ENVIRONMENTAL STANDARDS
Setting the Standards for Innovative Environmental Solutions

February 12, 2009

Ms. Penny Bassett
Brown and Caldwell
3264 Goni Road, Suite 153
Carson City, NV 89706

Dear Ms. Bassett:

Enclosed is the quality assurance review of the analytical data for the analyses of the aqueous samples that were collected on October 8, 12, and 13, 2008, in association with the ARCO Yerington Mine Site. The samples were collectively analyzed for ICP metals, ICP/MS metals, mercury, and wet chemistry parameters.

Based on this quality assurance review, the results for antimony and copper in two samples were qualified as "not-detected" due to blank contamination. The results for nitrate nitrogen, nitrite nitrogen, nitrate/nitrite nitrogen, and pH in a few samples were qualified as estimated due to exceeded holding time. The results for aluminum, lithium, and potassium in one sample were qualified as estimated due to low matrix spike/matrix spike duplicate recoveries. The results for aluminum in two samples were qualified as estimated due to out-of-criteria matrix spike/matrix spike duplicate precision. The results for cobalt, nickel, and total organic carbon in two samples were qualified as estimated due to field duplicate imprecision. In addition, several metals results were qualified as estimated because the reported results were between the method detection limit and the reporting limit.

If you have any questions or comments, please do not hesitate to call.

Sincerely,

Konstadina Vlahogiani, M.S.
Senior Quality Assurance Chemist/
Project Manager

Concurred by:

Rock J. Vitale, CEAC, CPC
Technical Director of Chemistry/
Principal

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ENVIRONMENTAL STANDARDS
Setting the Standards for Innovative Environmental Solutions

QUALITY ASSURANCE REVIEW

OF THE AQUEOUS SAMPLES COLLECTED

AT THE ARCO YERINGTON MINE SITE

ON OCTOBER 8, 12, AND 13, 2008

February 12, 2009

Prepared for:

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1.0 Introduction

This quality assurance (QA) review is based upon a rigorous examination of all data generated from the analyses of the aqueous samples that were collected by Brown and Caldwell on October 8, 12, and 13, 2008, in association with the ARCO Yerington Mine Site. The samples included in this QA review are specified on Table 1.

This review has been performed with guidance from the "National Functional Guidelines for Inorganic Data Review" (US EPA, February 1994). This document has been used to aid the data reviewer in the interpretation of the QC analysis results and in the overall evaluation of the sample data deliverables. It should be noted, however, that results affected by blank contamination will be designated with a "UJ" qualifier (not the "U" qualifier typically used when following the National Functional Guidelines) in order to be consistent with historical project validation protocols and the current project database.

The reported analytical results are presented as a summary of the data in Section 2. Data were examined to determine the usability of the analytical results and the compliance relative to the requirements specified in the published analytical methods, the Quality Assurance Project Plan (QAPjP) for the Atlantic Richfield Company Yerington Mine Site, Revision 1 (May 2007), and the Technical Requirements For Environmental Laboratory Analytical Services BP Global Contract Lab Network (GCLN) (5/22/02, Revision 08). Qualifier codes have been placed next to results to enable the data user to quickly assess the qualitative and/or quantitative reliability of any result. This critical QA review identifies data quality issues for specific samples and specific evaluation criteria. The data qualifications allow the data's end-user to best understand the usability of the analytical results. Data not qualified in this report should be considered valid based on the QC criteria that have been reviewed. Details of this QA review are presented in Section 1 of this report. This report was prepared to provide a critical review of the laboratory analyses and reported analytical results. Rigorous QA reviews of laboratory-generated data routinely identify various problems associated with analytical measurements, even from the most experienced and capable laboratories.

TABLE 1

SAMPLES INCLUDED IN THIS QUALITY ASSURANCE REVIEW

Field Sample Identification	Laboratory Sample Identification(s)	Project Number	Matrix	Date Sample Collected	Parameter(s) Examined
OU4-UEP-08-GW	IRJ1080-01	IRJ1080	Aq	10/8/08	M^1, M^2, Hg, Alk, IC, TDS, TOC, pH
OU4-UEP-08-GWMS (Matrix Spike)	8J22087-MS1 8J21102-MS1	IRJ1080	Aq	10/8/08	M^2 Hg
OU4-UEP-08-GWMSD (Matrix Spike Duplicate)	8J22087-MSD1 8J21102-MSD1	IRJ1080	Aq	10/8/08	M^2 Hg
OU4-UEP-08-GWDUP (Laboratory Duplicate)	8J10096-DUP1	IRJ1080	Aq	10/8/08	pH
OU4-UEP-10-GW	IRJ1354-01	IRJ1354	Aq	10/12/08	M^1, M^2, Hg, Alk, IC, TDS, TOC, pH
OU4-UEP-10-GWMS (Matrix Spike)	8J22088-MS1 8J22010-MS1	IRJ1354	Aq	10/12/08	M^1 TOC
OU4-UEP-10-GWMSD (Matrix Spike Duplicate)	8J22088-MSD1 8J22010-MSD1	IRJ1354	Aq	10/12/08	M^1 TOC
OU4-UEP-10-GWDUP (Laboratory Duplicate)	8J15074-DUP1	IRJ1354	Aq	10/12/08	pH
OU4-UEP-10-GW-DUP (Field Duplicate of OU4-UEP-10-GW)	IRJ1354-02	IRJ1354	Aq	10/12/08	M^1, M^2, Hg, Alk, IC, TDS, TOC, pH
OU4-UEP-10-GW-DUPMS (Matrix Spike)	8J23158-MS1 8J23162-MS1	IRJ1354	Aq	10/12/08	M^1 M^2
OU4-UEP-10-GW-DUPMSD (Matrix Spike Duplicate)	8J23158-MSD1 8J23162-MSD1	IRJ1354	Aq	10/12/08	M^1 M^2
OU4-FEP-13-GW	IRJ1354-03	IRJ1354	Aq	10/13/08	M^1, M^2, Hg, Alk, IC, TDS, TOC, pH

NOTES:

M^1 - Dissolved ICP Metals (specifically, aluminum, boron, calcium, iron, lithium, magnesium, phosphorus, potassium, silicon, sodium, strontium, tin, and titanium) by US EPA Method 200.7.

