Ag3280	0.02	U	mg/L	0.02				-0.00676	0.01	07/22/04	15:45	2	-0.01352
247359	Al3082	0.103		mg/L	0.1				0.05128	0.05	07/22/04	15:45	2	0.10256
247359	As1890	0.2	U	mg/L	0.2				0.04528	0.1	07/22/04	15:45	2	0.09056
247359	B_2496	2787		mg/L	10				27.86585	0.1	07/22/04	11:52	100	2786.585
247359	Ba4934	0.692		mg/L	0.01				0.34602	0.005	07/22/04	15:45	2	0.69204
247359	Be3130	0.01	U	mg/L	0.01				0.00020	0.005	07/22/04	15:45	2	0.0004
247359	Bi2230	0.2	U	mg/L	0.2				0.04044	0.1	07/22/04	15:45	2	0.08088
247359	Ca3179	28.3		mg/L	0.1				14.15011	0.05	07/22/04	15:45	2	28.30022
247359	Cd2265	0.01	U	mg/L	0.01				0.00138	0.005	07/22/04	15:45	2	0.00276
247359	Co2286	0.02	U	mg/L	0.02				-0.00801	0.01	07/22/04	15:45	2	-0.01602
247359	Cr2677	0.01	U	mg/L	0.01				0.00371	0.005	07/22/04	15:45	2	0.00742
247359	Cu3247	0.01	U	mg/L	0.01				0.00405	0.005	07/22/04	15:45	2	0.0081
247359	Fe2714	0.1	U	mg/L	0.1				-0.01300	0.05	07/22/04	15:45	2	-0.026
247359	K_766	2.56		mg/L	0.4				1.2795	0.2	07/22/04	14:38:24	2	2.559
247359	La3988	0.02	U	mg/L	0.02				-0.01318	0.01	07/22/04	15:45	2	-0.02636
247359	Li6707	0.01	U	mg/L	0.01				0.00189	0.005	07/22/04	15:45	2	0.00378
247359	Mg2790	1.01		mg/L	0.1				0.50280	0.05	07/22/04	15:45	2	1.0056
247359	Mn2576	0.01	U	mg/L	0.01				0.00050	0.005	07/22/04	15:45	2	0.001
247359	Mo2020	0.01	U	mg/L	0.01				-0.00412	0.005	07/22/04	15:45	2	-0.00824
247359	Na589	3679		mg/L	20				36.7894	0.2	07/22/04	12:18:01	100	3678.94
247359	Ni2316	0.01	U	mg/L	0.01				0.00102	0.005	07/22/04	15:45	2	0.00204
247359	P_1782	0.08	U	mg/L	0.08				0.02413	0.04	07/22/04	15:45	2	0.04826
247359	Pb220	0.02	U	mg/L	0.02				0.00469	0.01	07/22/04	15:45	2	0.00938
247359	Pd3404	0.02	U	mg/L	0.02				-0.01107	0.01	07/22/04	15:45	2	-0.02214

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
247359	S_1820	0.527		mg/L	0.1				0.26372	0.05	07/22/04	15:45	2	0.52744
247359	Sb2068	0.05	U	mg/L	0.05				-0.04207	0.025	07/22/04	15:45	2	-0.08414
247359	Se196	0.02	U	mg/L	0.02				-0.00597	0.01	07/22/04	15:45	2	-0.01194
247359	Si2881	2.10		mg/L	0.05				1.05137	0.025	07/22/04	15:45	2	2.10274
247359	Sn1899	0.05	U	mg/L	0.05				0.01787	0.025	07/22/04	15:45	2	0.03574
247359	Sr4215	0.057		mg/L	0.01				0.02853	0.005	07/22/04	15:45	2	0.05706
247359	Th2837	0.03	U	mg/L	0.03				0.00099	0.015	07/22/04	15:45	2	0.00198
247359	Ti3349	0.01	U	mg/L	0.01				-0.00102	0.005	07/22/04	15:45	2	-0.00204
247359	Tl1908	0.02	U	mg/L	0.02				-0.00500	0.01	07/22/04	15:45	2	-0.01
247359	U_4090	0.2	U	mg/L	0.2				0.04273	0.1	07/22/04	15:45	2	0.08546
247359	V_2924	0.01	U	mg/L	0.01				-0.00190	0.005	07/22/04	15:45	2	-0.0038
247359	W_2079	0.02	U	mg/L	0.02				-0.00013	0.01	07/22/04	15:45	2	-0.00026
247359	Y_3710	0.01	U	mg/L	0.01				-0.00008	0.005	07/22/04	15:45	2	-0.00016
247359	Zn2062	0.097		mg/L	0.01				0.04846	0.005	07/22/04	15:45	2	0.09692
247359	Zr3496	0.01	U	mg/L	0.01				-0.00154	0.005	07/22/04	15:45	2	-0.00308
247360	Ag3280	0.02	U	mg/L	0.02				-0.00685	0.01	07/22/04	15:50	2	-0.0137
247360	Al3082	0.1	U	mg/L	0.1				0.04801	0.05	07/22/04	15:50	2	0.09602
247360	As1890	0.2	U	mg/L	0.2				0.04723	0.1	07/22/04	15:50	2	0.09446
247360	B_2496	3027		mg/L	10				30.27394	0.1	07/22/04	11:58	100	3027.394
247360	Ba4934	0.500		mg/L	0.01				0.25021	0.005	07/22/04	15:50	2	0.50042
247360	Be3130	0.01	U	mg/L	0.01				0.00020	0.005	07/22/04	15:50	2	0.0004
247360	Bi2230	0.2	U	mg/L	0.2				0.04065	0.1	07/22/04	15:50	2	0.0813
247360	Ca3179	24.4		mg/L	0.1				12.19575	0.05	07/22/04	15:50	2	24.3915
247360	Cd2265	0.01	U	mg/L	0.01				0.00115	0.005	07/22/04	15:50	2	0.0023
247360	Co2286	0.02	U	mg/L	0.02				-0.00820	0.01	07/22/04	15:50	2	-0.0164
247360	Cr2677	0.01	U	mg/L	0.01				0.00453	0.005	07/22/04	15:50	2	0.00906
247360	Cu3247	0.01	U	mg/L	0.01				0.00432	0.005	07/22/04	15:50	2	0.00864
247360	Fe2714	0.1	U	mg/L	0.1				-0.01585	0.05	07/22/04	15:50	2	-0.0317
247360	K_766	2.36		mg/L	0.4				1.1804	0.2	07/22/04	14:41:27	2	2.3608
247360	La3988	0.02	U	mg/L	0.02				-0.01475	0.01	07/22/04	15:50	2	-0.0295
247360	Li6707	0.01	U	mg/L	0.01				0.00185	0.005	07/22/04	15:50	2	0.0037
247360	Mg2790	1.04		mg/L	0.1				0.52221	0.05	07/22/04	15:50	2	1.04442
247360	Mn2576	0.01	U	mg/L	0.01				0.00072	0.005	07/22/04	15:50	2	0.00144
247360	Mo2020	0.01	U	mg/L	0.01				-0.00359	0.005	07/22/04	15:50	2	-0.00718
247360	Na589	4046		mg/L	20				40.4550	0.2	07/22/04	12:21:05	100	4045.5
247360	Ni2316	0.01	U	mg/L	0.01				0.00159	0.005	07/22/04	15:50	2	0.00318

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
247360	P_1782	0.08	U	mg/L	0.08				0.02678	0.04	07/22/04	15:50	2	0.05356
247360	Pb220	0.02	U	mg/L	0.02				0.00333	0.01	07/22/04	15:50	2	0.00666
247360	Pd3404	0.02	U	mg/L	0.02				-0.01203	0.01	07/22/04	15:50	2	-0.02406
247360	S_1820	0.333		mg/L	0.1				0.16661	0.05	07/22/04	15:50	2	0.33322
247360	Sb2068	0.05	U	mg/L	0.05				-0.04504	0.025	07/22/04	15:50	2	-0.09008
247360	Se196	0.02	U	mg/L	0.02				-0.00664	0.01	07/22/04	15:50	2	-0.01328
247360	Si2881	2.59		mg/L	0.05				1.29578	0.025	07/22/04	15:50	2	2.59156
247360	Sn1899	0.05	U	mg/L	0.05				0.01729	0.025	07/22/04	15:50	2	0.03458
247360	Sr4215	0.065		mg/L	0.01				0.03226	0.005	07/22/04	15:50	2	0.06452
247360	Th2837	0.03	U	mg/L	0.03				0.00214	0.015	07/22/04	15:50	2	0.00428
247360	Ti3349	0.01	U	mg/L	0.01				-0.00089	0.005	07/22/04	15:50	2	-0.00178
247360	Tl1908	0.02	U	mg/L	0.02				-0.01005	0.01	07/22/04	15:50	2	-0.0201
247360	U_4090	0.2	U	mg/L	0.2				0.05917	0.1	07/22/04	15:50	2	0.11834
247360	V_2924	0.01	U	mg/L	0.01				-0.00139	0.005	07/22/04	15:50	2	-0.00278
247360	W_2079	0.02	U	mg/L	0.02				-0.00277	0.01	07/22/04	15:50	2	-0.00554
247360	Y_3710	0.01	U	mg/L	0.01				-0.00013	0.005	07/22/04	15:50	2	-0.00026
247360	Zn2062	0.131		mg/L	0.01				0.06541	0.005	07/22/04	15:50	2	0.13082
247360	Zr3496	0.01	U	mg/L	0.01				-0.00153	0.005	07/22/04	15:50	2	-0.00306
247433	Cu3247	0.01	U	mg/L	0.01				0.00092	0.005	07/20/04	12:42	2	0.00184
247433	Ag3280	0.02	U	mg/L	0.02				-0.00717	0.01	07/22/04	15:54	2	-0.01434
247433	Al3082	0.182		mg/L	0.1				0.09109	0.05	07/22/04	15:54	2	0.18218
247433	As1890	0.2	U	mg/L	0.2				0.04331	0.1	07/22/04	15:54	2	0.08662
247433	B_2496	2776		mg/L	10				27.75670	0.1	07/22/04	12:03	100	2775.67
247433	Ba4934	0.528		mg/L	0.01				0.26417	0.005	07/22/04	15:54	2	0.52834
247433	Be3130	0.01	U	mg/L	0.01				0.00022	0.005	07/22/04	15:54	2	0.00044
247433	Bi2230	0.2	U	mg/L	0.2				0.03630	0.1	07/22/04	15:54	2	0.0726
247433	Ca3179	1.02		mg/L	0.1				0.51042	0.05	07/22/04	15:54	2	1.02084
247433	Cd2265	0.01	U	mg/L	0.01				0.00090	0.005	07/22/04	15:54	2	0.0018
247433	Co2286	0.02	U	mg/L	0.02				-0.00811	0.01	07/22/04	15:54	2	-0.01622
247433	Cr2677	0.01	U	mg/L	0.01				0.00420	0.005	07/22/04	15:54	2	0.0084
247433	Fe2714	0.1	U	mg/L	0.1				-0.04443	0.05	07/22/04	15:54	2	-0.08886
247433	K_766	2.56		mg/L	0.4				1.2808	0.2	07/22/04	14:45:02	2	2.5616
247433	La3988	0.02	U	mg/L	0.02				-0.01380	0.01	07/22/04	15:54	2	-0.0276
247433	Li6707	0.01	U	mg/L	0.01				0.00178	0.005	07/22/04	15:54	2	0.00356
247433	Mg2790	0.1	U	mg/L	0.1				0.01543	0.05	07/22/04	15:54	2	0.03086
247433	Mn2576	0.01	U	mg/L	0.01				0.00049	0.005	07/22/04	15:54	2	0.00098

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
247433	Mo2020	0.01	U	mg/L	0.01				-0.00192	0.005	07/22/04	15:54	2	-0.00384
247433	Na589	3695		mg/L	20				36.9471	0.2	07/22/04	12:24:09	100	3694.71
247433	Ni2316	0.01	U	mg/L	0.01				0.00127	0.005	07/22/04	15:54	2	0.00254
247433	P_1782	0.08	U	mg/L	0.08				0.03801	0.04	07/22/04	15:54	2	0.07602
247433	Pb220	0.02	U	mg/L	0.02				0.00214	0.01	07/22/04	15:54	2	0.00428
247433	Pd3404	0.02	U	mg/L	0.02				-0.01303	0.01	07/22/04	15:54	2	-0.02606
247433	S_1820	0.501		mg/L	0.1				0.25051	0.05	07/22/04	15:54	2	0.50102
247433	Sb2068	0.05	U	mg/L	0.05				-0.03928	0.025	07/22/04	15:54	2	-0.07856
247433	Se196	0.02	U	mg/L	0.02				-0.00645	0.01	07/22/04	15:54	2	-0.0129
247433	Si2881	6.85		mg/L	0.05				3.42362	0.025	07/22/04	15:54	2	6.84724
247433	Sn1899	0.05	U	mg/L	0.05				0.01726	0.025	07/22/04	15:54	2	0.03452
247433	Sr4215	0.024		mg/L	0.01				0.01194	0.005	07/22/04	15:54	2	0.02388
247433	Th2837	0.03	U	mg/L	0.03				0.00476	0.015	07/22/04	15:54	2	0.00952
247433	Ti3349	0.01	U	mg/L	0.01				-0.00106	0.005	07/22/04	15:54	2	-0.00212
247433	Tl1908	0.02	U	mg/L	0.02				-0.00794	0.01	07/22/04	15:54	2	-0.01588
247433	U_4090	0.2	U	mg/L	0.2				0.03558	0.1	07/22/04	15:54	2	0.07116
247433	V_2924	0.01	U	mg/L	0.01				-0.00256	0.005	07/22/04	15:54	2	-0.00512
247433	W_2079	0.02	U	mg/L	0.02				-0.00007	0.01	07/22/04	15:54	2	-0.00014
247433	Y_3710	0.01	U	mg/L	0.01				0.00000	0.005	07/22/04	15:54	2	0
247433	Zn2062	1.15		mg/L	0.01				0.57481	0.005	07/22/04	15:54	2	1.14962
247433	Zr3496	0.01	U	mg/L	0.01				-0.00157	0.005	07/22/04	15:54	2	-0.00314
247435	Cu3247	0.01	U	mg/L	0.01				0.00419	0.005	07/20/04	12:46	2	0.00838
247435	Ag3280	0.02	U	mg/L	0.02				-0.00624	0.01	07/22/04	15:59	2	-0.01248
247435	Al3082	0.304		mg/L	0.1				0.15181	0.05	07/22/04	15:59	2	0.30362
247435	As1890	0.2	U	mg/L	0.2				0.04474	0.1	07/22/04	15:59	2	0.08948
247435	B_2496	2810		mg/L	10				28.10037	0.1	07/22/04	12:08	100	2810.037
247435	Ba4934	0.818		mg/L	0.01				0.40882	0.005	07/22/04	15:59	2	0.81764
247435	Be3130	0.01	U	mg/L	0.01				0.00022	0.005	07/22/04	15:59	2	0.00044
247435	Bi2230	0.2	U	mg/L	0.2				0.03749	0.1	07/22/04	15:59	2	0.07498
247435	Ca3179	21.5		mg/L	0.1				10.74022	0.05	07/22/04	15:59	2	21.48044
247435	Cd2265	0.01	U	mg/L	0.01				0.00117	0.005	07/22/04	15:59	2	0.00234
247435	Co2286	0.02	U	mg/L	0.02				-0.00868	0.01	07/22/04	15:59	2	-0.01736
247435	Cr2677	0.01	U	mg/L	0.01				0.00441	0.005	07/22/04	15:59	2	0.00882
247435	Fe2714	0.1	U	mg/L	0.1				-0.01793	0.05	07/22/04	15:59	2	-0.03586
247435	K_766	3.45		mg/L	0.4				1.7269	0.2	07/22/04	14:48:06	2	3.4538
247435	La3988	0.02	U	mg/L	0.02				-0.01342	0.01	07/22/04	15:59	2	-0.02684

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
247435	Li6707	0.01	U	mg/L	0.01				0.00173	0.005	07/22/04	15:59	2	0.00346
247435	Mg2790	1.07		mg/L	0.1				0.53293	0.05	07/22/04	15:59	2	1.06586
247435	Mn2576	0.01	U	mg/L	0.01				0.00064	0.005	07/22/04	15:59	2	0.00128
247435	Mo2020	0.01	U	mg/L	0.01				0.00080	0.005	07/22/04	15:59	2	0.0016
247435	Na589	3677		mg/L	20				36.7731	0.2	07/22/04	12:27:13	100	3677.31
247435	Ni2316	0.01	U	mg/L	0.01				0.00263	0.005	07/22/04	15:59	2	0.00526
247435	P_1782	0.08	U	mg/L	0.08				0.02262	0.04	07/22/04	15:59	2	0.04524
247435	Pb220	0.02	U	mg/L	0.02				0.00213	0.01	07/22/04	15:59	2	0.00426
247435	Pd3404	0.02	U	mg/L	0.02				-0.01219	0.01	07/22/04	15:59	2	-0.02438
247435	S_1820	1.05		mg/L	0.1				0.52611	0.05	07/22/04	15:59	2	1.05222
247435	Sb2068	0.05	U	mg/L	0.05				-0.04505	0.025	07/22/04	15:59	2	-0.0901
247435	Se196	0.02	U	mg/L	0.02				-0.00368	0.01	07/22/04	15:59	2	-0.00736
247435	Si2881	20.3		mg/L	0.05				10.15389	0.025	07/22/04	15:59	2	20.30778
247435	Sn1899	0.05	U	mg/L	0.05				0.01876	0.025	07/22/04	15:59	2	0.03752
247435	Sr4215	0.070		mg/L	0.01				0.03502	0.005	07/22/04	15:59	2	0.07004
247435	Th2837	0.03	U	mg/L	0.03				0.00095	0.015	07/22/04	15:59	2	0.0019
247435	Ti3349	0.01	U	mg/L	0.01				-0.00091	0.005	07/22/04	15:59	2	-0.00182
247435	Tl1908	0.02	U	mg/L	0.02				-0.00969	0.01	07/22/04	15:59	2	-0.01938
247435	U_4090	0.2	U	mg/L	0.2				0.07001	0.1	07/22/04	15:59	2	0.14002
247435	V_2924	0.01	U	mg/L	0.01				-0.00150	0.005	07/22/04	15:59	2	-0.003
247435	W_2079	0.02	U	mg/L	0.02				0.00186	0.01	07/22/04	15:59	2	0.00372
247435	Y_3710	0.01	U	mg/L	0.01				-0.00011	0.005	07/22/04	15:59	2	-0.00022
247435	Zn2062	0.252		mg/L	0.01				0.12599	0.005	07/22/04	15:59	2	0.25198
247435	Zr3496	0.01	U	mg/L	0.01				-0.00092	0.005	07/22/04	15:59	2	-0.00184
248205	Ag3280	0.02	U	mg/L	0.02				-0.00599	0.01	07/22/04	16:04	2	-0.01198
248205	Al3082	0.188		mg/L	0.1				0.09419	0.05	07/22/04	16:04	2	0.18838
248205	As1890	0.2	U	mg/L	0.2				0.03919	0.1	07/22/04	16:04	2	0.07838
248205	B_2496	2448		mg/L	10				24.48212	0.1	07/22/04	12:31	100	2448.212
248205	Ba4934	0.056		mg/L	0.01				0.02809	0.005	07/22/04	16:04	2	0.05618
248205	Be3130	0.01	U	mg/L	0.01				0.00025	0.005	07/22/04	16:04	2	0.0005
248205	Bi2230	0.2	U	mg/L	0.2				0.03276	0.1	07/22/04	16:04	2	0.06552
248205	Ca3179	1.02		mg/L	0.1				0.50907	0.05	07/22/04	16:04	2	1.01814
248205	Cd2265	0.01	U	mg/L	0.01				0.00137	0.005	07/22/04	16:04	2	0.00274
248205	Co2286	0.02	U	mg/L	0.02				-0.00768	0.01	07/22/04	16:04	2	-0.01536
248205	Cr2677	0.057		mg/L	0.01				0.02865	0.005	07/22/04	16:04	2	0.0573
248205	Cu3247	0.040		mg/L	0.01				0.02021	0.005	07/22/04	16:04	2	0.04042

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
248205	Fe2714	0.1	U	mg/L	0.1				-0.03046	0.05	07/22/04	16:04	2	-0.06092
248205	K_766	1.50		mg/L	0.4				0.7501	0.2	07/22/04	14:51:10	2	1.5002
248205	La3988	0.02	U	mg/L	0.02				-0.01173	0.01	07/22/04	16:04	2	-0.02346
248205	Li6707	0.01	U	mg/L	0.01				0.00271	0.005	07/22/04	16:04	2	0.00542
248205	Mg2790	0.101		mg/L	0.1				0.05048	0.05	07/22/04	16:04	2	0.10096
248205	Mn2576	0.01	U	mg/L	0.01				0.00151	0.005	07/22/04	16:04	2	0.00302
248205	Mo2020	0.057		mg/L	0.01				0.02864	0.005	07/22/04	16:04	2	0.05728
248205	Na589	3228		mg/L	20				32.2750	0.2	07/22/04	12:39:00	100	3227.5
248205	Ni2316	0.015		mg/L	0.01				0.00741	0.005	07/22/04	16:04	2	0.01482
248205	P_1782	0.08	U	mg/L	0.08				0.01744	0.04	07/22/04	16:04	2	0.03488
248205	Pb220	0.02	U	mg/L	0.02				0.00427	0.01	07/22/04	16:04	2	0.00854
248205	Pd3404	0.02	U	mg/L	0.02				-0.01161	0.01	07/22/04	16:04	2	-0.02322
248205	S_1820	0.159		mg/L	0.1				0.07940	0.05	07/22/04	16:04	2	0.1588
248205	Sb2068	0.05	U	mg/L	0.05				-0.03329	0.025	07/22/04	16:04	2	-0.06658
248205	Se196	0.02	U	mg/L	0.02				-0.00351	0.01	07/22/04	16:04	2	-0.00702
248205	Si2881	0.442		mg/L	0.05				0.22080	0.025	07/22/04	16:04	2	0.4416
248205	Sn1899	0.05	U	mg/L	0.05				0.02024	0.025	07/22/04	16:04	2	0.04048
248205	Sr4215	0.013		mg/L	0.01				0.00663	0.005	07/22/04	16:04	2	0.01326
248205	Th2837	0.03	U	mg/L	0.03				0.00195	0.015	07/22/04	16:04	2	0.0039
248205	Ti3349	0.01	U	mg/L	0.01				-0.00070	0.005	07/22/04	16:04	2	-0.0014
248205	Tl1908	0.02	U	mg/L	0.02				-0.01299	0.01	07/22/04	16:04	2	-0.02598
248205	U_4090	0.2	U	mg/L	0.2				0.04048	0.1	07/22/04	16:04	2	0.08096
248205	V_2924	0.01	U	mg/L	0.01				-0.00181	0.005	07/22/04	16:04	2	-0.00362
248205	W_2079	0.032		mg/L	0.02				0.01601	0.01	07/22/04	16:04	2	0.03202
248205	Y_3710	0.01	U	mg/L	0.01				0.00004	0.005	07/22/04	16:04	2	8E-05
248205	Zn2062	1.66		mg/L	0.01				0.83066	0.005	07/22/04	16:04	2	1.66132
248205	Zr3496	0.01	U	mg/L	0.01				-0.00083	0.005	07/22/04	16:04	2	-0.00166
248207	Ag3280	0.02	U	mg/L	0.02				-0.00520	0.01	07/22/04	16:09	2	-0.0104
248207	Al3082	0.133		mg/L	0.1				0.06653	0.05	07/22/04	16:09	2	0.13306
248207	As1890	0.2	U	mg/L	0.2				0.03719	0.1	07/22/04	16:09	2	0.07438
248207	B_2496	2607		mg/L	10				26.07326	0.1	07/22/04	12:43	100	2607.326
248207	Ba4934	0.107		mg/L	0.01				0.05374	0.005	07/22/04	16:09	2	0.10748
248207	Be3130	0.01	U	mg/L	0.01				0.00025	0.005	07/22/04	16:09	2	0.0005
248207	Bi2230	0.2	U	mg/L	0.2				0.04261	0.1	07/22/04	16:09	2	0.08522
248207	Ca3179	13.4		mg/L	0.1				6.72361	0.05	07/22/04	16:09	2	13.44722
248207	Cd2265	0.01	U	mg/L	0.01				0.00137	0.005	07/22/04	16:09	2	0.00274

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec	ug/ml	rl	date	time	df&prep	mg/L
248207	Co2286	0.02	U	mg/L	0.02			-0.00861	0.01	07/22/04	16:09	2	-0.01722
248207	Cr2677	0.040		mg/L	0.01			0.01996	0.005	07/22/04	16:09	2	0.03992
248207	Cu3247	0.01	U	mg/L	0.01			0.00431	0.005	07/22/04	16:09	2	0.00862
248207	Fe2714	0.1	U	mg/L	0.1			-0.02461	0.05	07/22/04	16:09	2	-0.04922
248207	K_766	1.55		mg/L	0.4			0.7754	0.2	07/22/04	14:54:14	2	1.5508
248207	La3988	0.02	U	mg/L	0.02			-0.01171	0.01	07/22/04	16:09	2	-0.02342
248207	Li6707	0.01	U	mg/L	0.01			0.00169	0.005	07/22/04	16:09	2	0.00338
248207	Mg2790	0.251		mg/L	0.1			0.12533	0.05	07/22/04	16:09	2	0.25066
248207	Mn2576	0.01	U	mg/L	0.01			0.00116	0.005	07/22/04	16:09	2	0.00232
248207	Mo2020	0.013		mg/L	0.01			0.00636	0.005	07/22/04	16:09	2	0.01272
248207	Na589	3410		mg/L	20			34.0951	0.2	07/22/04	12:42:04	100	3409.51
248207	Ni2316	0.01	U	mg/L	0.01			0.00308	0.005	07/22/04	16:09	2	0.00616
248207	P_1782	0.08	U	mg/L	0.08			0.02808	0.04	07/22/04	16:09	2	0.05616
248207	Pb220	0.02	U	mg/L	0.02			0.00276	0.01	07/22/04	16:09	2	0.00552
248207	Pd3404	0.02	U	mg/L	0.02			-0.01123	0.01	07/22/04	16:09	2	-0.02246
248207	S_1820	0.277		mg/L	0.1			0.13829	0.05	07/22/04	16:09	2	0.27658
248207	Sb2068	0.05	U	mg/L	0.05			-0.03958	0.025	07/22/04	16:09	2	-0.07916
248207	Se196	0.02	U	mg/L	0.02			-0.00453	0.01	07/22/04	16:09	2	-0.00906
248207	Si2881	1.11		mg/L	0.05			0.55346	0.025	07/22/04	16:09	2	1.10692
248207	Sn1899	0.05	U	mg/L	0.05			0.01523	0.025	07/22/04	16:09	2	0.03046
248207	Sr4215	0.079		mg/L	0.01			0.03967	0.005	07/22/04	16:09	2	0.07934
248207	Th2837	0.03	U	mg/L	0.03			-0.00235	0.015	07/22/04	16:09	2	-0.0047
248207	Ti3349	0.01	U	mg/L	0.01			-0.00120	0.005	07/22/04	16:09	2	-0.0024
248207	Tl1908	0.02	U	mg/L	0.02			-0.00641	0.01	07/22/04	16:09	2	-0.01282
248207	U_4090	0.2	U	mg/L	0.2			0.06715	0.1	07/22/04	16:09	2	0.1343
248207	V_2924	0.01	U	mg/L	0.01			-0.00034	0.005	07/22/04	16:09	2	-0.00068
248207	W_2079	0.02	U	mg/L	0.02			0.00901	0.01	07/22/04	16:09	2	0.01802
248207	Y_3710	0.01	U	mg/L	0.01			-0.00010	0.005	07/22/04	16:09	2	-0.0002
248207	Zn2062	1.26		mg/L	0.01			0.63188	0.005	07/22/04	16:09	2	1.26376
248207	Zr3496	0.01	U	mg/L	0.01			-0.00193	0.005	07/22/04	16:09	2	-0.00386
lcsw-g22w1	Ag3280	0.100		mg/L	0.02	0.1	100.3%	0.05017	0.01	07/22/04	11:26	2	0.10034
lcsw-g22w1	Al3082	3.93		mg/L	0.1	4	98.2%	1.96399	0.05	07/22/04	11:26	2	3.92798
lcsw-g22w1	As1890	4.08		mg/L	0.2	4	101.9%	2.03778	0.1	07/22/04	11:26	2	4.07556
lcsw-g22w1	B_2496	8.15		mg/L	0.2	8	101.8%	4.07398	0.1	07/22/04	11:26	2	8.14796
lcsw-g22w1	Ba4934	4.05		mg/L	0.01	4	101.1%	2.02299	0.005	07/22/04	11:26	2	4.04598
lcsw-g22w1	Be3130	0.099		mg/L	0.01	0.1	98.6%	0.04930	0.005	07/22/04	11:26	2	0.0986

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec	ug/ml	rl	date	time	df&prep	mg/L
lcsw-g22w1	Bi2230	0.2	U	mg/L	0.2			0.00206	0.1	07/22/04	11:26	2	0.00412
lcsw-g22w1	Ca3179	41.1		mg/L	0.1	40	102.7%	20.53994	0.05	07/22/04	11:26	2	41.07988
lcsw-g22w1	Cd2265	0.099		mg/L	0.01	0.1	99.2%	0.04961	0.005	07/22/04	11:26	2	0.09922
lcsw-g22w1	Co2286	0.989		mg/L	0.02	1	98.9%	0.49431	0.01	07/22/04	11:26	2	0.98862
lcsw-g22w1	Cr2677	0.401		mg/L	0.01	0.4	100.2%	0.20033	0.005	07/22/04	11:26	2	0.40066
lcsw-g22w1	Cu3247	0.506		mg/L	0.01	0.5	101.2%	0.25300	0.005	07/22/04	11:26	2	0.506
lcsw-g22w1	Fe2714	2.16		mg/L	0.1	2	107.8%	1.07811	0.05	07/22/04	11:26	2	2.15622
lcsw-g22w2	K_766	39.8		mg/L	0.4	40	99.5%	19.9016	0.2	07/22/04	12:02:12	2	39.8032
lcsw-g22w1	La3988	0.02	U	mg/L	0.02			0.00010	0.01	07/22/04	11:26	2	0.0002
lcsw-g22w1	Li6707	0.01	U	mg/L	0.01			0.00010	0.005	07/22/04	11:26	2	0.0002
lcsw-g22w1	Mg2790	40.8		mg/L	0.1	40	102.1%	20.42248	0.05	07/22/04	11:26	2	40.84496
lcsw-g22w1	Mn2576	1.01		mg/L	0.01	1	100.8%	0.50421	0.005	07/22/04	11:26	2	1.00842
lcsw-g22w1	Mo2020	0.01	U	mg/L	0.01			0.00029	0.005	07/22/04	11:26	2	0.00058
lcsw-g22w2	Na589	40.4		mg/L	0.4	40	100.9%	20.1772	0.2	07/22/04	12:02:12	2	40.3544
lcsw-g22w1	Ni2316	0.984		mg/L	0.01	1	98.4%	0.49204	0.005	07/22/04	11:26	2	0.98408
lcsw-g22w1	P_1782	0.08	U	mg/L	0.08			0.00369	0.04	07/22/04	11:26	2	0.00738
lcsw-g22w1	Pb220	1.01		mg/L	0.02	1	101.1%	0.50559	0.01	07/22/04	11:26	2	1.01118
lcsw-g22w1	Pd3404	0.02	U	mg/L	0.02			0.00126	0.01	07/22/04	11:26	2	0.00252
lcsw-g22w1	S_1820	0.1	U	mg/L	0.1			0.03326	0.05	07/22/04	11:26	2	0.06652
lcsw-g22w1	Sb2068	0.986		mg/L	0.05	1	98.6%	0.49304	0.025	07/22/04	11:26	2	0.98608
lcsw-g22w1	Se196	4.18		mg/L	0.02	4	104.5%	2.09072	0.01	07/22/04	11:26	2	4.18144
lcsw-g22w1	Si2881	0.05	U	mg/L	0.05			0.00618	0.025	07/22/04	11:26	2	0.01236
lcsw-g22w1	Sn1899	0.05	U	mg/L	0.05			-0.00191	0.025	07/22/04	11:26	2	-0.00382
lcsw-g22w1	Sr4215	0.01	U	mg/L	0.01			0.00077	0.005	07/22/04	11:26	2	0.00154
lcsw-g22w1	Th2837	0.03	U	mg/L	0.03			-0.01355	0.015	07/22/04	11:26	2	-0.0271
lcsw-g22w1	Ti3349	0.01	U	mg/L	0.01			-0.00011	0.005	07/22/04	11:26	2	-0.00022
lcsw-g22w1	Tl1908	4.21		mg/L	0.02	4	105.3%	2.10641	0.01	07/22/04	11:26	2	4.21282
lcsw-g22w1	U_4090	0.2	U	mg/L	0.2			0.01135	0.1	07/22/04	11:26	2	0.0227
lcsw-g22w1	V_2924	0.991		mg/L	0.01	1	99.1%	0.49558	0.005	07/22/04	11:26	2	0.99116
lcsw-g22w1	W_2079	0.02	U	mg/L	0.02			0.00478	0.01	07/22/04	11:26	2	0.00956
lcsw-g22w1	Y_3710	0.01	U	mg/L	0.01			0.00000	0.005	07/22/04	11:26	2	0
lcsw-g22w1	Zn2062	0.984		mg/L	0.01	1	98.4%	0.49196	0.005	07/22/04	11:26	2	0.98392
lcsw-g22w1	Zr3496	0.01	U	mg/L	0.01			0.00000	0.005	07/22/04	11:26	2	0
pbw-g22w1	Ag3280	0.02	U	mg/L	0.02			-0.00002	0.01	07/22/04	11:20	2	-4E-05
pbw-g22w1	Al3082	0.1	U	mg/L	0.1			0.01001	0.05	07/22/04	11:20	2	0.02002
pbw-g22w1	As1890	0.2	U	mg/L	0.2			0.00153	0.1	07/22/04	11:20	2	0.00306

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
pbw-g22w1	B_2496	0.2	U	mg/L	0.2				0.00504	0.1	07/22/04	11:20	2	0.01008
pbw-g22w1	Ba4934	0.01	U	mg/L	0.01				0.00001	0.005	07/22/04	11:20	2	2E-05
pbw-g22w1	Be3130	0.01	U	mg/L	0.01				-0.00001	0.005	07/22/04	11:20	2	-2E-05
pbw-g22w1	Bi2230	0.2	U	mg/L	0.2				-0.00214	0.1	07/22/04	11:20	2	-0.00428
pbw-g22w1	Ca3179	0.1	U	mg/L	0.1				0.01350	0.05	07/22/04	11:20	2	0.027
pbw-g22w1	Cd2265	0.01	U	mg/L	0.01				-0.00013	0.005	07/22/04	11:20	2	-0.00026
pbw-g22w1	Co2286	0.02	U	mg/L	0.02				0.00038	0.01	07/22/04	11:20	2	0.00076
pbw-g22w1	Cr2677	0.01	U	mg/L	0.01				0.00050	0.005	07/22/04	11:20	2	0.001
pbw-g22w1	Cu3247	0.01	U	mg/L	0.01				0.00017	0.005	07/22/04	11:20	2	0.00034
pbw-g22w1	Fe2714	0.1	U	mg/L	0.1				-0.00382	0.05	07/22/04	11:20	2	-0.00764
pbw-g22w2	K_766	0.4	U	mg/L	0.4				-0.0375	0.2	07/22/04	11:59:09	2	-0.075
pbw-g22w1	La3988	0.02	U	mg/L	0.02				0.00033	0.01	07/22/04	11:20	2	0.00066
pbw-g22w1	Li6707	0.01	U	mg/L	0.01				0.00004	0.005	07/22/04	11:20	2	8E-05
pbw-g22w1	Mg2790	0.1	U	mg/L	0.1				0.01116	0.05	07/22/04	11:20	2	0.02232
pbw-g22w1	Mn2576	0.01	U	mg/L	0.01				0.00003	0.005	07/22/04	11:20	2	6E-05
pbw-g22w1	Mo2020	0.01	U	mg/L	0.01				0.00055	0.005	07/22/04	11:20	2	0.0011
pbw-g22w2	Na589	0.4	U	mg/L	0.4				0.0424	0.2	07/22/04	11:59:09	2	0.0848
pbw-g22w1	Ni2316	0.01	U	mg/L	0.01				-0.00153	0.005	07/22/04	11:20	2	-0.00306
pbw-g22w1	P_1782	0.08	U	mg/L	0.08				0.00632	0.04	07/22/04	11:20	2	0.01264
pbw-g22w1	Pb220	0.02	U	mg/L	0.02				-0.00053	0.01	07/22/04	11:20	2	-0.00106
pbw-g22w1	Pd3404	0.02	U	mg/L	0.02				-0.00070	0.01	07/22/04	11:20	2	-0.0014
pbw-g22w1	S_1820	0.1	U	mg/L	0.1				0.02516	0.05	07/22/04	11:20	2	0.05032
pbw-g22w1	Sb2068	0.05	U	mg/L	0.05				-0.00074	0.025	07/22/04	11:20	2	-0.00148
pbw-g22w1	Se196	0.02	U	mg/L	0.02				-0.00134	0.01	07/22/04	11:20	2	-0.00268
pbw-g22w1	Si2881	0.05	U	mg/L	0.05				0.00632	0.025	07/22/04	11:20	2	0.01264
pbw-g22w1	Sn1899	0.05	U	mg/L	0.05				-0.00074	0.025	07/22/04	11:20	2	-0.00148
pbw-g22w1	Sr4215	0.01	U	mg/L	0.01				0.00003	0.005	07/22/04	11:20	2	6E-05
pbw-g22w1	Th2837	0.03	U	mg/L	0.03				-0.00018	0.015	07/22/04	11:20	2	-0.00036
pbw-g22w1	Ti3349	0.01	U	mg/L	0.01				-0.00012	0.005	07/22/04	11:20	2	-0.00024
pbw-g22w1	Tl1908	0.02	U	mg/L	0.02				-0.00162	0.01	07/22/04	11:20	2	-0.00324
pbw-g22w1	U_4090	0.2	U	mg/L	0.2				0.00928	0.1	07/22/04	11:20	2	0.01856
pbw-g22w1	V_2924	0.01	U	mg/L	0.01				0.00018	0.005	07/22/04	11:20	2	0.00036
pbw-g22w1	W_2079	0.02	U	mg/L	0.02				0.00073	0.01	07/22/04	11:20	2	0.00146
pbw-g22w1	Y_3710	0.01	U	mg/L	0.01				0.00009	0.005	07/22/04	11:20	2	0.00018
pbw-g22w1	Zn2062	0.01	U	mg/L	0.01				0.00059	0.005	07/22/04	11:20	2	0.00118
pbw-g22w1	Zr3496	0.01	U	mg/L	0.01				-0.00001	0.005	07/22/04	11:20	2	-2E-05

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
247434	Ag3280	0.06	U	mg/L	0.06				-0.00284	0.015	07/22/04	14:42	4	-0.01136
247434	Al3082	0.269		mg/L	0.2				0.06717	0.05	07/22/04	14:42	4	0.26868
247434	As1890	0.2	U	mg/L	0.2				0.02209	0.05	07/22/04	14:42	4	0.08836
247434	B_2496	2678		mg/L	10				26.77850	0.1	07/22/04	13:37	100	2677.85
247434	Ba4934	0.02	U	mg/L	0.02				0.00242	0.005	07/22/04	14:42	4	0.00968
247434	Be3130	0.02	U	mg/L	0.02				0.00007	0.005	07/22/04	14:42	4	0.00028
247434	Bi2230	0.2	U	mg/L	0.2				0.01487	0.05	07/22/04	14:42	4	0.05948
247434	Ca3179	0.946		mg/L	0.4				0.23639	0.1	07/22/04	14:42	4	0.94556
247434	Cd2265	0.02	U	mg/L	0.02				0.00081	0.005	07/22/04	14:42	4	0.00324
247434	Co2286	0.02	U	mg/L	0.02				-0.00198	0.005	07/22/04	14:42	4	-0.00792
247434	Cr2677	0.02	U	mg/L	0.02				0.00126	0.005	07/22/04	14:42	4	0.00504
247434	Cu3247	0.02	U	mg/L	0.02				0.00319	0.005	07/22/04	14:42	4	0.01276
247434	Fe2714	0.2	U	mg/L	0.2				0.00748	0.05	07/22/04	14:42	4	0.02992
247434	K_766	0.8	U	mg/L	0.8				0.1960	0.2	07/22/04	13:59:01	4	0.784
247434	La3988	0.02	U	mg/L	0.02				-0.00554	0.005	07/22/04	14:42	4	-0.02216
247434	Li6707	0.02	U	mg/L	0.02				0.00112	0.005	07/22/04	14:42	4	0.00448
247434	Mg2790	0.2	U	mg/L	0.2				0.01435	0.05	07/22/04	14:42	4	0.0574
247434	Mn2576	0.02	U	mg/L	0.02				0.00014	0.005	07/22/04	14:42	4	0.00056
247434	Mo2020	0.02	U	mg/L	0.02				-0.00252	0.005	07/22/04	14:42	4	-0.01008
247434	Na589	3631		mg/L	20				36.3136	0.2	07/22/04	13:22:14	100	3631.36
247434	Ni2316	0.02	U	mg/L	0.02				-0.00084	0.005	07/22/04	14:42	4	-0.00336
247434	P_1782	0.16	U	mg/L	0.16				0.03113	0.04	07/22/04	14:42	4	0.12452
247434	Pb220	0.04	U	mg/L	0.04				-0.00013	0.01	07/22/04	14:42	4	-0.00052
247434	Pd3404	0.04	U	mg/L	0.04				-0.00513	0.01	07/22/04	14:42	4	-0.02052
247434	S_1820	0.348		mg/L	0.2				0.08692	0.05	07/22/04	14:42	4	0.34768
247434	Sb2068	0.1	U	mg/L	0.1				-0.01284	0.025	07/22/04	14:42	4	-0.05136
247434	Se196	0.04	U	mg/L	0.04				0.00175	0.01	07/22/04	14:42	4	0.007
247434	Si2881	5.94		mg/L	0.1				1.48570	0.025	07/22/04	14:42	4	5.9428
247434	Sn1899	0.1	U	mg/L	0.1				0.00659	0.025	07/22/04	14:42	4	0.02636
247434	Sr4215	0.02	U	mg/L	0.02				0.00382	0.005	07/22/04	14:42	4	0.01528
247434	Th2837	0.06	U	mg/L	0.06				-0.00038	0.015	07/22/04	14:42	4	-0.00152
247434	Ti3349	0.02	U	mg/L	0.02				-0.00053	0.005	07/22/04	14:42	4	-0.00212
247434	Tl1908	0.04	U	mg/L	0.04				-0.00415	0.01	07/22/04	14:42	4	-0.0166
247434	U_4090	0.4	U	mg/L	0.4				0.02904	0.1	07/22/04	14:42	4	0.11616
247434	V_2924	0.02	U	mg/L	0.02				-0.00101	0.005	07/22/04	14:42	4	-0.00404

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
247434	W_2079	0.04	U	mg/L	0.04				0.00964	0.01	07/22/04	14:42	4	0.03856
247434	Y_3710	0.02	U	mg/L	0.02				-0.00009	0.005	07/22/04	14:42	4	-0.00036
247434	Zn2062	2.12		mg/L	0.02				0.53060	0.005	07/22/04	14:42	4	2.1224
247434	Zr3496	0.02	U	mg/L	0.02				-0.00098	0.005	07/22/04	14:42	4	-0.00392
247434d	Ag3280	0.06	U	mg/L	0.06				-0.00217	0.015	07/22/04	14:47	4	-0.00868
247434d	Al3082	0.291		mg/L	0.2				0.07280	0.05	07/22/04	14:47	4	0.2912
247434d	As1890	0.2	U	mg/L	0.2				0.02053	0.05	07/22/04	14:47	4	0.08212
247434d	B_2496	2652		mg/L	10				26.51599	0.1	07/22/04	13:41	100	2651.599
247434d	Ba4934	0.02	U	mg/L	0.02				0.00241	0.005	07/22/04	14:47	4	0.00964
247434d	Be3130	0.02	U	mg/L	0.02				0.00010	0.005	07/22/04	14:47	4	0.0004
247434d	Bi2230	0.2	U	mg/L	0.2				0.01816	0.05	07/22/04	14:47	4	0.07264
247434d	Ca3179	0.930		mg/L	0.4				0.23250	0.1	07/22/04	14:47	4	0.93
247434d	Cd2265	0.02	U	mg/L	0.02				0.00071	0.005	07/22/04	14:47	4	0.00284
247434d	Co2286	0.02	U	mg/L	0.02				-0.00031	0.005	07/22/04	14:47	4	-0.00124
247434d	Cr2677	0.02	U	mg/L	0.02				0.00204	0.005	07/22/04	14:47	4	0.00816
247434d	Cu3247	0.02	U	mg/L	0.02				0.00390	0.005	07/22/04	14:47	4	0.0156
247434d	Fe2714	0.2	U	mg/L	0.2				-0.00141	0.05	07/22/04	14:47	4	-0.00564
247434d	K_766	1.05		mg/L	0.8				0.2627	0.2	07/22/04	14:02:04	4	1.0508
247434d	La3988	0.02	U	mg/L	0.02				-0.00528	0.005	07/22/04	14:47	4	-0.02112
247434d	Li6707	0.02	U	mg/L	0.02				0.00160	0.005	07/22/04	14:47	4	0.0064
247434d	Mg2790	0.2	U	mg/L	0.2				0.02236	0.05	07/22/04	14:47	4	0.08944
247434d	Mn2576	0.02	U	mg/L	0.02				0.00024	0.005	07/22/04	14:47	4	0.00096
247434d	Mo2020	0.02	U	mg/L	0.02				-0.00250	0.005	07/22/04	14:47	4	-0.01
247434d	Na589	3605		mg/L	20				36.0508	0.2	07/22/04	13:25:18	100	3605.08
247434d	Ni2316	0.02	U	mg/L	0.02				0.00007	0.005	07/22/04	14:47	4	0.00028
247434d	P_1782	0.16	U	mg/L	0.16				0.03687	0.04	07/22/04	14:47	4	0.14748
247434d	Pb220	0.04	U	mg/L	0.04				-0.00007	0.01	07/22/04	14:47	4	-0.00028
247434d	Pd3404	0.04	U	mg/L	0.04				-0.00081	0.01	07/22/04	14:47	4	-0.00324
247434d	S_1820	0.294		mg/L	0.2				0.07361	0.05	07/22/04	14:47	4	0.29444
247434d	Sb2068	0.1	U	mg/L	0.1				-0.02030	0.025	07/22/04	14:47	4	-0.0812
247434d	Se196	0.04	U	mg/L	0.04				-0.00649	0.01	07/22/04	14:47	4	-0.02596
247434d	Si2881	5.98		mg/L	0.1				1.49494	0.025	07/22/04	14:47	4	5.97976
247434d	Sn1899	0.1	U	mg/L	0.1				0.00443	0.025	07/22/04	14:47	4	0.01772
247434d	Sr4215	0.02	U	mg/L	0.02				0.00383	0.005	07/22/04	14:47	4	0.01532
247434d	Th2837	0.06	U	mg/L	0.06				0.00186	0.015	07/22/04	14:47	4	0.00744
247434d	Ti3349	0.02	U	mg/L	0.02				-0.00063	0.005	07/22/04	14:47	4	-0.00252

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec	ug/ml	rl	date	time	df&prep	mg/L
247434d	Tl1908	0.04	U	mg/L	0.04			-0.00470	0.01	07/22/04	14:47	4	-0.0188
247434d	U_4090	0.4	U	mg/L	0.4			0.06758	0.1	07/22/04	14:47	4	0.27032
247434d	V_2924	0.02	U	mg/L	0.02			-0.00179	0.005	07/22/04	14:47	4	-0.00716
247434d	W_2079	0.04	U	mg/L	0.04			0.00656	0.01	07/22/04	14:47	4	0.02624
247434d	Y_3710	0.02	U	mg/L	0.02			0.00007	0.005	07/22/04	14:47	4	0.00028
247434d	Zn2062	2.16		mg/L	0.02			0.53906	0.005	07/22/04	14:47	4	2.15624
247434d	Zr3496	0.02	U	mg/L	0.02			-0.00044	0.005	07/22/04	14:47	4	-0.00176
247434s	Ag3280	0.080		mg/L	0.06	0.1	79.8%	0.01995	0.015	07/22/04	14:52	4	0.0798
247434s	Al3082	4.29		mg/L	0.2	4	100.6%	1.07345	0.05	07/22/04	14:52	4	4.2938
247434s	As1890	4.08		mg/L	0.2	4	101.9%	1.01927	0.05	07/22/04	14:52	4	4.07708
247434s	B_2496	2669		mg/L	10	4	-229.2%	26.68834	0.1	07/22/04	13:46	100	2668.834
247434s	Ba4934	3.80		mg/L	0.02	4	94.9%	0.94930	0.005	07/22/04	14:52	4	3.7972
247434s	Be3130	0.091		mg/L	0.02	0.1	91.4%	0.02286	0.005	07/22/04	14:52	4	0.09144
247434s	Bi2230	0.2	U	mg/L	0.2			0.00887	0.05	07/22/04	14:52	4	0.03548
247434s	Ca3179	39.6		mg/L	0.4	40	96.6%	9.90025	0.1	07/22/04	14:52	4	39.601
247434s	Cd2265	0.094		mg/L	0.02	0.1	94.4%	0.02359	0.005	07/22/04	14:52	4	0.09436
247434s	Co2286	0.951		mg/L	0.02	1	95.1%	0.23770	0.005	07/22/04	14:52	4	0.9508
247434s	Cr2677	0.393		mg/L	0.02	0.4	98.3%	0.09832	0.005	07/22/04	14:52	4	0.39328
247434s	Cu3247	0.522		mg/L	0.02	0.5	104.4%	0.13045	0.005	07/22/04	14:52	4	0.5218
247434s	Fe2714	1.96		mg/L	0.2	2	97.9%	0.48949	0.05	07/22/04	14:52	4	1.95796
247434s	K_766	46.2		mg/L	0.8	40	115.5%	11.5542	0.2	07/22/04	14:05:08	4	46.2168
247434s	La3988	0.02	U	mg/L	0.02			-0.00838	0.005	07/22/04	14:52	4	-0.03352
247434s	Li6707	0.02	U	mg/L	0.02			0.00162	0.005	07/22/04	14:52	4	0.00648
247434s	Mg2790	37.3		mg/L	0.2	40	93.4%	9.33661	0.05	07/22/04	14:52	4	37.34644
247434s	Mn2576	0.979		mg/L	0.02	1	97.9%	0.24484	0.005	07/22/04	14:52	4	0.97936
247434s	Mo2020	0.02	U	mg/L	0.02			-0.00250	0.005	07/22/04	14:52	4	-0.01
247434s	Na589	3636		mg/L	20	40	11.9%	36.3575	0.2	07/22/04	13:28:21	100	3635.75
247434s	Ni2316	0.934		mg/L	0.02	1	93.4%	0.23345	0.005	07/22/04	14:52	4	0.9338
247434s	P_1782	0.16	U	mg/L	0.16			0.02291	0.04	07/22/04	14:52	4	0.09164
247434s	Pb220	1.01		mg/L	0.04	1	101.4%	0.25342	0.01	07/22/04	14:52	4	1.01368
247434s	Pd3404	0.04	U	mg/L	0.04			-0.00923	0.01	07/22/04	14:52	4	-0.03692
247434s	S_1820	0.293		mg/L	0.2			0.07325	0.05	07/22/04	14:52	4	0.293
247434s	Sb2068	0.917		mg/L	0.1	1	91.7%	0.22929	0.025	07/22/04	14:52	4	0.91716
247434s	Se196	3.86		mg/L	0.04	4	96.6%	0.96568	0.01	07/22/04	14:52	4	3.86272
247434s	Si2881	5.95		mg/L	0.1			1.48708	0.025	07/22/04	14:52	4	5.94832
247434s	Sn1899	0.1	U	mg/L	0.1			0.00142	0.025	07/22/04	14:52	4	0.00568

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec	ug/ml	rl	date	time	df&prep	mg/L
247434s	Sr4215	0.02	U	mg/L	0.02			0.00404	0.005	07/22/04	14:52	4	0.01616
247434s	Th2837	0.06	U	mg/L	0.06			-0.00840	0.015	07/22/04	14:52	4	-0.0336
247434s	Ti3349	0.02	U	mg/L	0.02			-0.00074	0.005	07/22/04	14:52	4	-0.00296
247434s	Tl1908	4.19		mg/L	0.04	4	104.7%	1.04727	0.01	07/22/04	14:52	4	4.18908
247434s	U_4090	0.4	U	mg/L	0.4			-0.05978	0.1	07/22/04	14:52	4	-0.23912
247434s	V_2924	0.960		mg/L	0.02	1	96.0%	0.23988	0.005	07/22/04	14:52	4	0.95952
247434s	W_2079	0.04	U	mg/L	0.04			0.00524	0.01	07/22/04	14:52	4	0.02096
247434s	Y_3710	0.02	U	mg/L	0.02			-0.00016	0.005	07/22/04	14:52	4	-0.00064
247434s	Zn2062	3.19		mg/L	0.02	1	106.7%	0.79685	0.005	07/22/04	14:52	4	3.1874
247434s	Zr3496	0.02	U	mg/L	0.02			-0.00172	0.005	07/22/04	14:52	4	-0.00688
247436	Ag3280	0.06	U	mg/L	0.06			-0.00254	0.015	07/22/04	14:57	4	-0.01016
247436	Al3082	0.519		mg/L	0.2			0.12965	0.05	07/22/04	14:57	4	0.5186
247436	As1890	0.2	U	mg/L	0.2			0.02162	0.05	07/22/04	14:57	4	0.08648
247436	B_2496	2711		mg/L	10			27.10709	0.1	07/22/04	13:51	100	2710.709
247436	Ba4934	0.02	U	mg/L	0.02			0.00161	0.005	07/22/04	14:57	4	0.00644
247436	Be3130	0.02	U	mg/L	0.02			0.00012	0.005	07/22/04	14:57	4	0.00048
247436	Bi2230	0.2	U	mg/L	0.2			0.01680	0.05	07/22/04	14:57	4	0.0672
247436	Ca3179	21.7		mg/L	0.4			5.42360	0.1	07/22/04	14:57	4	21.6944
247436	Cd2265	0.02	U	mg/L	0.02			0.00047	0.005	07/22/04	14:57	4	0.00188
247436	Co2286	0.02	U	mg/L	0.02			-0.00180	0.005	07/22/04	14:57	4	-0.0072
247436	Cr2677	0.02	U	mg/L	0.02			0.00295	0.005	07/22/04	14:57	4	0.0118
247436	Cu3247	0.024		mg/L	0.02			0.00598	0.005	07/22/04	14:57	4	0.02392
247436	Fe2714	0.2	U	mg/L	0.2			0.00188	0.05	07/22/04	14:57	4	0.00752
247436	K_766	1.34		mg/L	0.8			0.3344	0.2	07/22/04	14:08:12	4	1.3376
247436	La3988	0.02	U	mg/L	0.02			-0.00531	0.005	07/22/04	14:57	4	-0.02124
247436	Li6707	0.02	U	mg/L	0.02			0.00176	0.005	07/22/04	14:57	4	0.00704
247436	Mg2790	1.06		mg/L	0.2			0.26439	0.05	07/22/04	14:57	4	1.05756
247436	Mn2576	0.02	U	mg/L	0.02			0.00035	0.005	07/22/04	14:57	4	0.0014
247436	Mo2020	0.02	U	mg/L	0.02			-0.00204	0.005	07/22/04	14:57	4	-0.00816
247436	Na589	3538		mg/L	20			35.3757	0.2	07/22/04	13:31:25	100	3537.57
247436	Ni2316	0.02	U	mg/L	0.02			-0.00086	0.005	07/22/04	14:57	4	-0.00344
247436	P_1782	0.16	U	mg/L	0.16			0.02616	0.04	07/22/04	14:57	4	0.10464
247436	Pb220	0.04	U	mg/L	0.04			0.00016	0.01	07/22/04	14:57	4	0.00064
247436	Pd3404	0.04	U	mg/L	0.04			-0.00279	0.01	07/22/04	14:57	4	-0.01116
247436	S_1820	0.571		mg/L	0.2			0.14277	0.05	07/22/04	14:57	4	0.57108
247436	Sb2068	0.1	U	mg/L	0.1			-0.01709	0.025	07/22/04	14:57	4	-0.06836

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec	ug/ml	rl	date	time	df&prep	mg/L
247436	Se196	0.04	U	mg/L	0.04			-0.00449	0.01	07/22/04	14:57	4	-0.01796
247436	Si2881	18.1		mg/L	0.1			4.53570	0.025	07/22/04	14:57	4	18.1428
247436	Sn1899	0.1	U	mg/L	0.1			0.00831	0.025	07/22/04	14:57	4	0.03324
247436	Sr4215	0.053		mg/L	0.02			0.01314	0.005	07/22/04	14:57	4	0.05256
247436	Th2837	0.06	U	mg/L	0.06			0.00116	0.015	07/22/04	14:57	4	0.00464
247436	Ti3349	0.02	U	mg/L	0.02			-0.00055	0.005	07/22/04	14:57	4	-0.0022
247436	Tl1908	0.04	U	mg/L	0.04			-0.00272	0.01	07/22/04	14:57	4	-0.01088
247436	U_4090	0.4	U	mg/L	0.4			0.05427	0.1	07/22/04	14:57	4	0.21708
247436	V_2924	0.02	U	mg/L	0.02			-0.00057	0.005	07/22/04	14:57	4	-0.00228
247436	W_2079	0.04	U	mg/L	0.04			0.00614	0.01	07/22/04	14:57	4	0.02456
247436	Y_3710	0.02	U	mg/L	0.02			0.00003	0.005	07/22/04	14:57	4	0.00012
247436	Zn2062	0.02	U	mg/L	0.02			0.00268	0.005	07/22/04	14:57	4	0.01072
247436	Zr3496	0.02	U	mg/L	0.02			0.00024	0.005	07/22/04	14:57	4	0.00096
248204	Ag3280	0.06	U	mg/L	0.06			-0.00318	0.015	07/22/04	15:01	4	-0.01272
248204	Al3082	0.284		mg/L	0.2			0.07100	0.05	07/22/04	15:01	4	0.284
248204	As1890	0.2	U	mg/L	0.2			0.02045	0.05	07/22/04	15:01	4	0.0818
248204	B_2496	2394		mg/L	10			23.94109	0.1	07/22/04	13:56	100	2394.109
248204	Ba4934	0.02	U	mg/L	0.02			0.00202	0.005	07/22/04	15:01	4	0.00808
248204	Be3130	0.02	U	mg/L	0.02			0.00014	0.005	07/22/04	15:01	4	0.00056
248204	Bi2230	0.2	U	mg/L	0.2			0.01336	0.05	07/22/04	15:01	4	0.05344
248204	Ca3179	1.21		mg/L	0.4			0.30203	0.1	07/22/04	15:01	4	1.20812
248204	Cd2265	0.02	U	mg/L	0.02			0.00047	0.005	07/22/04	15:01	4	0.00188
248204	Co2286	0.02	U	mg/L	0.02			-0.00227	0.005	07/22/04	15:01	4	-0.00908
248204	Cr2677	0.052		mg/L	0.02			0.01306	0.005	07/22/04	15:01	4	0.05224
248204	Cu3247	0.085		mg/L	0.02			0.02121	0.005	07/22/04	15:01	4	0.08484
248204	Fe2714	0.2	U	mg/L	0.2			-0.00528	0.05	07/22/04	15:01	4	-0.02112
248204	K_766	0.8	U	mg/L	0.8			0.0554	0.2	07/22/04	14:11:16	4	0.2216
248204	La3988	0.02	U	mg/L	0.02			-0.00612	0.005	07/22/04	15:01	4	-0.02448
248204	Li6707	0.02	U	mg/L	0.02			0.00144	0.005	07/22/04	15:01	4	0.00576
248204	Mg2790	0.2	U	mg/L	0.2			0.01426	0.05	07/22/04	15:01	4	0.05704
248204	Mn2576	0.02	U	mg/L	0.02			0.00054	0.005	07/22/04	15:01	4	0.00216
248204	Mo2020	0.02	U	mg/L	0.02			0.00482	0.005	07/22/04	15:01	4	0.01928
248204	Na589	3189		mg/L	20			31.8867	0.2	07/22/04	13:34:29	100	3188.67
248204	Ni2316	0.02	U	mg/L	0.02			0.00055	0.005	07/22/04	15:01	4	0.0022
248204	P_1782	0.16	U	mg/L	0.16			0.02039	0.04	07/22/04	15:01	4	0.08156
248204	Pb220	0.04	U	mg/L	0.04			-0.00050	0.01	07/22/04	15:01	4	-0.002

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
248204	Pd3404	0.04	U	mg/L	0.04				-0.00433	0.01	07/22/04	15:01	4	-0.01732
248204	S_1820	0.2	U	mg/L	0.2				0.04138	0.05	07/22/04	15:01	4	0.16552
248204	Sb2068	0.1	U	mg/L	0.1				-0.01815	0.025	07/22/04	15:01	4	-0.0726
248204	Se196	0.04	U	mg/L	0.04				-0.00365	0.01	07/22/04	15:01	4	-0.0146
248204	Si2881	0.225		mg/L	0.1				0.05632	0.025	07/22/04	15:01	4	0.22528
248204	Sn1899	0.1	U	mg/L	0.1				0.00747	0.025	07/22/04	15:01	4	0.02988
248204	Sr4215	0.02	U	mg/L	0.02				0.00317	0.005	07/22/04	15:01	4	0.01268
248204	Th2837	0.06	U	mg/L	0.06				0.00070	0.015	07/22/04	15:01	4	0.0028
248204	Ti3349	0.02	U	mg/L	0.02				-0.00040	0.005	07/22/04	15:01	4	-0.0016
248204	Tl1908	0.04	U	mg/L	0.04				-0.00771	0.01	07/22/04	15:01	4	-0.03084
248204	U_4090	0.4	U	mg/L	0.4				0.00858	0.1	07/22/04	15:01	4	0.03432
248204	V_2924	0.02	U	mg/L	0.02				-0.00199	0.005	07/22/04	15:01	4	-0.00796
248204	W_2079	0.110		mg/L	0.04				0.02761	0.01	07/22/04	15:01	4	0.11044
248204	Y_3710	0.02	U	mg/L	0.02				0.00001	0.005	07/22/04	15:01	4	4E-05
248204	Zn2062	14.6		mg/L	0.02				3.65937	0.005	07/22/04	15:01	4	14.63748
248204	Zr3496	0.02	U	mg/L	0.02				-0.00094	0.005	07/22/04	15:01	4	-0.00376
248206	Ag3280	0.06	U	mg/L	0.06				0.01377	0.015	07/22/04	15:06	4	0.05508
248206	Al3082	0.236		mg/L	0.2				0.05900	0.05	07/22/04	15:06	4	0.236
248206	As1890	0.2	U	mg/L	0.2				0.01973	0.05	07/22/04	15:06	4	0.07892
248206	B_2496	2484		mg/L	10				24.84433	0.1	07/22/04	14:01	100	2484.433
248206	Ba4934	0.02	U	mg/L	0.02				0.00186	0.005	07/22/04	15:06	4	0.00744
248206	Be3130	0.02	U	mg/L	0.02				0.00013	0.005	07/22/04	15:06	4	0.00052
248206	Bi2230	0.2	U	mg/L	0.2				0.01867	0.05	07/22/04	15:06	4	0.07468
248206	Ca3179	20.4		mg/L	0.4				5.10046	0.1	07/22/04	15:06	4	20.40184
248206	Cd2265	0.02	U	mg/L	0.02				0.00075	0.005	07/22/04	15:06	4	0.003
248206	Co2286	0.02	U	mg/L	0.02				-0.00130	0.005	07/22/04	15:06	4	-0.0052
248206	Cr2677	0.094		mg/L	0.02				0.02340	0.005	07/22/04	15:06	4	0.0936
248206	Cu3247	0.043		mg/L	0.02				0.01081	0.005	07/22/04	15:06	4	0.04324
248206	Fe2714	0.255		mg/L	0.2				0.06384	0.05	07/22/04	15:06	4	0.25536
248206	K_766	0.8	U	mg/L	0.8				0.1609	0.2	07/22/04	14:14:20	4	0.6436
248206	La3988	0.02	U	mg/L	0.02				-0.00477	0.005	07/22/04	15:06	4	-0.01908
248206	Li6707	0.02	U	mg/L	0.02				0.00162	0.005	07/22/04	15:06	4	0.00648
248206	Mg2790	0.289		mg/L	0.2				0.07227	0.05	07/22/04	15:06	4	0.28908
248206	Mn2576	0.02	U	mg/L	0.02				0.00227	0.005	07/22/04	15:06	4	0.00908
248206	Mo2020	0.02	U	mg/L	0.02				0.00445	0.005	07/22/04	15:06	4	0.0178
248206	Na589	3307		mg/L	20				33.0706	0.2	07/22/04	13:38:03	100	3307.06

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec	ug/ml	rl	date	time	df&prep	mg/L
248206	Ni2316	0.034		mg/L	0.02			0.00847	0.005	07/22/04	15:06	4	0.03388
248206	P_1782	0.16	U	mg/L	0.16			0.01943	0.04	07/22/04	15:06	4	0.07772
248206	Pb220	0.04	U	mg/L	0.04			0.00084	0.01	07/22/04	15:06	4	0.00336
248206	Pd3404	0.04	U	mg/L	0.04			-0.00228	0.01	07/22/04	15:06	4	-0.00912
248206	S_1820	0.305		mg/L	0.2			0.07630	0.05	07/22/04	15:06	4	0.3052
248206	Sb2068	0.1	U	mg/L	0.1			-0.01575	0.025	07/22/04	15:06	4	-0.063
248206	Se196	0.04	U	mg/L	0.04			-0.00298	0.01	07/22/04	15:06	4	-0.01192
248206	Si2881	0.652		mg/L	0.1			0.16305	0.025	07/22/04	15:06	4	0.6522
248206	Sn1899	0.1	U	mg/L	0.1			0.00776	0.025	07/22/04	15:06	4	0.03104
248206	Sr4215	0.078		mg/L	0.02			0.01951	0.005	07/22/04	15:06	4	0.07804
248206	Th2837	0.06	U	mg/L	0.06			-0.00092	0.015	07/22/04	15:06	4	-0.00368
248206	Ti3349	0.02	U	mg/L	0.02			-0.00077	0.005	07/22/04	15:06	4	-0.00308
248206	Tl1908	0.04	U	mg/L	0.04			-0.00672	0.01	07/22/04	15:06	4	-0.02688
248206	U_4090	0.4	U	mg/L	0.4			0.04947	0.1	07/22/04	15:06	4	0.19788
248206	V_2924	0.02	U	mg/L	0.02			-0.00036	0.005	07/22/04	15:06	4	-0.00144
248206	W_2079	0.056		mg/L	0.04			0.01396	0.01	07/22/04	15:06	4	0.05584
248206	Y_3710	0.02	U	mg/L	0.02			-0.00016	0.005	07/22/04	15:06	4	-0.00064
248206	Zn2062	1.95		mg/L	0.02			0.48801	0.005	07/22/04	15:06	4	1.95204
248206	Zr3496	0.02	U	mg/L	0.02			-0.00117	0.005	07/22/04	15:06	4	-0.00468
lcsw-G22W3	Ag3280	0.096		mg/L	0.06	0.1	96.3%	0.04814	0.015	07/22/04	13:32	2	0.09628
lcsw-G22W3	Al3082	3.70		mg/L	0.2	4	92.6%	1.85211	0.05	07/22/04	13:32	2	3.70422
lcsw-G22W3	As1890	3.74		mg/L	0.2	4	93.4%	1.86841	0.05	07/22/04	13:32	2	3.73682
lcsw-G22W3	B_2496	3.77		mg/L	0.4	4	94.1%	1.88252	0.1	07/22/04	13:32	2	3.76504
lcsw-G22W3	Ba4934	3.90		mg/L	0.02	4	97.6%	1.95140	0.005	07/22/04	13:32	2	3.9028
lcsw-G22W3	Be3130	0.090		mg/L	0.02	0.1	89.8%	0.04491	0.005	07/22/04	13:32	2	0.08982
lcsw-G22W3	Bi2230	0.2	U	mg/L	0.2			0.00188	0.05	07/22/04	13:32	2	0.00376
lcsw-G22W3	Ca3179	38.6		mg/L	0.4	40	96.4%	19.28089	0.1	07/22/04	13:32	2	38.56178
lcsw-G22W3	Cd2265	0.094		mg/L	0.02	0.1	93.9%	0.04695	0.005	07/22/04	13:32	2	0.0939
lcsw-G22W3	Co2286	0.938		mg/L	0.02	1	93.8%	0.46922	0.005	07/22/04	13:32	2	0.93844
lcsw-G22W3	Cr2677	0.384		mg/L	0.02	0.4	96.0%	0.19204	0.005	07/22/04	13:32	2	0.38408
lcsw-G22W3	Cu3247	0.476		mg/L	0.02	0.5	95.3%	0.23818	0.005	07/22/04	13:32	2	0.47636
lcsw-G22W3	Fe2714	2.11		mg/L	0.2	2	105.5%	1.05455	0.05	07/22/04	13:32	2	2.1091
lcsw-G22W3	K_766	37.9		mg/L	0.8	40	94.8%	18.9600	0.2	07/22/04	13:19:11	2	37.92
lcsw-G22W3	La3988	0.02	U	mg/L	0.02			0.00108	0.005	07/22/04	13:32	2	0.00216
lcsw-G22W3	Li6707	0.02	U	mg/L	0.02			0.00001	0.005	07/22/04	13:32	2	2E-05
lcsw-G22W3	Mg2790	37.9		mg/L	0.2	40	94.9%	18.97488	0.05	07/22/04	13:32	2	37.94976

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The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec	ug/ml	rl	date	time	df&prep	mg/L
lcsw-G22W3	Mn2576	0.964		mg/L	0.02	1	96.4%	0.48179	0.005	07/22/04	13:32	2	0.96358
lcsw-G22W3	Mo2020	0.02	U	mg/L	0.02			-0.00116	0.005	07/22/04	13:32	2	-0.00232
lcsw-G22W3	Na589	38.4		mg/L	0.8	40	95.9%	19.1784	0.2	07/22/04	13:19:11	2	38.3568
lcsw-G22W3	Ni2316	0.936		mg/L	0.02	1	93.6%	0.46820	0.005	07/22/04	13:32	2	0.9364
lcsw-G22W3	P_1782	0.16	U	mg/L	0.16			0.01898	0.04	07/22/04	13:32	2	0.03796
lcsw-G22W3	Pb220	0.974		mg/L	0.04	1	97.4%	0.48693	0.01	07/22/04	13:32	2	0.97386
lcsw-G22W3	Pd3404	0.04	U	mg/L	0.04			0.00290	0.01	07/22/04	13:32	2	0.0058
lcsw-G22W3	S_1820	0.2	U	mg/L	0.2			-0.02203	0.05	07/22/04	13:32	2	-0.04406
lcsw-G22W3	Sb2068	0.932		mg/L	0.1	1	93.2%	0.46605	0.025	07/22/04	13:32	2	0.9321
lcsw-G22W3	Se196	3.53		mg/L	0.04	4	88.1%	1.76255	0.01	07/22/04	13:32	2	3.5251
lcsw-G22W3	Si2881	0.1	U	mg/L	0.1			0.00905	0.025	07/22/04	13:32	2	0.0181
lcsw-G22W3	Sn1899	0.1	U	mg/L	0.1			0.00089	0.025	07/22/04	13:32	2	0.00178
lcsw-G22W3	Sr4215	0.02	U	mg/L	0.02			0.00080	0.005	07/22/04	13:32	2	0.0016
lcsw-G22W3	Th2837	0.06	U	mg/L	0.06			-0.01119	0.015	07/22/04	13:32	2	-0.02238
lcsw-G22W3	Ti3349	0.02	U	mg/L	0.02			-0.00004	0.005	07/22/04	13:32	2	-8E-05
lcsw-G22W3	Tl1908	3.97		mg/L	0.04	4	99.3%	1.98639	0.01	07/22/04	13:32	2	3.97278
lcsw-G22W3	U_4090	0.4	U	mg/L	0.4			0.04853	0.1	07/22/04	13:32	2	0.09706
lcsw-G22W3	V_2924	0.96		mg/L	0.02	1	95.6%	0.47794	0.005	07/22/04	13:32	2	0.95588
lcsw-G22W3	W_2079	0.040	U	mg/L	0.04			0.01430	0.01	07/22/04	13:32	2	0.0286
lcsw-G22W3	Y_3710	0.02	U	mg/L	0.02			-0.00011	0.005	07/22/04	13:32	2	-0.00022
lcsw-G22W3	Zn2062	0.936		mg/L	0.02	1	93.6%	0.46816	0.005	07/22/04	13:32	2	0.93632
lcsw-G22W3	Zr3496	0.02	U	mg/L	0.02			0.00036	0.005	07/22/04	13:32	2	0.00072
pbw-G22W3	Ag3280	0.06	U	mg/L	0.06			0.00031	0.015	07/22/04	13:27	4	0.00124
pbw-G22W3	Al3082	0.2	U	mg/L	0.2			0.01326	0.05	07/22/04	13:27	4	0.05304
pbw-G22W3	As1890	0.2	U	mg/L	0.2			0.00110	0.05	07/22/04	13:27	4	0.0044
pbw-G22W3	B_2496	0.4	U	mg/L	0.4			0.01875	0.1	07/22/04	13:27	4	0.075
pbw-G22W3	Ba4934	0.02	U	mg/L	0.02			0.00001	0.005	07/22/04	13:27	4	4E-05
pbw-G22W3	Be3130	0.02	U	mg/L	0.02			-0.00003	0.005	07/22/04	13:27	4	-0.00012
pbw-G22W3	Bi2230	0.2	U	mg/L	0.2			-0.00170	0.05	07/22/04	13:27	4	-0.0068
pbw-G22W3	Ca3179	0.4	U	mg/L	0.4			0.08282	0.1	07/22/04	13:27	4	0.33128
pbw-G22W3	Cd2265	0.02	U	mg/L	0.02			-0.00003	0.005	07/22/04	13:27	4	-0.00012
pbw-G22W3	Co2286	0.02	U	mg/L	0.02			0.00027	0.005	07/22/04	13:27	4	0.00108
pbw-G22W3	Cr2677	0.02	U	mg/L	0.02			0.00073	0.005	07/22/04	13:27	4	0.00292
pbw-G22W3	Cu3247	0.02	U	mg/L	0.02			-0.00003	0.005	07/22/04	13:27	4	-0.00012
pbw-G22W3	Fe2714	0.2	U	mg/L	0.2			-0.00363	0.05	07/22/04	13:27	4	-0.01452
pbw-G22W3	K_766	0.8	U	mg/L	0.8			-0.1221	0.2	07/22/04	13:16:07	4	-0.4884

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7/23/04

The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

07/23/04

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
247357	Ag3280	0.02	U	mg/L	0.02				-0.00588	0.01	07/22/04	15:26	2	-0.01176
247357	Al3082	0.1	U	mg/L	0.1				0.02775	0.05	07/22/04	15:26	2	0.0555
247357	As1890	0.2	U	mg/L	0.2				0.04052	0.1	07/22/04	15:26	2	0.08104
247357	B_2496	2782		mg/L	10				27.82480	0.1	07/22/04	11:31	100	2782.48
247357	Ba4934	0.422		mg/L	0.01				0.21083	0.005	07/22/04	15:26	2	0.42166
247357	Be3130	0.01	U	mg/L	0.01				0.00021	0.005	07/22/04	15:26	2	0.00042
247357	Bi2230	0.2	U	mg/L	0.2				0.04038	0.1	07/22/04	15:26	2	0.08076
247357	Ca3179	0.329		mg/L	0.1				0.16440	0.05	07/22/04	15:26	2	0.3288
247357	Cd2265	0.01	U	mg/L	0.01				0.00083	0.005	07/22/04	15:26	2	0.00166
247357	Co2286	0.02	U	mg/L	0.02				-0.00729	0.01	07/22/04	15:26	2	-0.01458
247357	Cr2677	0.01	U	mg/L	0.01				0.00405	0.005	07/22/04	15:26	2	0.0081
247357	Cu3247	0.01	U	mg/L	0.01				0.00421	0.005	07/22/04	15:26	2	0.00842
247357	Fe2714	0.1	U	mg/L	0.1				-0.01233	0.05	07/22/04	15:26	2	-0.02466
247357	K_766	1.93		mg/L	0.4				0.9673	0.2	07/22/04	14:26:08	2	1.9346
247357	La3988	0.02	U	mg/L	0.02				-0.01330	0.01	07/22/04	15:26	2	-0.0266
247357	Li6707	0.01	U	mg/L	0.01				0.00153	0.005	07/22/04	15:26	2	0.00306
247357	Mg2790	0.1	U	mg/L	0.1				-0.00025	0.05	07/22/04	15:26	2	-0.0005
247357	Mn2576	0.01	U	mg/L	0.01				0.00050	0.005	07/22/04	15:26	2	0.001
247357	Mo2020	0.01	U	mg/L	0.01				-0.00302	0.005	07/22/04	15:26	2	-0.00604
247357	Na589	3729		mg/L	20				37.2870	0.2	07/22/04	12:05:16	100	3728.7
247357	Ni2316	0.01	U	mg/L	0.01				0.00093	0.005	07/22/04	15:26	2	0.00186
247357	P_1782	0.08	U	mg/L	0.08				0.03347	0.04	07/22/04	15:26	2	0.06694
247357	Pb220	0.02	U	mg/L	0.02				0.00344	0.01	07/22/04	15:26	2	0.00688
247357	Pd3404	0.02	U	mg/L	0.02				-0.00956	0.01	07/22/04	15:26	2	-0.01912
247357	S_1820	0.227		mg/L	0.1				0.11327	0.05	07/22/04	15:26	2	0.22654
247357	Sb2068	0.05	U	mg/L	0.05				-0.04229	0.025	07/22/04	15:26	2	-0.08458
247357	Se196	0.02	U	mg/L	0.02				-0.00642	0.01	07/22/04	15:26	2	-0.01284
247357	Si2881	0.549		mg/L	0.05				0.27432	0.025	07/22/04	15:26	2	0.54864
247357	Sn1899	0.05	U	mg/L	0.05				0.01409	0.025	07/22/04	15:26	2	0.02818
247357	Sr4215	0.020		mg/L	0.01				0.00990	0.005	07/22/04	15:26	2	0.0198
247357	Th2837	0.03	U	mg/L	0.03				0.00419	0.015	07/22/04	15:26	2	0.00838
247357	Ti3349	0.01	U	mg/L	0.01				-0.00103	0.005	07/22/04	15:26	2	-0.00206
247357	Tl1908	0.02	U	mg/L	0.02				-0.00511	0.01	07/22/04	15:26	2	-0.01022
247357	U_4090	0.2	U	mg/L	0.2				0.05532	0.1	07/22/04	15:26	2	0.11064
247357	V_2924	0.01	U	mg/L	0.01				-0.00203	0.005	07/22/04	15:26	2	-0.00406
247357	W_2079	0.02	U	mg/L	0.02				0.00645	0.01	07/22/04	15:26	2	0.0129

010060

Div 20
to#040713-4, 040714-12, 040720-10
10542.02.002

The sodium and boron matrix spike recoveries for system id 247434 are low due to the sample concentrations being greater than 90 times the spike amounts added.

system id	elem	result	qual	units	rl	tv	rec		ug/ml	rl	date	time	df&prep	mg/L
pbw-G22W3	La3988	0.02	U	mg/L	0.02				0.00034	0.005	07/22/04	13:27	4	0.00136
pbw-G22W3	Li6707	0.02	U	mg/L	0.02				-0.00006	0.005	07/22/04	13:27	4	-0.00024
pbw-G22W3	Mg2790	0.2	U	mg/L	0.2				0.00055	0.05	07/22/04	13:27	4	0.0022
pbw-G22W3	Mn2576	0.02	U	mg/L	0.02				0.00010	0.005	07/22/04	13:27	4	0.0004
pbw-G22W3	Mo2020	0.02	U	mg/L	0.02				-0.00120	0.005	07/22/04	13:27	4	-0.0048
pbw-G22W3	Na589	0.8	U	mg/L	0.8				-0.0193	0.2	07/22/04	13:16:07	4	-0.0772
pbw-G22W3	Ni2316	0.02	U	mg/L	0.02				-0.00074	0.005	07/22/04	13:27	4	-0.00296
pbw-G22W3	P_1782	0.16	U	mg/L	0.16				0.03361	0.04	07/22/04	13:27	4	0.13444
pbw-G22W3	Pb220	0.04	U	mg/L	0.04				0.00045	0.01	07/22/04	13:27	4	0.0018
pbw-G22W3	Pd3404	0.04	U	mg/L	0.04				-0.00177	0.01	07/22/04	13:27	4	-0.00708
pbw-G22W3	S_1820	0.2	U	mg/L	0.2				-0.02186	0.05	07/22/04	13:27	4	-0.08744
pbw-G22W3	Sb2068	0.1	U	mg/L	0.1				-0.00041	0.025	07/22/04	13:27	4	-0.00164
pbw-G22W3	Se196	0.04	U	mg/L	0.04				0.00000	0.01	07/22/04	13:27	4	0
pbw-G22W3	Si2881	0.1	U	mg/L	0.1				0.00037	0.025	07/22/04	13:27	4	0.00148
pbw-G22W3	Sn1899	0.1	U	mg/L	0.1				-0.00003	0.025	07/22/04	13:27	4	-0.00012
pbw-G22W3	Sr4215	0.02	U	mg/L	0.02				0.00007	0.005	07/22/04	13:27	4	0.00028
pbw-G22W3	Th2837	0.06	U	mg/L	0.06				-0.00153	0.015	07/22/04	13:27	4	-0.00612
pbw-G22W3	Ti3349	0.02	U	mg/L	0.02				-0.00009	0.005	07/22/04	13:27	4	-0.00036
pbw-G22W3	Tl1908	0.04	U	mg/L	0.04				-0.00588	0.01	07/22/04	13:27	4	-0.02352
pbw-G22W3	U_4090	0.4	U	mg/L	0.4				0.02376	0.1	07/22/04	13:27	4	0.09504
pbw-G22W3	V_2924	0.02	U	mg/L	0.02				-0.00028	0.005	07/22/04	13:27	4	-0.00112
pbw-G22W3	W_2079	0.04	U	mg/L	0.04				0.00775	0.01	07/22/04	13:27	4	0.031
pbw-G22W3	Y_3710	0.02	U	mg/L	0.02				0.00000	0.005	07/22/04	13:27	4	0
pbw-G22W3	Zn2062	0.02	U	mg/L	0.02				0.00236	0.005	07/22/04	13:27	4	0.00944
pbw-G22W3	Zr3496	0.02	U	mg/L	0.02				-0.00021	0.005	07/22/04	13:27	4	-0.00084

ICP ANALYSIS 010082

PROJ. NO.	PROJECT	TO#	DATE	MATRIX	LOGBK PG
10542.02.002	Div 20	040713-4 040714-12	7.20.04	Liquid	57160
	Div 20	040714-12	7.20.04	Liquid	57158

INSTRUMENT: TRACE1 FILENAME: A040720

INSTRUMENT DL:

Standardization Rpt. 07/20/04 10:51:35 AM page 1

Method: DAILY1 Standard: blk
Run Time: 07/20/04 10:47:14

010083

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Avge	.0002	.0005	-.0000	.0001	-.0000	-.0001	.0000
SDev	.0000	.0000	.0000	.0000	.0000	.0000	.0000
%RSD	1.123	.6446	82.42	8.436	2.015	4.139	246.5
#1	.0002	.0005	-.0001	.0001	-.0000	-.0001	.0000
#2	.0003	.0005	-.0000	.0001	-.0000	-.0001	-.0000

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Avge	.0000	-.0000	-.0000	.0000	.0003	-.0000	.0010
SDev	.0000	.0000	.0000	.0000	.0000	.0000	.0003
%RSD	.4660	46.73	60.23	212.7	.4660	20.61	29.28
#1	.0000	-.0000	-.0000	-.0000	.0003	-.0000	.0008
#2	.0000	-.0000	-.0000	.0000	.0003	-.0000	.0012

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Avge	.0005	.0001	-.0000	.0000	-.0000	-.0044	-.0002
SDev	.0000	.0000	.0000	.0000	.0000	.0001	.0000
%RSD	1.071	2.885	90.27	47.55	42.00	2.905	13.66
#1	.0005	.0001	-.0000	.0000	-.0000	-.0045	-.0002
#2	.0005	.0002	-.0000	.0000	-.0000	-.0043	-.0001

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Avge	-.0000	.0001	.0001	-.0001	-.0000	.0001	.0000
SDev	.0000	.0000	.0000	.0000	.0000	.0000	.0000
%RSD	46.17	13.58	24.61	63.56	.4660	30.67	198.4
#1	-.0001	.0001	.0001	-.0000	-.0000	.0001	-.0000
#2	-.0000	.0001	.0001	-.0001	-.0000	.0001	.0000

Elem	Sc3613	1960/1	1960/2	Si2881	Sn1899	Sr4215	Th2837
Avge	71.40	-.0002	.0001	.0011	.0000	.0000	.0000
SDev	.33	.0001	.0002	.0000	.0000	.0000	.0000
%RSD	.4604	38.14	112.0	1.699	123.9	28.73	51.70
#1	71.17	-.0002	.0003	.0011	.0000	.0000	.0000
#2	71.63	-.0001	.0000	.0012	.0000	.0000	.0000

Elem	Ti3372	Tl1908	U_3859	V_2924	W_2079	Y_3710	Zn2062
Avge	-.0014	-.0000	.0038	-.0000	.0001	-.0000	-.0000
SDev	.0000	.0000	.0000	.0000	.0000	.0000	.0000
%RSD	.1771	13.22	.1579	27.84	34.09	101.2	141.4
#1	-.0014	-.0000	.0038	-.0000	.0001	-.0000	.0000
#2	-.0014	-.0000	.0038	-.0000	.0001	-.0000	-.0000

Elem	Zr3496
Avge	.0001
SDev	.0000
%RSD	2.450
#1	.0001
#2	.0001

DL 7.20.04

7/22/04

010084

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	713924	10000	--	--	--	--	--
SDev	3326.938	.0000000	--	--	--	--	--
%RSD	.4660069	.0000000	--	--	--	--	--
#1	711572	10000	--	--	--	--	--
#2	716277	10000	--	--	--	--	--

Method: DAILY1 Standard: clp_std4
Run Time: 07/20/04 10:51:39

010085

Elem	Ag3280	As1890	2203/1	2203/2	Sb2068	1960/1	1960/2
Avge	.0465	.0801	.3298	.3546	.0895	.1722	.2774
SDev	.0002	.0001	.0021	.0001	.0002	.0003	.0036
%RSD	.4300	.1035	.6254	.0301	.1898	.1622	1.281
#1	.0463	.0802	.3312	.3546	.0896	.1724	.2749
#2	.0466	.0801	.3283	.3547	.0893	.1720	.2800

Elem	T11908
Avge	.0252
SDev	.0001
%RSD	.2082
#1	.0251
#2	.0252

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	699857	10000	--	--	--	--	--
SDev	1968.585	.0000000	--	--	--	--	--
%RSD	.2812839	.0000000	--	--	--	--	--
#1	698465	10000	--	--	--	--	--
#2	701249	10000	--	--	--	--	--

Method: DAILY1 Standard: clp_std1
Run Time: 07/20/04 10:55:19

010086

Elem	Al3082	Ca3179	Fe2714	K_7664	Li6707	Mg2790	Na3302
Avge	.1241	.1183	.0867	1.867	3.878	.0447	.0123
SDev	.0008	.0003	.0002	.008	.003	.0001	.0002
%RSD	.6680	.2292	.1927	.4049	.0813	.1313	1.410
#1	.1235	.1185	.0866	1.861	3.876	.0446	.0122
#2	.1246	.1181	.0868	1.872	3.880	.0447	.0124

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	667762	10000	--	--	--	--	--
SDev	1387.343	.0000000	--	--	--	--	--
%RSD	.2077602	.0000000	--	--	--	--	--
#1	666781	10000	--	--	--	--	--
#2	668743	10000	--	--	--	--	--

010087

Method: DAILY1 Standard: clp_std5
Run Time: 07/20/04 10:58:59

Elem	B_2496	Bi2230	Mo2020	P_1782	Si2881	Sn1899	Sr4215
Avge	.2957	.0489	.1175	.0366	.1032	.1336	1.695
SDev	.0036	.0001	.0019	.0006	.0004	.0009	.009
%RSD	1.207	.1121	1.655	1.582	.4114	.6970	.5284
#1	.2932	.0489	.1162	.0362	.1029	.1330	1.702
#2	.2983	.0489	.1189	.0370	.1035	.1343	1.689

Elem	Ti3372
Avge	1.006
SDev	.002
%RSD	.2118
#1	1.008
#2	1.005

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	657129	10000	--	--	--	--	--
SDev	7146.021	.0000000	--	--	--	--	--
%RSD	1.087461	.0000000	--	--	--	--	--
#1	652076	10000	--	--	--	--	--
#2	662182	10000	--	--	--	--	--

Method: DAILY1 Standard: clp_std2
Run Time: 07/20/04 11:02:18

010088

Elem	Ba4934	Be3130	Cr2677	Cu3247	Ni2316
Avge	.7348	.1969	.2538	.2926	.5572
SDev	.0067	.0013	.0024	.0015	.0013
%RSD	.9146	.6601	.9562	.5237	.2411
#1	.7300	.1979	.2555	.2916	.5581
#2	.7395	.1960	.2521	.2937	.5562

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	569824	10000	--	--	--	--	--
SDev	122805.4	.0000000	--	--	--	--	--
%RSD	21.55144	.0000000	--	--	--	--	--
#1	482988	10000	--	--	--	--	--
#2	656661	10000	--	--	--	--	--

Method: DAILY1 Standard: clp_std3
Run Time: 07/20/04 11:05:16

010089

Elem	Cd2265	Co2286	Mn2576	V_2924	Zn2062
Avge	.8609	.2161	.3541	.0688	.0619
SDev	.0001	.0016	.0012	.0004	.0006
%RSD	.0063	.7377	.3511	.5801	.9621
#1	.8609	.2172	.3550	.0691	.0624
#2	.8609	.2150	.3532	.0685	.0615

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	683146	10000	--	--	--	--	--
SDev	1024.598	.0000000	--	--	--	--	--
%RSD	.1499821	.0000000	--	--	--	--	--
#1	682422	10000	--	--	--	--	--
#2	683871	10000	--	--	--	--	--

Method: DAILY1 Standard: clp_std6
Run Time: 07/20/04 11:08:56

010090

Elem	La4086	Na5889	Pd3404	S_1820	Th2837	U_3859	W_2079
Avge	.4105	.4638	.1468	.0346	.0559	.0355	.0947
SDev	.0008	.0028	.0001	.0007	.0002	.0003	.0005
%RSD	.1869	.6055	.0345	1.922	.3963	.7341	.5381
#1	.4111	.4658	.1468	.0341	.0558	.0353	.0943
#2	.4100	.4618	.1467	.0351	.0561	.0357	.0951

Elem	Y_3710	Zr3496
Avge	1.012	1.196
SDev	.001	.002
%RSD	.0539	.1653
#1	1.013	1.198
#2	1.012	1.195

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	668756	10000	--	--	--	--	--
SDev	7998.085	.0000000	--	--	--	--	--
%RSD	1.195964	.0000000	--	--	--	--	--
#1	663101	10000	--	--	--	--	--
#2	674412	10000	--	--	--	--	--

Standardization Report 07/20/04 11:13:17 AM page 1

Method: DAILY1 Slope = Conc(SIR)/IR **010091**

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	clp_std4	blk	43.2881	-.010793	07/20/04 11:08:56
Al3082	308.215	clp_std1	blk	404.787	-.216586	07/20/04 11:08:56
As1890	189.042	clp_std4	blk	124.714	.005426	07/20/04 11:08:56
B_2496	249.678	clp_std5	blk	33.8248	-.003387	07/20/04 11:08:56
Ba4934	493.409	clp_std2	blk	13.6091	.000543	07/20/04 11:08:56
Be3130	313.042	clp_std2	blk	25.3750	.002737	07/20/04 11:08:56
Bi2230	223.061	clp_std5	blk	101.518	-.000572	07/20/04 11:08:56
Ca3179	317.933	clp_std1	blk	422.657	-.005328	07/20/04 11:08:56
Cd2265	226.502	clp_std3	blk	11.6126	.000122	07/20/04 11:08:56
Co2286	228.616	clp_std3	blk	46.2707	.000680	07/20/04 11:08:56
Cr2677	267.716	clp_std2	blk	39.3974	-.000110	07/20/04 11:08:56
Cu3247	324.753	clp_std2	blk	34.2048	-.009534	07/20/04 11:08:56
Fe2714	271.441	clp_std1	blk	576.344	.018962	07/20/04 11:08:56
K_7664	766.491	clp_std1	blk	26.8007	-.027217	07/20/04 11:08:56
La4086	408.672	clp_std6	blk	23.5745	-.012151	07/20/04 11:08:56
Li6707	670.784	clp_std1	blk	2.57872	-.000381	07/20/04 11:08:56
Mg2790	279.078	clp_std1	blk	559.553	.004320	07/20/04 11:08:56
Mn2576	257.610	clp_std3	blk	28.2393	-.000059	07/20/04 11:08:56
Mo2020	202.030	clp_std5	blk	85.0819	.001191	07/20/04 11:08:56
Na5889	588.995	clp_std6	blk	2.13591	.009368	07/20/04 11:08:56
Na3302	330.232	clp_std1	blk	4007.94	.631771	07/20/04 11:08:56
Ni2316	231.604	clp_std2	blk	17.9461	.000856	07/20/04 11:08:56
P_1782	178.287	clp_std5	blk	273.453	-.018583	07/20/04 11:08:56
2203/1	220.351	clp_std4	blk	30.3346	-.003355	07/20/04 11:08:56
2203/2	220.352	clp_std4	blk	28.1947	.001439	07/20/04 11:08:56
Pd3404	340.458	clp_std6	blk	69.1690	.000097	07/20/04 11:08:56
S_1820	182.040	clp_std6	blk	289.887	-.020288	07/20/04 11:08:56
Sb2068	206.838	clp_std4	blk	111.785	-.000390	07/20/04 11:08:56
Sc3613	361.384	blk	dark	1.40303	-.177694	07/20/04 11:08:56
1960/1	196.021	clp_std4	blk	58.0082	.010979	07/20/04 11:08:56
1960/2	196.022	clp_std4	blk	36.0654	-.005318	07/20/04 11:08:56
Si2881	288.158	clp_std5	blk	97.7118	-.111746	07/20/04 11:08:56
Pb220	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se196	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Sn1899	189.989	clp_std5	blk	74.8930	-.001683	07/20/04 11:08:56
Sr4215	421.552	clp_std5	blk	5.89832	-.000021	07/20/04 11:08:56
Th2837	283.730	clp_std6	blk	187.829	-.002496	07/20/04 11:08:56
Ti3372	337.280	clp_std5	blk	9.92381	.013609	07/20/04 11:08:56
Tl1908	190.864	clp_std4	blk	396.298	.017203	07/20/04 11:08:56
U_3859	385.958	clp_std6	blk	315.440	-1.20180	07/20/04 11:08:56
V_2924	292.402	clp_std3	blk	145.274	.000508	07/20/04 11:08:56
W_2079	207.910	clp_std6	blk	52.8595	-.006362	07/20/04 11:08:56
Y_3710	371.030	clp_std6	blk	9.87534	.000049	07/20/04 11:08:56
Zn2062	206.200	clp_std3	blk	161.435	.000338	07/20/04 11:08:56
Zr3496	349.621	clp_std6	blk	8.89429	-.001208	07/20/04 11:08:56

Analysis Report QC Standard 07/20/04 11:17:42 AM page 1

Method: DAILY1 Sample Name: icv/ccv Operator:
Run Time: 07/20/04 11:13:21
Comment:
Mode: CONC Corr. Factor: 1

010092

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.009	9.931	5.240	5.046	10.04	1.043	5.185
SDev	.011	.041	.028	.037	.03	.004	.016
%RSD	1.057	.4089	.5316	.7271	.2508	.3751	.3051
#1	1.001	9.902	5.220	5.020	10.03	1.040	5.173
#2	1.016	9.959	5.259	5.072	10.06	1.045	5.196
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	10.00	5.000	5.000	10.00	1.000	5.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.65	1.001	4.999	2.035	2.045	10.29	18.82
SDev	.06	.002	.007	.002	.020	.04	.14
%RSD	.2784	.2128	.1483	.0815	.9815	.3859	.7356
#1	20.61	.9994	4.993	2.034	2.031	10.32	18.72
#2	20.69	1.002	5.004	2.036	2.060	10.26	18.92
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00	1.000	5.000	2.000	2.000	10.00	20.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.060	5.080	20.31	1.022	5.248	Q15.82	27.64
SDev	.004	.006	.05	.001	.042	.08	.19
%RSD	.0782	.1217	.2452	.0919	.8034	.4768	.7002
#1	5.057	5.084	20.28	1.021	5.218	Q15.76	27.51
#2	5.063	5.075	20.35	1.023	5.278	Q15.87	27.78
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	5.000	5.000	20.00	1.000	5.000	30.00	30.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.099	5.294	5.171	5.243	1.027	Q5.206	1.026
SDev	.008	.021	.003	.034	.000	.046	.006
%RSD	.1655	.3990	.0513	.6541	.0302	.8780	.5865
#1	5.093	5.279	5.173	5.219	1.027	Q5.239	1.022
#2	5.105	5.309	5.169	5.267	1.027	Q5.174	1.031
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value	5.000	5.000			1.000	1.000	1.000
Range	10.00	10.00			10.00	10.00	10.00

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	90.91	5.476	5.490	5.125	5.214	5.480	5.233
SDev	.12	.009	.033	.006	.022	.025	.017
%RSD	.1287	.1636	.6019	.1203	.4211	.4561	.3196
#1	90.99	5.469	5.467	5.130	5.198	5.462	5.221
#2	90.83	5.482	5.514	5.121	5.229	5.498	5.245
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass
Value				5.000	5.000	5.000	5.000
Range				10.00	10.00	10.00	10.00

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.147	1.030	Q1.075	Q5.527	.9407	4.998	1.048
SDev	.015	.005	.005	.043	.0064	.004	.002
%RSD	.2942	.5187	.5058	.7766	.6829	.0702	.1591
#1	5.136	1.034	Q1.071	5.496	.9453	4.995	1.047
#2	5.157	1.026	Q1.078	Q5.557	.9362	5.000	1.049
Errors	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value	5.000	1.000	5.000	5.000	1.000	5.000	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.104	.9813	4.930
SDev	.009	.0010	.008
%RSD	.1755	.0986	.1591
#1	5.110	.9819	4.924
#2	5.098	.9806	4.935
Errors	QC Pass	QC Pass	QC Pass
Value	5.000	1.000	5.000
Range	10.00	10.00	10.00

N for CCVs
Ti @ 1ppm
S @ 5 ppm

7/23/04

010094

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	649160	10000	--	--	--	--	--
SDev	870.4484	.0000000	--	--	--	--	--
%RSD	.1340885	.0000000	--	--	--	--	--
#1	649775	10000	--	--	--	--	--
#2	648544	10000	--	--	--	--	--

Analysis Report Blank Sample 07/20/04 11:23:47 AM page 1

Method: DAILY1 Sample Name: icb/ccb4 Operator:
Run Time: 07/20/04 11:19:27
Comment:
Mode: CONC Corr. Factor: 1

010095

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0009	.0145	.0022	.0092	H.0071	.0006	-.0018
SDev	.0006	.0089	.0019	.0030	.0033	.0004	.0019
%RSD	60.75	61.04	84.49	32.67	45.75	72.44	107.2
#1	.0013	.0208	.0009	.0113	H.0095	.0008	-.0031
#2	.0005	.0082	.0036	.0071	.0048	.0003	-.0004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0137	.0007	.0039	.0013	.0014	.0069	-.0197
SDev	.0054	.0004	.0019	.0013	.0015	.0071	.0307
%RSD	39.43	63.87	46.91	96.63	107.2	103.2	156.1
#1	.0176	.0010	H.0052	.0022	.0024	.0119	-.0414
#2	.0099	.0004	.0026	.0004	.0003	.0019	.0020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0044	.0026	.0117	.0008	H.0107	.0069	L-.1789
SDev	.0018	.0012	.0070	.0004	.0027	.0022	.0534
%RSD	41.38	46.11	60.06	51.29	25.58	31.94	29.82
#1	H.0057	.0034	.0167	.0011	H.0126	.0085	L-.2167
#2	.0031	.0017	.0067	.0005	H.0087	.0053	L-.1412
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Low
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0030	.0069	.0042	.0029	.0005	-.0048	.0007
SDev	.0019	.0179	.0004	.0003	.0008	.0058	.0016
%RSD	64.79	258.4	9.855	10.33	161.8	121.5	234.1
#1	.0043	-.0057	.0045	.0031	.0010	-.0007	.0019
#2	.0016	H.0195	.0039	.0027	-.0001	-.0089	-.0005
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	95.84	.0104	.0067	.0059	H.0033	H.0079	.0035
SDev	.88	.0005	.0060	.0005	.0003	.0039	.0010
%RSD	.9228	4.728	90.17	9.193	10.13	48.52	27.41
#1	95.22	.0101	.0110	.0055	H.0036	H.0107	.0028
#2	96.47	.0108	.0024	.0063	H.0031	H.0052	.0042
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC High	LC High	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0037	.0019	.0004	.0091	-.0082	.0034	.0024
SDev	.0017	.0015	.0003	.0026	.0074	.0015	.0008
%RSD	46.45	78.58	95.11	28.19	90.68	46.11	35.42
#1	.0049	.0030	.0006	.0073	-.0029	.0045	.0029
#2	.0025	.0009	.0001	H.0109	-.0134	.0023	.0018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0043	.0010	.0038
SDev	.0020	.0010	.0022
%RSD	47.42	95.96	56.43
#1	H.0057	.0018	H.0054
#2	.0029	.0003	.0023
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	684380	10000	--	--	--	--	--
SDev	6305.271	.0000000	--	--	--	--	--
%RSD	.9213108	.0000000	--	--	--	--	--
#1	679922	10000	--	--	--	--	--
#2	688839	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: pbw-G19W3 pg57-160 Operator:
Run Time: 07/20/04 11:23:51
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0089	.0196	-.0023	.0017	.0008	-.0002	.0008
SDev	.0010	.0029	.0055	.0008	.0003	.0000	.0011
%RSD	10.69	14.91	237.7	47.37	35.52	4.204	139.1
#1	L-.0082	.0217	.0016	.0023	.0010	-.0002	.0000
#2	L-.0096	.0176	L-.0062	.0012	.0006	-.0002	.0015
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0374	-.0000	.0002	.0003	.0007	.0076	-.0217
SDev	.0012	.0000	.0001	.0004	.0000	.0005	.0439
%RSD	3.323	121.5	93.35	142.3	5.814	6.739	202.0
#1	.0383	-.0000	.0003	.0006	.0007	.0072	-.0528
#2	.0365	-.0000	.0001	-.0000	.0007	.0079	.0093
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	-.0001	.0015	.0003	.0026	-.0002	H.1329
SDev	.0006	.0000	.0024	.0000	.0003	.0010	.2334
%RSD	154.3	26.04	157.4	.6149	11.13	510.2	175.6
#1	.0008	-.0001	.0033	.0003	.0028	-.0009	-.0321
#2	-.0000	-.0001	-.0002	.0003	.0024	.0005	H.2979
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0023	H.0479	.0060	.0017	.0001	.0007	.0033
SDev	.0006	.0019	.0007	.0020	.0006	.0052	.0006
%RSD	24.22	4.026	11.39	114.0	932.5	738.9	17.46
#1	-.0019	H.0466	.0065	.0003	.0005	-.0030	.0029
#2	-.0027	H.0493	.0055	.0031	-.0004	.0044	.0037
Errors	LC Pass	LC High	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	91.55	-.0032	.0100	.0047	H.0031	H.0056	-.0002
SDev	.60	.0021	.0027	.0015	.0011	.0011	.0010
%RSD	.6584	66.97	26.89	31.13	34.18	19.25	458.3
#1	91.12	-.0017	.0081	.0058	.0024	.0048	-.0010
#2	91.97	-.0047	.0119	.0037	H.0039	H.0064	.0005
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC High	LC High	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	.0063	.0009	-.0077	L-.1172	.0004	.0079
SDev	.0002	.0013	.0001	.0041	.0061	.0002	.0022
%RSD	36.71	20.00	7.240	53.88	5.220	40.57	27.97
#1	.0006	.0072	.0010	-.0047	L-.1129	.0005	.0094
#2	.0003	.0054	.0009	L-.0106	L-.1215	.0003	.0063
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0006	.0016	.0002
SDev	.0001	.0004	.0002
%RSD	23.73	22.64	103.7
#1	.0007	.0018	.0003
#2	.0005	.0013	.0001
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010100

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	653675	10000	--	--	--	--	--
SDev	4300.623	.0000000	--	--	--	--	--
%RSD	.6579146	.0000000	--	--	--	--	--
#1	650634	10000	--	--	--	--	--
#2	656716	10000	--	--	--	--	--

010101

Analysis Report 07/20/04 11:32:40 AM page 1

Method: DAILY1 Sample Name: lcsw-G19W3 Operator:
Run Time: 07/20/04 11:28:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0411	1.879	1.898	1.913	1.992	.0462	-.0011
SDev	.0025	.019	.011	.005	.010	.0002	.0054
%RSD	6.090	1.018	.5589	.2668	.5214	.4120	470.9
#1	.0429	1.892	1.906	1.917	1.999	.0463	.0027
#2	.0393	1.865	1.891	1.909	1.985	.0461	-.0050

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.87	.0468	.4685	.1980	.2484	.9661	17.52
SDev	.04	.0010	.0048	.0002	.0008	.0014	.22
%RSD	.2053	2.139	1.033	.1199	.3235	.1449	1.242
#1	19.90	.0475	.4719	.1982	.2489	.9651	17.67
#2	19.84	.0461	.4650	.1978	.2478	.9671	17.36

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	-.0002	19.55	.4856	-.0004	9.614	16.94
SDev	.0020	.0000	.17	.0031	.0002	.137	.01
%RSD	124.6	3.040	.8496	.6436	41.23	1.426	.0773
#1	.0031	-.0002	19.67	.4878	-.0003	9.711	16.95
#2	.0002	-.0002	19.44	.4834	-.0005	9.517	16.93

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4827	.0261	.5015	.4918	.0027	-.0101	.4854
SDev	.0007	.0095	.0119	.0090	.0046	.0009	.0075
%RSD	.1505	36.43	2.375	1.835	172.2	8.520	1.554
#1	.4822	.0328	.5099	.4855	.0059	-.0107	.4908
#2	.4832	.0194	.4931	.4982	-.0006	-.0095	.4801

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	89.77	1.753	1.803	.0127	.4946	1.785	.0063
SDev	.92	.004	.004	.0078	.0020	.001	.0014
%RSD	1.022	.2487	.2074	60.93	.4134	.0579	22.09
#1	89.12	1.756	1.801	.0182	.4931	1.784	.0073
#2	90.42	1.750	1.806	.0072	.4960	1.786	.0053

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	-.0015	.0018	2.041	-.1074	.4835	.0095
SDev	.0001	.0026	.0011	.018	.0382	.0012	.0023
%RSD	16.26	170.6	64.73	.8595	35.59	.2554	24.66
#1	.0006	-.0034	.0026	2.054	-.0804	.4844	.0111
#2	.0005	.0003	.0010	2.029	-.1345	.4826	.0078

010102

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.4510	.0004
SDev	.0001	.0032	.0001
%RSD	101.8	.7003	22.25
#1	.0000	.4533	.0003
#2	.0002	.4488	.0004

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	641086	10000	--	--	--	--	--
SDev	6518.110	.0000000	--	--	--	--	--
%RSD	1.016730	.0000000	--	--	--	--	--
#1	636477	10000	--	--	--	--	--
#2	645695	10000	--	--	--	--	--

Analysis Report 07/20/04 11:37:19 AM page 1

Method: DAILY1 Sample Name: 247434 Operator:
Run Time: 07/20/04 11:32:44
Comment:
Mode: CONC Corr. Factor: 1

010103

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0190	.1385	.0444	970.0	.0075	-.0002	.0441
SDev	.0017	.0029	.0175	6.4	.0018	.0004	.0019
%RSD	8.700	2.118	39.31	.6637	24.26	236.9	4.386
#1	-.0179	.1364	.0567	965.4	.0088	.0001	.0427
#2	-.0202	.1406	.0320	974.5	.0062	-.0004	.0455

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4707	.0029	-.0291	.0028	.0056	.1153	1.289
SDev	.0146	.0000	.0001	.0009	.0001	.0262	.027
%RSD	3.101	1.170	.3508	31.35	1.800	22.76	2.103
#1	.4811	.0029	-.0290	.0022	.0055	.0968	1.308
#2	.4604	.0028	-.0292	.0035	.0057	.1339	1.270

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0019	.0003	.0179	.0013	.0192	S1.621	2748.
SDev	.0004	.0001	.0226	.0003	.0011	5.290	16.
%RSD	20.41	33.38	125.8	24.04	5.649	326.2	.5653
#1	.0022	.0003	.0339	.0015	.0200	S5.362	2759.
#2	.0016	.0002	.0020	.0010	.0184	S-2.119	2737.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0021	.0887	.0341	-.0352	-.0281	.0643	-.0066
SDev	.0016	.0155	.0035	.0031	.0006	.0176	.0026
%RSD	76.53	17.46	10.37	8.705	2.040	27.35	38.47
#1	.0010	.0997	.0316	-.0331	-.0285	.0518	-.0048
#2	.0033	.0778	.0366	-.0374	-.0277	.0767	-.0084

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	80.40	.0520	-.0288	3.375	-.0121	-.0018	.0309
SDev	.75	.0005	.0001	.002	.0009	.0002	.0039
%RSD	.9380	.9200	.3121	.0712	7.148	11.91	12.45
#1	80.93	.0523	-.0287	3.377	-.0115	-.0017	.0337
#2	79.86	.0517	-.0288	3.374	-.0127	-.0020	.0282

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0080	.0121	-.0036	.0010	-.3764	-.0030	.0093
SDev	.0000	.0044	.0002	.0139	.0081	.0003	.0022
%RSD	.0403	36.10	5.095	1328.	2.164	10.58	24.12
#1	.0080	.0090	-.0037	.0109	-.3822	-.0032	.0077
#2	.0080	.0152	-.0034	-.0088	-.3707	-.0027	.0109

010104

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0003	1.132	-.0048
SDev	.0002	.021	.0007
%RSD	58.43	1.835	15.12
#1	.0002	1.117	-.0054
#2	.0004	1.146	-.0043

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	574253	10000	--	--	--	--	--
SDev	5395.225	.0000000	--	--	--	--	--
%RSD	.9395205	.0000000	--	--	--	--	--
#1	578068	10000	--	--	--	--	--
#2	570438	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247344d Operator:
Run Time: 07/20/04 11:37:23
Comment:
Mode: CONC Corr. Factor: 1

010105

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0185	.1452	.0415	954.6	.0052	-.0004	.0469
SDev	.0013	.0051	.0006	9.9	.0000	.0000	.0037
%RSD	6.987	3.513	1.488	1.042	.0552	9.798	7.835
#1	-.0176	.1416	.0419	961.6	.0053	-.0004	.0495
#2	-.0194	.1488	.0411	947.5	.0052	-.0004	.0443

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4397	.0026	-.0327	.0033	.0056	.1288	1.285
SDev	.0025	.0002	.0006	.0007	.0003	.0038	.062
%RSD	.5652	8.316	1.903	22.19	4.572	2.986	4.864
#1	.4415	.0024	-.0331	.0027	.0054	.1260	1.240
#2	.4380	.0027	-.0322	.0038	.0058	.1315	1.329

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0026	.0005	.0024	.0006	.0186	S1.476	2768.
SDev	.0002	.0000	.0007	.0001	.0004	6.688	6.
%RSD	6.964	9.308	29.99	10.39	2.106	453.1	.2133
#1	.0025	.0005	.0029	.0006	.0184	S6.205	2764.
#2	.0027	.0004	.0019	.0007	.0189	S-3.253	2772.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0015	.1120	.0341	-.0319	-.0298	.0618	-.0057
SDev	.0009	.0123	.0033	.0015	.0016	.0032	.0022
%RSD	58.22	10.98	9.602	4.636	5.357	5.157	38.18
#1	.0009	.1033	.0317	-.0308	-.0309	.0640	-.0042
#2	.0021	.1207	.0364	-.0329	-.0286	.0595	-.0073

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	79.29	.0424	-.0333	3.382	-.0099	-.0080	.0250
SDev	.62	.0051	.0003	.002	.0001	.0015	.0004
%RSD	.7779	12.04	1.012	.0520	1.054	18.34	1.439
#1	78.85	.0460	-.0335	3.381	-.0100	-.0070	.0247
#2	79.72	.0388	-.0331	3.383	-.0098	-.0091	.0252

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0082	.0109	-.0037	-.0142	-.3860	-.0031	.0084
SDev	.0000	.0008	.0002	.0057	.0130	.0002	.0046
%RSD	.3274	7.407	4.118	39.94	3.378	6.727	54.98
#1	.0082	.0115	-.0036	-.0182	-.3768	-.0033	.0051
#2	.0082	.0104	-.0038	-.0102	-.3952	-.0030	.0117

010106

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0004	1.108	-.0045
SDev	.0001	.002	.0004
%RSD	25.45	.1430	8.276
#1	.0003	1.109	-.0048
#2	.0005	1.107	-.0043

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	566324	10000	--	--	--	--	--
SDev	4415.882	.0000000	--	--	--	--	--
%RSD	.7797441	.0000000	--	--	--	--	--
#1	563202	10000	--	--	--	--	--
#2	569447	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247434s Operator:

Run Time: 07/20/04 11:42:02

Comment:

Mode: CONC Corr. Factor: 1

010107

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0352	2.244	2.226	958.4	1.879	.0470	.0424
SDev	.0017	.004	.009	10.2	.010	.0002	.0015
%RSD	4.739	.1951	.3841	1.065	.5227	.4365	3.529
#1	.0363	2.241	2.220	951.2	1.872	.0468	.0435
#2	.0340	2.247	2.232	965.7	1.886	.0471	.0413

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.80	.0518	.4700	.2095	.2741	1.111	41.09
SDev	.08	.0006	.0041	.0010	.0001	.006	.30
%RSD	.3673	1.083	.8691	.4984	.0550	.5259	.7309
#1	20.74	.0514	.4671	.2088	.2742	1.115	41.30
#2	20.85	.0522	.4729	.2102	.2740	1.107	40.87

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0020	.0006	18.06	.5014	.0190	S1.824	2751.
SDev	.0004	.0002	.09	.0029	.0007	5.022	1.
%RSD	19.55	26.59	.4886	.5789	3.850	275.4	.0436
#1	.0017	.0007	18.00	.4993	.0195	S5.375	2750.
#2	.0023	.0005	18.12	.5035	.0185	S-1.727	2751.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5016	.0815	.5585	.5063	-.0243	.0986	.5371
SDev	.0034	.0022	.0007	.0012	.0011	.0478	.0068
%RSD	.6769	2.674	.1196	.2385	4.473	48.48	1.271
#1	.4992	.0799	.5590	.5055	-.0251	.0648	.5323
#2	.5040	.0830	.5580	.5072	-.0235	.1324	.5419

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	80.40	2.010	1.988	3.355	.5232	1.993	.0282
SDev	.94	.007	.012	.005	.0006	.006	.0049
%RSD	1.171	.3521	.5943	.1611	.1112	.2766	17.44
#1	81.07	2.005	1.997	3.359	.5228	1.997	.0317
#2	79.74	2.015	1.980	3.351	.5236	1.989	.0247

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0081	.0089	-.0034	2.403	-.3568	.4898	.0043
SDev	.0000	.0053	.0001	.012	.0053	.0007	.0042
%RSD	.1419	59.14	2.336	.5117	1.499	.1416	99.28
#1	.0081	.0052	-.0034	2.394	-.3531	.4893	.0072
#2	.0081	.0127	-.0035	2.411	-.3606	.4903	.0013

010108

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0005	1.636	-.0043
SDev	.0001	.018	.0005
%RSD	22.98	1.083	11.66
#1	.0005	1.623	-.0040
#2	.0004	1.648	-.0047

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	574248	10000	--	--	--	--	--
SDev	6706.908	.0000000	--	--	--	--	--
%RSD	1.167945	.0000000	--	--	--	--	--
#1	578991	10000	--	--	--	--	--
#2	569506	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247436 Operator:
Run Time: 07/20/04 11:46:42
Comment:
Mode: CONC Corr. Factor: 1

010109

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0198	.3226	.0448	963.3	.0058	-.0007	.0480
SDev	.0000	.0124	.0055	5.4	.0010	.0000	.0021
%RSD	.0362	3.851	12.32	.5583	16.63	2.637	4.335
#1	-.0198	.3138	.0487	959.5	.0065	-.0007	.0465
#2	-.0198	.3314	.0409	967.2	.0052	-.0007	.0494

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.38	.0026	-.0312	.0026	.0116	.1319	1.335
SDev	.06	.0003	.0010	.0001	.0001	.0014	.051
%RSD	.5333	11.35	3.114	4.178	.5797	1.033	3.787
#1	11.34	.0028	-.0306	.0027	.0116	.1329	1.300
#2	11.43	.0024	-.0319	.0026	.0115	.1310	1.371

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0020	.0007	.5141	.0016	.0206	S2.953	2759.
SDev	.0001	.0001	.0053	.0003	.0005	5.723	18.
%RSD	3.173	8.673	1.028	16.29	2.368	193.8	.6448
#1	.0020	.0007	.5179	.0018	.0202	S7.000	2747.
#2	.0019	.0006	.5104	.0014	.0209	S-1.094	2772.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0023	.0707	.0372	-.0348	-.0300	.1956	-.0073
SDev	.0000	.0078	.0025	.0017	.0009	.0411	.0010
%RSD	.1099	11.10	6.771	5.022	3.049	21.01	14.46
#1	.0023	.0652	.0354	-.0336	-.0294	.1665	-.0080
#2	.0023	.0763	.0390	-.0360	-.0307	.2246	-.0065

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	77.39	.0525	-.0282	10.06	-.0108	-.0013	.0277
SDev	1.05	.0082	.0024	.06	.0003	.0043	.0016
%RSD	1.356	15.56	8.511	.5999	3.012	339.1	5.858
#1	78.14	.0582	-.0265	10.02	-.0105	.0018	.0288
#2	76.65	.0467	-.0299	10.10	-.0110	-.0043	.0265

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0278	.0116	-.0036	-.0164	-.3888	-.0028	.0091
SDev	.0001	.0007	.0001	.0030	.0068	.0000	.0084
%RSD	.4600	6.270	2.372	18.15	1.751	1.527	91.63
#1	.0277	.0110	-.0036	-.0143	-.3840	-.0028	.0150
#2	.0278	.0121	-.0035	-.0185	-.3936	-.0028	.0032

010110

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0002	.0139	-.0045
SDev	.0001	.0015	.0001
%RSD	23.17	10.51	2.069
#1	.0002	.0150	-.0045
#2	.0003	.0129	-.0044

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	552850	10000	--	--	--	--	--
SDev	7457.855	.0000000	--	--	--	--	--
%RSD	1.348985	.0000000	--	--	--	--	--
#1	558123	10000	--	--	--	--	--
#2	547576	10000	--	--	--	--	--

Analysis Report QC Standard 07/20/04 11:59:45 AM page 1

Method: DAILY1 Sample Name: icv/ccv Operator:
Run Time: 07/20/04 11:55:06
Comment:
Mode: CONC Corr. Factor: 1

010111

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.031	9.945	5.412	Q11.96	9.767	1.082	5.136
SDev	.008	.004	.031	.99	.027	.004	.016
%RSD	.7837	.0412	.5668	8.266	.2739	.3272	.3193
#1	1.025	9.948	5.433	Q12.66	9.786	1.080	5.124
#2	1.036	9.942	5.390	Q11.26	9.748	1.085	5.147
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	1.000	10.00	5.000	5.000	10.00	1.000	5.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	21.97	1.046	5.157	2.120	2.016	10.71	Q17.94
SDev	.06	.003	.007	.010	.010	.03	.00
%RSD	.2584	.2642	.1352	.4640	.4725	.2973	.0037
#1	Q22.01	1.048	5.161	2.127	2.010	10.74	Q17.94
#2	21.93	1.044	5.152	2.113	2.023	10.69	Q17.94
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	20.00	1.000	5.000	2.000	2.000	10.00	20.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.931	4.989	20.86	1.054	5.376	Q14.88	28.42
SDev	.009	.027	.04	.005	.041	.30	.47
%RSD	.1772	.5320	.1889	.4433	.7691	2.000	1.646
#1	4.925	5.008	20.89	1.057	5.347	Q15.09	28.75
#2	4.938	4.971	20.83	1.050	5.405	Q14.67	28.09
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	5.000	5.000	20.00	1.000	5.000	30.00	30.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.242	5.459	5.305	5.381	1.004	Q5.244	1.039
SDev	.028	.001	.010	.010	.004	.170	.001
%RSD	.5254	.0188	.1828	.1864	.3900	3.241	.1308
#1	5.262	5.460	5.312	5.374	1.002	Q5.124	1.040
#2	5.223	5.458	5.298	5.388	1.007	Q5.364	1.038
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value	5.000	5.000			1.000	1.000	1.000
Range	10.00	10.00			10.00	10.00	10.00

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010112

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	91.39	5.493	5.491	5.232	5.350	5.486	5.445
SDev	.83	.031	.009	.004	.003	.016	.022
%RSD	.9107	.5554	.1661	.0723	.0645	.2959	.4071
#1	90.81	5.514	5.497	5.229	5.348	5.498	5.430
#2	91.98	5.471	5.484	5.234	5.353	5.475	5.461
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass
Value				5.000	5.000	5.000	5.000
Range				10.00	10.00	10.00	10.00

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.071	1.025	Q1.086	Q5.628	.9408	5.122	1.070
SDev	.003	.009	.003	.054	.0062	.003	.002
%RSD	.0495	.8345	.2834	.9513	.6557	.0635	.2240
#1	5.073	1.031	Q1.083	Q5.590	.9452	5.125	1.072
#2	5.069	1.019	Q1.088	Q5.665	.9365	5.120	1.068
Errors	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value	5.000	1.000	5.000	5.000	1.000	5.000	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.071	1.057	4.927
SDev	.010	.001	.006
%RSD	.1998	.1182	.1133
#1	5.078	1.058	4.923
#2	5.064	1.056	4.931
Errors	QC Pass	QC Pass	QC Pass
Value	5.000	1.000	5.000
Range	10.00	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	652633	10000	--	--	--	--	--
SDev	5982.123	.0000000	--	--	--	--	--
%RSD	.9166137	.0000000	--	--	--	--	--
#1	648403	10000	--	--	--	--	--
#2	656863	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: icb/ccb4 Operator:
Run Time: 07/20/04 12:01:49
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	.0316	.0022	H3.951	.0038	-.0001	.0010
SDev	.0009	.0037	.0007	.187	.0013	.0002	.0002
%RSD	3981.	11.52	31.07	4.742	34.00	353.4	20.31
#1	-.0007	.0291	.0027	H4.084	.0047	.0001	.0011
#2	.0006	.0342	.0018	H3.819	.0029	-.0002	.0008
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0103	.0003	.0018	.0005	.0011	.0068	.0104
SDev	.0003	.0000	.0006	.0007	.0000	.0022	.0076
%RSD	2.758	4.169	31.01	147.0	2.442	31.88	73.90
#1	.0105	.0003	.0022	.0010	.0011	.0083	.0049
#2	.0101	.0003	.0014	-.0000	.0011	.0052	.0158
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0022	.0025	.0082	.0004	H.0082	.0448	.0370
SDev	.0001	.0005	.0019	.0002	.0004	.0036	.0167
%RSD	3.440	20.96	22.65	49.45	5.103	8.079	45.21
#1	.0021	.0029	.0069	.0005	H.0085	.0473	.0488
#2	.0022	.0022	.0095	.0002	H.0079	.0422	.0251
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0034	.0014	.0024	.0005	-.0097	.0010
SDev	.0005	.0054	.0004	.0019	.0009	.0049	.0037
%RSD	33.82	156.8	30.24	82.39	183.4	50.68	381.4
#1	.0020	-.0004	.0017	.0037	-.0001	-.0062	-.0017
#2	.0012	.0073	.0011	.0010	.0012	L-.0132	.0036
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	92.20	.0038	.0064	.0048	.0020	H.0055	.0019
SDev	.49	.0023	.0001	.0025	.0014	.0007	.0011
%RSD	.5300	60.62	1.221	52.21	70.35	12.80	56.93
#1	92.54	.0054	.0063	.0030	H.0031	H.0060	.0027
#2	91.85	.0021	.0064	.0066	.0010	H.0050	.0012
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC High	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0019	-.0007	.0001	.0066	.0186	.0015	.0009
SDev	.0006	.0014	.0005	.0030	.0146	.0006	.0053
%RSD	33.21	208.4	324.0	45.59	78.39	42.57	581.7
#1	.0024	-.0017	.0005	.0088	.0083	.0019	-.0028
#2	.0015	.0003	-.0002	.0045	.0290	.0010	.0047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0018	.0005	.0017
SDev	.0007	.0002	.0006
%RSD	35.81	38.46	38.27
#1	.0023	.0006	.0021
#2	.0014	.0003	.0012
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	658344	10000	--	--	--	--	--
SDev	3489.572	.0000000	--	--	--	--	--
%RSD	.5300526	.0000000	--	--	--	--	--
#1	660812	10000	--	--	--	--	--
#2	655877	10000	--	--	--	--	--

010117

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Method: DAILY1 Sample Name: pbw-G19W1 pg57-158 Operator:
Run Time: 07/20/04 12:06:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0009	.0421	.0026	H3.327	.0003	-.0004	.0004
SDev	.0009	.0065	.0009	.182	.0002	.0000	.0031
%RSD	94.08	15.40	35.05	5.461	57.37	6.470	853.9
#1	-.0015	.0467	.0032	H3.456	.0004	-.0005	-.0019
#2	-.0003	.0375	.0019	H3.199	.0002	-.0004	.0026
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0146	-.0000	.0000	-.0002	.0010	-.0007	-.0179
SDev	.0014	.0000	.0000	.0005	.0001	.0102	.0318
%RSD	9.359	50.37	92.51	313.0	11.73	1539.	177.4
#1	.0156	-.0000	.0001	.0002	.0010	.0065	-.0404
#2	.0137	-.0000	.0000	-.0005	.0009	-.0079	.0046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	.0009	.0065	.0001	.0028	.0295	-.0415
SDev	.0008	.0001	.0018	.0001	.0002	.0011	.1059
%RSD	104.7	5.592	27.53	101.4	5.754	3.718	255.4
#1	.0013	.0010	.0053	.0002	.0027	.0303	L-.1164
#2	.0002	.0009	.0078	.0000	.0029	.0287	.0334
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0072	.0021	.0024	-.0006	-.0029	.0025
SDev	.0011	.0020	.0016	.0004	.0001	.0061	.0018
%RSD	381.8	27.42	74.92	18.84	21.42	209.7	72.32
#1	.0011	.0058	.0010	.0027	-.0005	.0014	.0037
#2	-.0005	.0086	.0032	.0021	-.0007	-.0072	.0012
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	89.02	.0042	.0006	H.0196	.0023	.0018	-.0030
SDev	1.59	.0020	.0021	.0019	.0002	.0008	.0011
%RSD	1.788	48.33	380.6	9.411	9.794	42.01	34.87
#1	87.89	.0028	.0021	H.0183	.0021	.0023	-.0023
#2	90.14	.0056	-.0010	H.0209	.0024	.0013	-.0038
Errors	NOCHECK	NOCHECK	NOCHECK	LC High	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0003	-.0003	-.0016	.0143	.0001	.0023
SDev	.0001	.0019	.0001	.0127	.0093	.0000	.0032
%RSD	41.76	553.4	27.37	789.2	65.47	12.91	139.0
#1	.0003	.0016	-.0003	L-.0106	.0209	.0001	.0046
#2	.0002	-.0010	-.0002	.0074	.0077	.0001	.0000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0002	.0003	.0002
SDev	.0001	.0000	.0001
%RSD	74.10	.8959	47.17
#1	.0003	.0003	.0002
#2	.0001	.0003	.0003
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

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IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	635688	10000	--	--	--	--	--
SDev	11301.69	.0000000	--	--	--	--	--
%RSD	1.777866	.0000000	--	--	--	--	--
#1	627697	10000	--	--	--	--	--
#2	643680	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: lcsw-G19W1 Operator:
Run Time: 07/20/04 12:11:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0512	2.056	2.148	6.971	2.076	.0529	.0017
SDev	.0001	.003	.008	.099	.004	.0001	.0059
%RSD	.1645	.1439	.3913	1.414	.1944	.2225	344.0
#1	.0513	2.054	2.154	7.041	2.073	.0530	.0059
#2	.0512	2.058	2.142	6.902	2.079	.0528	-.0025

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	21.49	.0497	.4973	.2091	.2597	1.025	17.50
SDev	.07	.0003	.0024	.0005	.0003	.001	.05
%RSD	.3184	.6362	.4926	.2240	.1233	.0695	.3113
#1	21.44	.0495	.4956	.2088	.2595	1.026	17.54
#2	21.54	.0499	.4990	.2095	.2599	1.025	17.46

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0013	.0006	21.39	.5150	.0011	10.32	18.29
SDev	.0000	.0001	.06	.0020	.0007	.04	.34
%RSD	.1188	18.42	.2674	.3862	61.80	.3806	1.847
#1	.0013	.0005	21.35	.5136	.0016	10.34	18.05
#2	.0013	.0007	21.43	.5164	.0006	10.29	18.52

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5157	.0043	.5240	.5355	.0001	-.0033	.5241
SDev	.0034	.0038	.0021	.0070	.0008	.0047	.0017
%RSD	.6548	87.50	.4048	1.317	761.1	141.1	.3217
#1	.5133	.0070	.5225	.5405	-.0005	-.0000	.5229
#2	.5181	.0017	.5255	.5305	.0007	-.0066	.5253

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	86.18	2.156	2.213	.0257	.5311	2.192	.0015
SDev	.10	.013	.009	.0009	.0040	.010	.0003
%RSD	.1196	.5897	.4244	3.415	.7511	.4786	23.16
#1	86.11	2.147	2.206	.0251	.5339	2.184	.0018
#2	86.25	2.165	2.220	.0263	.5283	2.199	.0013

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	-.0046	-.0004	2.216	-.0351	.5060	.0015
SDev	.0000	.0011	.0001	.018	.0092	.0022	.0047
%RSD	.6187	25.09	25.97	.8281	26.14	.4428	317.4
#1	.0004	-.0038	-.0005	2.203	-.0416	.5044	-.0018
#2	.0004	-.0054	-.0003	2.229	-.0286	.5076	.0048

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.4880	.0002
SDev	.0000	.0029	.0002
%RSD	47.43	.6034	93.91
#1	.0001	.4859	.0001
#2	.0000	.4901	.0003

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	615440	10000	--	--	--	--	--
SDev	723.3702	.0000000	--	--	--	--	--
%RSD	.1175372	.0000000	--	--	--	--	--
#1	614928	10000	--	--	--	--	--
#2	615951	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247357 [illegible] Operator:
Run Time: 07/20/04 12:15:47 [illegible] 7-22-04
Comment:
Mode: CONC Corr. Factor: 1

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Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0174	.0732	.0482	1012.	.2194	-.0008	.0492
SDev	.0004	.0003	.0026	2.	.0007	.0003	.0021
%RSD	2.224	.4287	5.417	.1673	.3048	41.20	4.318
#1	-.0172	.0730	.0501	1011.	.2198	-.0006	.0477
#2	-.0177	.0734	.0464	1013.	.2189	-.0010	.0507

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1887	.0029	-.0308	.0033	.0031	.1242	1.892
SDev	.0088	.0005	.0006	.0000	.0000	.0102	.028
%RSD	4.685	17.29	1.971	.9287	.5225	8.194	1.456
#1	.1949	.0026	-.0304	.0033	.0031	.1314	1.872
#2	.1824	.0033	-.0313	.0033	.0031	.1170	1.911

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0026	.0010	.0030	.0012	.0189	S1.497	2860.
SDev	.0005	.0001	.0080	.0003	.0004	5.574	15.
%RSD	19.11	10.14	266.9	21.29	2.172	372.4	.5148
#1	.0022	.0009	.0087	.0013	.0192	S5.438	2850.
#2	.0029	.0011	-.0027	.0010	.0186	S-2.445	2871.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0023	.0287	.0243	-.0339	-.0251	.0442	-.0096
SDev	.0005	.0110	.0021	.0051	.0014	.0206	.0002
%RSD	20.12	38.37	8.558	15.07	5.569	46.64	2.338
#1	.0026	.0365	.0228	-.0303	-.0260	.0588	-.0094
#2	.0020	.0209	.0258	-.0375	-.0241	.0296	-.0097

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	76.00	.0675	-.0365	.5073	-.0145	-.0018	.0329
SDev	.62	.0013	.0041	.0003	.0027	.0031	.0046
%RSD	.8110	1.910	11.14	.0520	18.71	173.3	13.98
#1	76.44	.0666	-.0394	.5075	-.0126	-.0040	.0362
#2	75.57	.0684	-.0336	.5072	-.0164	.0004	.0297

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0104	.0115	-.0048	-.0049	-.3686	-.0030	-.0002
SDev	.0000	.0011	.0000	.0071	.0051	.0006	.0008
%RSD	.3719	9.555	.9067	144.2	1.370	19.81	391.3
#1	.0105	.0108	-.0048	-.0099	-.3722	-.0026	-.0008
#2	.0104	.0123	-.0048	.0001	-.3651	-.0035	.0004

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Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0004	.7481	-.0051
SDev	.0001	.0058	.0001
%RSD	26.38	.7757	1.077
#1	.0004	.7440	-.0051
#2	.0003	.7522	-.0052

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	542928	10000	--	--	--	--	--
SDev	4365.677	.0000000	--	--	--	--	--
%RSD	.8040987	.0000000	--	--	--	--	--
#1	546015	10000	--	--	--	--	--
#2	539841	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247357d Operator:
Run Time: 07/20/04 12:20:11 OH 7.22.04
Comment:
Mode: CONC Corr. Factor: 1

010124

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0165	.0708	.0450	1026.	.2132	-.0007	.0460
SDev	.0001	.0045	.0044	3.	.0014	.0000	.0034
%RSD	.3515	6.326	9.877	.3270	.6656	.8229	7.330
#1	-.0165	.0677	.0481	1023.	.2122	-.0007	.0436
#2	-.0166	.0740	.0419	1028.	.2142	-.0007	.0484

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1768	.0028	-.0283	.0024	.0263	.1136	1.796
SDev	.0023	.0002	.0003	.0005	.0004	.0013	.022
%RSD	1.311	6.292	.8858	22.65	1.411	1.114	1.225
#1	.1785	.0027	-.0281	.0027	.0266	.1145	1.780
#2	.1752	.0030	-.0285	.0020	.0261	.1127	1.811

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0017	-.0102	.0005	.0186	S2.954	2799.
SDev	.0003	.0002	.0056	.0001	.0014	7.362	10.
%RSD	15.56	10.75	55.02	14.09	7.562	249.2	.3546
#1	.0014	.0016	-.0062	.0005	.0176	S8.160	2806.
#2	.0018	.0018	-.0142	.0004	.0196	S-2.251	2792.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0471	.0224	-.0350	-.0210	.0971	-.0123
SDev	.0006	.0006	.0039	.0017	.0005	.0067	.0013
%RSD	34.99	1.222	17.52	4.875	2.219	6.874	10.15
#1	.0020	.0475	.0252	-.0338	-.0207	.1018	-.0115
#2	.0012	.0466	.0196	-.0362	-.0213	.0924	-.0132

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	79.31	.0595	-.0331	.5046	-.0158	-.0022	.0283
SDev	.13	.0068	.0051	.0019	.0024	.0057	.0057
%RSD	.1660	11.46	15.31	.3708	15.41	254.0	20.36
#1	79.41	.0644	-.0295	.5060	-.0141	.0018	.0242
#2	79.22	.0547	-.0367	.5033	-.0176	-.0062	.0323

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0103	.0086	-.0042	.0103	-.3123	-.0029	-.0029
SDev	.0000	.0006	.0001	.0054	.0036	.0005	.0065
%RSD	.2371	6.766	3.404	52.56	1.168	18.85	228.8
#1	.0103	.0082	-.0043	.0065	-.3098	-.0025	-.0075
#2	.0103	.0090	-.0041	.0142	-.3149	-.0032	.0018

010125

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0003	.8149	-.0046
SDev	.0001	.0045	.0002
%RSD	47.43	.5534	4.347
#1	.0004	.8181	-.0044
#2	.0002	.8117	-.0047

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	566529	10000	--	--	--	--	--
SDev	929.1383	.0000000	--	--	--	--	--
%RSD	.1640054	.0000000	--	--	--	--	--
#1	567186	10000	--	--	--	--	--
#2	565872	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247357s dr z Operator:
Run Time: 07/20/04 12:24:36 OH 7.22.04
Comment:
Mode: CONC Corr. Factor: 1

010126

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0419	2.279	2.403	1023.	2.174	.0508	.0448
SDev	.0003	.002	.002	7.	.015	.0001	.0031
%RSD	.6352	.1077	.0731	.7188	.6897	.1328	6.888
#1	.0417	2.280	2.402	1017.	2.163	.0508	.0426
#2	.0421	2.277	2.404	1028.	2.185	.0509	.0470

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	21.77	.0538	.4908	.2182	.2803	1.150	43.05
SDev	.10	.0002	.0038	.0015	.0009	.011	.51
%RSD	.4620	.3081	.7680	.6993	.3180	.9573	1.195
#1	21.70	.0537	.4882	.2171	.2809	1.142	43.41
#2	21.84	.0539	.4935	.2192	.2797	1.157	42.68

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0019	.0018	19.32	.5258	.0200	S4.265	2868.
SDev	.0002	.0000	.04	.0014	.0005	8.171	25.
%RSD	11.51	.5269	.1847	.2654	2.505	191.6	.8779
#1	.0018	.0018	19.29	.5249	.0196	S10.04	2886.
#2	.0021	.0018	19.34	.5268	.0203	S-1.513	2850.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5274	.0334	.5847	.5358	-.0232	.0605	.5616
SDev	.0054	.0113	.0017	.0005	.0016	.0101	.0025
%RSD	1.028	33.83	.2959	.1013	6.940	16.70	.4376
#1	.5235	.0254	.5834	.5355	-.0244	.0676	.5599
#2	.5312	.0414	.5859	.5362	-.0221	.0533	.5634

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	75.15	2.323	2.294	.5072	.5516	2.301	.0268
SDev	.20	.018	.020	.0004	.0009	.007	.0035
%RSD	.2700	.7774	.8531	.0830	.1700	.3050	13.14
#1	75.29	2.310	2.308	.5075	.5509	2.306	.0243
#2	75.00	2.336	2.280	.5069	.5522	2.296	.0293

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0107	.0044	-.0045	2.531	-.3388	.5122	-.0081
SDev	.0000	.0017	.0006	.010	.0182	.0028	.0050
%RSD	.3412	37.36	13.03	.4007	5.380	.5421	61.72
#1	.0107	.0033	-.0049	2.524	-.3517	.5102	-.0116
#2	.0107	.0056	-.0040	2.539	-.3260	.5141	-.0045

010127

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0004	1.301	-.0048
SDev	.0001	.007	.0001
%RSD	13.98	.5577	2.988
#1	.0003	1.296	-.0047
#2	.0004	1.306	-.0049

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	536818	10000	--	--	--	--	--
SDev	1502.602	.0000000	--	--	--	--	--
%RSD	.2799087	.0000000	--	--	--	--	--
#1	537881	10000	--	--	--	--	--
#2	535756	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247358 dc 2 Operator:
Run Time: 07/20/04 12:29:00 DH 7-22-04 **010128**
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0160	.0649	.0586	1079.	.2446	-.0004	.0516
SDev	.0017	.0159	.0000	1.	.0036	.0001	.0086
%RSD	10.74	24.49	.0034	.1168	1.475	14.66	16.70
#1	-.0172	.0761	.0586	1078.	.2472	-.0004	.0577
#2	-.0148	.0536	.0586	1080.	.2421	-.0005	.0455

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2183	.0034	-.0315	.0032	.0040	.1281	2.181
SDev	.0164	.0006	.0005	.0002	.0004	.0017	.014
%RSD	7.532	17.13	1.492	4.987	10.66	1.292	.6511
#1	.2299	.0030	-.0318	.0033	.0043	.1293	2.191
#2	.2067	.0039	-.0311	.0031	.0037	.1269	2.171

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0018	.0020	.0108	.0012	.0209	S1.564	3059.
SDev	.0010	.0001	.0191	.0005	.0007	8.169	5.
%RSD	52.68	2.352	176.0	39.55	3.379	522.3	.1508
#1	.0012	.0019	.0244	.0016	.0214	S7.341	3062.
#2	.0025	.0020	-.0027	.0009	.0204	S-4.212	3055.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0026	.0489	.0310	-.0331	-.0251	.0891	-.0098
SDev	.0001	.0102	.0042	.0039	.0035	.0318	.0034
%RSD	2.854	20.78	13.44	11.90	13.81	35.62	34.16
#1	.0027	.0561	.0339	-.0359	-.0275	.1116	-.0075
#2	.0025	.0417	.0280	-.0304	-.0226	.0667	-.0122

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	75.44	.0683	-.0394	.6890	-.0118	-.0035	.0303
SDev	.13	.0066	.0001	.0010	.0012	.0023	.0049
%RSD	.1788	9.638	.3348	.1436	10.55	65.55	16.04
#1	75.35	.0729	-.0393	.6883	-.0126	-.0019	.0268
#2	75.54	.0636	-.0395	.6897	-.0109	-.0051	.0337

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0110	.0085	-.0047	-.0055	-.3318	-.0028	-.0094
SDev	.0001	.0010	.0004	.0099	.0005	.0006	.0022
%RSD	.6663	11.23	8.504	180.9	.1607	20.79	23.54
#1	.0110	.0079	-.0049	-.0125	-.3321	-.0024	-.0110
#2	.0109	.0092	-.0044	.0015	-.3314	-.0032	-.0078

010129

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0003	1.169	-.0048
SDev	.0001	.006	.0005
%RSD	33.60	.4755	9.506
#1	.0002	1.165	-.0051
#2	.0004	1.173	-.0045

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	538930	10000	--	--	--	--	--
SDev	951.0586	.0000000	--	--	--	--	--
%RSD	.1764715	.0000000	--	--	--	--	--
#1	538258	10000	--	--	--	--	--
#2	539603	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247359 26-2 Operator:
Run Time: 07/20/04 12:33:24
Comment: DH 7-22-04
Mode: CONC Corr. Factor: 1

010130

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0153	.0697	.0493	1039.	.3444	-.0005	.0495
SDev	.0011	.0042	.0081	11.	.0010	.0001	.0012
%RSD	7.315	5.998	16.44	1.022	.2945	25.50	2.458
#1	-.0161	.0727	.0436	1031.	.3451	-.0005	.0486
#2	-.0145	.0668	.0550	1046.	.3436	-.0004	.0503

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.82	.0026	-.0280	.0027	.0024	.1032	2.312
SDev	.23	.0005	.0017	.0007	.0010	.0046	.014
%RSD	1.475	19.36	6.213	25.26	40.63	4.470	.5841
#1	15.66	.0022	-.0292	.0031	.0031	.1065	2.303
#2	15.99	.0029	-.0267	.0022	.0017	.0999	2.322

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0015	.0018	.5065	.0007	.0192	S5.682	2750.
SDev	.0005	.0001	.0127	.0001	.0001	8.346	67.
%RSD	35.20	2.455	2.510	6.399	.6561	146.9	2.429
#1	.0011	.0018	.4975	.0008	.0191	S11.58	2797.
#2	.0019	.0019	.5155	.0007	.0193	S-.2197	2703.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0031	.0417	.0284	-.0373	-.0145	.2036	-.0123
SDev	.0010	.0266	.0029	.0031	.0052	.0071	.0021
%RSD	34.00	63.71	10.05	8.216	35.70	3.497	17.11
#1	.0038	.0605	.0264	-.0351	-.0181	.1986	-.0138
#2	.0023	.0229	.0305	-.0395	-.0108	.2086	-.0108

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	76.24	.0638	-.0433	1.182	-.0154	-.0075	.0313
SDev	.41	.0008	.0034	.010	.0011	.0025	.0092
%RSD	.5359	1.338	7.805	.8345	7.088	33.60	29.22
#1	75.95	.0644	-.0409	1.189	-.0146	-.0057	.0248
#2	76.53	.0632	-.0456	1.175	-.0161	-.0093	.0378

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0288	.0055	-.0043	-.0027	-.2585	-.0026	-.0030
SDev	.0000	.0025	.0009	.0053	.0434	.0007	.0155
%RSD	.0584	46.55	19.95	198.1	16.79	28.26	515.2
#1	.0288	.0073	-.0049	-.0064	-.2892	-.0021	-.0140
#2	.0288	.0037	-.0037	.0011	-.2278	-.0031	.0079

010131

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0003	.0613	-.0040
SDev	.0001	.0007	.0000
%RSD	40.41	1.163	1.058
#1	.0004	.0608	-.0040
#2	.0002	.0619	-.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	544637	10000	--	--	--	--	--
SDev	2866.611	.0000000	--	--	--	--	--
%RSD	.5263342	.0000000	--	--	--	--	--
#1	542610	10000	--	--	--	--	--
#2	546664	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247360 dr 2 Operator:
Run Time: 07/20/04 12:37:48 DH 7-22-04
Comment:
Mode: CONC Corr. Factor: 1

010132

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0145	.0007	.0549	1073.	.2468	.0005	.0499
SDev	.0014	.0046	.0012	7.	.0003	.0003	.0034
%RSD	9.683	647.3	2.145	.6077	.1386	51.67	6.779
#1	-.0155	.0040	.0557	1078.	.2470	.0007	.0475
#2	-.0135	-.0026	.0541	1069.	.2465	.0003	.0523

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.67	.0029	-.0295	.0011	-.0015	.0930	1.813
SDev	.08	.0002	.0009	.0025	.0016	.0627	.001
%RSD	.6063	7.027	3.053	225.3	106.1	67.35	.0323
#1	13.72	.0030	-.0302	.0029	-.0004	.1374	1.813
#2	13.61	.0027	-.0289	-.0007	-.0027	.0487	1.812

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	.0011	.5155	.0007	.0207	S4.727	2844.
SDev	.0006	.0001	.0026	.0004	.0012	8.537	6.
%RSD	75.36	6.280	.5007	55.91	5.760	180.6	.1943
#1	.0012	.0012	.5174	.0010	.0215	S10.76	2841.
#2	.0004	.0011	.5137	.0004	.0198	S-1.310	2848.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	.0449	.0368	-.0431	-.0099	.1506	-.0178
SDev	.0029	.0137	.0239	.0119	.0008	.0076	.0027
%RSD	525.0	30.56	64.77	27.59	7.733	5.024	15.00
#1	.0026	.0352	.0200	-.0347	-.0094	.1560	-.0197
#2	-.0015	.0546	.0537	-.0515	-.0105	.1453	-.0160

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	77.11	.0838	-.0526	1.419	-.0165	-.0071	.0356
SDev	.38	.0208	.0080	.011	.0000	.0016	.0087
%RSD	.4926	24.85	15.30	.7718	.1408	22.19	24.35
#1	76.84	.0690	-.0469	1.411	-.0165	-.0082	.0295
#2	77.38	.0985	-.0582	1.427	-.0164	-.0060	.0417

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0327	-.0001	-.0044	-.0042	-.2649	-.0040	.0014
SDev	.0001	.0096	.0001	.0018	.0046	.0024	.0044
%RSD	.1448	9007.	1.825	42.75	1.746	60.48	315.4
#1	.0327	.0067	-.0045	-.0055	-.2616	-.0023	-.0017
#2	.0326	-.0069	-.0044	-.0029	-.2682	-.0057	.0046

010133

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.0777	-.0050
SDev	.0004	.0010	.0017
%RSD	3161.	1.296	33.93
#1	.0003	.0784	-.0038
#2	-.0003	.0770	-.0062

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	550801	10000	--	--	--	--	--
SDev	2719.533	.0000000	--	--	--	--	--
%RSD	.4937414	.0000000	--	--	--	--	--
#1	548878	10000	--	--	--	--	--
#2	552724	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247433 dr-2 Operator:
Run Time: 07/20/04 12:42:12 DH 7.22.04
Comment:
Mode: CONC Corr. Factor: 1

010134

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0137	.0175	.0519	1019.	.2602	.0009	.0388
SDev	.0004	.0015	.0076	9.	.0025	.0000	.0015
%RSD	2.753	8.586	14.74	.8600	.9620	.5595	3.911
#1	-.0139	.0185	.0573	1025.	.2584	.0008	.0398
#2	-.0134	.0164	.0465	1013.	.2619	.0009	.0377

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5625	.0019	-.0245	.0032	.0009	.1031	1.821
SDev	.0212	.0001	.0004	.0015	.0013	.0361	.026
%RSD	3.761	3.986	1.637	48.34	143.9	35.03	1.441
#1	.5775	.0019	-.0243	.0042	.0019	.1287	1.803
#2	.5476	.0020	-.0248	.0021	-.0000	.0776	1.840

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0011	.0151	.0007	.0238	S8.850	2568.
SDev	.0003	.0003	.0019	.0002	.0002	8.758	30.
%RSD	48.19	23.30	12.48	34.23	1.027	98.96	1.158
#1	.0004	.0013	.0164	.0008	.0240	S15.04	2547.
#2	.0009	.0009	.0137	.0005	.0236	S2.657	2589.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0036	.0405	.0221	-.0347	-.0020	.1646	-.0193
SDev	.0026	.0070	.0022	.0031	.0007	.0374	.0006
%RSD	71.21	17.35	9.725	9.016	34.41	22.70	3.265
#1	.0055	.0455	.0236	-.0370	-.0015	.1382	-.0188
#2	.0018	.0355	.0206	-.0325	-.0025	.1910	-.0197

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	75.31	.0702	-.0402	3.667	-.0158	-.0034	.0317
SDev	2.49	.0029	.0041	.008	.0014	.0037	.0025
%RSD	3.306	4.106	10.10	.2051	8.686	106.9	7.817
#1	77.07	.0722	-.0374	3.672	-.0168	-.0008	.0299
#2	73.55	.0681	-.0431	3.661	-.0148	-.0060	.0334

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0120	.0039	-.0048	-.0095	-.2311	-.0015	-.0092
SDev	.0000	.0007	.0002	.0003	.0297	.0020	.0099
%RSD	.1477	17.90	4.632	2.737	12.87	129.6	108.0
#1	.0119	.0034	-.0046	-.0097	-.2100	-.0001	-.0022
#2	.0120	.0044	-.0050	-.0093	-.2521	-.0029	-.0162

010135

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0004	.6853	-.0025
SDev	.0003	.0257	.0015
%RSD	63.48	3.754	60.06
#1	.0006	.7035	-.0014
#2	.0002	.6671	-.0035

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	537981	10000	--	--	--	--	--
SDev	17787.98	.0000000	--	--	--	--	--
%RSD	3.306433	.0000000	--	--	--	--	--
#1	550559	10000	--	--	--	--	--
#2	525403	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247435 df 2 Operator:
Run Time: 07/20/04 12:46:38 DH 7.22.04
Comment:
Mode: CONC Corr. Factor: 1

010136

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0126	.0845	.0467	1033.	.4071	.0009	.0467
SDev	.0009	.0019	.0016	3.	.0070	.0000	.0032
%RSD	7.134	2.311	3.436	.3032	1.731	4.217	6.904
#1	-.0120	.0858	.0455	1031.	.4021	.0010	.0490
#2	-.0132	.0831	.0478	1036.	.4121	.0009	.0444

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.18	.0024	-.0229	.0041	.0042	.1095	2.843
SDev	.16	.0001	.0029	.0024	.0009	.0403	.094
%RSD	1.314	4.010	12.50	57.53	21.36	36.77	3.291
#1	12.30	.0024	-.0208	.0058	.0048	.1380	2.776
#2	12.07	.0023	-.0249	.0024	.0036	.0810	2.909

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0026	.0012	.5377	.0009	.0263	S11.50	2619.
SDev	.0001	.0000	.0077	.0003	.0017	8.87	12.
%RSD	3.977	3.468	1.435	31.53	6.355	77.11	.4519
#1	.0027	.0012	.5431	.0011	.0275	S17.76	2611.
#2	.0025	.0013	.5322	.0007	.0251	S5.228	2628.

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0048	.0372	.0066	-.0267	-.0064	.4073	-.0093
SDev	.0019	.0293	.0292	.0189	.0105	.0633	.0016
%RSD	39.47	78.72	440.0	70.87	164.8	15.55	17.28
#1	.0062	.0579	.0273	-.0400	.0011	.3625	-.0082
#2	.0035	.0165	-.0140	-.0133	-.0138	.4521	-.0105

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	70.93	.0684	-.0380	10.68	-.0155	-.0025	.0340
SDev	1.58	.0110	.0151	.02	.0028	.0064	.0053
%RSD	2.227	16.13	39.86	.2099	18.32	258.5	15.54
#1	72.05	.0762	-.0487	10.70	-.0176	-.0070	.0377
#2	69.81	.0606	-.0273	10.66	-.0135	.0021	.0303

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0356	.0131	-.0038	-.0089	-.2498	-.0006	-.0028
SDev	.0005	.0036	.0000	.0093	.0282	.0023	.0032
%RSD	1.340	27.69	.7460	104.2	11.31	354.4	114.4
#1	.0352	.0156	-.0038	-.0023	-.2298	.0010	-.0005
#2	.0359	.0105	-.0038	-.0155	-.2698	-.0022	-.0050

010137

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0005	.1500	-.0022
SDev	.0004	.0050	.0016
%RSD	78.62	3.343	73.32
#1	.0008	.1536	-.0011
#2	.0002	.1465	-.0034

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	506770	10000	--	--	--	--	--
SDev	11223.91	.0000000	--	--	--	--	--
%RSD	2.214795	.0000000	--	--	--	--	--
#1	514706	10000	--	--	--	--	--
#2	498833	10000	--	--	--	--	--

Analysis Report QC Standard 07/20/04 12:59:25 PM page 1

Method: DAILY1 Sample Name: icv/ccv Operator:
Run Time: 07/20/04 12:54:46
Comment:
Mode: CONC Corr. Factor: 1

010138

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9944	10.02	Q5.731	Q12.18	9.858	Q1.109	5.101
SDev	.0000	.00	.005	1.00	.037	.015	.006
%RSD	.0024	.0041	.0954	8.211	.3788	1.375	.1224
#1	.9945	10.02	Q5.735	Q12.89	9.884	Q1.120	5.105
#2	.9944	10.02	Q5.727	Q11.48	9.831	1.098	5.096
Errors	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Fail	QC Pass
Value	1.000	10.00	5.000	5.000	10.00	1.000	5.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q23.44	1.073	5.281	Q2.237	1.854	Q11.16	18.02
SDev	.43	.018	.048	.025	.013	.13	.07
%RSD	1.835	1.642	.9075	1.106	.7146	1.124	.4045
#1	Q23.75	1.086	5.315	Q2.255	1.845	Q11.25	Q17.96
#2	Q23.14	1.061	5.247	Q2.220	1.864	Q11.07	18.07
Errors	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass
Value	20.00	1.000	5.000	2.000	2.000	10.00	20.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.923	4.818	21.38	Q1.101	5.444	Q14.44	28.67
SDev	.026	.023	.13	.009	.005	.01	.83
%RSD	.5284	.4783	.6129	.8303	.0980	.0999	2.896
#1	4.904	4.834	21.48	Q1.107	5.441	Q14.45	29.26
#2	4.941	4.802	21.29	1.094	5.448	Q14.43	28.08
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass
Value	5.000	5.000	20.00	1.000	5.000	30.00	30.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.389	Q5.561	5.536	5.784	.9279	Q5.437	1.099
SDev	.107	.048	.013	.024	.0049	.169	.003
%RSD	1.993	.8653	.2279	.4233	.5231	3.108	.2386
#1	5.465	Q5.527	5.527	5.801	.9245	Q5.317	1.097
#2	5.313	Q5.595	5.545	5.767	.9313	Q5.556	Q1.101
Errors	QC Pass	QC Fail	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value	5.000	5.000			1.000	1.000	1.000
Range	10.00	10.00			10.00	10.00	10.00

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010139

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	85.37	5.804	6.205	5.095	Q5.696	Q6.065	Q5.872
SDev	1.11	.075	.049	.020	.012	.057	.087
%RSD	1.299	1.285	.7820	.3901	.2125	.9424	1.484
#1	86.15	5.751	6.170	5.109	Q5.704	Q6.025	Q5.934
#2	84.58	5.856	6.239	5.081	Q5.687	Q6.105	Q5.810
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Fail	QC Fail
Value				5.000	5.000	5.000	5.000
Range				10.00	10.00	10.00	10.00

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.063	1.038	Q1.101	Q6.492	1.030	5.254	1.052
SDev	.004	.000	.002	.044	.000	.041	.006
%RSD	.0724	.0228	.1502	.6825	.0380	.7806	.5474
#1	5.060	1.038	Q1.102	Q6.461	1.030	5.283	1.048
#2	5.066	1.038	Q1.100	Q6.524	1.030	5.225	1.056
Errors	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value	5.000	1.000	5.000	5.000	1.000	5.000	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.028	Q1.175	4.909
SDev	.000	.028	.001
%RSD	.0043	2.364	.0261
#1	5.028	Q1.194	4.910
#2	5.028	Q1.155	4.908
Errors	QC Pass	QC Fail	QC Pass
Value	5.000	1.000	5.000
Range	10.00	10.00	10.00

Analysis Report Blank Sample 07/20/04 04:38:58 PM page 1

Method: DAILY1 Sample Name: icb/ccb4 Operator:
Run Time: 07/20/04 16:34:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0027	-.0444	.0037	H4.163	.0048	.0011	.0002
SDev	.0001	.0016	.0021	.005	.0019	.0002	.0010
%RSD	5.585	3.499	56.21	.1153	39.09	15.64	530.1
#1	-.0026	-.0455	.0023	H4.160	H.0062	.0013	-.0005
#2	-.0028	-.0433	H.0052	H4.167	.0035	.0010	.0009
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0127	.0007	.0029	.0007	-.0016	.0106	-.0006
SDev	.0037	.0001	.0008	.0004	.0004	.0003	.0157
%RSD	28.82	8.327	26.69	57.52	22.61	3.160	2440.
#1	.0153	.0007	.0035	.0010	-.0013	.0108	-.0117
#2	.0101	.0006	.0024	.0004	-.0018	.0104	.0104
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	.0018	.0100	.0005	H.0084	.0360	H.1488
SDev	.0004	.0006	.0011	.0002	.0029	.0012	.0670
%RSD	38.82	33.39	10.94	39.09	35.00	3.281	44.99
#1	.0013	.0022	.0108	.0006	H.0105	.0369	H.1015
#2	.0008	.0014	.0093	.0004	H.0063	.0352	H.1962
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC High
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0025	.0001	.0016	.0038	.0005	-.0029	.0025
SDev	.0013	.0036	.0006	.0024	.0011	.0020	.0013
%RSD	54.07	3814.	36.86	63.34	236.7	67.92	51.87
#1	.0034	-.0024	.0020	.0055	-.0003	-.0015	.0016
#2	.0015	.0026	.0012	.0021	.0013	-.0044	.0035
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010140

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	609660	10000	--	--	--	--	--
SDev	7891.311	.0000000	--	--	--	--	--
%RSD	1.294379	.0000000	--	--	--	--	--
#1	615240	10000	--	--	--	--	--
#2	604080	10000	--	--	--	--	--

Analysis Report Blank Sample 07/20/04 01:06:07 PM page 1

Method: DAILY1 Sample Name: icb/ccb4 Operator:
Run Time: 07/20/04 13:01:28
Comment:
Mode: CONC Corr. Factor: 1

010141

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	L-.0731	H.0053	H5.591	H.0061	.0014	-.0031
SDev	.0005	.0019	.0015	.510	.0014	.0002	.0006
%RSD	171.3	2.612	27.67	9.129	22.05	16.31	20.21
#1	-.0007	L-.0718	.0043	H5.952	H.0071	.0016	-.0036
#2	.0001	L-.0745	H.0064	H5.230	H.0052	.0013	-.0027
Errors	LC Pass	LC Low	LC High	LC High	LC High	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0152	.0005	.0019	.0006	-.0031	.0136	-.0095
SDev	.0025	.0000	.0012	.0016	.0008	.0403	.1024
%RSD	16.76	2.289	62.13	253.9	24.76	297.1	1081.
#1	.0170	.0005	.0011	.0018	-.0025	H.0421	.0629
#2	.0134	.0005	.0028	-.0005	-.0036	-.0149	-.0818
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0020	.0021	.0064	.0006	H.0080	H.1189	H.2520
SDev	.0006	.0008	.0013	.0004	.0021	.0102	1.033
%RSD	26.98	40.25	19.80	62.21	26.16	8.545	409.9
#1	.0024	.0026	.0073	.0009	H.0095	H.1261	H.9823
#2	.0016	.0015	.0055	.0003	H.0065	H.1117	L-.4783
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC High	LC High
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0026	.0060	-.0092	.0082	-.0023	-.0057	-.0012
SDev	.0024	.0086	.0166	.0134	.0067	.0090	.0005
%RSD	91.82	142.1	181.1	162.3	291.3	157.2	39.78
#1	.0043	H.0121	-.0209	.0177	L-.0070	.0006	-.0016
#2	.0009	-.0000	.0026	-.0012	.0024	L-.0121	-.0009
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010142

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	86.00	.0006	.0127	L-.0420	.0024	H.0087	H.0054
SDev	1.93	.0177	.0073	.0008	.0034	.0011	.0020
%RSD	2.243	2925.	57.28	1.904	138.7	12.28	36.31
#1	87.36	-.0119	.0179	L-.0426	H.0048	H.0079	.0040
#2	84.64	.0132	.0076	L-.0415	.0000	H.0094	H.0068
Errors	NOCHECK	NOCHECK	NOCHECK	LC Low	LC Pass	LC High	LC High
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0031	-.0046	-.0010	.0016	H.1462	.0026	.0013
SDev	.0006	.0033	.0004	.0066	.0029	.0018	.0019
%RSD	18.33	71.22	39.06	414.6	1.989	69.72	139.6
#1	.0035	-.0023	-.0008	.0063	H.1482	.0039	.0026
#2	.0027	-.0069	-.0013	-.0031	H.1441	.0013	.0000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0029	.0009	.0034
SDev	.0009	.0011	.0015
%RSD	31.22	129.4	42.53
#1	.0035	.0001	.0045
#2	.0023	.0017	.0024
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	614159	10000	--	--	--	--	--
SDev	13741.91	.0000000	--	--	--	--	--
%RSD	2.237517	.0000000	--	--	--	--	--
#1	623876	10000	--	--	--	--	--
#2	604442	10000	--	--	--	--	--

010144

Analysis Report 07/20/04 01:10:46 PM page 1

Method: DAILY1 Sample Name: 247357 dr-100 Operator:
Run Time: 07/20/04 13:06:11 DH 7-22-04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	-.0654	.0002	31.17	.0055	.0009	.0026
SDev	.0012	.0056	.0040	.64	.0003	.0001	.0001
%RSD	1338.	8.598	2057.	2.056	6.316	14.23	2.015
#1	.0008	-.0614	.0031	31.62	.0058	.0010	.0026
#2	-.0009	-.0693	-.0027	30.71	.0053	.0008	.0027

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0105	.0004	.0006	.0007	-.0032	.0219	.0105
SDev	.0012	.0001	.0005	.0009	.0002	.0220	.1108
%RSD	11.40	13.76	73.82	125.3	5.818	100.8	1051.
#1	.0114	.0003	.0010	.0014	-.0030	.0374	-.0678
#2	.0097	.0004	.0003	.0001	-.0033	.0063	.0889

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	.0005	.0123	.0002	.0034	16.94	33.46
SDev	.0005	.0001	.0013	.0001	.0010	.21	.98
%RSD	38.94	17.90	10.33	58.82	29.38	1.243	2.935
#1	.0015	.0005	.0132	.0003	.0041	16.79	32.76
#2	.0009	.0006	.0114	.0001	.0027	17.09	34.15

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0014	.0083	-.0126	.0052	-.0003	-.0070	.0038
SDev	.0012	.0176	.0014	.0032	.0010	.0008	.0028
%RSD	87.32	211.4	11.03	62.89	296.9	11.58	73.98
#1	.0023	-.0041	-.0117	.0029	.0004	-.0064	.0057
#2	.0005	.0208	-.0136	.0075	-.0010	-.0076	.0018

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	80.91	-.0059	.0073	-.0231	-.0008	.0029	.0034
SDev	1.65	.0070	.0058	.0019	.0017	.0015	.0069
%RSD	2.035	119.6	79.31	8.092	220.8	52.21	201.5
#1	82.08	-.0009	.0032	-.0218	-.0020	.0019	.0082
#2	79.75	-.0108	.0114	-.0244	.0004	.0040	-.0014

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	.0013	-.0003	.0034	.1052	.0007	.0043
SDev	.0001	.0016	.0001	.0051	.0252	.0009	.0005
%RSD	15.96	127.1	20.49	150.0	23.97	134.3	11.23
#1	.0008	.0001	-.0003	.0070	.1230	.0013	.0040
#2	.0007	.0024	-.0004	-.0002	.0874	.0000	.0047

010145

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0006	.0175	.0017
SDev	.0002	.0010	.0008
%RSD	34.20	5.912	45.28
#1	.0008	.0182	.0023
#2	.0005	.0168	.0012

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	577929	10000	--	--	--	--	--
SDev	11728.07	.0000000	--	--	--	--	--
%RSD	2.029328	.0000000	--	--	--	--	--
#1	586222	10000	--	--	--	--	--
#2	569636	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247357d dF100 Operator: **010146**

Run Time: 07/20/04 13:10:50

Comment: DH 7-22-04

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0018	-.0686	.0011	31.18	.0047	.0008	-.0038
SDev	.0001	.0056	.0043	.03	.0002	.0000	.0004
%RSD	3.008	8.134	393.9	.1032	4.478	5.552	10.65
#1	-.0019	-.0725	.0042	31.21	.0048	.0007	-.0041
#2	-.0018	-.0646	-.0020	31.16	.0045	.0008	-.0036

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0049	.0000	.0003	-.0010	-.0043	-.0068	-.0597
SDev	.0006	.0003	.0001	.0010	.0010	.0270	.0447
%RSD	12.13	1465.	52.61	95.76	23.31	396.4	74.89
#1	.0053	.0002	.0004	-.0003	-.0036	.0123	-.0914
#2	.0045	-.0002	.0002	-.0017	-.0050	-.0259	-.0281

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	-.0000	.0011	-.0001	.0014	17.00	32.82
SDev	.0001	.0000	.0006	.0002	.0030	.29	.56
%RSD	22.03	80.13	50.43	171.9	217.4	1.705	1.702
#1	-.0003	-.0000	.0007	.0000	.0035	16.80	32.42
#2	-.0002	-.0000	.0015	-.0002	-.0007	17.21	33.21

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0013	.0081	-.0074	.0046	.0004	-.0048	-.0023
SDev	.0014	.0013	.0118	.0077	.0013	.0091	.0003
%RSD	102.8	16.13	158.7	166.4	333.5	191.3	14.95
#1	-.0004	.0090	.0009	-.0008	.0013	.0017	-.0020
#2	-.0023	.0072	-.0157	.0101	-.0005	-.0112	-.0025

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	81.69	-.0015	.0083	-.0286	.0006	.0050	.0013
SDev	2.09	.0027	.0034	.0000	.0012	.0013	.0018
%RSD	2.556	186.7	40.91	.1726	197.2	26.68	141.9
#1	83.16	.0005	.0059	-.0285	-.0002	.0041	.0026
#2	80.21	-.0034	.0107	-.0286	.0015	.0060	-.0000

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0002	-.0016	-.0019	.0818	-.0006	-.0039
SDev	.0001	.0047	.0002	.0081	.0136	.0009	.0039
%RSD	20.21	1886.	12.65	425.2	16.60	157.5	99.28
#1	.0004	-.0031	-.0014	.0038	.0914	.0001	-.0067
#2	.0003	.0035	-.0017	-.0076	.0722	-.0013	-.0012

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Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0168	.0003
SDev	.0003	.0009	.0006
%RSD	353.8	5.678	187.5
#1	.0002	.0175	.0008
#2	-.0001	.0161	-.0001

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	583430	10000	--	--	--	--	--
SDev	14853.49	.0000000	--	--	--	--	--
%RSD	2.545890	.0000000	--	--	--	--	--
#1	593933	10000	--	--	--	--	--
#2	572927	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247357s 1:100 Operator:
Run Time: 07/20/04 16:01:56 DH 7-22-04
Comment:
Mode: CONC Corr. Factor: 1

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Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0532	1.922	2.236	32.98	1.988	.0557	.0017
SDev	.0006	.004	.016	.43	.004	.0000	.0069
%RSD	1.059	.2025	.7176	1.292	.2073	.0176	414.0
#1	.0528	1.925	2.225	33.28	1.985	.0557	-.0032
#2	.0536	1.920	2.247	32.68	1.991	.0557	.0065

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.07	.0512	.5074	.2178	.2270	1.084	17.73
SDev	.00	.0004	.0001	.0008	.0003	.006	.08
%RSD	.0048	.7534	.0222	.3593	.1444	.5726	.4495
#1	22.07	.0509	.5075	.2172	.2268	1.089	17.67
#2	22.07	.0514	.5074	.2183	.2273	1.080	17.79

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0000	20.48	.5282	.0016	25.95	50.76
SDev	.0010	.0001	.01	.0005	.0004	.03	.04
%RSD	176.2	240.1	.0686	.0980	23.79	.1253	.0788
#1	-.0012	-.0001	20.47	.5279	.0013	25.97	50.79
#2	.0001	.0000	20.49	.5286	.0018	25.93	50.73

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5335	.0111	.5493	.5630	.0003	.0013	.5387
SDev	.0001	.0083	.0006	.0006	.0009	.0092	.0070
%RSD	.0116	74.93	.1132	.1001	340.1	725.6	1.292
#1	.5335	.0170	.5497	.5634	-.0004	-.0053	.5338
#2	.5336	.0052	.5489	.5626	.0009	.0078	.5436

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	89.06	2.261	2.407	-.0270	.5579	2.356	.0039
SDev	.41	.001	.031	.0017	.0006	.021	.0000
%RSD	.4608	.0416	1.273	6.367	.1044	.8794	.7217
#1	88.77	2.260	2.385	-.0282	.5583	2.341	.0039
#2	89.35	2.261	2.428	-.0258	.5575	2.370	.0038

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	-.0075	-.0008	2.551	.0385	.5113	-.0019
SDev	.0000	.0006	.0004	.016	.0129	.0007	.0028
%RSD	8.047	7.749	57.05	.6138	33.48	.1427	151.7
#1	.0004	-.0071	-.0011	2.540	.0294	.5118	-.0039
#2	.0005	-.0079	-.0005	2.562	.0477	.5108	.0001

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Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.5646	.0005
SDev	.0000	.0012	.0001
%RSD	377.0	.2052	8.816
#1	-.0000	.5654	.0005
#2	.0000	.5638	.0005

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	635952	10000	--	--	--	--	--
SDev	2927.422	.0000000	--	--	--	--	--
%RSD	.4603212	.0000000	--	--	--	--	--
#1	633882	10000	--	--	--	--	--
#2	638022	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247358 df 100 Operator:
Run Time: 07/20/04 16:06:24 DH 7-22-04 **010150**
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	-.0566	.0054	33.03	.0082	.0010	.0004
SDev	.0001	.0022	.0019	.05	.0017	.0002	.0022
%RSD	14.31	3.887	34.63	.1391	20.47	24.16	561.5
#1	.0004	-.0582	.0068	33.06	.0094	.0011	-.0012
#2	.0003	-.0551	.0041	32.99	.0070	.0008	.0019

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0472	.0000	.0008	.0009	-.0027	.0152	.0094
SDev	.0186	.0000	.0001	.0011	.0003	.0155	.0428
%RSD	39.36	31.66	12.85	119.7	10.74	102.0	456.9
#1	.0604	.0000	.0009	.0017	-.0025	.0262	-.0209
#2	.0341	.0001	.0007	.0001	-.0029	.0042	.0396

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0010	.0000	.0335	.0010	.0003	18.20	35.61
SDev	.0002	.0001	.0132	.0006	.0003	.13	.63
%RSD	26.11	645.0	39.34	59.86	81.55	.6886	1.774
#1	-.0011	-.0000	.0428	.0014	.0005	18.11	35.17
#2	-.0008	.0001	.0242	.0006	.0001	18.28	36.06

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0013	.0176	-.0036	.0027	-.0003	-.0039	.0021
SDev	.0015	.0070	.0056	.0023	.0003	.0064	.0008
%RSD	117.5	39.88	157.4	84.55	79.70	163.8	39.63
#1	.0024	.0126	-.0076	.0044	-.0001	-.0084	.0027
#2	.0002	.0226	.0004	.0011	-.0005	.0006	.0015

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	91.63	.0068	.0079	-.0110	.0006	.0076	.0040
SDev	.56	.0013	.0016	.0027	.0003	.0006	.0030
%RSD	.6077	19.75	19.96	24.55	52.22	8.088	76.28
#1	92.02	.0077	.0068	-.0129	.0004	.0071	.0018
#2	91.24	.0058	.0091	-.0091	.0009	.0080	.0061

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	-.0022	-.0008	.0053	.0634	.0012	-.0012
SDev	.0000	.0045	.0004	.0004	.0125	.0009	.0026
%RSD	.9019	207.5	59.61	7.418	19.65	79.06	223.4
#1	.0003	.0010	-.0011	.0051	.0723	.0019	-.0030
#2	.0003	-.0053	-.0004	.0056	.0546	.0005	.0007

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Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0260	.0010
SDev	.0001	.0016	.0002
%RSD	92.47	6.119	19.27
#1	.0002	.0271	.0011
#2	.0000	.0249	.0008

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	654306	10000	--	--	--	--	--
SDev	3952.727	.0000000	--	--	--	--	--
%RSD	.6041098	.0000000	--	--	--	--	--
#1	657101	10000	--	--	--	--	--
#2	651511	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247359 dc 100 Operator:
Run Time: 07/20/04 16:10:49 DH 7-22-04 **010152**
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0016	-.0559	.0013	31.45	.0076	.0007	-.0015
SDev	.0000	.0007	.0019	.15	.0001	.0000	.0008
%RSD	.4945	1.271	147.3	.4693	1.163	4.644	57.77
#1	-.0016	-.0554	-.0001	31.34	.0077	.0007	-.0009
#2	-.0016	-.0564	.0027	31.55	.0076	.0007	-.0021

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3391	.0000	.0003	-.0002	-.0028	.0032	-.0125
SDev	.0046	.0001	.0001	.0002	.0001	.0070	.0563
%RSD	1.343	832.3	20.54	78.40	2.949	220.8	449.0
#1	.3423	.0001	.0002	-.0001	-.0028	.0082	-.0524
#2	.3358	-.0001	.0003	-.0004	-.0027	-.0018	.0273

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0013	.0002	.0179	.0002	.0005	15.69	31.58
SDev	.0001	.0001	.0035	.0001	.0003	.06	.26
%RSD	4.847	71.56	19.34	34.37	57.98	.3951	.8252
#1	-.0012	.0001	.0155	.0002	.0003	15.73	31.40
#2	-.0013	.0002	.0204	.0001	.0007	15.65	31.76

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	.0078	.0010	-.0002	.0002	.0022	-.0012
SDev	.0006	.0020	.0002	.0007	.0000	.0005	.0010
%RSD	185.8	25.87	16.80	421.5	3.646	24.35	78.80
#1	-.0007	.0093	.0011	-.0007	.0002	.0026	-.0019
#2	.0001	.0064	.0009	.0003	.0002	.0019	-.0005

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	92.82	.0034	-.0010	.0019	.0002	.0005	.0009
SDev	.97	.0030	.0001	.0026	.0004	.0009	.0006
%RSD	1.050	89.10	11.88	133.3	177.6	190.4	67.93
#1	92.13	.0013	-.0009	.0001	-.0001	-.0002	.0005
#2	93.51	.0055	-.0011	.0037	.0005	.0011	.0013

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	-.0031	-.0008	.0116	.0659	.0001	-.0025
SDev	.0000	.0001	.0007	.0113	.0099	.0000	.0077
%RSD	2.773	2.743	96.50	97.98	15.09	8.474	310.7
#1	.0006	-.0031	-.0013	.0196	.0588	.0001	-.0079
#2	.0007	-.0030	-.0002	.0036	.0729	.0001	.0030

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Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.0025	.0003
SDev	.0000	.0004	.0000
%RSD	101.0	14.73	.9899
#1	.0000	.0028	.0003
#2	.0000	.0023	.0003

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	662748	10000	--	--	--	--	--
SDev	6954.395	.0000000	--	--	--	--	--
%RSD	1.049328	.0000000	--	--	--	--	--
#1	657830	10000	--	--	--	--	--
#2	667665	10000	--	--	--	--	--

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Method: DAILY1 Sample Name: 247360 df-100 Operator: **010154**
Run Time: 07/20/04 16:15:13 DH 7-22-04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0021	-.0459	-.0011	33.95	.0054	.0007	-.0024
SDev	.0009	.0048	.0057	.10	.0002	.0001	.0007
%RSD	41.80	10.50	506.0	.2831	3.578	23.08	28.97
#1	-.0027	-.0493	.0029	34.02	.0056	.0008	-.0019
#2	-.0015	-.0425	-.0051	33.88	.0053	.0005	-.0029

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2950	.0000	-.0003	.0009	-.0024	.0293	-.0124
SDev	.0037	.0001	.0012	.0014	.0006	.0288	.0521
%RSD	1.256	808.8	390.8	147.6	23.86	98.40	419.9
#1	.2976	-.0001	-.0012	.0019	-.0020	.0497	-.0492
#2	.2923	.0001	.0005	-.0000	-.0028	.0089	.0244

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0010	.0002	.0185	.0003	.0016	16.97	34.27
SDev	.0007	.0000	.0045	.0002	.0019	.27	.47
%RSD	65.48	2.958	24.16	82.18	117.9	1.571	1.373
#1	-.0015	.0002	.0154	.0004	.0030	16.78	33.93
#2	-.0006	.0002	.0217	.0001	.0003	17.16	34.60

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0017	-.0039	-.0090	.0047	-.0019	-.0137	-.0008
SDev	.0007	.0076	.0168	.0114	.0013	.0005	.0030
%RSD	38.71	195.4	186.9	239.6	69.17	3.611	385.1
#1	.0022	.0015	-.0209	.0128	-.0028	-.0133	-.0029
#2	.0013	-.0093	.0029	-.0033	-.0010	-.0140	.0013

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	92.18	-.0048	.0058	.0100	.0002	.0023	.0021
SDev	1.86	.0130	.0124	.0049	.0020	.0039	.0018
%RSD	2.015	271.2	212.4	48.83	1240.	170.4	82.98
#1	93.49	-.0140	.0146	.0066	.0015	.0051	.0009
#2	90.86	.0044	-.0029	.0135	-.0012	-.0005	.0034

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0017	-.0007	-.0009	.0570	.0007	-.0039
SDev	.0000	.0059	.0002	.0057	.0001	.0016	.0061
%RSD	5.556	351.8	28.04	642.6	.0932	213.0	158.4
#1	.0007	.0058	-.0008	-.0049	.0570	.0018	-.0082
#2	.0008	-.0025	-.0006	.0031	.0569	-.0004	.0005

010155

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0002	.0023	.0013
SDev	.0002	.0003	.0009
%RSD	92.33	13.63	68.93
#1	.0004	.0025	.0019
#2	.0001	.0021	.0007

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	658175	10000	--	--	--	--	--
SDev	13258.25	.0000000	--	--	--	--	--
%RSD	2.014396	.0000000	--	--	--	--	--
#1	667550	10000	--	--	--	--	--
#2	648800	10000	--	--	--	--	--

Analysis Report 07/20/04 04:23:58 PM page 1

Method: DAILY1 Sample Name: 247433 &c-100 Operator:
Run Time: 07/20/04 16:19:37 DH 7-22-04
Comment:
Mode: CONC Corr. Factor: 1

010156

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0028	-.0404	.0017	31.93	.0056	.0006	.0009
SDev	.0002	.0015	.0039	.28	.0000	.0000	.0007
%RSD	8.650	3.735	227.6	.8674	.0286	2.344	77.85
#1	-.0026	-.0414	.0045	31.73	.0056	.0006	.0004
#2	-.0029	-.0393	-.0010	32.12	.0056	.0006	.0013

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0237	-.0001	.0002	-.0001	-.0027	.0092	.0123
SDev	.0008	.0000	.0003	.0001	.0001	.0014	.0204
%RSD	3.303	43.26	177.0	77.08	2.524	15.26	165.7
#1	.0243	-.0001	.0004	-.0002	-.0027	.0102	-.0021
#2	.0232	-.0000	-.0000	-.0001	-.0028	.0082	.0268

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	.0003	.0074	.0001	.0012	15.72	32.10
SDev	.0004	.0000	.0018	.0001	.0006	.03	.25
%RSD	65.34	14.80	24.33	58.83	51.65	.2155	.7860
#1	-.0004	.0002	.0087	.0001	.0017	15.74	31.92
#2	-.0010	.0003	.0061	.0001	.0008	15.69	32.28

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0005	.0042	-.0009	-.0020	-.0005	.0008	.0000
SDev	.0002	.0063	.0011	.0012	.0011	.0002	.0023
%RSD	38.11	150.1	126.7	59.60	241.2	24.14	5307.
#1	-.0004	-.0003	-.0001	-.0029	.0003	.0009	.0017
#2	-.0006	.0087	-.0017	-.0012	-.0012	.0006	-.0016

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	91.57	.0052	-.0011	.0561	-.0016	.0010	-.0011
SDev	.56	.0037	.0003	.0015	.0004	.0014	.0017
%RSD	.6166	69.53	23.23	2.766	25.73	136.6	160.9
#1	91.97	.0027	-.0013	.0550	-.0019	.0000	-.0023
#2	91.17	.0078	-.0009	.0572	-.0013	.0020	.0001

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	-.0026	-.0008	.0002	.0686	-.0000	-.0025
SDev	.0000	.0012	.0000	.0068	.0015	.0002	.0002
%RSD	1.298	45.15	2.389	2988.	2.146	742.0	8.486
#1	.0003	-.0017	-.0008	-.0046	.0697	.0001	-.0023
#2	.0003	-.0034	-.0008	.0050	.0676	-.0001	-.0026

010157

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.0137	.0004
SDev	.0001	.0004	.0000
%RSD	2377.	3.153	10.89
#1	.0000	.0134	.0004
#2	-.0000	.0140	.0004

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	653872	10000	--	--	--	--	--
SDev	3982.425	.0000000	--	--	--	--	--
%RSD	.6090528	.0000000	--	--	--	--	--
#1	656688	10000	--	--	--	--	--
#2	651056	10000	--	--	--	--	--

Analysis Report 07/20/04 04:28:22 PM page 1

Method: DAILY1 Sample Name: 247435 dc100 Operator:
Run Time: 07/20/04 16:24:02 DH 7-22-04 **010158**
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0029	-.0391	.0025	31.92	.0086	.0007	-.0015
SDev	.0004	.0082	.0034	.38	.0001	.0001	.0017
%RSD	15.44	20.97	137.0	1.196	1.584	10.70	117.2
#1	-.0026	-.0449	.0001	31.65	.0085	.0007	-.0027
#2	-.0032	-.0333	.0049	32.19	.0087	.0006	-.0002

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2608	.0003	.0002	-.0000	-.0021	.0015	.0151
SDev	.0020	.0001	.0000	.0005	.0002	.0016	.0326
%RSD	.7770	24.10	19.73	5289.	8.374	107.1	215.5
#1	.2594	.0003	.0002	-.0003	-.0019	.0027	-.0079
#2	.2623	.0004	.0003	.0003	-.0022	.0004	.0382

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	.0002	.0186	.0000	.0000	15.44	31.61
SDev	.0002	.0001	.0013	.0000	.0000	.10	.21
%RSD	29.18	39.08	7.065	78.19	43.96	.6562	.6500
#1	-.0010	.0002	.0177	.0000	.0000	15.37	31.46
#2	-.0007	.0003	.0195	.0001	.0000	15.51	31.75

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0058	-.0016	.0016	-.0002	.0003	-.0003
SDev	.0006	.0092	.0002	.0004	.0004	.0007	.0015
%RSD	356.0	159.2	11.80	25.84	239.8	256.6	510.3
#1	.0006	-.0007	-.0014	.0019	.0001	.0008	-.0014
#2	-.0003	.0123	-.0017	.0013	-.0004	-.0002	.0008

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	93.72	.0064	.0019	.1836	.0006	.0034	.0036
SDev	.92	.0022	.0001	.0000	.0003	.0008	.0010
%RSD	.9781	33.68	4.514	.0085	61.18	22.70	27.96
#1	94.37	.0080	.0020	.1836	.0008	.0040	.0029
#2	93.08	.0049	.0019	.1836	.0003	.0029	.0043

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	-.0015	-.0005	.0181	.0534	-.0001	-.0038
SDev	.0000	.0034	.0002	.0063	.0023	.0003	.0009
%RSD	1.001	233.6	36.09	34.75	4.311	234.6	24.29
#1	.0008	.0010	-.0006	.0137	.0518	-.0003	-.0044
#2	.0008	-.0039	-.0004	.0226	.0550	.0001	-.0031

010159

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.0035	.0005
SDev	.0000	.0000	.0002
%RSD	116.6	.9122	38.04
#1	.0000	.0034	.0006
#2	.0000	.0035	.0004

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	669232	10000	--	--	--	--	--
SDev	6554.173	.0000000	--	--	--	--	--
%RSD	.9793581	.0000000	--	--	--	--	--
#1	673866	10000	--	--	--	--	--
#2	664597	10000	--	--	--	--	--

Analysis Report QC Standard 07/20/04 04:32:52 PM page 1

Method: DAILY1 Sample Name: icv/ccv Operator:
Run Time: 07/20/04 16:28:27
Comment:
Mode: CONC Corr. Factor: 1

010160

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9788	9.798	Q5.551	Q9.165	10.03	1.081	5.165
SDev	.0018	.001	.000	.030	.01	.003	.001
%RSD	.1852	.0112	.0033	.3289	.0826	.2611	.0203
#1	.9801	9.797	Q5.551	Q9.186	10.04	1.083	5.166
#2	.9775	9.798	Q5.551	Q9.143	10.03	1.079	5.164
Errors	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value	1.000	10.00	5.000	5.000	10.00	1.000	5.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q22.27	1.046	5.134	2.152	1.899	10.85	Q17.39
SDev	.00	.001	.002	.003	.001	.00	.04
%RSD	.0209	.1017	.0480	.1550	.0351	.0318	.2418
#1	Q22.26	1.045	5.136	2.154	1.899	10.85	Q17.42
#2	Q22.27	1.046	5.132	2.150	1.900	10.84	Q17.36
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	20.00	1.000	5.000	2.000	2.000	10.00	20.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	La4086	Li6707	Mg2790	Mn2576	Mo2020	Na5889	Na3302
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.938	4.709	20.76	1.064	5.421	Q13.71	Q26.21
SDev	.010	.032	.00	.001	.048	.08	.14
%RSD	.1962	.6867	.0221	.0792	.8841	.6100	.5150
#1	4.945	4.732	20.77	1.064	5.388	Q13.77	Q26.31
#2	4.931	4.686	20.76	1.063	5.455	Q13.65	Q26.12
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail
Value	5.000	5.000	20.00	1.000	5.000	30.00	30.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.335	Q5.763	5.379	5.563	.9433	Q5.290	1.074
SDev	.017	.182	.020	.030	.0030	.015	.005
%RSD	.3204	3.166	.3734	.5344	.3149	.2888	.4936
#1	5.323	Q5.634	5.365	5.584	.9412	Q5.279	1.078
#2	5.347	Q5.892	5.393	5.542	.9454	Q5.300	1.070
Errors	QC Pass	QC Fail	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value	5.000	5.000			1.000	1.000	1.000
Range	10.00	10.00			10.00	10.00	10.00

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	93.67	5.685	5.885	5.066	5.496	Q5.812	Q5.677
SDev	.08	.020	.027	.005	.013	.011	.027
%RSD	.0836	.3572	.4546	.0985	.2386	.1902	.4812
#1	93.61	5.671	5.904	5.069	Q5.505	Q5.820	Q5.696
#2	93.72	5.699	5.866	5.062	5.487	Q5.805	Q5.657
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Fail	QC Fail
Value				5.000	5.000	5.000	5.000
Range				10.00	10.00	10.00	10.00

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.096	1.037	Q1.087	Q6.262	.9613	5.162	1.052
SDev	.012	.001	.001	.052	.0074	.005	.011
%RSD	.2294	.0683	.0848	.8319	.7677	.0988	1.003
#1	5.104	1.037	Q1.086	Q6.225	.9665	5.158	1.045
#2	5.088	1.038	Q1.087	Q6.299	.9561	5.166	1.060
Errors	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value	5.000	1.000	5.000	5.000	1.000	5.000	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.056	1.096	4.940
SDev	.004	.006	.003
%RSD	.0786	.5374	.0651
#1	5.059	Q1.100	4.938
#2	5.053	1.092	4.942
Errors	QC Pass	QC Pass	QC Pass
Value	5.000	1.000	5.000
Range	10.00	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	668764	10000	--	--	--	--	--
SDev	568.5139	.0000000	--	--	--	--	--
%RSD	.0850096	.0000000	--	--	--	--	--
#1	668362	10000	--	--	--	--	--
#2	669166	10000	--	--	--	--	--

Analysis Report Blank Sample 07/20/04 04:38:58 PM page 2

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	99.49	.0087	.0014	L-.0238	H.0031	.0038	.0049
SDev	.16	.0023	.0015	.0001	.0018	.0017	.0008
%RSD	.1621	26.55	107.8	.3506	58.72	45.75	15.30
#1	99.61	.0103	.0024	L-.0238	H.0044	H.0050	.0044
#2	99.38	.0071	.0003	L-.0239	.0018	.0026	H.0055
Errors	NOCHECK	NOCHECK	NOCHECK	LC Low	LC High	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3372	Tl1908	U_3859	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0024	-.0031	.0002	H.0116	.0980	.0022	-.0012
SDev	.0009	.0014	.0002	.0095	.0046	.0009	.0007
%RSD	38.96	43.90	99.62	81.60	4.664	39.83	60.53
#1	.0031	-.0041	.0003	.0049	.0948	.0029	-.0018
#2	.0018	-.0022	.0001	H.0183	H.1013	.0016	-.0007
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0024	.0012	.0027
SDev	.0010	.0000	.0006
%RSD	40.04	.0797	21.30
#1	.0031	.0012	.0031
#2	.0017	.0012	.0023
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	710334	10000	--	--	--	--	--
SDev	1130.664	.0000000	--	--	--	--	--
%RSD	.1591734	.0000000	--	--	--	--	--
#1	711134	10000	--	--	--	--	--
#2	709535	10000	--	--	--	--	--

010166

ICP ANALYSIS

K NA

PROJ. NO.	PROJECT	TO#	DATE	MATRIX	LOGBK PG
105A2.02.002	Div 20	040713-8 040714-12 040720-10	7-22-04	Liquid	S7 165
	Div 20		7.22-04	Liquid	S7 166

INSTRUMENT: Spec 20 FILENAME: 040722A

INSTRUMENT DL:

VOLUTION by Micro-Active Australia Pty Ltd 11:52:08 AM July 22, 2004

010167

eep last result visible enabled ...
tarting run ...
reating high priority queue entries ...
ACKGROUND CORRECTED INTENSITIES
dentity 1 : BLK_SC Identity 2 : Type : STD
eight : 1.0000 Volume : 1.00 Printed : 11:45:40 AM July 22, 2004

	K_766	Li670	Na589	Sc361
# 1	19.0	-18.5	28.0	4921.0
# 2	30.0	1.5	42.0	4878.0
ean	24.5	-8.5	35.0	4899.5
D	7.8	14.1	9.9	30.4
RSD	31.7	166.4	28.3	0.6

NTENSITIES
dentity 1 : BLK_SC Identity 2 : Type : STD
eight : 1.0000 Volume : 1.00 Printed : 11:45:42 AM July 22, 2004

	K_766	Li670	Na589	Sc361
# 1	0.0	-0.0	0.0	4921.0
# 2	0.0	0.0	0.0	4878.0
ean	0.0	-0.0	0.0	4899.5
D	0.0	0.0	0.0	30.4
RSD	32.3	166.6	28.9	0.6

ACKGROUND CORRECTED INTENSITIES
dentity 1 : CLP_STD1_SC Identity 2 : Type : STD
eight : 1.0000 Volume : 1.00 Printed : 11:48:48 AM July 22, 2004

	K_766	Li670	Na589
# 1	4561.5	37301.0	24463.0
# 2	4576.5	37456.0	24500.0
ean	4569.0	37378.5	24481.5
D	10.6	109.6	26.2
RSD	0.2	0.3	0.1

NTENSITIES
dentity 1 : CLP_STD1_SC Identity 2 : Type : STD
eight : 1.0000 Volume : 1.00 Printed : 11:48:48 AM July 22, 2004

	K_766	Li670	Na589
# 1	0.9	7.7	5.0
# 2	0.9	7.7	5.1
ean	0.9	7.7	5.1
D	0.0	0.0	0.0
RSD	0.3	0.4	0.2

7/23/04

ACKGROUND CORRECTED INTENSITIES
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 11:51:56 AM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1919.0	19570.0	15406.0	5141.0	5141.0
# 2	1893.0	19377.0	15206.0	5050.0	5050.0

DA 7-22-04

D	18.4	136.5	141.4	64.3	64.3
RSD	1.0	0.7	0.9	1.3	1.3

PPARENT CONCENTRATIONS

VOLUTION by Micro-Active Australia Pty Ltd 11:52:08 AM July 22, 2004

010168

dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 11:51:56 AM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	19.6321	4.9358	29.6272	5141.000 H	104.9356
# 2	19.7162	4.9752	29.7699	5050.000 H	103.0758
ean	19.6742	4.9555	29.6985	5095.500 H	104.0057
D	0.0595	0.0278	0.1009	64.347	1.3151
RSD	0.3023	0.5618	0.3397	1.263	1.2644

hecking calibration verification ...
dentity 1 : CLP_CCV_SC Identity 2 :

eport name	Low limit	Value	High limit
_766	18.000	19.674	22.000
i670	4.500	4.956	5.500
a589	27.000	29.699	33.000

VOLUTION by Micro-Active Australia Pty Ltd 12:02:40 PM July 22, 2004

010169

ACKGROUND CORRECTED INTENSITIES
dentity 1 : Calibration blank Identity 2 : Type : CB
eight : 1.0000 Volume : 1.00 Printed : 11:56:10 AM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	18.5	-12.5	53.0	4956.5	4956.5
# 2	13.5	-7.5	50.0	4862.5	4862.5
ean	16.0	-10.0	51.5	4909.5	4909.5
D	3.5	3.5	2.1	66.5	66.5
RSD	22.1	35.4	4.1	1.4	1.4

PPARENT CONCENTRATIONS
dentity 1 : Calibration blank Identity 2 : Type : CB
eight : 1.0000 Volume : 1.00 Printed : 11:56:10 AM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	L -0.0676	L -0.0010	0.0352	4956.500	H 101.1649
# 2	L -0.1186	0.0002	0.0311	4862.500	99.2438
ean	L -0.0931	L -0.0004	0.0331	4909.500	H 100.2044
D	0.0360	0.0009	0.0029	66.468	1.3584
RSD	38.7195	232.9668	8.6742	1.354	1.3557

hecking calibration blank ...
dentity 1 : Calibration blank Identity 2 :

eport name	CRDL	Value
_766	0.100	-0.093
i670	0.010	-0.000
a589	0.050	0.033
c361	0.000	100.204

ACKGROUND CORRECTED INTENSITIES
dentity 1 : pbw Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 11:59:18 AM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	18.5	-1.5	54.5	4790.0	4790.0
# 2	22.5	-9.5	54.5	4755.0	4755.0
ean	20.5	-5.5	54.5	4772.5	4772.5
D	2.8	5.7	0.0	24.7	24.7
RSD	13.8	102.9	0.0	0.5	0.5

PPARENT CONCENTRATIONS
dentity 1 : pbw Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 11:59:18 AM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	L -0.0607	0.0018	0.0420	4790.000	97.7621
# 2	L -0.0143	L -0.0003	0.0428	4755.000	97.0468
ean	L -0.0375	0.0008	0.0424	4772.500	97.4045
D	0.0328	0.0015	0.0006	24.749	0.5058
RSD	87.4140	205.6274	1.3849	0.519	0.5193

ACKGROUND CORRECTED INTENSITIES

eight : 1.0000 Volume : 1.00 Printed : 12:02:24 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1784.0	-19.0	9635.0	4723.0	4723.0

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# 2	1770.0	-16.0	9558.0	4671.0	4671.0
ean	1777.0	-17.5	9596.5	4697.0	4697.0
D	9.9	2.1	54.4	36.8	36.8
RSD	0.6	12.1	0.6	0.8	0.8

PPARENT CONCENTRATIONS
dentity 1 : lcsw Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 12:02:24 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	19.8694 L	-0.0030	20.1463	4723.000	96.3928
# 2	19.9338 L	-0.0022	20.2080	4671.000	95.3301
ean	19.9016 L	-0.0026	20.1772	4697.000	95.8614
D	0.0455	0.0005	0.0436	36.770	0.7515
RSD	0.2288	21.2380	0.2162	0.783	0.7839

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:VOLUTION by Micro-Active Australia Pty Ltd 12:12:10 PM July 22, 2004

BACKGROUND CORRECTED INTENSITIES
:dentity 1 : 247357r df100 Identity 2 : Type : SAMPLE
/eight : 1.0000 Volume : 1.00 Printed : 12:05:32 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	23.0	-12.5	18334.5	4852.5	4852.5
# 2	19.0	-7.5	17967.5	4777.5	4777.5
Mean	21.0	-10.0	18151.0	4815.0	4815.0
SD	2.8	3.5	259.5	53.0	53.0
%RSD	13.5	35.4	1.4	1.1	1.1

APPARENT CONCENTRATIONS
:dentity 1 : 247357r df100 Identity 2 : Type : SAMPLE
/eight : 1.0000 Volume : 1.00 Printed : 12:05:32 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1 L	-0.0139 L	-0.0011	37.3738	4852.500	99.0394
# 2 L	-0.0546	0.0002	37.2003	4777.500	97.5066
Mean L	-0.0342 L	-0.0004	37.2870	4815.000	98.2730
SD	0.0288	0.0009	0.1227	53.033	1.0839
%RSD	84.0068	210.4524	0.3290	1.101	1.1029

BACKGROUND CORRECTED INTENSITIES
:dentity 1 : 247357dr df100 Identity 2 : Type : SAMPLE
/eight : 1.0000 Volume : 1.00 Printed : 12:08:40 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	24.5	-18.5	18153.0	4844.0	4844.0
# 2	13.5	-10.5	18003.0	4799.0	4799.0
Mean	19.0	-14.5	18078.0	4821.5	4821.5
SD	7.8	5.7	106.1	31.8	31.8
%RSD	40.9	39.0	0.6	0.7	0.7

APPARENT CONCENTRATIONS
:dentity 1 : 247357dr df100 Identity 2 : Type : SAMPLE
/eight : 1.0000 Volume : 1.00 Printed : 12:08:40 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	0.0031 L	-0.0027	37.0681	4844.000	98.8657
# 2 L	-0.1166 L	-0.0006	37.1066	4799.000	97.9460
Mean L	-0.0568 L	-0.0016	37.0874	4821.500	98.4059
SD	0.0846	0.0015	0.0272	31.820	0.6503
%RSD	149.0289	90.9156	0.0734	0.660	0.6608

BACKGROUND CORRECTED INTENSITIES
:dentity 1 : 247357sr df100 Identity 2 : Type : SAMPLE
/eight : 1.0000 Volume : 1.00 Printed : 12:11:48 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1825.0	1.0	27798.5	4797.5	4797.5
# 2	1839.0	-6.0	27717.5	4756.5	4756.5
Mean	1832.0	-2.5	27758.0	4777.0	4777.0

RSD	0.5	198.0	0.2	0.6	0.6

PPARENT CONCENTRATIONS
dentity 1 : 247357sr df100 Identity 2 : Type : SAMPLE
VOLUTION by Micro-Active Australia Pty Ltd 12:21:40 PM July 22, 2004

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Weight : 1.0000 Volume : 1.00 Printed : 12:11:48 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	20.0123	0.0025 H	57.3529	4797.500	97.9154
# 2	20.3440	0.0006 H	57.6792	4756.500	97.0775
Mean	20.1782	0.0016 H	57.5160	4777.000	97.4964
SD	0.2346	0.0013	0.2307	28.991	0.5925
%RSD	1.1624	86.0128	0.4011	0.607	0.6077

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247358 df100 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 12:14:56 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	31.0	-13.0	19721.5	4868.0	4868.0
# 2	38.0	-12.0	19543.5	4822.0	4822.0
Mean	34.5	-12.5	19632.5	4845.0	4845.0
SD	4.9	0.7	125.9	32.5	32.5
%RSD	14.3	5.7	0.6	0.7	0.7

APPARENT CONCENTRATIONS
Identity 1 : 247358 df100 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 12:14:56 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	0.0729 L	-0.0012	40.0782	4868.000	99.3562
# 2	0.1535 L	-0.0010	40.0954	4822.000	98.4161
Mean	0.1132 L	-0.0011	40.0868	4845.000	98.8862
SD	0.0570	0.0002	0.0121	32.527	0.6648
%RSD	50.3549	15.2281	0.0303	0.671	0.6723

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247359 df100 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 12:18:02 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	22.0	-17.5	18161.0	4881.0	4881.0
# 2	17.0	-8.5	17973.0	4834.0	4834.0
Mean	19.5	-13.0	18067.0	4857.5	4857.5
SD	3.5	6.4	132.9	33.2	33.2
%RSD	18.1	49.0	0.7	0.7	0.7

APPARENT CONCENTRATIONS
Identity 1 : 247359 df100 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 12:18:02 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1 L	-0.0263 L	-0.0024	36.8028	4881.000	99.6219
# 2 L	-0.0791 L	-0.0000	36.7759	4834.000	98.6614
Mean L	-0.0527 L	-0.0012	36.7894	4857.500	99.1416
SD	0.0373	0.0017	0.0190	33.234	0.6792

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247360 df100 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 12:21:10 PM July 22, 2004
EVOLUTION by Micro-Active Australia Pty Ltd 12:27:40 PM July 22, 2004

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	K_766	Li670	Na589	Sc	Sc361
# 1	12.0	-6.5	19850.5	4864.5	4864.5
# 2	16.0	-14.5	19786.5	4828.5	4828.5
Mean	14.0	-10.5	19818.5	4846.5	4846.5
SD	2.8	5.7	45.3	25.5	25.5
%RSD	20.2	53.9	0.2	0.5	0.5

APPARENT CONCENTRATIONS
Identity 1 : 247360 df100 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 12:21:10 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1 L	-0.1351	0.0005	40.3699	4864.500	99.2847
# 2 L	-0.0899 L	-0.0016	40.5400	4828.500	98.5489
Mean L	-0.1125 L	-0.0006	40.4550	4846.500	98.9168
SD	0.0319	0.0015	0.1203	25.456	0.5203
%RSD	28.3749	271.1068	0.2974	0.525	0.5259

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247433 df100 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 12:24:16 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	11.5	-11.5	18113.5	4851.0	4851.0
# 2	19.5	-18.5	17984.5	4813.0	4813.0
Mean	15.5	-15.0	18049.0	4832.0	4832.0
SD	5.7	4.9	91.2	26.9	26.9
%RSD	36.5	33.0	0.5	0.6	0.6

APPARENT CONCENTRATIONS
Identity 1 : 247433 df100 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 12:24:16 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1 L	-0.1402 L	-0.0008	36.9338	4851.000	99.0088
# 2 L	-0.0506 L	-0.0027	36.9604	4813.000	98.2322
Mean L	-0.0954 L	-0.0018	36.9471	4832.000	98.6205
SD	0.0634	0.0014	0.0188	26.870	0.5492
%RSD	66.4215	75.9035	0.0506	0.556	0.5568

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247435 df100 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 12:27:26 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	29.0	-5.5	18080.5	4866.0	4866.0
# 2	37.0	-15.5	17970.5	4831.0	4831.0
Mean	33.0	-10.5	18025.5	4848.5	4848.5
SD	5.7	7.1	77.8	24.7	24.7
%RSD	17.1	67.3	0.4	0.5	0.5

dentity 1 : 247435 dil00 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 12:27:26 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361

VOLUTION by Micro-Active Australia Pty Ltd 12:36:10 PM July 22, 2004

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	ppm	ppm	ppm		ppm
# 1	0.0511	0.0008	36.7526	4866.000	99.3153
# 2	0.1417 L	-0.0019	36.7937	4831.000	98.6000
ean	0.0964 L	-0.0006	36.7731	4848.500	98.9577
D	0.0640	0.0019	0.0291	24.749	0.5058
RSD	66.4247	338.2012	0.0791	0.510	0.5111

ACKGROUND CORRECTED INTENSITIES
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 12:31:38 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1917.5	19511.0	15399.5	5169.0	5169.0
# 2	1910.5	19370.0	15181.5	5098.0	5098.0
ean	1914.0	19440.5	15290.5	5133.5	5133.5
D	4.9	99.7	154.1	50.2	50.2
RSD	0.3	0.5	1.0	1.0	1.0

PPARENT CONCENTRATIONS
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 12:31:38 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	19.5088	4.8943	29.4539	5169.000 H	105.5079
# 2	19.7111	4.9266	29.4413	5098.000 H	104.0568
ean	19.6099	4.9105	29.4476	5133.500 H	104.7823
D	0.1430	0.0228	0.0089	50.205	1.0260
RSD	0.7292	0.4649	0.0302	0.978	0.9792

hecking calibration verification ...
dentity 1 : CLP_CCV_SC Identity 2 :

eport name	Low limit	Value	High limit
_766	18.000	19.610	22.000
i670	4.500	4.910	5.500
a589	27.000	29.448	33.000

ACKGROUND CORRECTED INTENSITIES
dentity 1 : Calibration blank Identity 2 : Type : CB
eight : 1.0000 Volume : 1.00 Printed : 12:35:52 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	9.0	-10.5	49.5	5011.5	5011.5
# 2	18.0	-2.5	50.5	4939.5	4939.5
ean	13.5	-6.5	50.0	4975.5	4975.5
D	6.4	5.7	0.7	50.9	50.9
RSD	47.1	87.0	1.4	1.0	1.0

PPARENT CONCENTRATIONS
dentity 1 : Calibration blank Identity 2 : Type : CB
eight : 1.0000 Volume : 1.00 Printed : 12:35:52 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1 L	-0.1708 L	-0.0005	0.0271	5011.500 H	102.2890

ean	L	-0.1216	0.0006	0.0288	4975.500 H	101.5532
D		0.0697	0.0015	0.0024	50.912	1.0405
RSD		57.3065	258.7714	8.4268	1.023	1.0246

VOLUTION by Micro-Active Australia Pty Ltd 12:46:42 PM July 22, 2004

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hecking calibration blank ...
dentity 1 : Calibration blank Identity 2 :

eport name	CRDL	Value	
_766	0.100	-0.122	Contaminated
i670	0.010	0.001	
a589	0.050	0.029	
c361	0.000	101.553	

ACKGROUND CORRECTED INTENSITIES
dentity 1 : 248205 df100 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 12:39:00 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	24.5	-7.5	16029.0	4932.0	4932.0
# 2	12.5	-10.5	15897.0	4850.0	4850.0
ean	18.5	-9.0	15963.0	4891.0	4891.0
D	8.5	2.1	93.3	58.0	58.0
RSD	45.9	23.6	0.6	1.2	1.2

PPARENT CONCENTRATIONS
dentity 1 : 248205 df100 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 12:39:00 PM July 22, 2004

		K_766	Li670	Na589	Sc	Sc361
		ppm	ppm	ppm		ppm
# 1	L	-0.0018	0.0003	32.1376	4932.000 H	100.6642
# 2	L	-0.1292 L	-0.0006	32.4124	4850.000	98.9884
ean	L	-0.0655 L	-0.0001	32.2750	4891.000	99.8263
D		0.0901	0.0006	0.1943	57.983	1.1850
RSD		137.6268	422.0391	0.6021	1.185	1.1871

ACKGROUND CORRECTED INTENSITIES
dentity 1 : 248207 df100 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 12:42:08 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	3.0	-15.0	16553.0	4800.5	4800.5
# 2	1.0	-24.0	16433.0	4767.5	4767.5
ean	2.0	-19.5	16493.0	4784.0	4784.0
D	1.4	6.4	84.9	23.3	23.3
RSD	70.7	32.6	0.5	0.5	0.5

PPARENT CONCENTRATIONS
dentity 1 : 248207 df100 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 12:42:08 PM July 22, 2004

		K_766	Li670	Na589	Sc	Sc361
		ppm	ppm	ppm		ppm
# 1	L	-0.2333 L	-0.0018	34.1016	4800.500	97.9767
# 2	L	-0.2554 L	-0.0043	34.0887	4767.500	97.3023
ean	L	-0.2443 L	-0.0030	34.0951	4784.000	97.6395
D		0.0157	0.0017	0.0091	23.335	0.4769
RSD		6.4056	57.5881	0.0268	0.488	0.4884

dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 12:46:22 PM July 22, 2004

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	K_766	Li670	Na589	Sc	Sc361
VOLUTION by Micro-Active Australia Pty Ltd 12:46:42 PM July 22, 2004					
# 1	1932.5	19589.0	15341.5	5172.0	5172.0
# 2	1917.5	19333.0	15189.5	5102.0	5102.0
ean	1925.0	19461.0	15265.5	5137.0	5137.0
D	10.6	181.0	107.5	49.5	49.5
RSD	0.6	0.9	0.7	1.0	1.0

PPARENT CONCENTRATIONS
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 12:46:22 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	19.6520	4.9110	29.3256	5172.000 H	105.5692
# 2	19.7685	4.9133	29.4337	5102.000 H	104.1386
ean	19.7103	4.9122	29.3797	5137.000 H	104.8539
D	0.0824	0.0016	0.0764	49.497	1.0116
RSD	0.4181	0.0334	0.2601	0.964	0.9648

hecking calibration verification ...
dentity 1 : CLP_CCV_SC Identity 2 :

eport name	Low limit	Value	High limit
_766	18.000	19.710	22.000
i670	4.500	4.912	5.500
a589	27.000	29.380	33.000

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VOLUTION by Micro-Active Australia Pty Ltd 12:57:12 PM July 22, 2004

ACKGROUND CORRECTED INTENSITIES
dentity 1 : Calibration blank Identity 2 : Type : CB
eight : 1.0000 Volume : 1.00 Printed : 12:50:34 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	21.5	-8.5	43.0	4985.5	4985.5
# 2	27.5	-2.5	45.0	4944.5	4944.5
lean	24.5	-5.5	44.0	4965.0	4965.0
SD	4.2	4.2	1.4	29.0	29.0
RSD	17.3	77.1	3.2	0.6	0.6

PPARENT CONCENTRATIONS
dentity 1 : Calibration blank Identity 2 : Type : CB
eight : 1.0000 Volume : 1.00 Printed : 12:50:34 PM July 22, 2004

		K_766	Li670	Na589	Sc		Sc361
		ppm	ppm	ppm			ppm
# 1	L	-0.0367	0.0000	0.0147	4985.500	H	101.7576
# 2		0.0299	0.0016	0.0194	4944.500	H	100.9197
lean	L	-0.0034	0.0008	0.0170	4965.000	H	101.3386
SD		0.0471	0.0011	0.0033	28.991		0.5925
RSD		1393.5090	134.6991	19.5756	0.584		0.5847

Checking calibration blank ...
Identity 1 : Calibration blank Identity 2 :

Report name	CRDL	Value
K_766	0.100	-0.003
Li670	0.010	0.001
Na589	0.050	0.017
Sc361	0.000	101.339

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:VOLUTION by Micro-Active Australia Pty Ltd 1:11:18 PM July 22, 2004

Keep last result visible enabled ...
Starting run ...
Creating high priority queue entries ...
BACKGROUND CORRECTED INTENSITIES
Identity 1 : CLP_CCV_SC Identity 2 : Type : CV
Weight : 1.0000 Volume : 1.00 Printed : 1:08:52 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1887.5	18982.5	14886.0	5041.0	5041.0
# 2	1859.5	18844.5	14860.0	4980.0	4980.0
Mean	1873.5	18913.5	14873.0	5010.5	5010.5
SD	19.8	97.6	18.4	43.1	43.1
%RSD	1.1	0.5	0.1	0.9	0.9

APPARENT CONCENTRATIONS
Identity 1 : CLP_CCV_SC Identity 2 : Type : CV
Weight : 1.0000 Volume : 1.00 Printed : 1:08:52 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	19.6937	4.8827	29.1941	5041.000 H	102.8919
# 2	19.6385	4.9065	29.5008	4980.000 H	101.6452
Mean	19.6661	4.8946	29.3474	5010.500 H	102.2685
SD	0.0391	0.0169	0.2169	43.134	0.8815
%RSD	0.1986	0.3448	0.7390	0.861	0.8620

Checking calibration verification ...
Identity 1 : CLP_CCV_SC Identity 2 :

Report name	Low limit	Value	High limit
K_766	18.000	19.666	22.000
Li670	4.500	4.895	5.500
Na589	27.000	29.347	33.000

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:VOLUTION by Micro-Active Australia Pty Ltd 1:19:42 PM July 22, 2004

BACKGROUND CORRECTED INTENSITIES
Identity 1 : Calibration blank Identity 2 : Type : CB
Weight : 1.0000 Volume : 1.00 Printed : 1:13:06 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	11.0	-4.5	50.5	4952.0	4952.0
# 2	20.0	-3.5	47.5	4931.0	4931.0
Mean	15.5	-4.0	49.0	4941.5	4941.5
SD	6.4	0.7	2.1	14.8	14.8
%RSD	41.1	17.7	4.3	0.3	0.3

APPARENT CONCENTRATIONS
Identity 1 : Calibration blank Identity 2 : Type : CB
Weight : 1.0000 Volume : 1.00 Printed : 1:13:06 PM July 22, 2004

		K_766 ppm	Li670 ppm	Na589 ppm	Sc		Sc361 ppm
# 1	L	-0.1482	0.0011	0.0303	4952.000	H	101.0730
# 2	L	-0.0504	0.0013	0.0247	4931.000	H	100.6438
Mean	L	-0.0993	0.0012	0.0275	4941.500	H	100.8584
SD		0.0692	0.0002	0.0040	14.849		0.3035
%RSD		69.6771	15.1968	14.4125	0.301		0.3009

Checking calibration blank ...
Identity 1 : Calibration blank Identity 2 :

Report name	CRDL	Value
K_766	0.100	-0.099
Li670	0.010	0.001
Na589	0.050	0.027
Sc361	0.000	100.858

BACKGROUND CORRECTED INTENSITIES
Identity 1 : pbw Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:16:14 PM July 22, 2004
G22W3 DN 7.22-04

	K_766	Li670	Na589	Sc	Sc361
# 1	8.5	-12.5	25.0	4628.0	4628.0
# 2	16.5	-14.5	23.0	4605.0	4605.0
Mean	12.5	-13.5	24.0	4616.5	4616.5
SD	5.7	1.4	1.4	16.3	16.3
%RSD	45.3	10.5	5.9	0.4	0.4

APPARENT CONCENTRATIONS
Identity 1 : pbw Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:16:14 PM July 22, 2004
G22W3 DN 7-22-04

		K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	L	-0.1687 L	-0.0013 L	-0.0173	4628.000	94.4513
# 2	L	-0.0756 L	-0.0018 L	-0.0213	4605.000	93.9812
Mean	L	-0.1221 L	-0.0015 L	-0.0193	4616.500	94.2162
SD		0.0658	0.0004	0.0029	16.263	0.3324
%RSD		53.9104	26.6091	14.8059	0.352	0.3528

BACKGROUND CORRECTED INTENSITIES

Weight : 1.0000 Volume : 1.00 Printed : 1:19:22 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1693.0	-11.5	9083.5	4669.0	4669.0

CVOLUTION by Micro-Active Australia Pty Ltd 1:25:52 PM July 22, 2004

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# 2	1667.0	-14.5	9011.5	4647.0	4647.0
Mean	1680.0	-13.0	9047.5	4658.0	4658.0
SD	18.4	2.1	50.9	15.6	15.6
%RSD	1.1	16.3	0.6	0.3	0.3

APPARENT CONCENTRATIONS
Identity 1 : lcsw Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:19:22 PM July 22, 2004
G 22 W 3 DM 7-22-04

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	19.0633 L	-0.0009	19.2095	4669.000	95.2892
# 2	18.8566 L	-0.0018	19.1473	4647.000	94.8396
Mean	18.9600 L	-0.0014	19.1784	4658.000	95.0644
SD	0.1462	0.0006	0.0440	15.556	0.3179
%RSD	0.7711	43.9758	0.2296	0.334	0.3344

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247434r df50 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:22:26 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	30.0	-14.0	17654.0	4824.0	4824.0
# 2	15.0	-18.0	17576.0	4772.0	4772.0
Mean	22.5	-16.0	17615.0	4798.0	4798.0
SD	10.6	2.8	55.2	36.8	36.8
%RSD	47.1	17.7	0.3	0.8	0.8

APPARENT CONCENTRATIONS
Identity 1 : 247434r df50 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:22:28 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	0.0650 L	-0.0015	36.1970	4824.000	98.4570
# 2 L	-0.0990 L	-0.0026	36.4302	4772.000	97.3942
Mean L	-0.0170 L	-0.0021	36.3136	4798.000	97.9256
SD	0.1159	0.0008	0.1649	36.770	0.7515
%RSD	680.9104	38.3892	0.4541	0.766	0.7674

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247434dr df50 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:25:34 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	13.0	-13.5	17437.5	4800.5	4800.5
# 2	21.0	-18.5	17432.5	4766.5	4766.5
Mean	17.0	-16.0	17435.0	4783.5	4783.5
SD	5.7	3.5	3.5	24.0	24.0
%RSD	33.3	22.1	0.0	0.5	0.5

APPARENT CONCENTRATIONS
Identity 1 : 247434dr df50 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:25:34 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1 L	-0.1222 L	-0.0014	35.9276	4800.500	97.9767
# 2 L	-0.0317 L	-0.0028	36.1740	4766.500	97.2818

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lean L	-0.0770 L	-0.0021	36.0508	4783.500	97.6293
SD	0.0640	0.0010	0.1742	24.042	0.4913
RSD	83.1563	46.8980	0.4833	0.503	0.5033

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247434sr df50 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:28:42 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	62.0	-8.5	17773.5	4831.0	4831.0
# 2	55.0	-18.5	17694.5	4818.0	4818.0
lean	58.5	-13.5	17734.0	4824.5	4824.5
SD	4.9	7.1	55.9	9.2	9.2
RSD	8.5	52.4	0.3	0.2	0.2

APPARENT CONCENTRATIONS
Identity 1 : 247434sr df50 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:28:42 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	0.4176 L	-0.0000	36.3896	4831.000	98.6000
# 2	0.3420 L	-0.0027	36.3254	4818.000	98.3344
lean	0.3798 L	-0.0014	36.3575	4824.500	98.4672
SD	0.0535	0.0019	0.0453	9.192	0.1879
RSD	14.0769	138.1541	0.1247	0.191	0.1908

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247436r df50 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:31:50 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	22.5	-18.0	17355.0	4858.0	4858.0
# 2	23.5	-10.0	17214.0	4807.0	4807.0
lean	23.0	-14.0	17284.5	4832.5	4832.5
SD	0.7	5.7	99.7	36.1	36.1
RSD	3.1	40.4	0.6	0.7	0.7

APPARENT CONCENTRATIONS
Identity 1 : 247436r df50 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:31:50 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1 L	-0.0197 L	-0.0026	35.3332	4858.000	99.1518
# 2 L	-0.0060 L	-0.0004	35.4181	4807.000	98.1095
lean L	-0.0128 L	-0.0015	35.3757	4832.500	98.6307
SD	0.0097	0.0015	0.0601	36.062	0.7370
RSD	75.6459	99.2318	0.1698	0.746	0.7473

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 248204 df50 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:34:58 PM July 22, 2004

# 1	24.5	-10.5	15480.5	4821.0	4821.0
# 2	27.5	-15.5	15524.5	4794.0	4794.0
ean	26.0	-13.0	15502.5	4807.5	4807.5

VOLUTION by Micro-Active Australia Pty Ltd 1:42:44 PM July 22, 2004

D	2.1	3.5	31.1	19.1	19.1
RSD	8.2	27.2	0.2	0.4	0.4

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PPARENT CONCENTRATIONS
dentity 1 : 248204 df50 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 1:34:58 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	0.0043 L	-0.0006	31.7516	4821.000	98.3957
# 2	0.0392 L	-0.0019	32.0218	4794.000	97.8439
ean	0.0218 L	-0.0013	31.8867	4807.500	98.1198
D	0.0247	0.0010	0.1910	19.092	0.3902
RSD	113.2416	76.8673	0.5991	0.397	0.3977

BACKGROUND CORRECTED INTENSITIES
dentity 1 : 248206 df50 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 1:38:06 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	19.0	-19.5	16145.5	4837.5	4837.5
# 2	22.0	-13.5	15964.5	4764.5	4764.5
ean	20.5	-16.5	16055.0	4801.0	4801.0
D	2.1	4.2	128.0	51.6	51.6
RSD	10.3	25.7	0.8	1.1	1.1

PPARENT CONCENTRATIONS
dentity 1 : 248206 df50 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 1:38:06 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1 L	-0.0572 L	-0.0030	33.0054	4837.500	98.7329
# 2 L	-0.0204 L	-0.0014	33.1357	4764.500	97.2410
ean L	-0.0388 L	-0.0022	33.0706	4801.000	97.9869
D	0.0260	0.0011	0.0921	51.619	1.0550
RSD	67.0088	49.8890	0.2786	1.075	1.0766

BACKGROUND CORRECTED INTENSITIES
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 1:42:20 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1841.0	18938.0	14873.0	5055.5	5055.5
# 2	1844.0	18664.0	14707.0	4982.5	4982.5
ean	1842.5	18801.0	14790.0	5019.0	5019.0
D	2.1	193.7	117.4	51.6	51.6
RSD	0.1	1.0	0.8	1.0	1.0

PPARENT CONCENTRATIONS
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 1:42:20 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm

# 2	19.4627	4.8571	29.1816	4982.500 H	101.6963
Mean	19.3044	4.8572	29.1331	5019.000 H	102.4423
SD	0.2238	0.0001	0.0686	51.619	1.0550
RSD	1.1594	0.0020	0.2354	1.028	1.0298

EVOLUTION by Micro-Active Australia Pty Ltd 1:52:44 PM July 22, 2004

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Checking calibration verification ...
Identity 1 : CLP_CCV_SC Identity 2 :

Report name	Low limit	Value	High limit
K_766	18.000	19.304	22.000
Li670	4.500	4.857	5.500
Na589	27.000	29.133	33.000

BACKGROUND CORRECTED INTENSITIES
Identity 1 : Calibration blank Identity 2 : Type : CB
Weight : 1.0000 Volume : 1.00 Printed : 1:46:34 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	13.0	-7.5	26.5	5013.0	5013.0
# 2	6.0	-4.5	26.5	4932.0	4932.0
Mean	9.5	-6.0	26.5	4972.5	4972.5
SD	4.9	2.1	0.0	57.3	57.3
%RSD	52.1	35.4	0.0	1.2	1.2

APPARENT CONCENTRATIONS
Identity 1 : Calibration blank Identity 2 : Type : CB
Weight : 1.0000 Volume : 1.00 Printed : 1:46:34 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1 L	-0.1283	0.0003 L	-0.0184	5013.000 H	102.3196
# 2 L	-0.2017	0.0011 L	-0.0175	4932.000 H	100.6642
Mean L	-0.1650	0.0007 L	-0.0180	4972.500 H	101.4919
SD	0.0519	0.0005	0.0006	57.276	1.1706
%RSD	31.4472	77.7856	3.3844	1.152	1.1534

Checking calibration blank ...
Identity 1 : Calibration blank Identity 2 :

Report name	CRDL	Value	
K_766	0.100	-0.165	Contaminated
Li670	0.010	0.001	
Na589	0.050	-0.018	
Sc361	0.000	101.492	

EVOLUTION by Micro-Active Australia Pty Ltd 2:03:16 PM July 22, 2004

010184

Keep last result visible enabled ...
Starting run ...
Creating high priority queue entries ...
BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247434r df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:59:00 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	41.5	-17.5	446106.0	4739.5	4739.5
# 2	40.5	-11.5	442871.0	4709.5	4709.5
Mean	41.0	-14.5	444488.5	4724.5	4724.5
SD	0.7	4.2	2287.5	21.2	21.2
%RSD	1.7	29.3	0.5	0.4	0.4

APPARENT CONCENTRATIONS
Identity 1 : 247434r df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 1:59:00 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	0.2002 L	-0.0025 H	932.7336	4739.500	96.7300
# 2	0.1919 L	-0.0009 H	931.8682	4709.500	96.1169
Mean	0.1960 L	-0.0017 H	932.3009	4724.500	96.4235
SD	0.0059	0.0011	0.6119	21.213	0.4335
%RSD	3.0104	66.3716	0.0656	0.449	0.4496

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247434dr df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:02:08 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	51.5	1.5	438750.5	4712.0	4712.0
# 2	41.5	-9.5	434473.5	4649.0	4649.0
Mean	46.5	-4.0	436612.0	4680.5	4680.5
SD	7.1	7.8	3024.3	44.5	44.5
%RSD	15.2	194.5	0.7	1.0	1.0

APPARENT CONCENTRATIONS
Identity 1 : 247434dr df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:02:08 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	0.3161	0.0027 H	922.7076	4712.000	96.1680
# 2	0.2093 L	-0.0004 H	926.0951	4649.000	94.8804
Mean	0.2627	0.0011 H	924.4014	4680.500	95.5242
SD	0.0755	0.0022	2.3954	44.548	0.9104
%RSD	28.7414	191.4489	0.2591	0.952	0.9531

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:VOLUTION by Micro-Active Australia Pty Ltd 2:11:48 PM July 22, 2004

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247434sr df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:05:16 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1033.5	-10.5	442739.5	4722.5	4722.5
# 2	1048.5	-14.5	440274.5	4667.5	4667.5
Mean	1041.0	-12.5	441507.0	4695.0	4695.0
SD	10.6	2.8	1743.0	38.9	38.9
%RSD	1.0	22.6	0.4	0.8	0.8

APPARENT CONCENTRATIONS
Identity 1 : 247434sr df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:05:16 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	11.3998 L	-0.0006 H	929.0269	4722.500	96.3826
# 2	11.7086 L	-0.0018 H	934.7412	4667.500	95.2585
Mean	11.5542 L	-0.0012 H	931.8840	4695.000	95.8206
SD	0.2183	0.0008	4.0406	38.891	0.7948
%RSD	1.8898	67.1427	0.4336	0.828	0.8295

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247436r df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:08:24 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	57.0	-20.5	431050.5	4700.5	4700.5
# 2	49.0	-24.5	431189.5	4701.5	4701.5
Mean	53.0	-22.5	431120.0	4701.0	4701.0
SD	5.7	2.8	98.3	0.7	0.7
%RSD	10.7	12.6	0.0	0.0	0.0

APPARENT CONCENTRATIONS
Identity 1 : 247436r df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:08:24 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	0.3799 L	-0.0034 H	908.7310	4700.500	95.9330
# 2	0.2890 L	-0.0045 H	908.8307	4701.500	95.9534
Mean	0.3344 L	-0.0040 H	908.7808	4701.000	95.9432
SD	0.0642	0.0008	0.0705	0.707	0.0145
%RSD	19.2073	19.6947	0.0078	0.015	0.0151

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 248204 df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:11:32 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	28.0	-9.0	387360.0	4734.5	4734.5
# 2	29.0	-11.0	385511.0	4704.5	4704.5
Mean	28.5	-10.0	386435.5	4719.5	4719.5

RSD	2.5	14.1	0.3	0.4	0.4

PPARENT CONCENTRATIONS
dentity 1 : 248204 df2 Identity 2 : Type : SAMPLE
VOLUTION by Micro-Active Australia Pty Ltd 2:19:16 PM July 22, 2004

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eight : 1.0000 Volume : 1.00 Printed : 2:11:32 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	0.0487 L	-0.0002 H	810.7516	4734.500	96.6278
# 2	0.0620 L	-0.0008 H	812.0271	4704.500	96.0147
ean	0.0554 L	-0.0005 H	811.3893	4719.500	96.3213
D	0.0094	0.0004	0.9019	21.213	0.4335
RSD	17.0384	80.3708	0.1112	0.449	0.4501

ACKGROUND CORRECTED INTENSITIES
dentity 1 : 248206 df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:14:40 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	32.5	-12.0	401782.0	4775.0	4775.0
# 2	43.5	1.0	400111.0	4712.0	4712.0
ean	38.0	-5.5	400946.5	4743.5	4743.5
D	7.8	9.2	1181.6	44.5	44.5
RSD	20.5	167.1	0.3	0.9	0.9

PPARENT CONCENTRATIONS
dentity 1 : 248206 df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:14:40 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	0.0963 L	-0.0010 H	833.8065	4775.000	97.4555
# 2	0.2256	0.0025 H	841.4411	4712.000	96.1680
ean	0.1609	0.0008 H	837.6238	4743.500	96.8118
D	0.0914	0.0025	5.3985	44.548	0.9104
RSD	56.8183	329.7332	0.6445	0.939	0.9404

ACKGROUND CORRECTED INTENSITIES
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 2:18:54 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1868.5	19007.0	14924.5	5058.5	5058.5
# 2	1848.5	18706.0	14793.5	4988.5	4988.5
ean	1858.5	18856.5	14859.0	5023.5	5023.5
D	14.1	212.8	92.6	49.5	49.5
RSD	0.8	1.1	0.6	1.0	1.0

PPARENT CONCENTRATIONS
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 2:18:54 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	19.4244	4.8720	29.1682	5058.500 H	103.2495
# 2	19.4870	4.8622	29.3183	4988.500 H	101.8189
ean	19.4557	4.8671	29.2433	5023.500 H	102.5342
D	0.0443	0.0070	0.1061	49.497	1.0116

Checking calibration verification ...
Identity 1 : CLP_CCV_SC Identity 2 :

EVOLUTION by Micro-Active Australia Pty Ltd 2:29:46 PM July 22, 2004

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Report name	Low limit	Value	High limit
K_766	18.000	19.456	22.000
Li670	4.500	4.867	5.500
Na589	27.000	29.243	33.000

BACKGROUND CORRECTED INTENSITIES
Identity 1 : Calibration blank Identity 2 : Type : CB
Weight : 1.0000 Volume : 1.00 Printed : 2:23:06 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	31.0	-10.5	72.0	5002.5	5002.5
# 2	20.0	-9.5	98.0	4962.5	4962.5
Mean	25.5	-10.0	85.0	4982.5	4982.5
SD	7.8	0.7	18.4	28.3	28.3
%RSD	30.5	7.1	21.6	0.6	0.6

APPARENT CONCENTRATIONS
Identity 1 : Calibration blank Identity 2 : Type : CB
Weight : 1.0000 Volume : 1.00 Printed : 2:23:06 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	0.0638 L	-0.0005	0.0718	5002.500 H	102.1050
# 2 L	-0.0517 L	-0.0002	0.1249	4962.500 H	101.2876
Mean	0.0060 L	-0.0004	0.0984	4982.500 H	101.6963
SD	0.0817	0.0002	0.0375	28.284	0.5781
%RSD	1355.1686	48.0261	38.1467	0.568	0.5684

Checking calibration blank ...
Identity 1 : Calibration blank Identity 2 :

Report name	CRDL	Value	
K_766	0.100	0.006	
Li670	0.010	-0.000	
Na589	0.050	0.098	Contaminated
Sc361	0.000	101.696	

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247357 df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:26:16 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	113.0	-7.5	895320.5	4813.5	4813.5
# 2	109.0	-14.5	895508.5	4777.5	4777.5
Mean	111.0	-11.0	895414.5	4795.5	4795.5
SD	2.8	4.9	132.9	25.5	25.5
%RSD	2.5	45.0	0.0	0.5	0.5

APPARENT CONCENTRATIONS
Identity 1 : 247357 df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:26:16 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	0.9849	0.0002 H	1843.2572	4813.500	98.2424
# 2	0.9497 L	-0.0017 H	1857.5372	4777.500	97.5066
Mean	0.9673 L	-0.0007 H	1850.3972	4795.500	97.8745

RSD	2.5734	185.9217	0.5457	0.531	0.5315

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247357dr df2 Identity 2 : Type : SAMPLE
EVOLUTION by Micro-Active Australia Pty Ltd 2:29:46 PM July 22, 2004

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Weight : 1.0000 Volume : 1.00 Printed : 2:29:24 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	105.5	-3.5	888562.5	4777.0	4777.0
# 2	123.5	-9.5	888717.5	4743.0	4743.0
Mean	114.5	-6.5	888640.0	4760.0	4760.0
SD	12.7	4.2	109.6	24.0	24.0
%RSD	11.1	65.3	0.0	0.5	0.5

APPARENT CONCENTRATIONS
Identity 1 : 247357dr df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:29:24 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	0.9107	0.0013 H	1843.3216	4777.000	97.4964
# 2	1.1215 L	-0.0003 H	1856.8598	4743.000	96.8016
Mean	1.0161	0.0005 H	1850.0907	4760.000	97.1490
SD	0.1490	0.0012	9.5729	24.042	0.4913
%RSD	14.6657	244.7089	0.5174	0.505	0.5058

VOLUTION by Micro-Active Australia Pty Ltd 2:39:16 PM July 22, 2004 **010189**

ACKGROUND CORRECTED INTENSITIES
dentity 1 : 247357sr df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:32:32 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	2347.5	-7.5	885304.5	4713.0	4713.0
# 2	2318.5	-4.5	878626.5	4656.0	4656.0
ean	2333.0	-6.0	881965.5	4684.5	4684.5
D	20.5	2.1	4722.1	40.3	40.3
RSD	0.9	35.4	0.5	0.9	0.9

PPARENT CONCENTRATIONS
dentity 1 : 247357sr df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:32:32 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	26.2859	0.0002 H	1861.5031	4713.000	96.1884
# 2	26.2789	0.0010 H	1870.0790	4656.000	95.0235
ean	26.2824	0.0006 H	1865.7911	4684.500	95.6060
D	0.0049	0.0006	6.0640	40.305	0.8237
RSD	0.0188	96.9037	0.3250	0.860	0.8616

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247358r df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:35:40 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	129.5	-12.0	956946.5	4740.5	4740.5
# 2	132.5	-11.0	961523.5	4753.5	4753.5
Mean	131.0	-11.5	959235.0	4747.0	4747.0
SD	2.1	0.7	3236.4	9.2	9.2
%RSD	1.6	6.1	0.3	0.2	0.2

APPARENT CONCENTRATIONS
Identity 1 : 247358r df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:35:40 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	1.1897 L	-0.0010 H	2000.4753	4740.500	96.7505
# 2	1.2194 L	-0.0008 H	2004.5465	4753.500	97.0161
Mean	1.2045 L	-0.0009 H	2002.5109	4747.000	96.8833
SD	0.0210	0.0002	2.8787	9.192	0.1879
%RSD	1.7412	22.3374	0.1438	0.194	0.1939

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247359r df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:38:48 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	140.5	-2.0	886124.5	4785.0	4785.0
# 2	136.5	-8.0	866626.5	4766.0	4766.0
Mean	138.5	-5.0	866375.5	4775.5	4775.5

RSD 2.0 84.9 0.0 0.3 0.3

PPARENT CONCENTRATIONS
dentity 1 : 247359r df2 Identity 2 : Type : SAMPLE
VOLUTION by Micro-Active Australia Pty Ltd 2:48:28 PM July 22, 2004

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eight : 1.0000 Volume : 1.00 Printed : 2:38:48 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	1.2987	0.0017 H	1835.1903	4785.000	97.6599
# 2	1.2602	0.0001 H	1843.5506	4766.000	97.2716
ean	1.2795	0.0009 H	1839.3704	4775.500	97.4658
D	0.0272	0.0012	5.9116	13.435	0.2746
RSD	2.1278	129.8222	0.3214	0.281	0.2817

ACKGROUND CORRECTED INTENSITIES
dentity 1 : 247360r df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:41:54 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	124.5	-14.0	950179.0	4727.0	4727.0
# 2	130.5	-9.0	946933.0	4669.0	4669.0
ean	127.5	-11.5	948556.0	4698.0	4698.0
D	4.2	3.5	2295.3	41.0	41.0
RSD	3.3	30.7	0.2	0.9	0.9

PPARENT CONCENTRATIONS
dentity 1 : 247360r df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:41:54 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	1.1375 L	-0.0016 H	1992.0005	4727.000	96.4746
# 2	1.2234 L	-0.0002 H	2009.8569	4669.000	95.2892
ean	1.1804 L	-0.0009 H	2000.9287	4698.000	95.8819
D	0.0608	0.0009	12.6264	41.012	0.8382
RSD	5.1484	103.0196	0.6310	0.873	0.8742

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 247433r df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:45:02 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	135.5	-5.5	884564.5	4755.0	4755.0
# 2	136.5	-4.5	866227.5	4618.0	4618.0
ean	136.0	-5.0	875396.0	4686.5	4686.5
D	0.7	0.7	12966.2	96.9	96.9
RSD	0.5	14.1	1.5	2.1	2.1

APPARENT CONCENTRATIONS
Identity 1 : 247433r df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:45:04 PM July 22, 2004

	K_766 ppm	Li670 ppm	Na589 ppm	Sc	Sc361 ppm
# 1	1.2525	0.0007 H	1843.5179	4755.000	97.0468
# 2	1.3091	0.0010 H	1858.8595	4618.000	94.2469
Mean	1.2808	0.0009 H	1851.1887	4686.500	95.6468
SD	0.0400	0.0002	10.8481	96.874	1.9798

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ACKGROUND CORRECTED INTENSITIES
dentity 1 : 247435r df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:48:12 PM July 22, 2004
VOLUTION by Micro-Active Australia Pty Ltd 2:54:48 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	177.0	-10.0	883441.0	4773.0	4773.0
# 2	179.0	-15.0	880125.0	4747.0	4747.0
ean	178.0	-12.5	881783.0	4760.0	4760.0
D	1.4	3.5	2344.8	18.4	18.4
RSD	0.8	28.3	0.3	0.4	0.4

PPARENT CONCENTRATIONS
dentity 1 : 247435r df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:48:12 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	1.7103 L	-0.0005 H	1834.2326	4773.000	97.4147
# 2	1.7436 L	-0.0018 H	1837.3566	4747.000	96.8833
ean	1.7269 L	-0.0012 H	1835.7946	4760.000	97.1490
D	0.0235	0.0010	2.2090	18.385	0.3757
RSD	1.3630	84.3468	0.1203	0.386	0.3868

ACKGROUND CORRECTED INTENSITIES
dentity 1 : 248205 df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:51:20 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	96.0	-14.0	780376.0	4821.0	4821.0
# 2	87.0	-10.0	777050.0	4772.0	4772.0
ean	91.5	-12.0	778713.0	4796.5	4796.5
D	6.4	2.8	2351.8	34.6	34.6
RSD	7.0	23.6	0.3	0.7	0.7

APPARENT CONCENTRATIONS
Identity 1 : 248205 df2 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:51:20 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	0.7950 L	-0.0015 H	1604.1045	4821.000	98.3957
# 2	0.7053 L	-0.0005 H	1613.6693	4772.000	97.3942
ean	0.7501 L	-0.0010 H	1608.8869	4796.500	97.8950
D	0.0634	0.0007	6.7633	34.648	0.7081
RSD	8.4498	74.7335	0.4204	0.722	0.7233

BACKGROUND CORRECTED INTENSITIES
Identity 1 : 248207 df2 Identity 2 : Type : SAMPLE
Weight : 1.0000 Volume : 1.00 Printed : 2:54:28 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	97.5	-11.5	816099.0	4693.0	4693.0
# 2	85.5	-5.5	814844.0	4668.0	4668.0
Mean	91.5	-8.5	815471.5	4680.5	4680.5
SD	8.5	4.2	887.4	17.7	17.7
%RSD	9.3	49.9	0.1	0.4	0.4

dentity 1 : 248207 012 Identity 2 : Type : SAMPLE
eight : 1.0000 Volume : 1.00 Printed : 2:54:28 PM July 22, 2004

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	K_766	Li670	Na589	Sc	Sc361

VOLUTION by Micro-Active Australia Pty Ltd 3:03:18 PM July 22, 2004

	ppm	ppm	ppm		ppm
# 1	0.8409 L	-0.0009 H	1723.2945	4693.000	95.7797
# 2	0.7098	0.0007 H	1729.8598	4668.000	95.2688
ean	0.7754 L	-0.0001 H	1726.5772	4680.500	95.5242
D	0.0927	0.0012	4.6424	17.678	0.3613
RSD	11.9562	1131.9175	0.2689	0.378	0.3782

ACKGROUND CORRECTED INTENSITIES
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 2:58:40 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	1812.5	18617.5	14596.0	4937.5	4937.5
# 2	1774.5	18434.5	14383.0	4870.5	4870.5
ean	1793.5	18526.0	14489.5	4904.0	4904.0
D	26.9	129.4	150.6	47.4	47.4
RSD	1.5	0.7	1.0	1.0	1.0

PPARENT CONCENTRATIONS
dentity 1 : CLP_CCV_SC Identity 2 : Type : CV
eight : 1.0000 Volume : 1.00 Printed : 2:58:40 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1	19.3024	4.8891	29.2254	4937.500 H	100.7766
# 2	19.1557	4.9077	29.1950	4870.500	99.4073
ean	19.2290	4.8984	29.2102	4904.000 H	100.0920
D	0.1037	0.0131	0.0215	47.376	0.9682
RSD	0.5395	0.2675	0.0736	0.966	0.9674

hecking calibration verification ...
dentity 1 : CLP_CCV_SC Identity 2 :

eport name	Low limit	Value	High limit
_766	18.000	19.229	22.000
i670	4.500	4.898	5.500
a589	27.000	29.210	33.000

ACKGROUND CORRECTED INTENSITIES
dentity 1 : Calibration blank Identity 2 : Type : CB
eight : 1.0000 Volume : 1.00 Printed : 3:02:52 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
# 1	19.0	-12.5	188.0	4973.5	4973.5
# 2	18.0	-15.5	158.0	4892.5	4892.5
ean	18.5	-14.0	173.0	4933.0	4933.0
D	0.7	2.1	21.2	57.3	57.3
RSD	3.8	15.2	12.3	1.2	1.2

PPARENT CONCENTRATIONS
dentity 1 : Calibration blank Identity 2 : Type : CB
eight : 1.0000 Volume : 1.00 Printed : 3:02:52 PM July 22, 2004

	K_766	Li670	Na589	Sc	Sc361
	ppm	ppm	ppm		ppm
# 1 L	-0.0629 L	-0.0010	0.3038	4973.500 H	101.5124

ean	L -0.0667	L -0.0014	0.2765	4933.000 H	100.6847
D	0.0053	0.0006	0.0386	57.276	1.1706
RSD	7.9791	41.8692	13.9527	1.161	1.1626

010193

VOLUTION by Micro-Active Australia Pty Ltd 3:07:34 PM July 22, 2004

hecking calibration blank ...
dentity 1 : Calibration blank Identity 2 :

eport name	CRDL	Value	
_766	0.100	-0.067	
1670	0.010	-0.001	
a589	0.050	0.277	Contaminated
c361	0.000	100.685	

010194

ICP ANALYSIS

PROJ. NO.	PROJECT	TO#	DATE	MATRIX	LOGBK PG
10542.02.002	Div 20	040713-4 040714-12 040720-10	7-22-04	Liquid	57 164
	Div 20		7-22-04	Liquid	57 166

INSTRUMENT: TLACE2 FILENAME: B040722

INSTRUMENT DL:

Methods: DATLY2 Standards: blk

010195

Run Times: 07/22/04 09:00:27

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Avge	-.0000	.0003	-.0000	.0000	-.0000	-.0001	.0000
SDev	.0000	.0000	.0000	.0000	.0000	.0000	.0000
%RSD	38.41	.9424	71.03	11.19	9.163	4.498	232.3
#1	-.0000	.0003	-.0001	.0001	-.0000	-.0001	.0000
#2	-.0000	.0003	-.0000	.0000	-.0000	-.0001	-.0000

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Avge	.0000	.0000	-.0000	-.0000	.0003	.0000	.0003
SDev	.0000	.0000	.0000	.0000	.0000	.0000	.0000
%RSD	24.80	265.0	46.30	203.3	1.863	46.30	6.624
#1	.0000	.0000	-.0000	.0000	.0003	.0000	.0003
#2	.0000	-.0000	-.0000	-.0000	.0003	.0000	.0003

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Avge	-.0000	.0000	-.0000	.0000	-.0000	-.0002	-.0101
SDev	.0000	.0000	.0000	.0000	.0000	.0000	.0002
%RSD	33.53	102.4	77.91	27.38	358.6	24.39	1.573
#1	-.0000	.0000	-.0000	.0000	-.0000	-.0001	-.0100
#2	-.0000	.0000	-.0000	.0000	.0000	-.0002	-.0102

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Avge	.0000	.0000	.0001	.0000	.0001	.0006	-.0010
SDev	.0000	.0000	.0001	.0001	.0000	.0001	.0001
%RSD	141.4	67.72	85.78	472.2	19.78	11.84	7.276
#1	.0000	.0000	.0000	.0001	.0001	.0005	-.0011
#2	.0000	.0000	.0002	-.0000	.0001	.0006	-.0010

Elem	Sc3613	1960/1	1960/2	Si2881	Sn1899	Sr4215	Th2837
Avge	71.34	-.0001	.0001	.0016	.0000	-.0000	.0000
SDev	.67	.0000	.0000	.0000	.0000	.0000	.0000
%RSD	.9372	41.38	23.25	2.699	43.61	46.30	22.35
#1	71.71	-.0001	.0001	.0016	.0000	-.0000	.0000
#2	70.76	-.0001	.0001	.0017	.0000	-.0000	.0000

Elem	Ti3349	Tl1908	U_4090	V_2924	W_2079	Y_3710	Zn2062
Avge	-.0001	-.0001	-.0004	-.0000	.0002	.0000	.0000
SDev	.0000	.0000	.0000	.0000	.0001	.0000	.0000
%RSD	15.56	28.98	.7412	7.089	36.28	141.4	38.73
#1	-.0001	-.0002	-.0004	-.0000	.0002	.0000	.0000
#2	-.0001	-.0001	-.0004	-.0000	.0001	.0000	.0000

Elem	Zr3496
Avge	.0002
SDev	.0000
%RSD	8.093
#1	.0002
#2	.0002

DL 7-22-04

7/23/04

010196

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	712276	10000	--	--	--	--	--
SDev	6712.565	.0000000	--	--	--	--	--
%RSD	.9424099	.0000000	--	--	--	--	--
#1	717023	10000	--	--	--	--	--
#2	707530	10000	--	--	--	--	--

Method: DAILY2 Standard: clp_std4
Run Time: 07/22/04 09:05:13

010197

Elem	Ag3280	As1890	2203/1	2203/2	Sb206A	1960/1	1960/2
Avge	.0784	.1068	.2934	.2535	.1626	.2378	.2386
SDev	.0000	.0001	.0015	.0021	.0005	.0024	.0028
%RSD	.0485	.0547	.4980	.8084	.2956	.9950	1.184
#1	.0785	.1068	.2924	.2520	.1623	.2361	.2366
#2	.0784	.1067	.2944	.2549	.1630	.2395	.2406

Elem	Tl190A
Avge	.2080
SDev	.0002
%RSD	.0810
#1	.2082
#2	.2079

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	731324	10000	--	--	--	--	--
SDev	1222.588	.0000000	--	--	--	--	--
%RSD	.1671747	.0000000	--	--	--	--	--
#1	732188	10000	--	--	--	--	--
#2	730459	10000	--	--	--	--	--

Method: DAILY2 Standard: clp_std1

010198

Run Time: 07/22/04 09:09:36

Elem	Al3082	Ca3179	Fe2714	K_7664	Li6707	Mg2790	Na3302
Avge	.1049	.1900	.0946	.1886	3.211	.0808	.0085
SDev	.0002	.0003	.0000	.0004	.002	.0001	.0000
%RSD	.1761	.1562	.0117	.1969	.0518	.1197	.0665
#1	.1050	.1902	.0946	.1889	3.212	.0808	.0085
#2	.1047	.1898	.0946	.1884	3.209	.0807	.0085

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	739181	10000	--	--	--	--	--
SDev	2083.137	.0000000	--	--	--	--	--
%RSD	.2818168	.0000000	--	--	--	--	--
#1	740654	10000	--	--	--	--	--
#2	737708	10000	--	--	--	--	--

Method: DAILY2 Standard: clp_std5
Run Time: 07/22/04 09:13:16

010199

Elem	B_2496	Bi2230	Mo2020	P_1782	Si2881	Sn1899	Sr4215
Avge	.1532	.0317	.3295	.0158	.1603	.1484	2.598
SDev	.0001	.0000	.0009	.0003	.0003	.0001	.000
%RSD	.0526	.0308	.2849	1.853	.1969	.0320	.0156
#1	.1531	.0317	.3289	.0156	.1606	.1485	2.598
#2	.1533	.0317	.3302	.0160	.1601	.1484	2.598

Elem	Ti3349
Avge	2.622
SDev	.000
%RSD	.0106
#1	2.622
#2	2.622

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	746850	10000	--	--	--	--	--
SDev	928.4312	.0000000	--	--	--	--	--
%RSD	.1243129	.0000000	--	--	--	--	--
#1	747507	10000	--	--	--	--	--
#2	746194	10000	--	--	--	--	--

Method: DAILY2 Standard: clp_std2
Run Time: 07/22/04 09:16:57

010200

Elem	Ba4934	Be3130	Cr2677	Cu3247	Ni2316
Avge	1.185	1.286	.3897	.2952	.3231
SDev	.000	.000	.0009	.0000	.0007
%RSD	.0362	.0035	.2324	.0052	.2292
#1	1.185	1.286	.3904	.2952	.3236
#2	1.185	1.286	.3891	.2952	.3226

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	728744	10000	--	--	--	--	--
SDev	4734.080	.0000000	--	--	--	--	--
%RSD	.6496223	.0000000	--	--	--	--	--
#1	725396	10000	--	--	--	--	--
#2	732091	10000	--	--	--	--	--

Method: DAILY2 Standard: clp_std3
Run Time: 07/22/04 09:20:15

010201

Elem	Cd2265	Co2286	Mn2576	V_2924	Zn2062
Avge	.9261	.2016	.8222	.1861	.2766
SDev	.0029	.0000	.0004	.0002	.0001
%RSD	.3094	.0077	.0513	.0874	.0526
#1	.9241	.2016	.8225	.1860	.2765
#2	.9282	.2016	.8219	.1862	.2767

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	731784	10000	--	--	--	--	--
SDev	9079.958	.0000000	--	--	--	--	--
%RSD	1.240797	.0000000	--	--	--	--	--
#1	725364	10000	--	--	--	--	--
#2	738205	10000	--	--	--	--	--

Method: DAILY2 Standard: clp_std6
Run Time: 07/22/04 09:23:56

010202

Elem	La3988	Na5889	Pd3404	S_1820	Th2837	U_4090	W_2079
Avge	.4862	.1419	.2019	.0322	.1091	.0770	.1111
SDev	.0001	.0000	.0004	.0002	.0001	.0001	.0004
%RSD	.0307	.0034	.1855	.6427	.0643	.1531	.3752
#1	.4861	.1419	.2016	.0320	.1091	.0771	.1114
#2	.4863	.1419	.2022	.0323	.1090	.0769	.1108

Elem	Y_3710	Zr3496
Avge	.7769	1.927
SDev	.0011	.002
%RSD	.1442	.0988
#1	.7777	1.929
#2	.7761	1.926

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	730454	10000	--	--	--	--	--
SDev	1967.878	.0000000	--	--	--	--	--
%RSD	.2694050	.0000000	--	--	--	--	--
#1	731845	10000	--	--	--	--	--
#2	729062	10000	--	--	--	--	--

Standardization Report 07/22/04 09:27:46 AM page 1

Method: DAILY2 Slope = Conc(SIR)/IR

010203

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	clp_std4	blk	25.4897	.000643	07/22/04 09:23:56
Al3082	308.215	clp_std1	blk	478.274	-.157803	07/22/04 09:23:56
As1890	189.042	clp_std4	blk	93.5987	.004518	07/22/04 09:23:56
B_2496	249.678	clp_std5	blk	65.2948	-.003207	07/22/04 09:23:56
Ba4934	493.409	clp_std2	blk	8.43843	.000166	07/22/04 09:23:56
Be3130	313.042	clp_std2	blk	3.88833	.000284	07/22/04 09:23:56
Bi2230	223.061	clp_std5	blk	156.261	-.002062	07/22/04 09:23:56
Ca3179	317.933	clp_std1	blk	263.226	-.004060	07/22/04 09:23:56
Cd2265	226.502	clp_std3	blk	10.7945	-.000052	07/22/04 09:23:56
Co2286	228.616	clp_std3	blk	49.5973	.000313	07/22/04 09:23:56
Cr2677	267.716	clp_std2	blk	25.6573	.000327	07/22/04 09:23:56
Cu3247	324.753	clp_std2	blk	33.9142	-.010976	07/22/04 09:23:56
Fe2714	271.441	clp_std1	blk	529.195	-.014456	07/22/04 09:23:56
K_7664	766.491	clp_std1	blk	265.495	-.078859	07/22/04 09:23:56
La3988	398.853	clp_std6	blk	20.5866	.000188	07/22/04 09:23:56
Li6707	670.784	clp_std1	blk	3.11469	-.000048	07/22/04 09:23:56
Mg2790	279.078	clp_std1	blk	309.394	.003895	07/22/04 09:23:56
Mn2576	257.610	clp_std3	blk	12.1640	-.000085	07/22/04 09:23:56
Mo2020	202.030	clp_std5	blk	30.3514	.000084	07/22/04 09:23:56
Na3302	330.232	clp_std1	blk	5756.06	.950636	07/22/04 09:23:56
Na5889	588.991	clp_std6	blk	6.61338	.066679	07/22/04 09:23:56
Ni2316	231.604	clp_std2	blk	30.9529	-.000547	07/22/04 09:23:56
P_1782	178.287	clp_std5	blk	632.354	-.008461	07/22/04 09:23:56
2203/1	220.351	clp_std4	blk	34.0966	-.004109	07/22/04 09:23:56
2203/2	220.352	clp_std4	blk	39.4556	-.000596	07/22/04 09:23:56
Pd3404	340.458	clp_std6	blk	50.8775	-.004290	07/22/04 09:23:56
S_1820	182.040	clp_std6	blk	316.104	-.175618	07/22/04 09:23:56
Sb2068	206.838	clp_std4	blk	61.1089	.062008	07/22/04 09:23:56
Sc3613	361.384	blk	dark	1.40379	.000000	07/22/04 09:23:56
1960/1	196.021	clp_std4	blk	42.0372	.004536	07/22/04 09:23:56
1960/2	196.022	clp_std4	blk	41.9267	-.002799	07/22/04 09:23:56
Si2881	288.158	clp_std5	blk	62.7757	-.102909	07/22/04 09:23:56
Pb220	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDI7FD
Se196	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Sn1899	189.989	clp_std5	blk	67.4264	-.002039	07/22/04 09:23:56
Sr4215	421.552	clp_std5	blk	3.84941	.000008	07/22/04 09:23:56
Th2837	283.730	clp_std6	blk	95.7223	-.002220	07/22/04 09:23:56
Ti3349	334.941	clp_std5	blk	3.81423	.000233	07/22/04 09:23:56
Tl1908	190.864	clp_std4	blk	48.0279	.007171	07/22/04 09:23:56
U_4090	409.014	clp_std6	blk	136.748	.048379	07/22/04 09:23:56
V_2924	292.402	clp_std3	blk	53.7244	.001735	07/22/04 09:23:56
W_2079	207.914	clp_std6	blk	45.0544	-.008051	07/22/04 09:23:56
Y_3710	371.030	clp_std6	blk	12.8695	-.000018	07/22/04 09:23:56
Zn2062	206.200	clp_std3	blk	36.1606	-.000633	07/22/04 09:23:56
Zr3496	349.621	clp_std6	blk	5.67171	-.001024	07/22/04 09:23:56

Analysis Report QC Standard 07/22/04 11:11:34 AM page 1

Method: DAILY2 Sample Name: icv/ccv Operator:

010204

Run Time: 07/22/04 11:06:26

Comment:

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9863	9.883	5.103	4.826	10.12	.9766	5.027
SDev	.0004	.005	.000	.006	.02	.0004	.011
%RSD	.0373	.0515	.0072	.1314	.1648	.0387	.2109
#1	.9860	9.887	5.103	4.821	10.10	.9763	5.035
#2	.9865	9.880	5.103	4.830	10.13	.9768	5.020
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	10.00	5.000	5.000	10.00	1.000	5.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.96	1.007	5.007	1.978	2.039	10.27	18.63
SDev	.02	.000	.002	.004	.001	.01	.05
%RSD	.1167	.0428	.0432	.1810	.0612	.1205	.2623
#1	19.95	1.007	5.006	1.975	2.040	10.26	18.66
#2	19.98	1.007	5.009	1.981	2.038	10.28	18.59
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00	1.000	5.000	2.000	2.000	10.00	20.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.993	4.736	20.02	1.017	5.025	28.30	Q15.83
SDev	.009	.010	.03	.002	.014	.41	.04
%RSD	.1846	.2175	.1350	.1577	.2800	1.437	.2212
#1	4.986	4.743	20.00	1.016	5.015	28.59	Q15.85
#2	4.999	4.728	20.04	1.018	5.035	28.01	Q15.81
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	5.000	5.000	20.00	1.000	5.000	30.00	30.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.932	5.299	5.003	5.015	1.010	Q5.068	.9941
SDev	.000	.025	.054	.060	.003	.004	.0009
%RSD	.0027	.4798	1.078	1.198	.3192	.0856	.0868
#1	4.932	5.317	5.041	5.057	1.013	Q5.065	.9935
#2	4.932	5.281	4.965	4.972	1.008	Q5.071	.9947
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value	5.000	5.000			1.000	1.000	1.000
Range	10.00	10.00			10.00	10.00	10.00

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010205

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	101.4	5.254	5.287	5.007	5.011	5.276	4.989
SDev	.2	.051	.053	.003	.058	.052	.010
%RSD	.1911	.9678	.9969	.0525	1.158	.9872	.2079
#1	101.6	5.290	5.324	5.009	5.052	5.313	4.982
#2	101.3	5.218	5.250	5.005	4.970	5.239	4.996
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass
Value				5.000	5.000	5.000	5.000
Range				10.00	10.00	10.00	10.00

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.042	.9826	Q1.043	5.340	.9580	4.963	Q1.682
SDev	.008	.0051	.000	.027	.0028	.003	.001
%RSD	.1664	.5219	.0349	.5023	.2968	.0528	.0633
#1	5.036	.9789	Q1.043	5.321	.9600	4.961	Q1.683
#2	5.048	.9862	Q1.043	5.359	.9559	4.964	Q1.681
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail
Value	5.000	1.000	5.000	5.000	1.000	5.000	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.048	.9993	4.886
SDev	.000	.0007	.007
%RSD	.0029	.0699	.1434
#1	5.048	.9988	4.881
#2	5.048	.9998	4.891
Errors	QC Pass	QC Pass	QC Pass
Value	5.000	1.000	5.000
Range	10.00	10.00	10.00

Ns for CCVs
Ti @ 1ppm
S @ 5ppm

7/23/04

010206

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	722400	10000	--	--	--	--	--
SDev	1424.820	.0000000	--	--	--	--	--
%RSD	.1972341	.0000000	--	--	--	--	--
#1	723408	10000	--	--	--	--	--
#2	721393	10000	--	--	--	--	--

010207

Analysis Report Blank Sample 07/22/04 11:19:15 AM page 1

Method: DAILY2 Sample Name: icb/ccb Operator:
Run Time: 07/22/04 11:14:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0023	.0023	.0018	-.0000	.0000	-.0012
SDev	.0005	.0018	.0038	.0007	.0000	.0000	.0000
%RSD	522.7	79.47	167.5	40.85	375.7	98.57	1.541
#1	.0004	.0036	.0050	.0023	.0000	.0000	-.0012
#2	-.0002	.0010	-.0004	.0013	-.0000	.0000	-.0012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	-.0001	-.0002	.0001	-.0005	.0006	-.0049
SDev	.0003	.0001	.0004	.0006	.0002	.0242	.0045
%RSD	25.15	96.88	234.1	468.6	44.78	4214.	90.97
#1	.0014	-.0001	.0001	.0006	-.0003	.0177	-.0018
#2	.0010	-.0000	-.0004	-.0003	-.0006	-.0165	-.0081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0001	.0034	.0000	.0012	L-.0758	.0046
SDev	.0000	.0000	.0010	.0000	.0011	.0508	.0001
%RSD	.8292	78.19	29.71	172.3	96.13	67.09	3.299
#1	-.0002	.0001	.0027	-.0000	.0020	-.0398	.0047
#2	-.0002	.0000	.0041	.0000	.0004	L-.1118	.0045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0015	-.0008	-.0004	-.0027	H.0314	-.0077
SDev	.0008	.0062	.0023	.0022	.0003	.0032	.0006
%RSD	141.9	408.7	302.9	521.7	10.28	10.21	8.189
#1	-.0011	.0028	-.0024	-.0020	-.0029	H.0336	-.0081
#2	.0000	-.0059	.0009	.0011	-.0025	H.0291	-.0073
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010208

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	102.4	.0000	-.0019	-.0031	-.0005	-.0012	-.0008
SDev	.5	.0015	.0007	.0003	.0022	.0000	.0017
%RSD	.5010	4895.	35.22	10.03	431.1	3.877	201.4
#1	102.0	.0011	-.0023	-.0029	-.0021	-.0012	-.0020
#2	102.7	-.0010	-.0014	-.0034	.0011	-.0013	.0004
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	-.0010	-.0001	.0026	.0048	.0001	-.0011
SDev	.0000	.0017	.0000	.0014	.0060	.0004	.0038
%RSD	162.9	158.2	21.93	53.59	125.3	318.6	359.1
#1	.0000	.0001	-.0001	.0035	.0090	-.0002	.0016
#2	-.0000	-.0022	-.0002	.0016	.0005	.0004	-.0037
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	-.0003	-.0001
SDev	.0000	.0001	.0001
%RSD	29.72	33.96	108.9
#1	.0001	-.0002	-.0000
#2	.0000	-.0004	-.0002
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010209

Int:Std	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	729256	10000	--	--	--	--	--
SDev	3727.160	.0000000	--	--	--	--	--
%RSD	.5110911	.0000000	--	--	--	--	--
#1	726620	10000	--	--	--	--	--
#2	731891	10000	--	--	--	--	--

010210

Analysis Report 07/22/04 11:25:59 AM page 1

Method: DAILY2 Sample Name: pbw Operator:
Run Time: 07/22/04 11:20:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	.0100	.0015	.0050	.0000	-.0000	-.0021
SDev	.0007	.0007	.0003	.0003	.0000	.0000	.0049
%RSD	2186.	7.230	22.47	6.300	46.39	19.02	227.0
#1	.0004	.0095	.0013	.0053	.0000	-.0000	.0013
#2	-.0005	.0105	.0018	.0048	.0000	-.0000	-.0056
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0135	-.0001	.0004	.0005	.0002	-.0038	-.0044
SDev	.0002	.0001	.0001	.0005	.0002	.0160	.0040
%RSD	1.157	104.7	26.22	91.48	135.5	417.4	90.94
#1	.0136	-.0002	.0003	.0008	.0000	.0075	-.0073
#2	.0134	-.0000	.0005	.0002	.0003	-.0151	-.0016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0000	.0112	.0000	.0006	-.0138	.0058
SDev	.0004	.0000	.0115	.0000	.0001	.1440	.0012
%RSD	109.6	15.26	102.7	72.26	21.31	1044.	20.59
#1	.0006	.0000	.0193	.0001	.0005	H.0890	.0050
#2	.0001	.0000	.0031	.0000	.0006	L-.1156	.0067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0015	.0063	-.0010	-.0003	-.0007	H.0252	-.0007
SDev	.0006	.0069	.0021	.0012	.0015	.0034	.0019
%RSD	42.03	109.0	222.2	348.7	218.8	13.61	259.5
#1	-.0011	.0014	.0006	.0005	.0004	H.0227	.0006
#2	-.0020	H.0112	-.0025	-.0012	-.0018	H.0276	-.0021
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	98.90	-.0074	.0017	.0063	-.0005	-.0013	-.0007
SDev	.66	.0077	.0062	.0027	.0015	.0016	.0001
%RSD	.6682	103.5	368.9	43.37	284.0	116.4	9.712
#1	98.43	-.0129	.0061	.0044	.0005	-.0002	-.0007
#2	99.37	-.0020	-.0027	.0083	-.0016	-.0025	-.0008
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	-.0002	-.0001	-.0016	.0093	.0002	.0007
SDev	.0000	.0025	.0001	.0001	.0070	.0001	.0022
%RSD	71.28	1364.	71.61	3.286	75.60	37.10	307.6
#1	.0001	.0016	-.0001	-.0017	.0142	.0001	-.0009
#2	.0000	-.0019	-.0002	-.0016	.0043	.0002	.0023
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0006	-.0000
SDev	.0000	.0001	.0004
%RSD	29.30	13.68	2918.
#1	.0001	.0007	.0003
#2	.0001	.0005	-.0003
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010212

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	704458	10000	--	--	--	--	--
SDev	4670.440	.0000000	--	--	--	--	--
%RSD	.6629830	.0000000	--	--	--	--	--
#1	701156	10000	--	--	--	--	--
#2	707761	10000	--	--	--	--	--

Method: DAILY2 Sample Name: lcsw Operator: 010213
Run Time: 07/22/04 11:26:11
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0502	1.964	2.038	4.074	2.023	.0493	.0021
SDev	.0001	.014	.000	.010	.001	.0000	.0041
%RSD	.1178	.6924	.0014	.2475	.0283	.0598	196.9
#1	.0502	1.974	2.038	4.067	2.023	.0493	.0049
#2	.0501	1.954	2.038	4.081	2.023	.0493	-.0008

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.54	.0496	.4943	.2003	.2530	1.078	17.38
SDev	.04	.0004	.0005	.0002	.0005	.009	.00
%RSD	.1768	.8009	.0921	.1022	.2136	.8107	.0203
#1	20.57	.0499	.4946	.2002	.2534	1.072	17.38
#2	20.51	.0493	.4940	.2005	.2526	1.084	17.37

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0001	20.42	.5042	.0003	18.12	10.16
SDev	.0003	.0000	.03	.0000	.0002	.19	.02
%RSD	267.1	21.91	.1330	.0025	52.77	1.050	.1528
#1	.0003	.0001	20.44	.5042	.0004	18.26	10.17
#2	-.0001	.0001	20.40	.5042	.0002	17.99	10.15

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4920	.0037	.5040	.5064	.0013	.0333	.4930
SDev	.0009	.0085	.0080	.0025	.0022	.0140	.0036
%RSD	.1895	231.2	1.585	.4968	176.0	42.07	.7214
#1	.4914	.0097	.5097	.5081	.0028	.0432	.4956
#2	.4927	-.0023	.4984	.5046	-.0003	.0234	.4905

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	95.81	2.076	2.098	.0062	.5056	2.091	-.0019
SDev	.27	.003	.017	.0010	.0043	.013	.0007
%RSD	.2798	.1462	.8323	16.83	.8584	.6066	36.33
#1	95.62	2.079	2.110	.0055	.5087	2.100	-.0014
#2	96.00	2.074	2.086	.0069	.5025	2.082	-.0024

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	-.0136	-.0001	2.106	.0114	.4956	.0048
SDev	.0000	.0023	.0001	.009	.0123	.0002	.0039
%RSD	.7448	16.99	118.1	.4448	108.8	.0443	80.98
#1	.0008	-.0152	-.0000	2.113	.0201	.4954	.0075
#2	.0008	-.0119	-.0002	2.100	.0026	.4957	.0020

010214

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0000	.4920	.0000
SDev	.0001	.0008	.0004
%RSD	8373.	.1662	3834.
#1	.0000	.4925	.0003
#2	-.0000	.4914	-.0003

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	682438	10000	--	--	--	--	--
SDev	1912.724	.0000000	--	--	--	--	--
%RSD	.2802782	.0000000	--	--	--	--	--
#1	681085	10000	--	--	--	--	--
#2	683790	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 247357r df100 Operator:
Run Time: 07/22/04 11:31:29
Comment:
Mode: CONC Corr. Factor: 1

010215

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0062	.0039	27.82	.0044	-.0000	-.0018
SDev	.0001	.0029	.0011	.04	.0000	.0000	.0025
%RSD	44.11	45.97	28.81	.1542	.9255	605.5	135.9
#1	-.0003	.0042	.0047	27.79	.0044	-.0000	-.0001
#2	-.0001	.0082	.0031	27.86	.0045	.0000	-.0036

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0080	.0001	.0006	.0003	.0002	-.0107	.0079
SDev	.0003	.0002	.0003	.0002	.0001	.0011	.0055
%RSD	3.546	147.5	57.50	74.58	42.12	10.31	69.60
#1	.0082	-.0000	.0004	.0001	.0002	-.0115	.0040
#2	.0078	.0003	.0008	.0004	.0001	-.0099	.0117

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	.0001	-.0017	.0000	-.0002	33.16	17.38
SDev	.0002	.0000	.0093	.0000	.0004	.00	.07
%RSD	73.26	51.50	533.5	8.892	280.8	.0016	.4267
#1	-.0004	.0000	-.0083	.0000	-.0005	33.16	17.43
#2	-.0001	.0001	.0048	.0000	.0001	33.16	17.32

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0009	-.0111	-.0031	-.0003	-.0037	.0301	-.0020
SDev	.0001	.0076	.0012	.0008	.0006	.0104	.0005
%RSD	14.56	68.15	39.50	225.4	16.59	27.27	26.47
#1	-.0009	-.0058	-.0022	.0002	-.0042	.0454	-.0016
#2	-.0008	-.0165	-.0039	-.0009	-.0033	.0308	-.0024

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	99.27	.0025	.0007	.0076	-.0012	.0013	-.0029
SDev	.42	.0026	.0040	.0001	.0009	.0019	.0011
%RSD	.4207	101.3	620.8	1.887	74.27	143.6	40.18
#1	98.98	.0043	-.0022	.0075	-.0006	-.0000	-.0037
#2	99.57	.0007	.0035	.0077	-.0019	.0026	-.0020

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0018	-.0002	.0005	-.0001	.0004	.0007
SDev	.0000	.0009	.0002	.0030	.0141	.0003	.0017
%RSD	4.260	52.19	93.23	613.9	15390.	93.72	250.9
#1	.0002	.0024	-.0003	.0026	-.0101	.0001	-.0005
#2	.0002	.0011	-.0001	-.0016	.0099	.0006	.0019

010216

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0144	-.0005
SDev	.0000	.0003	.0003
%RSD	37.83	2.210	56.04
#1	.0001	.0147	-.0006
#2	.0001	.0142	-.0003

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	707110	10000	--	--	--	--	--
SDev	3009.447	.0000000	--	--	--	--	--
%RSD	.4255981	.0000000	--	--	--	--	--
#1	704982	10000	--	--	--	--	--
#2	709238	10000	--	--	--	--	--

Analysis Report

07/22/04 11:41:56 AM

Method: DAILY2 Sample Name: 247357dr df100

Run Time: 07/22/04 11:36:49 Operator: **010217**

Comment:

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	.0035	-.0004	27.83	.0045	-.0000	-.0017
SDev	.0004	.0041	.0019	.03	.0000	.0000	.0005
%RSD	62.32	118.1	485.2	.1184	.8999	3.720	26.67
#1	-.0009	.0006	-.0017	27.81	.0045	-.0000	-.0021
#2	-.0003	.0064	.0009	27.85	.0044	-.0000	-.0014

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0099	-.0002	.0014	-.0003	.0001	.0121	.0127
SDev	.0010	.0001	.0005	.0001	.0000	.0052	.0041
%RSD	10.30	65.65	35.25	48.84	54.30	42.91	32.49
#1	.0106	-.0003	.0010	-.0004	.0001	.0158	.0098
#2	.0092	-.0001	.0017	-.0002	.0001	.0084	.0156

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	.0001	-.0024	.0001	-.0004	33.28	17.53
SDev	.0003	.0000	.0008	.0000	.0010	.30	.06
%RSD	52.36	25.41	35.86	45.53	250.2	.8867	.3294
#1	-.0008	.0001	-.0018	.0001	.0003	33.07	17.49
#2	-.0004	.0001	-.0029	.0001	-.0011	33.49	17.57

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	-.0049	.0005	-.0002	-.0018	.0165	.0008
SDev	.0015	.0013	.0001	.0002	.0020	.0048	.0011
%RSD	1607.	25.41	9.886	79.21	110.9	29.15	140.5
#1	.0010	-.0058	.0005	-.0001	-.0004	.0131	.0016
#2	-.0011	-.0040	.0005	-.0004	-.0032	.0199	.0000

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	100.7	.0012	.0014	.0081	.0000	.0014	.0015
SDev	.2	.0022	.0010	.0029	.0001	.0014	.0021
%RSD	.2328	179.9	71.30	35.62	539.7	102.6	138.3
#1	100.9	-.0003	.0007	.0061	.0001	.0004	.0030
#2	100.6	.0028	.0022	.0101	-.0001	.0024	.0000

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	-.0001	-.0002	-.0015	-.0027	-.0003	-.0000
SDev	.0000	.0008	.0002	.0009	.0033	.0003	.0015
%RSD	.2097	1113.	102.0	59.60	124.8	115.0	3967.
#1	.0002	-.0006	-.0001	-.0009	-.0003	-.0001	-.0011
#2	.0002	.0005	-.0004	-.0021	-.0050	-.0005	.0010

010218

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.0149	-.0006
SDev	.0001	.0000	.0001
%RSD	284.1	.2382	23.45
#1	-.0000	.0149	-.0005
#2	.0001	.0150	-.0007

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	717546	10000	--	--	--	--	--
SDev	1635.538	.0000000	--	--	--	--	--
%RSD	.2279348	.0000000	--	--	--	--	--
#1	718703	10000	--	--	--	--	--
#2	716390	10000	--	--	--	--	--

Analysis Report 07/22/04 11:47:14 AM page 1

Method: DAILY2 Sample Name: 247357sr df100 Operator:
Run Time: 07/22/04 11:42:07
Comment:
Mode: CONC Corr. Factor: 1

010219

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0500	1.987	2.051	32.22	2.021	.0497	-.0004
SDev	.0007	.009	.004	.07	.001	.0001	.0022
%RSD	1.422	.4484	.1954	.2197	.0727	.1167	615.9
#1	.0505	1.981	2.048	32.17	2.020	.0497	.0012
#2	.0495	1.993	2.054	32.27	2.022	.0497	-.0020

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.62	.0492	.4961	.2004	.2551	1.100	19.56
SDev	.02	.0006	.0009	.0007	.0004	.003	.03
%RSD	.0894	1.121	.1857	.3674	.1435	.2800	.1507
#1	20.61	.0488	.4954	.2009	.2548	1.098	19.54
#2	20.63	.0496	.4967	.1999	.2554	1.102	19.58

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0002	20.53	.5046	-.0004	55.68	29.92
SDev	.0002	.0000	.01	.0000	.0007	.02	.07
%RSD	105.7	12.42	.0548	.0089	154.0	.0433	.2187
#1	-.0001	.0003	20.54	.5046	.0000	55.66	29.88
#2	-.0004	.0002	20.52	.5046	-.0009	55.70	29.97

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4930	.0085	.4974	.5039	.0007	.0435	.4922
SDev	.0006	.0025	.0040	.0038	.0019	.0069	.0010
%RSD	.1165	29.17	.7963	.7499	283.2	15.88	.2080
#1	.4934	.0103	.5002	.5066	.0020	.0386	.4929
#2	.4926	.0068	.4946	.5012	-.0007	.0484	.4914

Elem	Sc3613	1960/1	1960/2	Si2881	Th220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	97.12	2.055	2.103	.0125	.5018	2.087	-.0018
SDev	.48	.012	.005	.0005	.0038	.000	.0003
%RSD	.4904	.6039	.2614	4.266	.7650	.0225	15.48
#1	97.45	2.046	2.107	.0121	.5045	2.087	-.0020
#2	96.78	2.063	2.099	.0129	.4990	2.087	-.0016

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0009	-.0138	-.0001	2.142	.0032	.4973	.0031
SDev	.0000	.0000	.0000	.011	.0169	.0001	.0033
%RSD	1.966	.3387	21.82	.5363	525.4	.0242	104.9
#1	.0010	-.0137	-.0002	2.134	.0151	.4972	.0008
#2	.0009	-.0138	-.0001	2.150	-.0087	.4973	.0054

010220

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0002	.5085	-.0001
SDev	.0000	.0003	.0006
%RSD	14.51	.0521	543.0
#1	-.0002	.5087	.0003
#2	-.0002	.5083	-.0006

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	691776	10000	--	--	--	--	--
SDev	3408.255	.0000000	--	--	--	--	--
%RSD	.4926818	.0000000	--	--	--	--	--
#1	694186	10000	--	--	--	--	--
#2	689366	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 247358r df100 Operator:
Run Time: 07/22/04 11:47:26
Comment:
Mode: CONC Corr. Factor: 1

010221

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0063	.0021	30.72	.0052	.0000	-.0019
SDev	.0005	.0046	.0004	.06	.0001	.0000	.0045
%RSD	314.6	72.70	21.29	.2069	.8875	52.16	229.8
#1	.0002	.0031	.0018	30.68	.0052	.0000	.0012
#2	-.0006	.0096	.0024	30.77	.0052	.0000	-.0051

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0095	.0001	.0000	.0009	-.0000	.0033	.0234
SDev	.0005	.0001	.0006	.0003	.0008	.0010	.0029
%RSD	5.660	181.0	1504.	39.61	2748.	31.54	12.54
#1	.0099	.0002	.0005	.0006	-.0006	.0025	.0255
#2	.0091	-.0000	-.0004	.0011	.0005	.0040	.0214

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0002	.0020	.0001	-.0004	37.03	19.54
SDev	.0002	.0000	.0028	.0001	.0004	.22	.12
%RSD	97.20	6.819	141.9	73.68	92.01	.5992	.5966
#1	-.0004	.0002	.0040	.0001	-.0001	36.87	19.45
#2	-.0001	.0002	-.0000	.0000	-.0007	37.18	19.62

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	.0078	-.0014	-.0009	-.0002	.0313	.0011
SDev	.0005	.0044	.0017	.0001	.0001	.0029	.0005
%RSD	79.76	56.03	120.1	8.115	79.52	9.383	46.23
#1	-.0009	.0109	-.0002	-.0010	-.0003	.0334	.0015
#2	-.0002	.0047	-.0027	-.0009	-.0001	.0293	.0008

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	101.1	.0008	.0022	.0108	-.0011	.0017	.0004
SDev	.1	.0016	.0012	.0003	.0005	.0003	.0024
%RSD	.0650	189.5	55.09	3.138	48.37	15.04	608.6
#1	101.1	.0020	.0013	.0105	-.0007	.0016	-.0013
#2	101.1	-.0003	.0030	.0110	-.0015	.0019	.0021

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0021	-.0000	-.0014	.0076	-.0002	.0007
SDev	.0000	.0018	.0001	.0023	.0016	.0005	.0009
%RSD	1.523	86.43	440.3	166.3	21.34	275.9	134.8
#1	.0002	.0034	-.0001	-.0030	.0064	-.0005	.0013
#2	.0002	.0008	.0001	.0002	.0087	.0002	.0000

010222

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0230	.0000
SDev	.0001	.0004	.0003
%RSD	181.0	1.934	14170.
#1	-.0000	.0227	-.0002
#2	.0001	.0233	.0002

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	720130	10000	--	--	--	--	--
SDev	519.7235	.0000000	--	--	--	--	--
%RSD	.0721707	.0000000	--	--	--	--	--
#1	719763	10000	--	--	--	--	--
#2	720498	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 247359r df100 Operator:
Run Time: 07/22/04 11:52:44
Comment:
Mode: CONC Corr. Factor: 1

010223

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0082	.0044	27.87	.0073	.0000	-.0055
SDev	.0005	.0047	.0042	.00	.0001	.0000	.0026
%RSD	276.4	57.19	93.88	.0037	1.519	82.30	48.16
#1	.0002	.0115	.0015	27.87	.0072	.0000	-.0036
#2	-.0005	.0049	.0074	27.87	.0074	.0000	-.0074

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2964	.0001	.0006	.0002	.0002	-.0009	.0260
SDev	.0032	.0001	.0000	.0001	.0001	.0225	.0226
%RSD	1.077	63.01	.1894	52.13	45.79	2430.	86.86
#1	.2987	.0001	.0006	.0001	.0003	.0150	.0420
#2	.2942	.0001	.0006	.0002	.0001	-.0168	.0100

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0002	.0155	-.0000	-.0004	33.36	17.38
SDev	.0008	.0001	.0004	.0000	.0010	.27	.24
%RSD	472.9	40.27	2.826	194.9	229.9	.8083	1.405
#1	.0007	.0002	.0158	-.0000	.0003	33.55	17.55
#2	-.0004	.0001	.0152	.0000	-.0012	33.17	17.20

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	-.0004	-.0023	-.0005	.0004	.0430	-.0032
SDev	.0007	.0012	.0046	.0016	.0047	.0010	.0004
%RSD	1541.	319.7	196.5	296.4	1212.	2.297	13.25
#1	-.0005	-.0012	-.0055	-.0017	.0037	.0423	-.0029
#2	.0004	.0005	.0009	.0006	-.0029	.0437	-.0035

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	98.87	-.0010	-.0010	.0246	-.0011	-.0010	-.0029
SDev	.70	.0018	.0010	.0031	.0026	.0000	.0008
%RSD	.7086	188.3	99.41	12.60	231.6	3.864	26.39
#1	98.38	-.0023	-.0003	.0268	-.0029	-.0009	-.0034
#2	99.37	.0003	-.0017	.0225	.0007	-.0010	-.0023

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	.0000	-.0001	-.0023	-.0060	.0000	-.0014
SDev	.0000	.0020	.0001	.0036	.0093	.0003	.0026
%RSD	4.464	24400.	70.96	156.9	153.2	2139.	191.2
#1	.0006	-.0014	-.0002	.0002	.0005	.0002	.0005
#2	.0006	.0014	-.0001	-.0048	-.0126	-.0002	-.0032

010224

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0017	-.0003
SDev	.0001	.0001	.0002
%RSD	140.5	3.316	72.39
#1	.0001	.0016	-.0002
#2	.0000	.0017	-.0005

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	704274	10000	--	--	--	--	--
SDev	4998.538	.0000000	--	--	--	--	--
%RSD	.7097439	.0000000	--	--	--	--	--
#1	700739	10000	--	--	--	--	--
#2	707808	10000	--	--	--	--	--

Analysis Report

07/22/04 12:03:09 PM

Method: DAILYP Sample Name: 247360r df100 Operator:
Run Time: 07/22/04 11:58:02
Comment:
Mode: CONC Corr. Factor: 1

010225

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	.0094	-.0002	30.27	.0053	.0000	.0010
SDev	.0009	.0038	.0002	.07	.0000	.0000	.0040
%RSD	4526.	40.58	74.77	.2322	.7766	51.13	396.0
#1	.0007	.0067	-.0003	30.22	.0053	.0000	.0039
#2	-.0007	.0121	-.0001	30.32	.0052	.0000	-.0018

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2593	-.0002	.0009	.0006	.0004	.0037	.0192
SDev	.0008	.0000	.0011	.0005	.0005	.0056	.0107
%RSD	.3183	12.99	124.1	83.75	113.5	152.4	55.62
#1	.2598	-.0002	.0016	.0009	.0007	.0077	.0268
#2	.2587	-.0002	.0001	.0002	.0001	-.0003	.0117

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	.0001	.0210	.0000	-.0004	36.49	19.11
SDev	.0003	.0000	.0018	.0002	.0004	.10	.02
%RSD	1418.	19.53	8.765	461.1	104.4	.2703	.0921
#1	.0002	.0002	.0197	.0002	-.0007	36.56	19.10
#2	-.0002	.0001	.0223	-.0001	-.0001	36.43	19.13

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0010	.0038	.0010	-.0006	.0003	.0355	-.0050
SDev	.0003	.0013	.0032	.0025	.0015	.0023	.0019
%RSD	34.80	35.02	315.6	431.8	552.3	6.524	38.05
#1	-.0007	.0048	-.0013	-.0023	.0013	.0371	-.0036
#2	-.0012	.0029	.0033	.0012	-.0008	.0338	-.0063

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	101.1	-.0008	-.0009	.0283	-.0000	-.0008	-.0003
SDev	.8	.0014	.0015	.0004	.0027	.0015	.0014
%RSD	.8035	178.2	171.6	1.525	11520.	176.2	530.5
#1	100.6	-.0018	-.0020	.0280	-.0020	-.0019	-.0013
#2	101.7	.0002	.0002	.0286	.0019	.0002	.0007

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0013	-.0002	.0000	.0190	.0000	-.0004
SDev	.0000	.0008	.0001	.0001	.0010	.0006	.0036
%RSD	1.869	56.39	70.07	350.3	5.426	2573.	1001.
#1	.0007	.0019	-.0001	-.0001	.0197	.0005	-.0029
#2	.0007	.0008	-.0003	.0001	.0182	-.0004	.0022

010226

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0048	-.0001
SDev	.0001	.0002	.0005
%RSD	181.5	3.427	328.6
#1	.0001	.0047	.0002
#2	-.0000	.0049	-.0005

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	720364	10000	--	--	--	--	--
SDev	5777.062	.0000000	--	--	--	--	--
%RSD	.8019643	.0000000	--	--	--	--	--
#1	716279	10000	--	--	--	--	--
#2	724449	10000	--	--	--	--	--

Analysis Report

07/22/04 12:08:28 pm

Method: DAILY2 Sample Name: 247433r df100

Run Time: 07/22/04 12:03:21 Operator:

Comment:

Mode: CONC Corr. Factor: 1

010227

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	.0081	.0035	27.76	.0056	.0000	.0013
SDev	.0001	.0034	.0006	.01	.0001	.0000	.0047
%RSD	770.7	41.66	17.16	.0326	1.061	74.87	370.2
#1	-.0001	.0057	.0040	27.75	.0055	.0000	.0046
#2	.0000	.0105	.0031	27.76	.0056	.0000	-.0020

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0221	.0001	.0005	.0006	.0003	.0014	.0288
SDev	.0008	.0001	.0005	.0001	.0002	.0138	.0176
%RSD	3.503	68.09	118.6	21.71	51.27	963.6	61.04
#1	.0227	.0001	.0008	.0007	.0002	.0112	.0412
#2	.0216	.0000	.0001	.0005	.0005	-.0084	.0164

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0002	.0107	.0000	-.0002	33.54	17.67
SDev	.0002	.0000	.0071	.0000	.0003	.04	.04
%RSD	96.82	7.233	66.91	8.312	125.0	.1210	.2174
#1	.0001	.0002	.0157	.0000	-.0005	33.51	17.70
#2	.0003	.0002	.0056	.0000	-.0000	33.56	17.64

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0011	.0013	.0015	-.0008	.0001	.0386	-.0009
SDev	.0008	.0000	.0007	.0005	.0030	.0057	.0005
%RSD	71.83	1.704	42.95	53.92	2912.	14.77	58.95
#1	-.0017	.0013	.0011	-.0005	.0022	.0346	-.0012
#2	-.0005	.0014	.0020	-.0012	-.0020	.0426	-.0005

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	99.53	.0009	.0013	.0701	-.0000	.0012	-.0007
SDev	.17	.0079	.0001	.0006	.0001	.0027	.0014
%RSD	.1677	878.1	5.084	.8804	288.9	231.9	210.7
#1	99.65	.0065	.0013	.0697	.0000	.0030	.0003
#2	99.42	-.0047	.0012	.0705	-.0001	-.0007	-.0017

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0006	-.0001	-.0037	.0225	-.0003	.0029
SDev	.0000	.0006	.0001	.0005	.0143	.0002	.0030
%RSD	3.544	108.0	75.29	14.85	63.73	57.75	105.7
#1	.0003	.0001	-.0002	-.0033	.0327	-.0004	.0050
#2	.0003	.0011	-.0001	-.0041	.0124	-.0002	.0007

010228

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0128	-.0001
SDev	.0000	.0002	.0001
%RSD	35.53	1.859	205.8
#1	.0001	.0127	-.0002
#2	.0001	.0130	.0000

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	708986	10000	--	--	--	--	--
SDev	1124.300	.0000000	--	--	--	--	--
%RSD	.1585786	.0000000	--	--	--	--	--
#1	709781	10000	--	--	--	--	--
#2	708191	10000	--	--	--	--	--

Analysis Report 07/22/04 12:13:46 PM

Method: DATLY2 Sample Name: 247435r df100 Operator:
Run Time: 07/22/04 12:08:40
Comment:
Mode: CONC Corr. Factor: 1

010229

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0005	.0034	.0003	28.10	.0086	.0000	-.0034
SDev	.0000	.0015	.0022	.11	.0000	.0000	.0015
%RSD	2.146	44.31	745.5	.3765	.2619	736.6	45.60
#1	-.0004	.0023	.0019	28.03	.0086	.0000	-.0045
#2	-.0005	.0044	-.0013	28.18	.0086	-.0000	-.0023

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2264	-.0000	.0006	.0005	.0002	-.0023	.0265
SDev	.0015	.0004	.0002	.0003	.0006	.0204	.0037
%RSD	.6536	22900.	30.20	64.27	379.4	890.1	14.13
#1	.2254	-.0003	.0008	.0007	-.0003	.0121	.0239
#2	.2275	.0003	.0005	.0003	.0006	-.0167	.0292

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0004	.0002	.0227	-.0000	-.0000	33.10	17.32
SDev	.0001	.0000	.0008	.0000	.0007	.26	.10
%RSD	29.99	2.154	3.398	152.7	1561.	.7958	.5832
#1	-.0005	.0002	.0222	.0000	.0005	33.28	17.39
#2	-.0003	.0002	.0233	-.0000	-.0006	32.91	17.25

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	.0042	-.0028	.0005	.0005	.0351	-.0023
SDev	.0009	.0079	.0001	.0008	.0009	.0004	.0029
%RSD	152.9	186.9	3.357	165.7	191.2	1.033	126.6
#1	-.0012	-.0014	-.0027	-.0001	.0012	.0349	-.0002
#2	.0000	.0099	-.0029	.0011	-.0002	.0354	-.0043

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	101.0	.0017	.0004	.1954	-.0006	.0009	-.0000
SDev	1.2	.0022	.0015	.0009	.0005	.0018	.0022
%RSD	1.146	130.6	347.1	.4805	92.08	200.3	23430.
#1	100.2	.0033	.0015	.1961	-.0009	.0021	.0016
#2	101.8	.0001	-.0006	.1947	-.0002	-.0004	-.0016

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	-.0002	-.0001	-.0005	-.0059	-.0002	-.0010
SDev	.0000	.0024	.0001	.0018	.0019	.0001	.0033
%RSD	1.614	1106.	63.50	390.4	32.18	41.05	311.7
#1	.0008	.0015	-.0002	-.0017	-.0072	-.0001	.0013
#2	.0008	-.0019	-.0001	.0008	-.0045	-.0003	-.0034

010230

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0032	-.0002
SDev	.0000	.0000	.0000
%RSD	37.18	.7957	6.216
#1	.0001	.0032	-.0002
#2	.0001	.0032	-.0002

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	719200	10000	--	--	--	--	--
SDev	8278.099	.0000000	--	--	--	--	--
%RSD	1.151014	.0000000	--	--	--	--	--
#1	713347	10000	--	--	--	--	--
#2	725054	10000	--	--	--	--	--

Method: DAILY2 Sample Name: ccv2 Operator:
Run Time: 07/22/04 12:18:44
Comment:
Mode: CONC Corr. Factor: 1

010231

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9826	9.852	5.107	4.867	10.07	.9765	5.014
SDev	.0006	.026	.009	.013	.01	.0001	.004
%RSD	.0570	.2599	.1701	.2650	.0773	.0126	.0875
#1	.9822	9.834	5.101	4.858	10.07	.9764	5.017
#2	.9829	9.870	5.113	4.876	10.06	.9766	5.011
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.100	11.00	5.500	5.500	11.00	1.100	5.500
Low	.9000	9.000	4.500	4.500	9.000	.9000	4.500

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.18	1.007	5.001	1.978	2.035	10.26	18.69
SDev	.37	.002	.003	.002	.000	.01	.04
%RSD	1.830	.1783	.0628	.0859	.0052	.1364	.2013
#1	19.92	1.005	4.999	1.979	2.035	10.27	18.66
#2	20.44	1.008	5.004	1.976	2.035	10.25	18.71
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	1.100	5.500	2.200	2.200	11.00	22.00
Low	18.00	.9000	4.500	1.800	1.800	9.000	18.00

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.983	4.733	19.97	1.017	5.015	28.18	L15.86
SDev	.003	.006	.06	.001	.005	.01	.02
%RSD	.0669	.1255	.3208	.1049	.0959	.0329	.1361
#1	4.985	4.737	19.93	1.017	5.012	28.19	L15.85
#2	4.981	4.729	20.02	1.018	5.019	28.18	L15.88
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	5.500	5.500	22.00	1.100	5.500	33.00	33.00
Low	4.500	4.500	18.00	.9000	4.500	27.00	27.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.932	5.325	5.008	4.998	1.012	H5.074	1.004
SDev	.006	.022	.011	.039	.000	.024	.001
%RSD	.1307	.4213	.2165	.7765	.0084	.4758	.1148
#1	4.936	5.309	5.001	4.971	1.012	H5.091	1.005
#2	4.927	5.341	5.016	5.026	1.012	H5.057	1.004
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	5.500	5.500			1.100	1.100	1.100
Low	4.500	4.500			.9000	.9000	.9000

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010232

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	99.51	5.288	5.298	5.013	5.002	5.295	4.996
SDev	.96	.016	.051	.002	.029	.039	.004
%RSD	.9664	.2942	.9645	.0305	.5897	.7414	.0740
#1	100.2	5.277	5.262	5.014	4.981	5.267	4.993
#2	98.83	5.299	5.334	5.012	5.022	5.323	4.998
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				5.500	5.500	5.500	5.500
Low				4.500	4.500	4.500	4.500

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.035	.9814	L1.041	5.344	.9588	4.949	H1.677
SDev	.001	.0048	.000	.028	.0339	.000	.006
%RSD	.0213	.4851	.0200	.5270	3.537	.0036	.3527
#1	5.035	.9780	L1.041	5.324	.9828	4.949	H1.681
#2	5.034	.9847	L1.042	5.364	.9348	4.949	H1.673
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High
High	5.500	1.100	5.500	5.500	1.100	5.500	1.100
Low	4.500	.9000	4.500	4.500	.9000	4.500	.9000

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.028	1.013	4.901
SDev	.006	.018	.003
%RSD	.1177	1.796	.0589
#1	5.032	1.000	4.903
#2	5.023	1.026	4.899
Errors	LC Pass	LC Pass	LC Pass
High	5.500	1.100	5.500
Low	4.500	.9000	4.500

010233

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	708773	10000	--	--	--	--	--
SDev	6832.066	.0000000	--	--	--	--	--
%RSD	.9639286	.0000000	--	--	--	--	--
#1	713604	10000	--	--	--	--	--
#2	703942	10000	--	--	--	--	--

010234

Analysis Report

07/22/04 12:31:32 PM

Method: DAILY2 Sample Name: ccb2

Operator:

Run Time: 07/22/04 12:26:25

Comment:

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	-.0009	-.0004	.0453	.0000	.0000	.0030
SDev	.0001	.0017	.0009	.0025	.0000	.0000	.0063
%RSD	9.434	176.1	231.7	5.501	41.87	75.94	206.7
#1	.0006	-.0021	-.0010	.0471	.0001	.0000	.0075
#2	.0005	.0002	.0002	.0435	.0000	.0000	-.0014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0042	.0001	.0006	.0008	-.0007	.0123	.0099
SDev	.0015	.0001	.0001	.0001	.0001	.0042	.0159
%RSD	35.48	61.37	8.580	18.01	19.06	34.06	160.1
#1	.0032	.0001	.0006	.0009	-.0007	.0153	.0212
#2	.0053	.0002	.0006	.0007	-.0006	.0094	-.0013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	.0001	.0073	-.0001	.0016	H.1775	.0085
SDev	.0004	.0001	.0029	.0000	.0008	.1784	.0023
%RSD	80.30	63.30	39.35	75.15	52.28	100.5	27.54
#1	.0008	.0002	.0093	-.0000	.0010	H.3037	.0101
#2	.0002	.0001	.0053	-.0001	.0022	H.0513	.0068
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0008	.0003	-.0025	.0008	H.0286	-.0041
SDev	.0005	.0049	.0037	.0011	.0052	.0004	.0045
%RSD	90.95	645.2	1396.	46.38	625.3	1.292	110.1
#1	-.0010	-.0042	.0029	-.0017	.0045	H.0289	-.0073
#2	-.0002	.0027	-.0023	-.0033	-.0028	H.0284	-.0009
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

Analysis Report 07/22/04 12:31:32 PM

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	103.6	.0052	.0012	-.0023	-.0015	.0025	-.0022
SDev	.4	.0022	.0015	.0034	.0020	.0003	.0013
%RSD	.4160	42.05	133.3	149.0	129.0	11.05	58.22
#1	103.9	.0068	.0001	.0001	-.0001	.0023	-.0031
#2	103.3	.0037	.0023	-.0047	-.0030	.0027	-.0013
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0016	-.0002	.0017	.0289	-.0003	.0031
SDev	.0000	.0016	.0000	.0046	.0223	.0004	.0018
%RSD	81.74	104.8	18.05	273.7	77.38	145.4	57.99
#1	.0000	.0004	-.0002	.0049	.0447	-.0006	.0043
#2	.0000	.0027	-.0002	-.0016	.0131	.0000	.0018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0000	.0001	-.0001
SDev	.0000	.0002	.0001
%RSD	139.5	408.4	181.5
#1	-.0000	-.0001	.0000
#2	-.0000	.0002	-.0001
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010236

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	738236	10000	--	--	--	--	--
SDev	3032.781	.0000000	--	--	--	--	--
%RSD	.4108143	.0000000	--	--	--	--	--
#1	740381	10000	--	--	--	--	--
#2	736092	10000	--	--	--	--	--

010237

Analysis Report 07/22/04 12:36:51 PM page 1

Method: DAILY2 Sample Name: 248205 df100 Operator:
Run Time: 07/22/04 12:31:44
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0004	.0065	.0019	24.48	.0007	.0000	-.0007
SDev	.0009	.0038	.0027	.04	.0000	.0000	.0003
%RSD	242.6	59.15	138.8	.1510	2.100	13.41	45.86
#1	-.0010	.0038	.0038	24.46	.0007	.0001	-.0010
#2	.0003	.0092	.0000	24.51	.0007	.0000	-.0005

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0231	.0001	.0008	.0008	.0007	.0012	.0114
SDev	.0009	.0000	.0002	.0004	.0004	.0168	.0055
%RSD	3.759	11.91	24.46	48.89	54.98	1433.	47.99
#1	.0225	.0001	.0007	.0005	.0004	-.0107	.0075
#2	.0237	.0001	.0010	.0011	.0010	.0131	.0153

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0001	.0077	.0000	.0010	28.71	15.24
SDev	.0011	.0000	.0064	.0001	.0009	.05	.03
%RSD	680.9	13.96	82.86	219.1	90.23	.1810	.1748
#1	-.0010	.0001	.0032	.0001	.0004	28.67	15.23
#2	.0006	.0001	.0122	-.0000	.0016	28.75	15.26

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	.0009	-.0018	.0002	-.0010	.0267	-.0010
SDev	.0003	.0107	.0003	.0014	.0006	.0005	.0030
%RSD	37.49	1239.	14.89	589.5	53.49	2.000	310.4
#1	-.0005	-.0067	-.0019	-.0007	-.0014	.0270	-.0030
#2	-.0009	.0084	-.0016	.0012	-.0006	.0263	.0011

Elem	Sc3613	1960/1	1960/2	Si2881	Pt220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	100.6	-.0033	.0017	.0084	-.0004	.0000	.0011
SDev	1.1	.0001	.0009	.0017	.0010	.0006	.0014
%RSD	1.130	2.153	54.45	19.66	248.0	1975.	123.7
#1	101.4	-.0034	.0024	.0073	-.0011	.0004	.0021
#2	99.79	-.0033	.0010	.0096	.0003	-.0004	.0001

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0005	-.0001	-.0006	.0044	-.0001	.0017
SDev	.0000	.0039	.0001	.0017	.0098	.0004	.0031
%RSD	4.947	816.2	49.50	275.1	221.3	810.1	183.6
#1	.0002	-.0023	-.0001	.0006	-.0025	-.0003	.0039
#2	.0002	.0032	-.0001	-.0018	.0114	.0002	-.0005

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0183	-.0002
SDev	.0001	.0000	.0004
%RSD	42.02	.2060	179.9
#1	.0001	.0183	-.0005
#2	.0002	.0183	.0001

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	716462	10000	--	--	--	--	--
SDev	8082.938	.0000000	--	--	--	--	--
%RSD	1.128175	.0000000	--	--	--	--	--
#1	722177	10000	--	--	--	--	--
#2	710746	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 248207 df100 Operator:
Run Time: 07/22/04 12:43:05
Comment:
Mode: CONC Corr. Factor: 1

010239

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	.0117	.0013	26.07	.0011	.0001	.0036
SDev	.0014	.0050	.0011	.00	.0001	.0000	.0032
%RSD	345.4	43.17	86.33	.0171	4.138	5.963	88.30
#1	-.0006	.0081	.0005	26.07	.0012	.0001	.0014
#2	.0014	.0153	.0021	26.08	.0011	.0001	.0058

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1468	.0003	.0002	.0011	-.0000	.1141	.0249
SDev	.0025	.0002	.0010	.0010	.0002	.0151	.0176
%RSD	1.699	81.14	571.8	92.77	1532.	13.23	70.70
#1	.1451	.0001	-.0005	.0019	.0001	.1034	.0125
#2	.1486	.0004	.0009	.0004	-.0002	.1247	.0374

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	.0002	.0092	.0005	.0005	31.03	16.23
SDev	.0018	.0001	.0034	.0001	.0004	.06	.15
%RSD	339.5	52.99	37.29	17.39	82.93	.2009	.9326
#1	-.0007	.0001	.0068	.0005	.0002	30.98	16.13
#2	.0018	.0002	.0117	.0006	.0008	31.07	16.34

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0003	-.0013	-.0006	.0009	.0330	-.0026
SDev	.0007	.0091	.0013	.0005	.0060	.0071	.0021
%RSD	130.5	3587.	94.74	88.74	643.4	21.42	82.79
#1	-.0000	.0062	-.0004	-.0009	-.0033	.0379	-.0041
#2	-.0011	-.0067	-.0022	-.0002	.0052	.0280	-.0011

Elem	Sc3613	1960/1	1960/2	Si2881	Th2920	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	101.5	-.0009	.0010	.0157	-.0008	.0004	.0000
SDev	2.0	.0019	.0040	.0067	.0001	.0033	.0001
%RSD	1.954	205.2	391.9	42.70	9.731	863.7	3872.
#1	102.9	-.0023	-.0018	.0110	-.0008	-.0019	.0001
#2	100.1	.0004	.0038	.0205	-.0009	.0027	-.0001

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0009	.0029	-.0000	.0013	.0274	-.0006	.0001
SDev	.0001	.0002	.0001	.0031	.0243	.0002	.0028
%RSD	7.470	6.034	164.3	228.7	88.85	42.88	3004.
#1	.0008	.0030	.0000	.0035	.0102	-.0004	-.0019
#2	.0009	.0028	-.0001	-.0008	.0445	-.0007	.0020

010240

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0000	.0147	.0002
SDev	.0001	.0001	.0002
%RSD	20440.	.6060	90.43
#1	.0000	.0146	.0001
#2	-.0000	.0148	.0004

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	722679	10000	--	--	--	--	--
SDev	14116.68	.0000000	--	--	--	--	--
%RSD	1.953382	.0000000	--	--	--	--	--
#1	732661	10000	--	--	--	--	--
#2	712697	10000	--	--	--	--	--

Analysis Report

07/22/04 12:58:16 PM

Method: DAILY2 Sample Name: ccv3
Run Time: 07/22/04 12:53:09 Operator:
Comment:
Mode: CONC Corr. Factor: 1

010241

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9820	9.969	5.108	4.850	10.06	.9756	5.012
SDev	.0006	.132	.006	.014	.02	.0003	.003
%RSD	.0631	1.321	.1238	.2825	.1794	.0357	.0666
#1	.9824	10.06	5.112	4.841	10.05	.9759	5.010
#2	.9816	9.876	5.103	4.860	10.07	.9754	5.014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.100	11.00	5.500	5.500	11.00	1.100	5.500
Low	.9000	9.000	4.500	4.500	9.000	.9000	4.500

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.89	1.004	4.997	1.975	2.036	10.27	18.79
SDev	.03	.001	.000	.002	.000	.05	.01
%RSD	.1617	.0681	.0022	.0858	.0085	.4856	.0588
#1	19.87	1.003	4.997	1.976	2.036	10.31	18.80
#2	19.91	1.004	4.997	1.973	2.036	10.24	18.78
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	1.100	5.500	2.200	2.200	11.00	22.00
Low	18.00	.9000	4.500	1.800	1.800	9.000	18.00

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.987	4.746	19.99	1.017	5.018	28.24	L15.93
SDev	.002	.010	.10	.000	.015	.10	.02
%RSD	.0368	.2005	.4874	.0050	.2911	.3483	.1515
#1	4.988	4.752	20.06	1.017	5.008	28.17	L15.94
#2	4.986	4.739	19.92	1.017	5.028	28.31	L15.91
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	5.500	5.500	22.00	1.100	5.500	33.00	33.00
Low	4.500	4.500	18.00	.9000	4.500	27.00	27.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.903	5.356	4.978	5.012	1.012	H5.076	1.016
SDev	.003	.177	.011	.019	.000	.041	.006
%RSD	.0518	3.308	.2293	.3758	.0467	.8107	.5662
#1	4.902	5.481	4.986	5.025	1.012	H5.105	1.012
#2	4.905	5.231	4.970	4.998	1.013	H5.047	1.020
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	5.500	5.500			1.100	1.100	1.100
Low	4.500	4.500			.9000	.9000	.9000

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	100.4	5.290	5.317	5.016	5.000	5.308	4.995
SDev	.3	.010	.019	.010	.016	.016	.015
%RSD	.2751	.1944	.3493	.1910	.3272	.2946	.2990
#1	100.2	5.297	5.330	5.023	5.012	5.319	4.985
#2	100.6	5.283	5.304	5.010	4.989	5.297	5.006
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				5.500	5.500	5.500	5.500
Low				4.500	4.500	4.500	4.500

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.037	.9790	L1.043	5.342	.9701	4.948	H1.678
SDev	.009	.0014	.001	.044	.0056	.001	.002
%RSD	.1700	.1460	.0889	.8304	.5731	.0272	.0948
#1	5.031	.9800	L1.044	5.311	.9740	4.949	H1.679
#2	5.043	.9780	L1.042	5.373	.9662	4.947	H1.677
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High
High	5.500	1.100	5.500	5.500	1.100	5.500	1.100
Low	4.500	.9000	4.500	4.500	.9000	4.500	.9000

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.023	1.001	4.909
SDev	.002	.000	.013
%RSD	.0391	.0407	.2631
#1	5.025	1.001	4.900
#2	5.022	1.001	4.918
Errors	LC Pass	LC Pass	LC Pass
High	5.500	1.100	5.500
Low	4.500	.9000	4.500

010243

IntStd	1	2	3	4	5	6	7
Mode	+Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	714880	10000	--	--	--	--	--
SDev	2020.204	.0000000	--	--	--	--	--
%RSD	.2825936	.0000000	--	--	--	--	--
#1	713451	10000	--	--	--	--	--
#2	716308	10000	--	--	--	--	--

Analysis Report 07/22/04 01:05:57 PM page 1

Method: DAILY2 Sample Name: ccb3 Operator:
Run Time: 07/22/04 13:00:51
Comment:
Mode: CONC Corr. Factor: 1

010244

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	-.0030	-.0007	.0360	.0001	.0001	-.0032
SDev	.0001	.0010	.0023	.0035	.0000	.0000	.0061
%RSD	52.76	32.25	354.8	9.745	58.01	3.077	192.4
#1	.0003	-.0023	-.0023	.0384	.0001	.0001	.0012
#2	.0002	-.0037	.0010	.0335	.0000	.0001	-.0075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0017	-.0001	.0001	.0009	-.0003	-.0144	-.0044
SDev	.0006	.0001	.0002	.0006	.0006	.0110	.0055
%RSD	33.87	86.64	161.6	59.51	203.2	76.59	125.4
#1	.0021	-.0001	.0003	.0013	.0001	-.0222	-.0082
#2	.0013	-.0000	-.0000	.0005	-.0007	-.0066	-.0005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0001	.0022	.0001	.0016	H.0742	.0083
SDev	.0002	.0000	.0012	.0001	.0003	.1091	.0001
%RSD	117.5	20.35	57.60	74.59	16.93	147.2	.7613
#1	.0003	.0001	.0030	.0001	.0018	-.0030	.0082
#2	.0000	.0001	.0013	.0000	.0014	H.1513	.0083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0029	-.0003	-.0006	-.0012	H.0230	-.0013
SDev	.0003	.0079	.0012	.0008	.0008	.0031	.0014
%RSD	46.49	272.7	420.8	133.3	66.78	13.46	107.5
#1	-.0004	.0027	.0006	-.0000	-.0018	H.0252	-.0023
#2	-.0008	-.0085	-.0011	-.0012	-.0006	H.0208	-.0003
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Se3613	1960/1	1960/2	Si2881	Pb220	Sr196	Sn1899

010245

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	103.8	.0019	.0006	-.0026	-.0005	.0010	.0000
SDev	.5	.0000	.0021	.0038	.0010	.0014	.0010
%RSD	.4998	.4858	365.6	146.7	191.8	138.3	8457.
#1	103.4	.0019	.0021	.0001	.0002	.0020	.0007
#2	104.2	.0019	-.0009	-.0053	-.0012	.0000	-.0007
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0010	-.0001	-.0008	.0129	.0004	-.0011
SDev	.0000	.0022	.0000	.0006	.0160	.0001	.0022
%RSD	50.34	227.3	7.449	72.49	124.3	12.70	210.1
#1	.0000	.0025	-.0001	-.0004	.0242	.0004	.0005
#2	.0000	-.0006	-.0001	-.0012	.0016	.0004	-.0026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	-.0003	.0001
SDev	.0001	.0002	.0002
%RSD	284.3	61.51	239.4
#1	.0002	-.0002	.0002
#2	-.0001	-.0005	-.0001
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010246

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	739346	10000	--	--	--	--	--
SDev	3667.056	.0000000	--	--	--	--	--
%RSD	.4959864	.0000000	--	--	--	--	--
#1	736753	10000	--	--	--	--	--
#2	741939	10000	--	--	--	--	--

Method: DAILY2 Sample Name: pbw-G22W3 pg57-166 Operator:
Run Time: 07/22/04 13:27:42
Comment:
Mode: CONC Corr. Factor: 1

010247

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0133	.0011	.0188	.0000	-.0000	-.0017
SDev	.0002	.0029	.0001	.0006	.0001	.0000	.0002
%RSD	57.02	22.19	10.61	3.058	563.2	.9694	10.31
#1	.0004	.0153	.0010	.0192	.0001	-.0000	-.0016
#2	.0002	.0112	.0012	.0184	-.0000	-.0000	-.0018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H.0828	-.0000	.0003	.0007	-.0000	-.0036	-.0040
SDev	.0000	.0001	.0001	.0001	.0002	.0021	.0022
%RSD	.0368	176.7	19.13	8.914	516.9	57.45	54.25
#1	H.0828	-.0001	.0002	.0007	.0001	-.0051	-.0056
#2	H.0828	.0000	.0003	.0008	-.0002	-.0022	-.0025
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	-.0001	.0006	.0001	-.0012	H.2638	.0064
SDev	.0004	.0000	.0006	.0001	.0005	.0805	.0002
%RSD	120.5	10.23	105.5	94.76	40.27	30.51	3.279
#1	.0006	-.0001	.0010	.0002	-.0015	H.3208	.0063
#2	.0001	-.0001	.0001	.0000	-.0009	H.2069	.0066
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	H.0336	.0030	-.0008	-.0018	L-.0219	-.0004
SDev	.0009	.0038	.0010	.0014	.0039	.0015	.0006
%RSD	120.8	11.18	35.53	173.1	217.0	6.661	137.5
#1	-.0014	H.0363	.0037	-.0018	-.0045	L-.0208	-.0000
#2	-.0001	H.0310	.0022	.0002	.0009	L-.0229	-.0008
Errors	LC Pass	LC High	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb2020	Se196	Sn1899

010248

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	99.13	-.0079	.0039	.0004	.0005	.0000	-.0000
SDev	.07	.0012	.0029	.0007	.0006	.0024	.0024
%RSD	.0745	15.57	75.18	195.7	127.3	24400.	6501.
#1	99.19	-.0087	.0018	.0009	.0000	-.0017	-.0018
#2	99.07	-.0070	.0060	-.0001	.0009	.0017	.0017
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	-.0015	-.0001	-.0059	.0238	-.0003	.0078
SDev	.0000	.0010	.0001	.0004	.0151	.0006	.0005
%RSD	37.86	63.23	62.07	6.201	63.47	209.9	6.841
#1	.0001	-.0008	-.0001	-.0061	.0344	.0001	.0081
#2	.0001	-.0022	-.0001	-.0056	.0131	-.0007	.0074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.0024	-.0002
SDev	.0001	.0001	.0005
%RSD	701.2	4.499	249.2
#1	.0001	.0024	.0002
#2	-.0000	.0023	-.0006
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010249

Analysis Report 07/22/04 01:32:16 PM

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	706054	10000	--	--	--	--	--
SDev	551.5433	.0000000	--	--	--	--	--
%RSD	.0781163	.0000000	--	--	--	--	--
#1	706444	10000	--	--	--	--	--
#2	705664	10000	--	--	--	--	--

Analysis Report 07/22/04 01:37:02 PM page 1

Method: DAILY2 Sample Name: lcsw-GP2W3 Operator:
Run Time: 07/22/04 13:32:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0481	1.852	1.868	1.883	1.951	.0449	.0019
SDev	.0008	.006	.007	.001	.002	.0000	.0044
%RSD	1.687	.3188	.3904	.0446	.0774	.1001	234.4
#1	.0487	1.856	1.863	1.882	1.950	.0449	-.0012
#2	.0476	1.848	1.874	1.883	1.952	.0449	.0050

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.28	.0470	.4692	.1920	.2382	1.085	17.10
SDev	.02	.0001	.0002	.0002	.0002	.025	.00
%RSD	.1039	.2840	.0335	.1118	.0657	2.402	.0285
#1	19.30	.0469	.4693	.1922	.2383	1.072	17.10
#2	19.27	.0471	.4691	.1919	.2381	1.037	17.10

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na330P	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0011	.0000	18.97	.4818	-.0012	17.17	9.373
SDev	.0008	.0001	.03	.0003	.0015	.03	.022
%RSD	74.93	937.9	.1351	.0564	129.9	.1647	.2369
#1	.0017	.0001	18.99	.4820	-.0001	17.19	9.357
#2	.0005	-.0001	18.96	.4816	-.0022	17.15	9.388

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4682	.0190	.4861	.4873	.0029	-.0220	.4661
SDev	.0009	.0031	.0103	.0125	.0068	.0044	.0000
%RSD	.1892	16.09	2.129	2.558	234.4	20.15	.0011
#1	.4688	.0168	.4934	.4961	.0077	-.0252	.4661
#2	.4676	.0211	.4788	.4785	-.0019	-.0189	.4661

Elem	Sc3613	1960/1	1960/2	Si2881	Th220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	97.34	1.742	1.773	.0091	.4869	1.763	.0009
SDev	.67	.012	.049	.0081	.0118	.037	.0013
%RSD	.6890	.712	2.767	89.20	2.415	2.090	130.9
#1	96.86	1.751	1.808	.0148	.4952	1.789	.0018
#2	97.81	1.733	1.738	.0033	.4786	1.737	.0000

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	-.0112	-.0000	1.986	.0485	.4779	.0143
SDev	.0001	.0008	.0000	.005	.0305	.0008	.0015
%RSD	5.954	7.361	11.68	.2564	62.88	.1630	10.31
#1	.0008	-.0106	-.0000	1.990	.0701	.4774	.0153
#2	.0008	-.0118	-.0000	1.983	.0270	.4785	.0133

010251

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0001	.4682	.0004
SDev	.0001	.0003	.0005
%RSD	93.61	.0530	130.7
#1	-.0000	.4683	.0007
#2	-.0002	.4680	.0000

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	693303	10000	--	--	--	--	--
SDev	4731.958	.0000000	--	--	--	--	--
%RSD	.6825239	.0000000	--	--	--	--	--
#1	689957	10000	--	--	--	--	--
#2	696649	10000	--	--	--	--	--

Method: DAILY2 Sample Name: P47434r df50 Operator:
Run Time: 07/22/04 13:37:14
Comment:
Mode: CONC Corr. Factor: 1

010252

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0160	.0010	26.78	.0002	-.0000	-.0000
SDev	.0002	.0021	.0006	.03	.0001	.0000	.0007
%RSD	4004.	13.29	63.05	.1116	50.55	21.83	2240.
#1	.0001	.0145	.0014	26.76	.0001	-.0000	-.0005
#2	-.0001	.0175	.0005	26.80	.0003	-.0000	.0005

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0200	.0001	.0009	.0007	.0003	-.0064	.0179
SDev	.0008	.0003	.0001	.0004	.0002	.0185	.0023
%RSD	4.206	281.0	5.621	48.21	64.10	286.3	12.70
#1	.0194	-.0001	.0009	.0005	.0002	-.0197	.0163
#2	.0206	.0003	.0008	.0010	.0004	.0066	.0195

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0001	.0062	-.0000	-.0006	32.42	17.02
SDev	.0012	.0001	.0010	.0000	.0001	.24	.09
%RSD	179.7	47.94	15.88	69.07	14.03	.7530	.5368
#1	-.0002	.0001	.0055	-.0001	-.0007	32.24	16.95
#2	.0015	.0002	.0069	-.0000	-.0005	32.59	17.08

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0008	-.0011	.0005	.0004	.0332	-.0031
SDev	.0006	.0046	.0025	.0002	.0025	.0102	.0038
%RSD	93.90	554.7	226.9	35.65	578.4	30.77	125.8
#1	-.0010	-.0041	.0007	.0004	-.0013	.0404	-.0058
#2	-.0002	.0024	-.0029	.0006	.0022	.0260	-.0003

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	99.18	-.0028	.0019	.0580	-.0000	.0004	.0014
SDev	2.07	.0057	.0014	.0025	.0007	.0028	.0021
%RSD	2.088	209.5	72.21	4.383	7299.	750.8	153.5
#1	100.6	.0013	.0029	.0563	.0005	.0024	.0029
#2	97.72	-.0068	.0009	.0598	-.0005	-.0016	-.0001

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	-.0011	-.0001	-.0034	.0336	.0000	.0019
SDev	.0000	.0013	.0000	.0092	.0314	.0000	.0029
%RSD	14.68	112.4	33.47	273.2	93.41	84.03	152.7
#1	.0002	-.0020	-.0002	.0032	.0114	.0000	-.0002
#2	.0002	-.0002	-.0001	-.0099	.0558	.0001	.0040

010253

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0000	.0209	-.0001
SDev	.0001	.0001	.0003
%RSD	143.9	.5978	267.0
#1	-.0001	.0208	-.0003
#2	.0000	.0210	.0001

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	706476	10000	--	--	--	--	--
SDev	14690.14	.0000000	--	--	--	--	--
%RSD	2.079356	.0000000	--	--	--	--	--
#1	716863	10000	--	--	--	--	--
#2	696088	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 247434dr df50 Operator: **010254**
Run Time: 07/22/04 13:41:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	.0154	.0014	26.52	.0002	-.0000	.0021
SDev	.0008	.0018	.0005	.00	.0001	.0000	.0043
%RSD	279.1	11.39	35.58	.0015	56.45	30.58	207.8
#1	-.0008	.0142	.0010	26.52	.0001	-.0000	-.0010
#2	.0003	.0167	.0017	26.52	.0003	-.0000	.0051

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0158	.0001	.0005	.0004	.0003	-.0005	.0136
SDev	.0040	.0002	.0001	.0003	.0005	.0039	.0174
%RSD	25.31	147.8	21.44	72.75	150.9	770.5	127.4
#1	.0130	.0003	.0006	.0002	-.0000	-.0033	.0014
#2	.0186	-.0000	.0004	.0006	.0007	.0033	.0259

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0002	.0086	-.0001	-.0012	31.80	16.87
SDev	.0007	.0001	.0089	.0001	.0009	.33	.05
%RSD	506.9	36.13	103.1	143.4	75.76	1.041	.2979
#1	-.0004	.0001	.0023	-.0002	-.0019	31.57	16.91
#2	.0007	.0002	.0148	.0000	-.0006	32.03	16.84

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	.0013	-.0026	-.0005	.0001	.0307	-.0023
SDev	.0006	.0215	.0017	.0008	.0057	.0015	.0005
%RSD	79.73	1641.	64.11	164.8	5884.	4.793	21.41
#1	-.0003	.0165	-.0038	.0001	-.0040	.0297	-.0026
#2	-.0012	-.0139	-.0014	-.0011	.0042	.0317	-.0019

Elem	Sc3613	1960/1	1960/2	Si2881	Th220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	98.62	.0007	.0013	.0589	-.0012	.0011	-.0022
SDev	1.15	.0032	.0001	.0041	.0000	.0010	.0006
%RSD	1.166	434.2	8.858	6.933	1.062	86.93	24.68
#1	99.44	.0030	.0012	.0560	-.0012	.0018	-.0018
#2	97.81	-.0015	.0014	.0618	-.0012	.0004	-.0026

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0031	-.0001	-.0041	-.0003	-.0001	-.0054
SDev	.0000	.0022	.0000	.0022	.0172	.0004	.0020
%RSD	23.74	70.83	31.13	54.41	6100.	474.5	36.74
#1	.0002	.0016	-.0001	-.0057	-.0125	-.0003	-.0068
#2	.0002	.0047	-.0001	-.0025	.0119	.0002	-.0040

010255

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0210	-.0003
SDev	.0001	.0003	.0007
%RSD	65.24	1.383	200.4
#1	.0001	.0208	-.0008
#2	.0001	.0212	.0001

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	702532	10000	--	--	--	--	--
SDev	8205.267	.0000000	--	--	--	--	--
%RSD	1.167956	.0000000	--	--	--	--	--
#1	708334	10000	--	--	--	--	--
#2	696730	10000	--	--	--	--	--

Method: DAILY2 Sample Name: P47434sr df50 Operator: **010256**
Run Time: 07/22/04 13:46:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0486	.0402	26.69	.0390	.0009	-.0064
SDev	.0007	.0010	.0016	.03	.0002	.0001	.0024
%RSD	107.2	2.140	4.078	.1239	.4809	8.033	37.40
#1	.0002	.0479	.0391	26.71	.0391	.0010	-.0081
#2	.0012	.0494	.0414	26.66	.0388	.0009	-.0047

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3999	.0010	.0103	.0038	.0048	.0317	.3420
SDev	.0011	.0001	.0004	.0003	.0002	.0086	.0110
%RSD	.2645	9.812	3.928	7.428	4.818	27.06	3.221
#1	.3992	.0011	.0100	.0036	.0046	.0378	.3342
#2	.4007	.0010	.0106	.0040	.0049	.0256	.3497

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	.0002	.3834	.0095	-.0001	32.37	17.01
SDev	.0010	.0000	.0004	.0001	.0001	.26	.28
%RSD	357.5	7.867	.0987	.4951	86.54	.7877	1.631
#1	-.0009	.0002	.3831	.0096	-.0002	32.56	17.20
#2	.0004	.0002	.3836	.0095	-.0001	32.19	16.81

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0087	-.0014	.0101	.0063	-.0005	.0233	.0044
SDev	.0017	.0024	.0058	.0000	.0018	.0046	.0010
%RSD	19.18	164.2	57.72	.5541	362.7	19.89	23.38
#1	.0075	.0002	.0060	.0064	-.0017	.0200	.0051
#2	.0099	-.0031	.0142	.0063	.0008	.0266	.0037

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	100.5	.0416	.0414	.0574	.0076	.0414	-.0013
SDev	2.2	.0057	.0002	.0010	.0019	.0018	.0019
%RSD	2.181	13.70	.4904	1.692	25.16	4.254	148.4
#1	102.1	.0375	.0415	.0567	.0062	.0402	-.0026
#2	98.97	.0456	.0412	.0581	.0090	.0427	.0001

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	-.0012	-.0003	.0365	.0122	.0092	-.0016
SDev	.0000	.0040	.0002	.0037	.0209	.0002	.0016
%RSD	9.199	327.4	65.34	10.18	170.9	1.954	98.38
#1	.0002	.0016	-.0002	.0392	-.0026	.0090	-.0005
#2	.0002	-.0041	-.0004	.0339	.0270	.0093	-.0027

010257

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0000	.0427	-.0005
SDev	.0000	.0013	.0005
%RSD	26.08	3.146	93.16
#1	-.0001	.0417	-.0002
#2	-.0000	.0436	-.0008

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	715964	10000	--	--	--	--	--
SDev	15615.04	.0000000	--	--	--	--	--
%RSD	2.180979	.0000000	--	--	--	--	--
#1	727006	10000	--	--	--	--	--
#2	704923	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 247436r df50 Operator:

Run Time: 07/22/04 13:51:30

Comment:

Mode: CONC Corr. Factor: 1

010258

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	.0131	.0006	27.11	.0001	.0000	-.0020
SDev	.0004	.0043	.0007	.01	.0000	.0000	.0008
%RSD	349.3	32.69	106.7	.0321	37.68	32.22	38.97
#1	.0002	.0162	.0011	27.10	.0001	.0000	-.0025
#2	-.0004	.0101	.0002	27.11	.0001	.0000	-.0014

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2259	-.0001	.0009	.0003	.0006	.0100	.0093
SDev	.0002	.0002	.0006	.0002	.0001	.0073	.0008
%RSD	.1057	150.1	65.23	55.55	12.08	73.39	8.569
#1	.2260	-.0002	.0005	.0004	.0006	.0048	.0099
#2	.2257	.0000	.0013	.0002	.0005	.0152	.0088

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0005	.0001	.0160	.0000	-.0001	31.64	16.78
SDev	.0006	.0000	.0032	.0001	.0009	.09	.15
%RSD	121.7	17.88	20.25	832.9	657.4	.2978	.8984
#1	-.0001	.0001	.0182	-.0001	.0005	31.71	16.89
#2	-.0009	.0002	.0137	.0001	-.0008	31.58	16.68

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0011	.0000	-.0011	-.0011	.0015	.0317	-.0001
SDev	.0006	.0120	.0007	.0007	.0000	.0063	.0005
%RSD	61.46	105700.	64.88	59.27	.8503	19.95	488.8
#1	-.0006	-.0085	-.0006	-.0016	.0015	.0362	.0003
#2	-.0015	.0085	-.0016	-.0007	.0015	.0272	-.0005

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	99.94	-.0005	.0015	.1762	-.0011	.0009	-.0014
SDev	.58	.0024	.0010	.0015	.0002	.0001	.0002
%RSD	.5833	517.0	64.78	.8510	19.31	17.20	14.47
#1	100.4	-.0022	.0022	.1772	-.0012	.0008	-.0016
#2	99.53	.0012	.0008	.1751	-.0009	.0010	-.0013

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	.0000	-.0002	.0011	-.0010	-.0005	-.0012
SDev	.0000	.0014	.0001	.0004	.0065	.0001	.0048
%RSD	2.060	6056.	33.00	33.24	649.4	15.48	388.8
#1	.0006	.0010	-.0002	.0014	.0036	-.0004	.0022
#2	.0006	-.0010	-.0001	.0009	-.0056	-.0005	-.0046

010259

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.0003	.0001
SDev	.0001	.0002	.0003
%RSD	283.9	63.98	456.3
#1	.0001	.0004	-.0001
#2	-.0000	.0001	.0003

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	711870	10000	--	--	--	--	--
SDev	4179.708	.0000000	--	--	--	--	--
%RSD	.5871453	.0000000	--	--	--	--	--
#1	714825	10000	--	--	--	--	--
#2	708914	10000	--	--	--	--	--

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Method: DAILY2 Sample Name: 248204 df50 Operator:
Run Time: 07/22/04 13:56:15
Comment:
Mode: CONC Corr. Factor: 1

010260

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0105	.0042	23.94	.0001	.0000	-.0017
SDev	.0004	.0007	.0032	.05	.0000	.0000	.0020
%RSD	254.3	6.899	74.71	.2035	25.14	29.28	116.3
#1	.0001	.0100	.0065	23.91	.0002	.0000	-.0003
#2	-.0005	.0110	.0020	23.98	.0001	.0000	-.0031

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0189	.0001	.0005	.0012	.0009	-.0063	.0106
SDev	.0007	.0004	.0000	.0001	.0001	.0085	.0060
%RSD	3.462	404.8	.6976	7.700	16.57	136.0	55.89
#1	.0194	.0004	.0005	.0012	.0008	-.0002	.0149
#2	.0185	-.0002	.0005	.0011	.0010	-.0123	.0064

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	.0001	.0000	-.0000	-.0007	28.08	14.75
SDev	.0001	.0000	.0009	.0001	.0006	.10	.14
%RSD	80.13	3.440	2127.	2417.	86.33	.3700	.9341
#1	-.0001	.0001	.0007	-.0001	-.0011	28.16	14.65
#2	-.0002	.0001	-.0006	.0000	-.0003	28.01	14.85

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0108	-.0050	-.0001	-.0020	.0259	-.0022
SDev	.0016	.0013	.0024	.0001	.0018	.0027	.0018
%RSD	1641.	12.40	46.79	137.0	89.36	10.25	82.36
#1	.0013	.0117	-.0067	-.0002	-.0007	.0278	-.0035
#2	-.0011	.0098	-.0034	-.0000	-.0033	.0240	-.0009

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	101.4	.0032	.0016	.0032	-.0017	.0021	-.0005
SDev	.6	.0068	.0024	.0028	.0009	.0007	.0009
%RSD	.5499	210.0	151.8	89.82	50.54	31.51	169.0
#1	101.0	.0080	-.0001	.0052	-.0023	.0026	-.0011
#2	101.8	-.0016	.0032	.0011	-.0011	.0017	.0001

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0007	-.0001	-.0022	.0107	-.0004	-.0036
SDev	.0000	.0022	.0000	.0002	.0143	.0004	.0030
%RSD	2.402	314.5	31.62	8.749	133.2	92.86	85.05
#1	.0002	-.0009	-.0001	-.0020	.0208	-.0001	.0014
#2	.0002	.0023	-.0001	-.0023	.0006	-.0006	-.0057

010261

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.1435	-.0002
SDev	.0001	.0001	.0000
%RSD	281.2	.0868	18.03
#1	.0001	.1434	-.0002
#2	-.0000	.1436	-.0002

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	722394	10000	--	--	--	--	--
SDev	3987.375	.0000000	--	--	--	--	--
%RSD	.5519672	.0000000	--	--	--	--	--
#1	719574	10000	--	--	--	--	--
#2	725213	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 24A206 df50 Operator:
Run Time: 07/22/04 14:01:01
Comment:
Mode: CONC Corr. Factor: 1

010262

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	.0151	-.0014	24.84	.0001	-.0000	-.0040
SDev	.0000	.0012	.0028	.03	.0000	.0000	.0016
%RSD	2.868	7.940	205.2	.1174	34.21	672.5	38.53
#1	.0010	.0142	-.0033	24.82	.0002	.0000	-.0029
#2	.0010	.0159	.0006	24.86	.0001	-.0000	-.0051

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2134	.0002	.0004	.0013	.0007	.0042	.0170
SDev	.0015	.0002	.0004	.0001	.0003	.0072	.0015
%RSD	.6936	103.8	126.8	4.127	48.25	170.7	9.006
#1	.2124	.0001	.0007	.0014	.0009	-.0009	.0159
#2	.2145	.0004	.0000	.0013	.0005	.0094	.0180

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	.0002	.0056	.0001	.0001	29.43	15.58
SDev	.0004	.0000	.0072	.0001	.0003	.06	.03
%RSD	760.4	11.82	128.7	123.2	325.7	.1904	.2124
#1	-.0003	.0002	.0005	.0002	-.0001	29.39	15.60
#2	.0002	.0001	.0106	.0000	.0003	29.47	15.56

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0004	.0055	-.0056	-.0020	-.0002	.0307	-.0025
SDev	.0007	.0223	.0013	.0018	.0025	.0037	.0009
%RSD	185.6	405.0	23.22	87.64	1228.	11.95	36.82
#1	-.0008	.0213	-.0047	-.0008	-.0020	.0333	-.0032
#2	.0001	-.0103	-.0065	-.0032	.0016	.0281	-.0019

Elem	Sc3613	1960/1	1960/2	Si2881	Pt2270	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	98.41	.0015	-.0030	.0092	-.0032	-.0015	-.0000
SDev	.08	.0054	.0032	.0051	.0016	.0039	.0001
%RSD	.0821	362.3	106.3	54.84	50.13	261.6	589.8
#1	98.35	-.0023	-.0053	.0057	-.0021	-.0043	.0001
#2	98.46	.0053	-.0007	.0128	-.0043	.0013	-.0001

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	.0006	-.0002	.0004	.0191	.0001	-.0003
SDev	.0000	.0019	.0001	.0035	.0255	.0004	.0038
%RSD	1.689	320.5	40.43	872.8	133.4	378.6	1410.
#1	.0008	.0020	-.0001	.0029	.0011	.0004	.0024
#2	.0009	-.0008	-.0002	-.0021	.0372	-.0002	-.0030

010263

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.0192	-.0002
SDev	.0000	.0001	.0001
%RSD	70.45	.2982	64.60
#1	.0001	.0192	-.0003
#2	.0000	.0192	-.0001

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	700967	10000	--	--	--	--	--
SDev	578.4133	.0000000	--	--	--	--	--
%RSD	.0825165	.0000000	--	--	--	--	--
#1	700558	10000	--	--	--	--	--
#2	701376	10000	--	--	--	--	--

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Method: DAILY2 Sample Name: ccv4 Operator:

Run Time: 07/22/04 14:09:27

Comment:

Mode: CONC Corr. Factor: 1

010264

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9823	9.836	5.104	4.862	10.07	.9751	5.018
SDev	.0014	.012	.003	.012	.02	.0002	.008
%RSD	.1463	.1230	.0611	.2412	.1900	.0232	.1701
#1	.9833	9.827	5.102	4.853	10.05	.9752	5.023
#2	.9813	9.845	5.106	4.870	10.08	.9749	5.013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.100	11.00	5.500	5.500	11.00	1.100	5.500
Low	.9000	9.000	4.500	4.500	9.000	.9000	4.500

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.88	1.002	4.996	1.970	2.037	10.25	18.63
SDev	.02	.002	.004	.001	.001	.06	.17
%RSD	.0898	.2223	.0813	.0477	.0435	.5561	.9234
#1	19.87	1.001	4.999	1.970	2.037	10.29	18.51
#2	19.90	1.004	4.993	1.971	2.038	10.21	18.76
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	1.100	5.500	2.200	2.200	11.00	22.00
Low	18.00	.9000	4.500	1.800	1.800	9.000	18.00

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.985	4.705	19.94	1.016	5.025	28.07	L15.76
SDev	.003	.031	.01	.000	.023	.06	.12
%RSD	.0596	.6614	.0524	.0128	.4622	.2213	.7485
#1	4.987	4.683	19.95	1.016	5.008	28.11	L15.67
#2	4.983	4.727	19.93	1.016	5.041	28.03	L15.84
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	5.500	5.500	22.00	1.100	5.500	33.00	33.00
Low	4.500	4.500	18.00	.9000	4.500	27.00	27.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.893	5.213	5.005	4.978	1.012	H5.030	.9973
SDev	.015	.077	.029	.029	.003	.017	.0029
%RSD	.3019	1.469	.5715	.5876	.2944	.3369	.2884
#1	4.882	5.267	5.025	4.958	1.014	H5.018	.9993
#2	4.903	5.159	4.985	4.999	1.010	H5.042	.9952
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	5.500	5.500			1.100	1.100	1.100
Low	4.500	4.500			.9000	.9000	.9000

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010265

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	101.3	5.280	5.256	4.994	4.987	5.264	4.994
SDev	.5	.004	.045	.009	.010	.032	.001
%RSD	.5424	.0767	.8631	.1862	.1999	.6001	.0182
#1	100.9	5.277	5.223	4.987	4.980	5.241	4.993
#2	101.6	5.283	5.288	5.001	4.994	5.286	4.994
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				5.500	5.500	5.500	5.500
Low				4.500	4.500	4.500	4.500

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.037	.9776	L1.042	5.344	.9650	4.928	H1.679
SDev	.000	.0029	.001	.029	.0059	.004	.007
%RSD	.0003	.3012	.0630	.5366	.6114	.0737	.4317
#1	5.037	.9755	L1.041	5.324	.9608	4.930	H1.684
#2	5.037	.9797	L1.042	5.365	.9691	4.925	H1.673
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High
High	5.500	1.100	5.500	5.500	1.100	5.500	1.100
Low	4.500	.9000	4.500	4.500	.9000	4.500	.9000

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.031	.9962	4.904
SDev	.002	.0032	.000
%RSD	.0492	.3164	.0047
#1	5.030	.9940	4.904
#2	5.032	.9985	4.903
Errors	LC Pass	LC Pass	LC Pass
High	5.500	1.100	5.500
Low	4.500	.9000	4.500

010266

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	721194	10000	--	--	--	--	--
SDev	3892.623	.0000000	--	--	--	--	--
%RSD	.5397474	.0000000	--	--	--	--	--
#1	718441	10000	--	--	--	--	--
#2	723946	10000	--	--	--	--	--

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Method: DATLY2 Sample Name: ccb4 Operator:
Run Time: 07/22/04 14:16:02
Comment:
Mode: CONC Corr. Factor: 1

010267

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0004	.0017	.0009	H.0533	.0001	.0000	-.0026
SDev	.0006	.0037	.0009	.0043	.0000	.0000	.0041
%RSD	156.3	220.0	102.7	8.008	5.872	36.46	158.4
#1	.0000	.0044	.0002	H.0563	.0001	.0000	.0003
#2	-.0007	-.0009	.0015	H.0503	.0001	.0000	-.0055
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0495	-.0000	.0006	.0004	-.0002	-.0072	-.0013
SDev	.0666	.0000	.0003	.0010	.0005	.0215	.0077
%RSD	134.4	51.52	54.35	230.2	242.7	298.8	598.9
#1	.0025	-.0000	.0009	.0012	.0001	.0080	.0041
#2	H.0966	-.0001	.0004	-.0003	-.0006	-.0024	-.0067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	.0001	.0092	.0001	.0015	H.0518	.0062
SDev	.0004	.0001	.0076	.0000	.0007	.0761	.0010
%RSD	567.2	52.89	82.46	50.34	50.03	146.9	16.65
#1	.0002	.0002	.0145	.0000	.0020	H.1056	.0069
#2	-.0004	.0001	.0038	.0001	.0010	-.0020	.0055
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0005	-.0007	-.0016	-.0002	-.0014	H.0179	-.0022
SDev	.0007	.0049	.0017	.0004	.0043	.0132	.0013
%RSD	130.6	732.3	107.8	165.2	311.5	73.63	60.24
#1	-.0000	.0028	-.0004	.0000	.0016	.0086	-.0032
#2	-.0010	-.0041	-.0028	-.0005	-.0044	H.0273	-.0013
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sr3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010268

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	102.6	-.0017	.0023	-.0015	-.0007	.0009	-.0011
SDev	.3	.0014	.0021	.0013	.0008	.0019	.0004
%RSD	.2952	82.63	90.54	88.33	123.6	194.7	35.09
#1	102.4	-.0027	.0008	-.0024	-.0001	-.0004	-.0008
#2	102.8	-.0007	.0037	-.0006	-.0013	.0023	-.0014
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0001	-.0001	.0066	.0107	.0001	.0000
SDev	.0000	.0007	.0000	.0006	.0040	.0004	.0019
%RSD	50.05	931.2	90.78	8.393	37.40	361.2	4636.
#1	.0000	-.0004	-.0000	.0070	.0135	.0004	.0013
#2	.0001	.0006	-.0001	.0063	.0078	-.0002	-.0013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0021	.0003
SDev	.0000	.0037	.0003
%RSD	35.25	178.2	89.59
#1	.0001	-.0005	.0004
#2	.0001	.0047	.0001
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010269

Int:Std	1	2	3	4	5	6	
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	730706	10000	--	--	--	--	--
SDev	2117.785	.0000000	--	--	--	--	--
%RSD	.2898036	.0000000	--	--	--	--	--
#1	729268	10000	--	--	--	--	--
#2	732263	10000	--	--	--	--	--

Method: DAILY2 Sample Name: icv/ccv Operator:
Run Time: 07/22/04 14:31:24
Comment:
Mode: CONC Corr. Factor: 1

010270

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9829	9.860	5.078	4.820	10.08	.9726	5.010
SDev	.0005	.019	.014	.002	.01	.0006	.016
%RSD	.0471	.1920	.2833	.0356	.1251	.0662	.3105
#1	.9833	9.873	5.088	4.821	10.07	.9721	4.999
#2	.9826	9.847	5.068	4.819	10.09	.9730	5.021
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	10.00	5.000	5.000	10.00	1.000	5.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.84	.9992	4.981	1.967	2.039	10.20	18.86
SDev	.01	.0029	.004	.002	.003	.01	.09
%RSD	.0526	.2919	.0889	.0846	.1657	.1459	.4828
#1	19.84	.9972	4.978	1.966	2.041	10.21	18.93
#2	19.85	1.001	4.984	1.968	2.037	10.19	18.80
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00	1.000	5.000	2.000	2.000	10.00	20.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.987	4.764	19.89	1.015	5.025	28.14	Q15.98
SDev	.002	.044	.01	.001	.023	.15	.14
%RSD	.0417	.9192	.0378	.1132	.4617	.5297	.8557
#1	4.986	4.795	19.90	1.014	5.009	28.25	Q16.07
#2	4.989	4.733	19.89	1.016	5.041	28.04	Q15.88
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	5.000	5.000	20.00	1.000	5.000	30.00	30.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.889	5.380	4.977	5.015	1.016	Q5.054	.9917
SDev	.004	.012	.023	.043	.001	.027	.0065
%RSD	.0815	.2260	.4651	.8488	.0511	.5250	.6518
#1	4.892	5.389	4.960	4.985	1.016	Q5.072	.9962
#2	4.886	5.372	4.993	5.046	1.016	Q5.035	.9871
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	QC Fail	QC Pass
Value	5.000	5.000			1.000	1.000	1.000
Range	10.00	10.00			10.00	10.00	10.00

Elem	Sr3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010271

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	101.7	5.294	5.316	4.995	5.003	5.309	4.981
SDev	.4	.028	.058	.006	.036	.048	.011
%RSD	.3806	.5350	1.083	.1289	.7215	.9009	.2128
#1	101.9	5.274	5.276	5.000	4.977	5.275	4.973
#2	101.4	5.314	5.357	4.990	5.028	5.343	4.988
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass
Value				5.000	5.000	5.000	5.000
Range				10.00	10.00	10.00	10.00

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.036	.9765	Q1.042	5.333	.9633	4.922	Q1.678
SDev	.006	.0057	.001	.048	.0179	.009	.004
%RSD	.1192	.5846	.0710	.8936	1.859	.1868	.2600
#1	5.032	.9806	Q1.041	5.299	.9507	4.915	Q1.675
#2	5.040	.9725	Q1.042	5.366	.9760	4.928	Q1.681
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail
Value	5.000	1.000	5.000	5.000	1.000	5.000	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.024	.9948	4.893
SDev	.007	.0001	.001
%RSD	.1428	.0122	.0150
#1	5.019	.9949	4.892
#2	5.029	.9947	4.893
Errors	QC Pass	QC Pass	QC Pass
Value	5.000	1.000	5.000
Range	10.00	10.00	10.00

010272

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	724192	10000	--	--	--	--	--
SDev	2762.666	.0000000	--	--	--	--	--
%RSD	.3814828	.0000000	--	--	--	--	--
#1	726145	10000	--	--	--	--	--
#2	722238	10000	--	--	--	--	--

Analysis Report Blank Sample 07/22/04 02:42:35 PM page 1

Method: DAILY2 Sample Name: icb/ccb Operator:

Run Time: 07/22/04 14:38:01

Comment:

Mode: CONC Corr. Factor: 1

010273

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0052	-.0008	.0316	.0000	.0001	-.0050
SDev	.0006	.0019	.0016	.0031	.0001	.0000	.0012
%RSD	94.72	37.27	206.4	9.635	365.0	18.31	24.19
#1	-.0002	-.0065	-.0020	.0338	.0001	.0000	-.0058
#2	-.0011	-.0038	.0004	.0295	-.0000	.0001	-.0041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0047	-.0001	-.0008	-.0003	-.0007	-.0210	-.0190
SDev	.0003	.0002	.0003	.0001	.0000	.0055	.0089
%RSD	6.880	161.6	41.17	28.42	3.356	26.25	46.78
#1	.0044	-.0003	-.0011	-.0003	-.0008	-.0171	-.0127
#2	.0049	.0000	-.0006	-.0004	-.0007	-.0249	-.0253
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	.0001	-.0034	-.0000	.0018	L-.1656	.0089
SDev	.0008	.0000	.0041	.0000	.0011	.0842	.0010
%RSD	113.6	42.33	121.4	218.7	62.98	50.85	10.93
#1	-.0001	.0001	-.0005	.0000	.0026	L-.1060	.0082
#2	-.0013	.0001	-.0062	-.0001	.0010	L-.2251	.0095
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0009	.0024	-.0001	.0003	-.0039	H.0158	-.0054
SDev	.0003	.0081	.0031	.0012	.0022	.0042	.0002
%RSD	29.91	343.0	2276.	394.4	57.59	26.32	2.912
#1	-.0011	-.0034	-.0023	-.0006	-.0023	H.0128	-.0055
#2	-.0007	.0081	.0021	.0012	L-.0055	H.0187	-.0053
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sr3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010274

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	106.0	.0029	.0004	-.0066	.0002	.0012	-.0010
SDev	1.6	.0027	.0018	.0020	.0019	.0003	.0006
%RSD	1.540	91.78	479.0	30.45	1047.	23.12	63.86
#1	104.8	.0010	.0016	-.0051	-.0011	.0014	-.0014
#2	107.1	.0048	-.0009	-.0080	.0015	.0010	-.0005
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	.0001	-.0002	.0057	-.0031	-.0007	-.0034
SDev	.0000	.0003	.0001	.0027	.0148	.0000	.0022
%RSD	2049.	466.0	45.89	47.25	472.2	2.849	66.63
#1	.0000	-.0001	-.0001	.0038	.0073	-.0007	-.0050
#2	-.0000	.0002	-.0003	.0075	-.0136	-.0007	-.0018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0001	-.0009	-.0002
SDev	.0001	.0001	.0002
%RSD	140.2	10.94	89.12
#1	-.0000	-.0008	-.0001
#2	-.0002	-.0010	-.0003
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010275

IntStd	1	2	3	4	5	6	
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	754762	10000	--	--	--	--	--
SDev	11656.66	.0000000	--	--	--	--	--
%RSD	1.544416	.0000000	--	--	--	--	--
#1	746519	10000	--	--	--	--	--
#2	763004	10000	--	--	--	--	--

Analysis Report 07/22/04 02:47:20 PM

Method: DATLY2 Sample Name: 247434r df2 Operator:
Run Time: 07/22/04 14:42:46
Comment:
Mode: CONC Corr. Factor: 1

010276

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0028	.0672	.0221	591.4	.0024	.0001	.0149
SDev	.0007	.0034	.0033	.4	.0001	.0000	.0027
%RSD	25.50	5.102	14.93	.0714	3.001	15.40	18.49
#1	-.0034	.0648	.0198	591.1	.0025	.0001	.0168
#2	-.0023	.0696	.0244	591.7	.0024	.0001	.0129

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2364	.0008	-.0020	.0013	.0032	.0075	.4960
SDev	.0001	.0000	.0001	.0016	.0007	.0011	.0087
%RSD	.0310	3.933	4.523	127.9	20.83	15.35	1.753
#1	.2364	.0008	-.0019	.0024	.0037	.0083	.4899
#2	.2363	.0008	-.0020	.0001	.0027	.0067	.5022

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0055	.0011	.0144	.0001	-.0025	1266.	545.81
SDev	.0008	.0003	.0054	.0000	.0007	1.	.05
%RSD	15.27	29.45	37.81	28.13	26.52	.0972	.1025
#1	-.0049	.0009	.0105	.0002	-.0021	1266.	545.78
#2	-.0061	.0014	.0182	.0001	-.0030	1267.	545.84

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	.0311	.0099	-.0052	-.0051	.0869	-.0128
SDev	.0014	.0027	.0004	.0017	.0008	.0051	.0059
%RSD	163.1	8.596	3.608	32.37	15.51	5.894	45.58
#1	.0001	.0330	.0102	-.0040	-.0046	.0833	-.0170
#2	-.0018	.0292	.0097	-.0064	-.0057	.0905	-.0087

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	96.38	-.0004	.0028	1.486	-.0001	.0018	.0066
SDev	.15	.0027	.0024	.006	.0012	.0025	.0006
%RSD	.1516	643.7	83.40	.3994	945.0	140.4	8.649
#1	96.28	-.0023	.0012	1.482	.0007	.0000	.0070
#2	96.48	.0015	.0045	1.490	-.0010	.0035	.0062

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0038	-.0004	-.0005	-.0042	.0290	-.0010	.0096
SDev	.0000	.0044	.0003	.0003	.0186	.0013	.0051
%RSD	.5595	1133.	59.69	7.642	64.22	129.5	53.04
#1	.0038	.0027	-.0003	-.0044	.0159	-.0001	.0060
#2	.0038	-.0035	-.0008	-.0039	.0422	-.0019	.0133

010277

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0001	.5306	-.0010
SDev	.0002	.0003	.0010
%RSD	199.6	.0554	99.84
#1	.0000	.5304	-.0003
#2	-.0002	.5308	-.0017

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	686490	10000	--	--	--	--	--
SDev	1048.639	.0000000	--	--	--	--	--
%RSD	.1527537	.0000000	--	--	--	--	--
#1	685749	10000	--	--	--	--	--
#2	687232	10000	--	--	--	--	--

Analysis Report 07/22/04 02:52:05 PM page 1

Method: DAILY2 Sample Name: P47434dr dfP Operator: **010278**
Run Time: 07/22/04 14:47:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0022	.0728	.0205	590.7	.0024	.0001	.0182
SDev	.0019	.0043	.0048	1.6	.0000	.0000	.0000
%RSD	87.79	5.864	23.33	.2768	.7320	20.81	.2396
#1	-.0008	.0758	.0239	589.5	.0024	.0001	.0181
#2	-.0035	.0698	.0171	591.8	.0024	.0001	.0182

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2325	.0007	-.0003	.0020	.0039	-.0014	.5151
SDev	.0008	.0003	.0015	.0007	.0000	.0240	.0041
%RSD	.3560	48.12	467.1	34.35	.3638	1703.	.7925
#1	.2331	.0010	.0007	.0025	.0039	.0156	.5179
#2	.2319	.0005	-.0014	.0015	.0039	-.0184	.5122

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0053	.0016	.0224	.0002	-.0025	1264.	547.09
SDev	.0012	.0001	.0123	.0000	.0000	1.	.82
%RSD	22.58	2.874	54.83	9.336	.8291	.0531	1.744
#1	-.0044	.0016	.0310	.0002	-.0025	1265.	546.51
#2	-.0061	.0016	.0137	.0003	-.0025	1264.	547.67

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0369	.0118	-.0060	-.0008	.0736	-.0203
SDev	.0007	.0032	.0019	.0026	.0019	.0043	.0047
%RSD	908.9	8.769	16.25	42.46	229.1	5.903	22.96
#1	-.0004	.0346	.0131	-.0078	.0005	.0767	-.0236
#2	.0006	.0392	.0104	-.0042	-.0021	.0705	-.0170

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	93.94	-.0071	-.0062	1.495	-.0001	-.0065	.0044
SDev	1.13	.0044	.0014	.007	.0011	.0024	.0008
%RSD	1.201	62.42	21.77	.4793	1447.	36.55	18.93
#1	94.74	-.0102	-.0072	1.500	-.0008	-.0082	.0050
#2	93.14	-.0039	-.0053	1.490	.0007	-.0048	.0038

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0038	.0019	-.0006	-.0047	.0676	-.0018	.0066
SDev	.0001	.0021	.0001	.0034	.0314	.0001	.0059
%RSD	1.638	111.3	10.64	71.21	46.42	3.209	90.22
#1	.0039	.0004	-.0006	-.0023	.0898	-.0018	.0108
#2	.0038	.0033	-.0007	-.0071	.0454	-.0018	.0024

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Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.5391	-.0004
SDev	.0001	.0016	.0006
%RSD	105.5	.3038	127.7
#1	.0000	.5379	-.0000
#2	.0001	.5402	-.0008

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	669176	10000	--	--	--	--	--
SDev	8044.754	.0000000	--	--	--	--	--
%RSD	1.202189	.0000000	--	--	--	--	--
#1	674064	10000	--	--	--	--	--
#2	663487	10000	--	--	--	--	--

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Method: DAILY2 Sample Name: 247434sr df2 Operator:

Run Time: 07/22/04 14:52:17

Comment:

010280

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0200	1.073	1.019	593.3	.9493	.0229	.0089
SDev	.0007	.005	.007	2.1	.0035	.0002	.0047
%RSD	3.492	.4331	.7054	.3564	.3656	.7723	52.40
#1	.0195	1.070	1.014	591.8	.9518	.0227	.0056
#2	.0205	1.077	1.024	594.8	.9469	.0230	.0122

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.900	.0236	.2377	.0983	.1305	.4895	16.72
SDev	.079	.0010	.0009	.0038	.0018	.0259	.14
%RSD	.7959	4.342	.3962	3.891	1.343	5.292	.8342
#1	9.845	.0229	.2370	.0956	.1292	.4712	16.82
#2	9.956	.0243	.2384	.1010	.1317	.5078	16.63

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0084	.0016	9.337	.2448	-.0025	1276.	851.10
SDev	.0010	.0001	.073	.0014	.0012	6.	1.73
%RSD	12.19	7.859	.7826	.5739	49.67	.4346	3.383
#1	-.0091	.0015	9.285	.2439	-.0034	1280.	849.87
#2	-.0077	.0017	9.388	.2458	-.0016	1272.	852.32

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2335	.0229	.2612	.2495	-.0092	.0733	.2293
SDev	.0029	.0015	.0066	.0002	.0048	.0126	.0031
%RSD	1.220	6.361	2.537	.0718	52.42	17.13	1.354
#1	.2314	.0239	.2565	.2494	-.0127	.0644	.2271
#2	.2355	.0219	.2659	.2496	-.0058	.0821	.2315

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	88.66	.9554	.9708	1.487	.2534	.9657	.0014
SDev	1.95	.0258	.0000	.003	.0023	.0086	.0021
%RSD	2.199	2.699	.0032	.2013	.9174	.8878	146.9
#1	90.04	.9371	.9708	1.485	.2518	.9596	-.0001
#2	87.28	.9736	.9708	1.489	.2551	.9717	.0029

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0040	-.0084	-.0007	1.047	-.0598	.2399	.0052
SDev	.0001	.0045	.0006	.001	.0405	.0025	.0019
%RSD	1.316	53.70	86.59	.1402	67.82	1.038	36.98
#1	.0040	-.0116	-.0012	1.048	-.0885	.2381	.0066
#2	.0041	-.0052	-.0003	1.046	-.0311	.2416	.0039

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Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0002	.7969	-.0017
SDev	.0004	.0094	.0020
%RSD	265.1	1.179	117.6
#1	-.0005	.7902	-.0032
#2	.0001	.8035	-.0003

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	631534	10000	--	--	--	--	--
SDev	13884.75	.0000000	--	--	--	--	--
%RSD	2.198575	.0000000	--	--	--	--	--
#1	641352	10000	--	--	--	--	--
#2	621716	10000	--	--	--	--	--

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Method: DAILY2 Sample Name: 247436r df2 Operator: **010282**
Run Time: 07/22/04 14:57:02
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0025	.1297	.0216	591.0	.0016	.0001	.0168
SDev	.0021	.0158	.0059	1.8	.0001	.0000	.0146
%RSD	82.00	12.19	27.08	.3119	8.589	15.36	86.59
#1	-.0040	.1185	.0175	589.7	.0015	.0001	.0065
#2	-.0011	.1408	.0258	592.3	.0017	.0001	.0271

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.424	.0005	-.0018	.0030	.0060	.0019	.5146
SDev	.030	.0006	.0011	.0011	.0012	.0309	.0549
%RSD	.5538	127.6	61.33	38.33	19.63	1641.	10.67
#1	5.402	.0000	-.0026	.0022	.0052	-.0200	.4758
#2	5.445	.0009	-.0010	.0038	.0068	.0238	.5534

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0053	.0018	.2644	.0004	-.0020	1235.	550.40
SDev	.0028	.0002	.0243	.0001	.0006	6.	.91
%RSD	52.97	11.89	9.206	37.02	27.43	.4762	1.803
#1	-.0073	.0016	.2472	.0003	-.0024	1240.	549.76
#2	-.0033	.0019	.2816	.0004	-.0016	1231.	551.05

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0009	.0262	.0137	-.0066	-.0028	.1428	-.0171
SDev	.0005	.0029	.0063	.0011	.0061	.0267	.0017
%RSD	52.66	11.12	46.27	16.96	219.4	18.68	9.915
#1	-.0012	.0241	.0092	-.0058	-.0071	.1616	-.0159
#2	-.0005	.0282	.0182	-.0074	.0015	.1239	-.0183

Elem	Sc3613	1960/1	1960/2	Si2881	Ph2220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	91.02	-.0045	-.0045	4.536	.0002	-.0045	.0083
SDev	2.34	.0026	.0022	.001	.0014	.0006	.0012
%RSD	2.568	57.55	47.91	.0236	809.6	12.64	14.41
#1	92.67	-.0064	-.0030	4.535	-.0008	-.0041	.0075
#2	89.37	-.0027	-.0060	4.536	.0011	-.0049	.0092

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0131	.0012	-.0006	-.0027	.0543	-.0006	.0061
SDev	.0001	.0016	.0001	.0031	.0826	.0009	.0026
%RSD	.8856	140.1	21.37	113.1	152.2	159.7	42.92
#1	.0131	.0000	-.0006	-.0049	-.0042	-.0012	.0043
#2	.0132	.0023	-.0005	-.0005	.1127	.0001	.0080

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Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.0027	.0002
SDev	.0001	.0003	.0012
%RSD	305.5	9.593	491.6
#1	-.0000	.0025	-.0006
#2	.0001	.0029	.0011

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	648323	10000	--	--	--	--	--
SDev	16622.67	.0000000	--	--	--	--	--
%RSD	2.563948	.0000000	--	--	--	--	--
#1	660077	10000	--	--	--	--	--
#2	636569	10000	--	--	--	--	--

Analysis Report

07/22/04 03:06:21 PM

Method: DAILY2 Sample Name: 248204 df2
Run Time: 07/22/04 15:01:48 Operator:
Comment:
Mode: CONC Corr. Factor: 1

010284

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0032	.0710	.0205	533.1	.0020	.0001	.0134
SDev	.0003	.0073	.0038	.9	.0000	.0000	.0030
%RSD	10.32	10.30	18.51	.1638	1.460	6.143	22.63
#1	-.0030	.0658	.0231	533.7	.0020	.0002	.0112
#2	-.0034	.0762	.0178	532.5	.0020	.0001	.0155

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3020	.0005	-.0023	.0131	.0212	-.0053	.3830
SDev	.0019	.0000	.0004	.0002	.0001	.0043	.0022
%RSD	.6176	1.980	16.68	1.749	.7096	81.11	.5833
#1	.3034	.0005	-.0020	.0129	.0211	-.0083	.3846
#2	.3007	.0005	-.0025	.0132	.0213	-.0023	.3814

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0061	.0014	.0143	.0005	.0048	1091.	553.29
SDev	.0002	.0000	.0048	.0001	.0008	6.	.47
%RSD	2.791	1.552	33.56	17.49	16.27	.5678	.8774
#1	-.0060	.0014	.0176	.0005	.0054	1096.	552.96
#2	-.0062	.0015	.0109	.0006	.0043	1087.	553.62

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	.0204	.0096	-.0056	-.0043	.0414	-.0182
SDev	.0009	.0158	.0025	.0010	.0008	.0063	.0036
%RSD	171.9	77.38	26.54	17.70	18.79	15.30	19.81
#1	-.0001	.0316	.0113	-.0063	-.0038	.0459	-.0207
#2	.0012	.0092	.0078	-.0049	-.0049	.0369	-.0156

Elem	Sc3613	1960/1	1960/2	Si2881	Pb2920	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	90.59	-.0120	.0005	.0563	-.0006	-.0037	.0076
SDev	.53	.0010	.0033	.0044	.0002	.0026	.0003
%RSD	.5858	8.701	675.1	7.776	37.08	70.16	3.283
#1	90.96	-.0127	-.0019	.0532	-.0004	-.0055	.0076
#2	90.21	-.0112	.0028	.0594	-.0006	-.0018	.0073

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0032	.0007	-.0004	-.0077	.0086	-.0020	.0276
SDev	.0000	.0040	.0001	.0000	.0157	.0002	.0022
%RSD	.1749	577.6	17.22	.3591	182.6	10.40	7.832
#1	.0032	-.0022	-.0004	-.0077	-.0025	-.0019	.0291
#2	.0032	.0036	-.0005	-.0077	.0197	-.0021	.0261

010285

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	3.659	-.0009
SDev	.0001	.012	.0001
%RSD	865.2	.3324	6.411
#1	.0001	3.668	-.0010
#2	-.0001	3.651	-.0009

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	645236	10000	--	--	--	--	--
SDev	3788.678	.0000000	--	--	--	--	--
%RSD	.5871771	.0000000	--	--	--	--	--
#1	647915	10000	--	--	--	--	--
#2	642557	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 248206 df2 Operator:
Run Time: 07/22/04 15:06:33
Comment:
Mode: CONC Corr. Factor: 1

010286

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0138	.0590	.0197	546.8	.0019	.0001	.0187
SDev	.0012	.0004	.0034	.2	.0000	.0000	.0034
%RSD	8.597	.6519	17.19	.0311	.2674	1.387	18.22
#1	.0129	.0593	.0221	546.7	.0019	.0001	.0211
#2	.0146	.0587	.0173	546.9	.0019	.0001	.0163

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.100	.0008	-.0013	.0234	.0108	.0638	.4181
SDev	.005	.0002	.0007	.0011	.0000	.0091	.0276
%RSD	.1071	31.04	54.49	4.917	.1257	14.20	6.609
#1	5.097	.0009	-.0018	.0226	.0108	.0574	.3985
#2	5.104	.0006	-.0008	.0242	.0108	.0703	.4376

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0048	.0016	.0723	.0023	.0045	1141.	551.45
SDev	.0010	.0001	.0108	.0001	.0001	5.	.51
%RSD	21.11	4.080	14.94	4.136	3.190	.4482	.9987
#1	-.0055	.0016	.0646	.0022	.0046	1145.	551.09
#2	-.0041	.0017	.0799	.0023	.0044	1138.	551.82

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0085	.0194	.0150	-.0063	-.0023	.0763	-.0158
SDev	.0003	.0037	.0018	.0025	.0019	.0061	.0029
%RSD	3.382	19.15	11.86	40.32	84.76	8.022	18.60
#1	.0083	.0221	.0163	-.0045	-.0037	.0806	-.0137
#2	.0087	.0168	.0138	-.0081	-.0009	.0720	-.0178

Elem	Sc3613	1960/1	1960/2	Si2881	Pb2200	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	92.11	-.0025	-.0032	.1631	.0008	-.0030	.0078
SDev	1.25	.0019	.0032	.0076	.0023	.0028	.0011
%RSD	1.362	75.70	98.53	4.632	269.2	92.59	14.29
#1	92.99	-.0012	-.0010	.1577	.0025	-.0010	.0085
#2	91.22	-.0038	-.0055	.1684	-.0008	-.0049	.0070

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0195	-.0009	-.0008	-.0067	.0495	-.0004	.0140
SDev	.0000	.0001	.0002	.0054	.0213	.0006	.0005
%RSD	.0503	10.51	30.81	79.74	43.04	169.4	3.366
#1	.0195	-.0010	-.0009	-.0105	.0344	-.0008	.0143
#2	.0195	-.0009	-.0006	-.0029	.0645	.0001	.0136

010287

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0002	.4880	-.0012
SDev	.0000	.0013	.0005
%RSD	7.228	.2746	43.15
#1	-.0002	.4871	-.0015
#2	-.0002	.4890	-.0008

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	656050	10000	--	--	--	--	--
SDev	8898.939	.0000000	--	--	--	--	--
%RSD	1.356443	.0000000	--	--	--	--	--
#1	662342	10000	--	--	--	--	--
#2	649757	10000	--	--	--	--	--

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Method: DAILY2 Sample Name: ccv6 Operator:
Run Time: 07/22/04 15:14:58
Comment:
Mode: CONC Corr. Factor: 1

010288

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9762	9.850	5.083	H6.062	9.982	.9747	5.019
SDev	.0004	.001	.003	.083	.014	.0000	.009
%RSD	.0381	.0100	.0537	1.377	.1406	.0033	.1735
#1	.9765	9.849	5.085	H6.121	9.973	.9747	5.026
#2	.9760	9.850	5.081	H6.003	9.992	.9747	5.013
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	1.100	11.00	5.500	5.500	11.00	1.100	5.500
Low	.9000	9.000	4.500	4.500	9.000	.9000	4.500

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.95	1.003	4.986	1.973	2.032	10.22	18.90
SDev	.00	.001	.002	.001	.001	.00	.01
%RSD	.0015	.0556	.0401	.0623	.0638	.0272	.0424
#1	19.95	1.003	4.988	1.972	2.033	10.22	18.91
#2	19.95	1.003	4.985	1.974	2.031	10.22	18.90
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	1.100	5.500	2.200	2.200	11.00	22.00
Low	18.00	.9000	4.500	1.800	1.800	9.000	18.00

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.976	4.760	19.95	1.015	4.995	28.29	L15.88
SDev	.005	.003	.01	.000	.010	.09	.01
%RSD	.1007	.0683	.0582	.0402	.1995	.3076	.0628
#1	4.972	4.763	19.94	1.015	4.988	28.35	L15.89
#2	4.979	4.758	19.95	1.016	5.002	28.23	L15.87
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	5.500	5.500	22.00	1.100	5.500	33.00	33.00
Low	4.500	4.500	18.00	.9000	4.500	27.00	27.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.889	5.452	5.003	4.990	1.016	H5.041	1.004
SDev	.005	.026	.011	.032	.007	.006	.004
%RSD	.0947	.4840	.2103	.6326	.6473	.1187	.3990
#1	4.893	5.471	4.996	5.013	1.021	H5.037	1.002
#2	4.886	5.433	5.010	4.968	1.011	H5.045	1.007
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	5.500	5.500			1.100	1.100	1.100
Low	4.500	4.500			.9000	.9000	.9000

Elem	Sr3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1499

010289

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	101.1	5.319	5.288	4.982	4.995	5.298	4.991
SDev	.3	.011	.015	.002	.018	.006	.001
%RSD	.2790	.2034	.2797	.0399	.3511	.1180	.0198
#1	100.9	5.311	5.298	4.983	5.007	5.303	4.990
#2	101.3	5.327	5.277	4.980	4.982	5.294	4.992
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				5.500	5.500	5.500	5.500
Low				4.500	4.500	4.500	4.500

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.033	.9684	L1.038	5.339	.9772	4.926	H1.663
SDev	.007	.0024	.001	.041	.0050	.002	.008
%RSD	.1339	.2445	.0495	.7650	.5152	.0352	.4597
#1	5.038	.9701	L1.038	5.310	.9736	4.925	H1.658
#2	5.028	.9667	L1.038	5.368	.9808	4.927	H1.669
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High
High	5.500	1.100	5.500	5.500	1.100	5.500	1.100
Low	4.500	.9000	4.500	4.500	.9000	4.500	.9000

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.015	1.007	4.895
SDev	.001	.006	.002
%RSD	.0163	.5917	.0388
#1	5.015	1.003	4.896
#2	5.014	1.011	4.893
Errors	LC Pass	LC Pass	LC Pass
High	5.500	1.100	5.500
Low	4.500	.9000	4.500

010290

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	720160	10000	--	--	--	--	--
SDev	2004.648	.0000000	--	--	--	--	--
%RSD	.2783612	.0000000	--	--	--	--	--
#1	718743	10000	--	--	--	--	--
#2	721578	10000	--	--	--	--	--

Method: DAILY2 Sample Name: ccb6 Operator:
Run Time: 07/22/04 15:21:34
Comment:
Mode: CONC Corr. Factor: 1

010291

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	-.0024	.0016	H.9516	.0001	.0002	-.0021
SDev	.0003	.0052	.0006	.0402	.0000	.0000	.0014
%RSD	251.0	212.2	41.89	4.225	32.95	3.717	65.02
#1	-.0003	-.0061	.0011	H.9800	.0001	.0002	-.0031
#2	.0001	.0012	.0020	H.9232	.0001	.0002	-.0012
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0162	.0002	.0000	.0002	.0002	-.0097	.0006
SDev	.0064	.0001	.0000	.0001	.0001	.0020	.0101
%RSD	39.56	71.21	9.654	34.72	44.07	20.66	1712.
#1	.0116	.0001	.0000	.0002	.0002	-.0083	-.0066
#2	.0207	.0003	.0000	.0003	.0003	-.0112	.0077
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	.0004	-.0005	.0001	.0025	H.0838	.0197
SDev	.0001	.0001	.0057	.0001	.0008	.0866	.0014
%RSD	32.06	15.30	1096.	154.7	30.48	103.3	7.171
#1	.0003	.0004	-.0045	-.0000	.0030	H.1450	.0207
#2	.0005	.0003	.0035	.0001	.0019	.0226	.0187
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	-.0036	-.0022	-.0010	-.0023	H.0238	-.0041
SDev	.0004	.0044	.0029	.0002	.0029	.0016	.0003
%RSD	62.68	121.6	130.3	23.12	127.4	6.937	7.822
#1	-.0010	-.0067	-.0002	-.0012	-.0044	H.0250	-.0043
#2	-.0004	-.0005	-.0043	-.0008	-.0002	H.0226	-.0039
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899

010292

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	100.9	.0004	.0017	.0011	-.0014	.0013	-.0005
SDev	.9	.0027	.0006	.0025	.0008	.0013	.0004
%RSD	.8894	620.5	35.15	227.9	57.87	99.05	85.12
#1	101.6	.0023	.0022	.0028	-.0008	.0022	-.0002
#2	100.3	-.0015	.0013	-.0007	-.0020	.0004	-.0007
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	-.0014	.0000	.0043	.0242	.0001	-.0003
SDev	.0000	.0015	.0003	.0004	.0022	.0006	.0052
%RSD	15.94	109.0	1375.	10.45	9.137	582.4	1482.
#1	.0001	-.0025	.0002	.0040	.0227	-.0003	-.0040
#2	.0001	-.0003	-.0002	.0046	.0258	.0005	.0033
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.0001	-.0001
SDev	.0001	.0006	.0002
%RSD	85.99	430.1	185.3
#1	.0000	-.0003	.0000
#2	.0001	.0006	-.0003
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010293

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	718063	10000	--	--	--	--	--
SDev	6382.346	.0000000	--	--	--	--	--
%RSD	.8878390	.0000000	--	--	--	--	--
#1	723376	10000	--	--	--	--	--
#2	714350	10000	--	--	--	--	--

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Method: DAILY2 Sample Name: 247357r dfP Operator:

010294

Run Time: 07/22/04 15:26:19

Comment:

Mode: CONC Corr. Factor: 1

Elem	Ag3290	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0059	.0278	.0405	1058.	.2108	.0002	.0404
SDev	.0000	.0066	.0016	8.	.0000	.0000	.0009
%RSD	.4034	23.73	3.875	.7972	.0133	2.880	2.292
#1	-.0059	.0231	.0416	1052.	.2108	.0002	.0397
#2	-.0059	.0324	.0394	1064.	.2109	.0002	.0410

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1644	.0008	-.0073	.0041	.0042	-.0123	1.778
SDev	.0021	.0001	.0007	.0005	.0012	.0112	.002
%RSD	1.280	17.24	9.150	12.34	29.00	90.44	.0961
#1	.1629	.0009	-.0068	.0037	.0033	-.0202	1.777
#2	.1659	.0007	-.0078	.0044	.0051	-.0044	1.779

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0133	.0015	-.0003	.0005	-.0030	2797.	521.61
SDev	.0001	.0001	.0044	.0002	.0001	.	1.62
%RSD	.8260	7.703	1717.	33.79	3.144	.0030	7.501
#1	-.0132	.0015	-.0034	.0004	-.0030	2797.	520.47
#2	-.0134	.0016	.0029	.0006	-.0031	2797.	522.76

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0009	.0335	.0273	-.0085	-.0096	.1133	-.0423
SDev	.0001	.0063	.0050	.0036	.0003	.0013	.0060
%RSD	15.98	18.71	18.12	42.43	3.042	1.101	14.10
#1	.0008	.0290	.0238	-.0060	-.0098	.1142	-.0465
#2	.0010	.0379	.0308	-.0111	-.0094	.1124	-.0381

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	88.00	.0135	-.0164	.2743	.0034	-.0064	.0141
SDev	2.67	.0040	.0036	.0051	.0008	.0011	.0028
%RSD	3.036	29.52	21.94	1.861	22.06	16.71	19.73
#1	89.88	.0106	-.0138	.2707	.0040	-.0057	.0161
#2	86.11	.0163	-.0189	.2779	.0029	-.0072	.0121

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0099	.0042	-.0010	-.0051	.0553	-.0020	.0065
SDev	.0000	.0004	.0001	.0042	.0047	.0011	.0005
%RSD	.3520	8.946	7.421	82.91	8.492	53.87	8.075
#1	.0099	.0039	-.0011	-.0081	.0587	-.0028	.0068
#2	.0099	.0045	-.0010	-.0021	.0520	-.0013	.0061

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Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0001	.7220	-.0012
SDev	.0001	.0012	.0007
%RSD	223.9	.1600	61.54
#1	-.0000	.7211	-.0017
#2	.0002	.7228	-.0007

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	626781	10000	--	--	--	--	--
SDev	14975.92	.0000000	--	--	--	--	--
%RSD	3.027520	.0000000	--	--	--	--	--
#1	640199	10000	--	--	--	--	--
#2	613363	10000	--	--	--	--	--

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Method: DAILY2 Sample Name: 247357dr dfP Operator:
Run Time: 07/22/04 15:31:05
Comment:
Mode: CONC Corr. Factor: 1

010296

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0065	.0229	.0413	1046.	.2105	.0002	.0393
SDev	.0004	.0031	.0034	5.	.0003	.0000	.0000
%RSD	5.802	13.42	8.284	.4335	.1573	14.12	.0292
#1	-.0062	.0207	.0437	1050.	.2103	.0002	.0393
#2	-.0067	.0250	.0389	1043.	.2108	.0002	.0393

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1597	.0008	-.0090	.0032	.0036	-.0354	1.741
SDev	.0002	.0001	.0005	.0001	.0006	.0107	.008
%RSD	.1043	15.09	5.450	3.527	17.20	30.28	.4539
#1	.1598	.0007	-.0094	.0033	.0032	-.0430	1.747
#2	.1596	.0008	-.0087	.0031	.0040	-.0278	1.736

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0132	.0019	-.0061	.0004	-.0026	2768.	521.97
SDev	.0004	.0000	.0022	.0001	.0014	6.	.86
%RSD	3.146	.4355	35.90	17.41	55.21	.2238	3.926
#1	-.0135	.0019	-.0045	.0005	-.0016	2772.	521.36
#2	-.0129	.0019	-.0076	.0004	-.0036	2763.	522.58

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	.0230	.0291	-.0093	-.0142	.1016	-.0373
SDev	.0003	.0009	.0024	.0007	.0001	.0018	.0030
%RSD	35.83	3.773	8.305	7.798	.8629	1.801	7.936
#1	.0010	.0236	.0274	-.0088	-.0142	.1003	-.0394
#2	.0006	.0224	.0308	-.0098	-.0143	.1029	-.0352

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	88.92	.0125	-.0154	.2672	.0035	-.0061	.0154
SDev	.43	.0089	.0031	.0022	.0003	.0009	.0007
%RSD	.4853	71.11	20.23	.8250	9.164	14.54	4.310
#1	88.61	.0062	-.0132	.2657	.0033	-.0067	.0149
#2	89.22	.0187	-.0176	.2688	.0037	-.0054	.0159

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0098	.0020	-.0010	-.0061	.0386	-.0023	.0018
SDev	.0000	.0004	.0001	.0025	.0138	.0006	.0012
%RSD	.2679	17.83	8.118	40.61	35.84	25.99	65.75
#1	.0099	.0023	-.0010	-.0079	.0288	-.0028	.0026
#2	.0098	.0017	-.0009	-.0044	.0484	-.0019	.0010

010297

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.7158	-.0016
SDev	.0000	.0014	.0005
%RSD	.9541	.1907	33.06
#1	.0000	.7168	-.0020
#2	.0000	.7148	-.0013

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	633328	10000	--	--	--	--	--
SDev	3059.651	.0000000	--	--	--	--	--
%RSD	.4831065	.0000000	--	--	--	--	--
#1	631165	10000	--	--	--	--	--
#2	635492	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 247357<r df2 Operator:
Run Time: 07/22/04 15:35:50
Comment:
Mode: CONC Corr. Factor: 1

010298

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0469	2.208	2.223	1062.	2.162	.0473	.0381
SDev	.0005	.011	.001	3.	.002	.0000	.0036
%RSD	1.151	.4814	.0329	.2679	.0950	.0019	9.410
#1	.0473	2.201	2.222	1064.	2.161	.0473	.0406
#2	.0466	2.216	2.223	1060.	2.164	.0473	.0356

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.50	.0499	.4977	.2072	.2765	1.035	42.12
SDev	.01	.0002	.0011	.0002	.0002	.003	.22
%RSD	.0567	.4346	.2277	.0863	.0735	.3364	.5230
#1	20.51	.0497	.4969	.2074	.2763	1.037	41.96
#2	20.49	.0500	.4985	.2071	.2766	1.032	42.28

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0132	.0020	19.61	.5110	-.0032	2844.	523.31
SDev	.0004	.0001	.01	.0004	.0014	4.	.92
%RSD	2.718	5.489	.0705	.0780	42.55	.1575	3.927
#1	-.0135	.0019	19.62	.5107	-.0022	2840.	522.66
#2	-.0130	.0021	19.60	.5113	-.0042	2847.	523.96

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4929	.0443	.5426	.5090	-.0136	.1220	.5031
SDev	.0034	.0137	.0092	.0038	.0011	.0100	.0030
%RSD	.6983	30.97	1.689	.7494	7.951	8.185	.5944
#1	.4953	.0540	.5491	.5117	-.0129	.1149	.5010
#2	.4905	.0346	.5361	.5063	-.0144	.1290	.5052

Elem	Sc3613	1960/1	1960/2	Si2881	Th220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	85.31	2.143	2.103	.2846	.5202	2.116	.0150
SDev	.73	.010	.008	.0067	.0056	.009	.0006
%RSD	.8567	.4743	.3821	2.368	1.076	.4132	4.151
#1	84.79	2.150	2.108	.2798	.5242	2.122	.0154
#2	85.83	2.136	2.097	.2894	.5163	2.110	.0145

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0107	-.0119	-.0011	2.227	.0322	.4995	.0034
SDev	.0000	.0015	.0003	.013	.0168	.0003	.0053
%RSD	.2788	12.45	23.19	.5846	52.20	.0508	157.7
#1	.0107	-.0130	-.0013	2.218	.0203	.4993	.0071
#2	.0107	-.0109	-.0009	2.236	.0441	.4997	-.0004

010299

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0000	1.229	-.0013
SDev	.0000	.000	.0005
%RSD	72.90	.0060	34.22
#1	-.0001	1.229	-.0016
#2	-.0000	1.229	-.0010

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	607684	10000	--	--	--	--	--
SDev	5173.900	.0000000	--	--	--	--	--
%RSD	.8514137	.0000000	--	--	--	--	--
#1	604025	10000	--	--	--	--	--
#2	611342	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 247358r df2 Operator:
Run Time: 07/22/04 15:40:35
Comment:
Mode: CONC Corr. Factor: 1

010300

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0074	.0289	.0487	1120.	.2419	.0002	.0427
SDev	.0003	.0016	.0011	3.	.0001	.0000	.0094
%RSD	3.848	5.491	2.222	.2576	.0344	1.816	22.04
#1	-.0076	.0278	.0479	1122.	.2419	.0002	.0493
#2	-.0072	.0300	.0494	1118.	.2418	.0002	.0360

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1844	.0014	-.0097	.0048	.0107	-.0210	2.141
SDev	.0025	.0001	.0007	.0002	.0001	.0061	.004
%RSD	1.350	8.107	6.846	4.468	1.348	29.14	.1704
#1	.1862	.0015	-.0101	.0049	.0106	-.0254	2.138
#2	.1827	.0013	-.0092	.0046	.0108	-.0167	2.143

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0148	.0021	-.0110	.0005	-.0035	3095.	916.95
SDev	.0000	.0001	.0105	.0001	.0019	3.	1.34
%RSD	.2181	3.038	95.36	21.07	54.87	.0838	7.893
#1	-.0147	.0022	-.0036	.0006	-.0049	3094.	916.01
#2	-.0148	.0021	-.0184	.0005	-.0021	3097.	917.90

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	.0422	.0284	-.0097	-.0126	.1530	-.0418
SDev	.0004	.0144	.0010	.0011	.0024	.0335	.0024
%RSD	37.07	34.06	3.691	11.09	18.95	21.87	5.811
#1	.0009	.0523	.0276	-.0105	-.0109	.1294	-.0401
#2	.0015	.0320	.0291	-.0089	-.0143	.1767	-.0436

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	87.61	.0151	-.0118	.4359	.0030	-.0028	.0220
SDev	.06	.0011	.0038	.0013	.0011	.0021	.0037
%RSD	.0674	7.260	31.90	.3030	35.38	76.42	16.95
#1	87.57	.0159	-.0144	.4350	.0023	-.0043	.0194
#2	87.65	.0144	-.0091	.4368	.0038	-.0013	.0246

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0106	.0016	-.0012	-.0065	.0575	-.0035	.0099
SDev	.0000	.0011	.0004	.0013	.0068	.0000	.0017
%RSD	.0554	69.71	30.37	20.24	11.76	.8084	17.38
#1	.0106	.0023	-.0009	-.0074	.0527	-.0035	.0087
#2	.0106	.0008	-.0014	-.0056	.0623	-.0035	.0111

010301

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0001	1.151	-.0014
SDev	.0001	.005	.0004
%RSD	103.8	.4174	28.02
#1	-.0000	1.154	-.0011
#2	-.0001	1.148	-.0017

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	624064	10000	--	--	--	--	--
SDev	412.2433	.0000000	--	--	--	--	--
%RSD	.0660579	.0000000	--	--	--	--	--
#1	623772	10000	--	--	--	--	--
#2	624355	10000	--	--	--	--	--

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Method: DAILY2 Sample Name: 347359r df2 Operator:
Run Time: 07/22/04 15:45:21
Comment:
Mode: CONC Corr. Factor: 1

2
JR 7/23/04

010302

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0068	.0513	.0453	1057.	.3460	.0002	.0404
SDev	.0005	.0005	.0013	1.	.0008	.0000	.0054
%RSD	8.113	1.024	2.885	.1229	.2439	15.57	13.43
#1	-.0064	.0509	.0444	1058.	.3454	.0002	.0443
#2	-.0071	.0517	.0462	1056.	.3466	.0002	.0366

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.15	.0014	-.0090	.0037	.0041	-.0130	2.287
SDev	.06	.0001	.0005	.0000	.0003	.0318	.003
%RSD	.4204	3.651	6.236	1.004	6.966	244.6	.1444
#1	14.19	.0014	-.0077	.0037	.0039	.0095	2.289
#2	14.11	.0013	-.0094	.0037	.0043	-.0355	2.285

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0132	.0019	.5028	.0005	-.0041	2803.	524.24
SDev	.0004	.0001	.0082	.0000	.0014	2.	1.12
%RSD	3.166	3.488	1.631	5.338	34.65	.0800	4.621
#1	-.0129	.0019	.5086	.0005	-.0031	2805.	523.44
#2	-.0135	.0018	.4970	.0005	-.0051	2802.	525.03

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	.0241	.0288	-.0074	-.0111	.2637	-.0421
SDev	.0001	.0029	.0034	.0034	.0026	.0315	.0050
%RSD	10.38	12.12	11.94	46.73	23.58	11.95	11.77
#1	.0010	.0221	.0263	-.0049	-.0092	.2414	-.0386
#2	.0011	.0262	.0312	-.0098	-.0129	.2860	-.0456

Elem	Sc3613	1960/1	1960/2	Si2881	Th220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	84.36	.0140	-.0160	1.051	.0047	-.0060	.0179
SDev	.16	.0001	.0018	.001	.0012	.0012	.0004
%RSD	.1947	.6756	11.21	.1094	24.70	20.56	2.034
#1	84.24	.0141	-.0147	1.052	.0055	-.0051	.0176
#2	84.48	.0140	-.0173	1.051	.0039	-.0068	.0181

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0285	.0010	-.0010	-.0050	.0427	-.0019	-.0001
SDev	.0000	.0001	.0001	.0093	.0162	.0010	.0003
%RSD	.0313	5.223	10.98	186.7	37.94	50.52	242.2
#1	.0285	.0010	-.0011	-.0116	.0542	-.0012	.0001
#2	.0285	.0010	-.0009	.0016	.0313	-.0026	-.0004

010303

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0001	.0485	-.0015
SDev	.0001	.0003	.0002
%RSD	72.93	.7313	13.25
#1	-.0000	.0487	-.0014
#2	-.0001	.0482	-.0017

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	600914	10000	--	--	--	--	--
SDev	1156.120	.0000000	--	--	--	--	--
%RSD	.1923937	.0000000	--	--	--	--	--
#1	600096	10000	--	--	--	--	--
#2	601731	10000	--	--	--	--	--

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Method: DAILY2 Sample Name: 247360r dfP Operator: **010304**
Run Time: 07/22/04 15:50:06
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0069	.0480	.0472	1107.	.2502	.0002	.0407
SDev	.0001	.0002	.0019	2.	.0001	.0000	.0033
%RSD	.7283	.3304	4.015	.2128	.0603	6.200	8.194
#1	-.0068	.0481	.0459	1109.	.2503	.0002	.0383
#2	-.0069	.0479	.0486	1106.	.2501	.0002	.0430

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.20	.0012	-.0082	.0045	.0043	-.0159	2.020
SDev	.01	.0000	.0003	.0002	.0001	.0061	.012
%RSD	.0557	2.000	3.791	4.897	2.571	38.23	.5712
#1	12.20	.0012	-.0084	.0044	.0044	-.0116	2.028
#2	12.19	.0011	-.0080	.0047	.0042	-.0202	2.012

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0148	.0019	.5222	.0007	-.0036	3048.	517.28
SDev	.0005	.0000	.0024	.0001	.0010	19.	.99
%RSD	3.712	1.101	.4527	16.83	26.61	.6191	5.755
#1	-.0151	.0019	.5239	.0008	-.0029	3061.	516.58
#2	-.0144	.0018	.5205	.0006	-.0043	3034.	517.98

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0268	.0315	-.0108	-.0120	.1666	-.0450
SDev	.0019	.0071	.0009	.0045	.0002	.0202	.0018
%RSD	116.5	26.52	2.970	41.56	1.309	12.12	3.956
#1	.0003	.0318	.0308	-.0076	-.0119	.1809	-.0463
#2	.0029	.0218	.0322	-.0139	-.0121	.1523	-.0438

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	88.08	.0117	-.0158	1.296	.0033	-.0066	.0173
SDev	.02	.0078	.0067	.001	.0037	.0071	.0040
%RSD	.0348	67.03	42.48	.0987	79.79	106.6	22.93
#1	88.10	.0061	-.0206	1.297	.0052	-.0117	.0145
#2	88.06	.0172	-.0111	1.295	.0015	-.0016	.0201

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0323	.0021	-.0009	-.0101	.0592	-.0014	-.0028
SDev	.0001	.0032	.0001	.0029	.0187	.0004	.0026
%RSD	.1843	148.9	9.083	28.71	31.68	31.24	93.06
#1	.0322	.0044	-.0008	-.0080	.0724	-.0011	-.0010
#2	.0323	-.0001	-.0010	-.0121	.0459	-.0017	-.0046

010305

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0001	.0654	-.0015
SDev	.0000	.0004	.0004
%RSD	11.32	.6188	28.00
#1	-.0001	.0657	-.0012
#2	-.0001	.0651	-.0018

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	627342	10000	--	--	--	--	--
SDev	218.4960	.0000000	--	--	--	--	--
%RSD	.0348288	.0000000	--	--	--	--	--
#1	627497	10000	--	--	--	--	--
#2	627188	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 247433r df2 Operator: **010306**
Run Time: 07/22/04 15:54:52
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0072	.0911	.0433	1034.	.2642	.0002	.0363
SDev	.0005	.0025	.0001	3.	.0006	.0000	.0017
%RSD	6.734	2.790	.2548	.2547	.2247	17.98	4.788
#1	-.0075	.0893	.0434	1036.	.2638	.0002	.0351
#2	-.0068	.0929	.0432	1033.	.2646	.0002	.0375

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5104	.0009	-.0081	.0042	.0074	-.0444	2.091
SDev	.0006	.0002	.0004	.0001	.0002	.0080	.011
%RSD	.1224	26.04	4.940	2.706	2.285	17.93	.5233
#1	.5109	.0007	-.0084	.0043	.0073	-.0501	2.083
#2	.5100	.0011	-.0078	.0041	.0075	-.0388	2.099

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0138	.0018	.0154	.0005	-.0019	2814.	521.10
SDev	.0006	.0001	.0011	.0001	.0013	1.	.25
%RSD	4.376	7.767	7.011	14.37	64.98	.0331	1.178
#1	-.0142	.0019	.0147	.0005	-.0010	2815.	520.92
#2	-.0134	.0017	.0162	.0004	-.0028	2813.	521.27

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0013	.0380	.0255	-.0096	-.0130	.2505	-.0393
SDev	.0013	.0217	.0021	.0020	.0002	.0228	.0079
%RSD	105.5	57.07	8.260	20.84	1.383	9.093	20.22
#1	.0003	.0227	.0240	-.0081	-.0132	.2666	-.0449
#2	.0022	.0534	.0269	-.0110	-.0129	.2344	-.0337

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	88.67	.0137	-.0165	3.424	.0021	-.0065	.0173
SDev	.47	.0008	.0008	.001	.0006	.0008	.0035
%RSD	.5244	5.754	4.762	.0384	29.28	12.20	20.39
#1	88.35	.0142	-.0160	3.425	.0026	-.0059	.0148
#2	89.00	.0131	-.0171	3.423	.0017	-.0070	.0198

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0119	.0048	-.0011	-.0079	.0356	-.0026	-.0001
SDev	.0000	.0017	.0000	.0027	.0067	.0002	.0029
%RSD	.1613	35.19	.6924	33.54	18.92	7.343	4108.
#1	.0119	.0036	-.0011	-.0098	.0308	-.0027	-.0021
#2	.0120	.0060	-.0011	-.0061	.0403	-.0024	.0020

010307

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0000	.5748	-.0016
SDev	.0000	.0010	.0004
%RSD	178.2	.1680	23.79
#1	-.0000	.5755	-.0013
#2	.0000	.5741	-.0018

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	631638	10000	--	--	--	--	--
SDev	3303.603	.0000000	--	--	--	--	--
%RSD	.5230216	.0000000	--	--	--	--	--
#1	629302	10000	--	--	--	--	--
#2	633974	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 247435r df2 Operator:
Run Time: 07/22/04 15:59:37
Comment:
Mode: CONC Corr. Factor: 1

010308

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0062	.1518	.0447	1044.	.4088	.0002	.0375
SDev	.0001	.0040	.0005	4.	.0005	.0000	.0040
%RSD	2.307	2.604	1.127	.3438	.1280	2.267	10.72
#1	-.0061	.1546	.0444	1047.	.4084	.0002	.0346
#2	-.0063	.1490	.0451	1042.	.4092	.0002	.0403

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.74	.0012	-.0087	.0044	.0107	-.0179	3.023
SDev	.02	.0001	.0008	.0003	.0001	.0044	.027
%RSD	.1743	10.29	9.376	7.557	.4502	24.36	.8799
#1	10.75	.0013	-.0093	.0046	.0108	-.0210	3.005
#2	10.73	.0011	-.0081	.0042	.0107	-.0148	3.042

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0134	.0017	.5329	.0006	.0008	2799.	521.93
SDev	.0005	.0000	.0162	.0001	.0005	2.	.43
%RSD	3.682	1.171	3.040	22.22	63.73	.0788	1.940
#1	-.0131	.0017	.5444	.0008	.0004	2801.	522.23
#2	-.0138	.0017	.5215	.0005	.0012	2798.	521.63

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0026	.0226	.0280	-.0108	-.0122	.5261	-.0451
SDev	.0010	.0111	.0035	.0044	.0011	.0097	.0003
%RSD	38.40	49.00	12.46	40.53	9.020	1.848	.6419
#1	.0019	.0148	.0256	-.0077	-.0114	.5192	-.0449
#2	.0034	.0305	.0305	-.0139	-.0130	.5330	-.0452

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	88.24	.0153	-.0132	10.15	.0021	-.0037	.0188
SDev	.84	.0010	.0039	.00	.0018	.0023	.0005
%RSD	.9535	6.571	29.84	.0407	82.65	62.23	2.658
#1	87.64	.0146	-.0104	10.16	.0034	-.0021	.0191
#2	88.83	.0161	-.0160	10.15	.0009	-.0053	.0184

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0350	.0010	-.0009	-.0097	.0700	-.0015	.0019
SDev	.0000	.0012	.0002	.0049	.0020	.0007	.0004
%RSD	.0091	124.3	20.07	50.62	2.842	49.50	21.90
#1	.0350	.0018	-.0008	-.0132	.0686	-.0010	.0022
#2	.0350	.0001	-.0010	-.0062	.0714	-.0020	.0016

010309

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0001	.1260	-.0009
SDev	.0001	.0000	.0007
%RSD	117.5	.0141	72.24
#1	-.0000	.1260	-.0005
#2	-.0002	.1260	-.0014

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	628514	10000	--	--	--	--	--
SDev	5926.262	.0000000	--	--	--	--	--
%RSD	.9429013	.0000000	--	--	--	--	--
#1	624323	10000	--	--	--	--	--
#2	632704	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 248205 df2 Operator:
Run Time: 07/22/04 16:04:23
Comment:
Mode: CONC Corr. Factor: 1

010310

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0060	.0942	.0392	933.4	.0281	.0003	.0328
SDev	.0008	.0070	.0012	7.1	.0001	.0000	.0014
%RSD	13.97	7.413	3.151	.7652	.3897	3.433	4.197
#1	-.0066	.0893	.0401	928.3	.0282	.0003	.0337
#2	-.0054	.0991	.0383	938.4	.0280	.0002	.0318

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5091	.0014	-.0077	.0287	.0202	-.0305	1.398
SDev	.0049	.0002	.0005	.0008	.0003	.0058	.019
%RSD	.9648	13.47	6.469	2.973	1.307	19.14	1.352
#1	.5056	.0012	-.0073	.0280	.0200	-.0346	1.384
#2	.5125	.0015	-.0080	.0293	.0204	-.0263	1.411

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0117	.0027	.0505	.0015	.0286	2430.	526.23
SDev	.0014	.0000	.0063	.0001	.0005	4.	1.40
%RSD	11.76	.8414	12.51	3.022	1.709	.1626	5.348
#1	-.0127	.0027	.0460	.0015	.0290	2433.	525.24
#2	-.0108	.0027	.0550	.0015	.0283	2427.	527.22

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0074	.0174	.0246	-.0059	-.0116	.0794	-.0333
SDev	.0010	.0115	.0008	.0006	.0021	.0152	.0016
%RSD	13.37	65.63	3.265	10.19	18.06	19.10	4.768
#1	.0067	.0255	.0240	-.0063	-.0131	.0901	-.0344
#2	.0081	.0093	.0251	-.0055	-.0101	.0687	-.0322

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	90.46	.0134	-.0120	.2208	.0043	-.0035	.0202
SDev	1.27	.0042	.0052	.0003	.0007	.0048	.0006
%RSD	1.400	31.31	42.94	.1162	15.66	137.5	2.869
#1	91.35	.0164	-.0084	.2210	.0038	-.0001	.0207
#2	89.56	.0104	-.0156	.2206	.0047	-.0069	.0198

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0066	.0020	-.0007	-.0130	.0405	-.0018	.0160
SDev	.0000	.0013	.0001	.0022	.0211	.0002	.0085
%RSD	.1144	67.52	13.96	16.57	52.19	13.49	53.34
#1	.0066	.0029	-.0006	-.0145	.0255	-.0020	.0100
#2	.0066	.0010	-.0008	-.0115	.0554	-.0016	.0221

010311

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	.0000	.8307	-.0008
SDev	.0001	.0072	.0000
%RSD	276.4	.8691	4.124
#1	.0001	.8256	-.0009
#2	-.0000	.8358	-.0008

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	644286	10000	--	--	--	--	--
SDev	9009.955	.0000000	--	--	--	--	--
%RSD	1.398440	.0000000	--	--	--	--	--
#1	650657	10000	--	--	--	--	--
#2	637915	10000	--	--	--	--	--

Method: DAILY2 Sample Name: 248207 df2 Operator:
Run Time: 07/22/04 16:09:08
Comment:
Mode: CONC Corr. Factor: 1

010312

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0052	.0665	.0372	976.9	.0537	.0003	.0426
SDev	.0010	.0095	.0044	2.4	.0000	.0000	.0016
%RSD	19.63	14.22	11.87	.2451	.0463	8.592	3.822
#1	-.0059	.0598	.0403	975.2	.0538	.0002	.0438
#2	-.0045	.0732	.0341	978.6	.0537	.0003	.0415

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.724	.0014	-.0086	.0200	.0043	-.0246	1.458
SDev	.002	.0002	.0002	.0002	.0002	.0136	.003
%RSD	.0347	13.13	2.024	1.041	4.135	55.26	.2270
#1	6.722	.0015	-.0085	.0201	.0044	-.0342	1.460
#2	6.725	.0012	-.0087	.0198	.0042	-.0150	1.455

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0117	.0017	.1253	.0012	.0064	2605.	523.20
SDev	.0009	.0000	.0092	.0001	.0006	4.	2.29
%RSD	7.885	1.905	7.370	6.585	9.314	.1672	9.882
#1	-.0124	.0017	.1319	.0012	.0059	2602.	521.58
#2	-.0111	.0017	.1188	.0011	.0068	2608.	524.82

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0031	.0281	.0282	-.0100	-.0112	.1383	-.0396
SDev	.0001	.0034	.0009	.0011	.0013	.0203	.0032
%RSD	2.545	12.10	3.082	10.64	11.24	14.70	8.078
#1	.0031	.0257	.0276	-.0092	-.0103	.1239	-.0373
#2	.0030	.0305	.0288	-.0107	-.0121	.1527	-.0418

Elem	Sc3613	1960/1	1960/2	Si2881	Pb220	Se196	Sn1899
Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	89.87	.0184	-.0160	.5535	.0028	-.0045	.0152
SDev	1.52	.0068	.0022	.0018	.0004	.0008	.0006
%RSD	1.696	36.88	13.52	.3221	15.10	18.06	3.830
#1	90.95	.0232	-.0175	.5547	.0031	-.0040	.0148
#2	88.79	.0136	-.0145	.5522	.0025	-.0051	.0156

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0397	-.0024	-.0012	-.0064	.0672	-.0003	.0090
SDev	.0001	.0005	.0000	.0009	.0278	.0004	.0023
%RSD	.2977	22.94	3.201	14.14	41.39	109.2	25.34
#1	.0396	-.0027	-.0012	-.0058	.0475	-.0001	.0074
#2	.0398	-.0020	-.0012	-.0071	.0868	-.0006	.0106

010313

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0001	.6319	-.0019
SDev	.0000	.0007	.0000
%RSD	40.09	.1174	1.792
#1	-.0001	.6314	-.0019
#2	-.0001	.6324	-.0020

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	640130	10000	--	--	--	--	--
SDev	10838.53	.0000000	--	--	--	--	--
%RSD	1.693177	.0000000	--	--	--	--	--
#1	647794	10000	--	--	--	--	--
#2	632466	10000	--	--	--	--	--

Method: DAILY2 Sample Name: ccv7 Operator:
Run Time: 07/22/04 16:17:34
Comment:
Mode: CONC Corr. Factor: 1

010314

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9732	9.804	5.037	H8.342	9.916	.9725	5.005
SDev	.0019	.014	.018	.250	.009	.0003	.005
%RSD	.1962	.1446	.3563	2.998	.0889	.0286	.1009
#1	.9746	9.814	5.049	H8.519	9.909	.9727	5.001
#2	.9719	9.794	5.024	H8.165	9.922	.9723	5.008
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	1.100	11.00	5.500	5.500	11.00	1.100	5.500
Low	.9000	9.000	4.500	4.500	9.000	.9000	4.500

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.94	.9949	4.967	1.970	2.025	10.15	18.77
SDev	.00	.0002	.006	.000	.003	.01	.04
%RSD	.0148	.0226	.1217	.0097	.1445	.0592	.2016
#1	19.94	.9947	4.971	1.970	2.027	10.15	18.79
#2	19.94	.9951	4.963	1.971	2.023	10.14	18.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	22.00	1.100	5.500	2.200	2.200	11.00	22.00
Low	18.00	.9000	4.500	1.800	1.800	9.000	18.00

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.972	4.719	19.87	1.014	5.000	27.87	L15.72
SDev	.002	.020	.01	.000	.010	.02	.09
%RSD	.0600	.4321	.0683	.0485	.2001	.0660	.5855
#1	4.974	4.733	19.87	1.013	4.993	27.88	L15.79
#2	4.970	4.704	19.86	1.014	5.007	27.85	L15.66
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	5.500	5.500	22.00	1.100	5.500	33.00	33.00
Low	4.500	4.500	18.00	.9000	4.500	27.00	27.00

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.828	5.167	4.984	4.974	1.016	H4.965	.9910
SDev	.001	.106	.080	.039	.002	.042	.0075
%RSD	.0143	2.044	1.614	.7927	.1478	.8541	.7550
#1	4.828	5.092	4.927	4.946	1.015	H4.935	.9963
#2	4.827	5.242	5.041	5.001	1.017	H4.995	.9857
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	5.500	5.500			1.100	1.100	1.100
Low	4.500	4.500			.9000	.9000	.9000

Elem	Sr3613	1960/1	1960/2	Si2881	Pb2020	Se196	Sn1899

010315

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	97.43	5.314	5.293	4.981	4.977	5.300	4.991
SDev	.70	.052	.056	.022	.053	.055	.000
%RSD	.7207	.9708	1.064	.4472	1.067	1.033	.0065
#1	97.93	5.277	5.253	4.997	4.939	5.261	4.991
#2	96.94	5.350	5.333	4.966	5.015	5.339	4.991
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High				5.500	5.500	5.500	5.500
Low				4.500	4.500	4.500	4.500

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.042	.9682	L1.036	5.287	.9705	4.897	H1.657
SDev	.003	.0022	.000	.030	.0084	.011	.005
%RSD	.0686	.2290	.0221	.5627	.8666	.2191	.2983
#1	5.045	.9698	L1.036	5.266	.9646	4.904	H1.654
#2	5.040	.9666	L1.036	5.308	.9765	4.889	H1.661
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High
High	5.500	1.100	5.500	5.500	1.100	5.500	1.100
Low	4.500	.9000	4.500	4.500	.9000	4.500	.9000

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	5.004	1.005	4.924
SDev	.008	.002	.000
%RSD	.1585	.1684	.0059
#1	5.010	1.004	4.924
#2	4.999	1.006	4.925
Errors	LC Pass	LC Pass	LC Pass
High	5.500	1.100	5.500
Low	4.500	.9000	4.500

010316

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	594034	10000	--	--	--	--	--
SDev	5001.366	.0000000	--	--	--	--	--
%RSD	.7206221	.0000000	--	--	--	--	--
#1	597571	10000	--	--	--	--	--
#2	590498	10000	--	--	--	--	--

Method: DAILY2 Sample Name: ccb7 Operator:
Run Time: 07/22/04 16:24:09
Comment:
Mode: CONC Corr. Factor: 1

010317

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	-.0055	.0028	H2.690	.0001	.0003	.0011
SDev	.0001	.0029	.0006	.114	.0001	.0000	.0002
%RSD	75.29	52.68	23.17	4.251	45.68	2.664	20.68
#1	-.0003	-.0076	.0023	H2.770	.0001	.0002	.0009
#2	-.0001	-.0035	.0032	H2.609	.0002	.0003	.0013
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0500	.0050	.0050	.0100
Low	-.0050	-.0500	-.0050	-.0500	-.0050	-.0050	-.0100

Elem	Ca3179	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0125	-.0001	.0001	.0004	.0005	.0089	.0125
SDev	.0121	.0001	.0003	.0013	.0007	.0001	.0087
%RSD	97.00	42.80	537.0	286.9	144.7	.8609	69.52
#1	.0039	-.0002	.0003	-.0005	-.0000	.0089	.0187
#2	.0210	-.0001	-.0002	.0013	.0009	.0090	.0064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0500	.0050	.0050	.0050	.0050	.0250	.1000
Low	-.0500	-.0050	-.0050	-.0050	-.0050	-.0250	-.1000

Elem	La3988	Li6707	Mg2790	Mn2576	Mo2020	Na3302	Na5889
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0003	.0059	.0001	.0020	H.0736	H.0558
SDev	.0005	.0000	.0072	.0000	.0003	.1484	.0050
%RSD	246.9	15.46	121.9	3.567	14.76	201.7	9.027
#1	-.0006	.0003	.0008	.0001	.0018	H.1786	H.0594
#2	.0002	.0003	.0110	.0001	.0022	-.0313	H.0522
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC High
High	.0050	.0050	.0500	.0050	.0050	.0500	.0500
Low	-.0050	-.0050	-.0500	-.0050	-.0050	-.0500	-.0500

Elem	Ni2316	P_1782	2203/1	2203/2	Pd3404	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0010	.0061	-.0036	.0001	.0003	H.0334	-.0032
SDev	.0002	.0015	.0010	.0006	.0024	.0053	.0054
%RSD	23.37	24.77	28.92	953.8	933.4	16.04	167.1
#1	-.0008	.0071	-.0028	-.0003	.0020	H.0371	.0006
#2	-.0011	.0050	-.0043	.0005	-.0015	H.0296	-.0071
Errors	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	LC High	LC Pass
High	.0050	.0100			.0050	.0100	.0100
Low	-.0050	-.0100			-.0050	-.0100	-.0100

Elem	Sc3613	1960/1	1960/2	Si2881	Th2020	Se196	Sn1899

010318

Units	%R	ppm	ppm	ppm	ppm	ppm	ppm
Avge	100.6	-.0031	.0002	H.0122	-.0011	-.0008	-.0018
SDev	2.5	.0013	.0040	.0006	.0000	.0031	.0016
%RSD	2.506	42.72	1624.	5.057	2.925	366.1	89.25
#1	102.4	-.0021	.0031	H.0117	-.0012	.0013	-.0007
#2	98.84	-.0040	-.0026	H.0126	-.0011	-.0030	-.0029
Errors	NOCHECK	NOCHECK	NOCHECK	LC High	LC Pass	LC Pass	LC Pass
High				.0100	.0030	.0050	.0050
Low				-.0100	-.0030	-.0050	-.0050

Elem	Sr4215	Th2837	Ti3349	Tl1908	U_4090	V_2924	W_2079
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0014	-.0002	.0045	.0074	-.0005	-.0012
SDev	.0000	.0033	.0000	.0003	.0020	.0004	.0041
%RSD	9.818	225.9	12.87	5.707	26.48	81.06	336.6
#1	.0000	.0038	-.0002	.0047	.0061	-.0008	-.0041
#2	.0001	-.0009	-.0002	.0043	.0088	-.0002	.0017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0100	.0050	.0100	.1000	.0050	.0100
Low	-.0050	-.0100	-.0050	-.0100	-.1000	-.0050	-.0100

Elem	Y_3710	Zn2062	Zr3496
Units	ppm	ppm	ppm
Avge	-.0000	-.0000	-.0001
SDev	.0001	.0012	.0002
%RSD	662.3	3599.	145.0
#1	.0000	-.0009	-.0002
#2	-.0001	.0008	.0000
Errors	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0050
Low	-.0050	-.0050	-.0050

010319

IntStd	1	2	3	4	5	6	7
Mode	*Counts	Time	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Sc	--	--	--	--	--	--
Wavlen	361.384	--	--	--	--	--	--
Avge	716758	10000	--	--	--	--	--
SDev	18002.94	.0000000	--	--	--	--	--
%RSD	2.511718	.0000000	--	--	--	--	--
#1	729488	10000	--	--	--	--	--
#2	704028	10000	--	--	--	--	--