M^2 - Dissolved ICP/MS Metals (specifically, uranium, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc) by US EPA Method 200.8.

TABLE 1 (Cont.)

NOTES (Cont.):

Hg	-	Dissolved Mercury by US EPA Method 245.1.
Alk	-	Alkalinity, Bicarbonate Alkalinity, Carbonate Alkalinity, and Hydroxide Alkalinity as CaCO3 by Standard Method 2320B.
IC	-	Chloride, Fluoride, Nitrate Nitrogen, Nitrite Nitrogen, and Sulfate by US EPA Method 300.0.
TDS	-	Total Dissolved Solids by Standard Method 2540C.
TOC	-	Total Organic Carbon by Standard Method 5310B.
pH	-	pH by Standard Method 4500-H,B.
Aq	-	Aqueous.

2.0 Findings

Complete support documentation for this inorganic QA review is presented in Section 8.0 of this report. The cover sheet for this section is a checklist of all QA procedures required by the protocols and examined in this data review.

A. ICP Metals Analysis

Eight samples (including quality control [QC] samples) were analyzed for dissolved ICP metals (specifically, aluminum, boron, calcium, iron, lithium, magnesium, phosphorus, potassium, silicon, sodium, strontium, tin, and titanium) by US EPA Method 200.7. The findings offered in this report for this fraction are based on the items on the following table.

Item Reviewed	Acceptable	Acceptable With Discussion	Acceptable With Qualification	Not Acceptable
Holding Times	√			
Sample Condition Upon Receipt	√			
Blank Analysis Results	√			
MS/MSD Recoveries and Precision			√	
LCS Recoveries	√			
Field Duplicate Precision	√			
Detection Limits/Sensitivity	√			
Calibrations	√			
RL Standard Recoveries	√			
ICP/MS Interference Check Samples	√			
Analytical Sequence	√			
Sample Preparation	√			
Quantitation of Positive Results			√	
A Critical Evaluation of Instrumental Raw Data	√			

MS/MSD Recoveries and Precision: Low (< 75%) recoveries were observed for aluminum, potassium, and lithium in the MS/MSD analyses in Project Number IRJ1354, indicating a low bias. The detection limit for aluminum in sample OU4-UEP-10-GW-FD may be higher than reported, and the "not-detected" result has been flagged "UJ" on the data tables. In addition, the reported positive results for potassium and lithium in sample OU4-UEP-10-GW-FD should be considered estimated and have been flagged "J" on the data tables.

High relative percent differences (RPDs > 20%) were observed between the results for aluminum in the associated MS/MSD analyses in Project Numbers IRJ1080 and IRJ1354. The reported positive results for aluminum in Project Number IRJ1080 sample OU4-UEP-08-GW and in Project Number IRJ1354 sample OU4-FEP-13-GW should be considered estimated and have been flagged "J" on the data tables.

Quantitation of Positive Results: All positive results reported at concentrations greater than the method detection limit (MDL) but less than the reporting limit (RL) were qualified as estimated and have been flagged "J" on the data tables.

B. ICP/MS Metals Analysis

Eight samples (including QC samples) were analyzed for dissolved ICP/MS metals (specifically, uranium, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc) by US EPA Method 200.8. The findings offered in this report for this fraction are based on the items on the following table.

Item Reviewed	Acceptable	Acceptable With Discussion	Acceptable With Qualification	Not Acceptable
Holding Times	√			
Sample Condition Upon Receipt	√			
Blank Analysis Results			√	
MS/MSD Recoveries and Precision	√			
LCS Recoveries	√			
Field Duplicate Precision			√	
Detection Limits/Sensitivity	√			
Calibrations	√			
RL Standard Recoveries	√			
ICP/MS Interference Check Samples	√			
Analytical Sequence	√			
Sample Preparation	√			
Quantitation of Positive Results			√	
A Critical Evaluation of Instrumental Raw Data	√			

Blank Analysis Results: Antimony was observed to be present in calibration blanks associated with the project samples in Project Number IRJ1354. The positive results for antimony in Project Number IRJ1354 samples OU4-UEP-10-GW and OU4-UEP-10-GW-FD should be considered "not-detected" and have been flagged "UJ" on the data tables.

Copper was observed to be present in the equipment blank associated with the project samples in Project Number IRJ1354. The positive results for copper in Project Number IRJ1354 samples OU4-UEP-10-GW and OU4-UEP-10-GW-FD should be considered "not-detected" and have been flagged "UJ" on the data tables.

Field Duplicate Precision: Acceptable precision and sample representativeness were not observed (RPD > 20%) between the cobalt and nickel positive results reported in Project Number IRJ1354 sample OU4-UEP-10-GW and its field duplicate, sample OU4-UEP-10-GW-FD. The positive results for cobalt and nickel in the field duplicate samples should be considered estimated and have been flagged "J" on the data tables.

Quantitation of Positive Results: All positive results reported at concentrations greater than the MDL but less than the RL were qualified as estimated and have been flagged "J" on the data tables.

C. Mercury Analysis

Six samples (including QC samples) were analyzed for dissolved mercury by US EPA Method 245.1. The findings offered in this report for this fraction are based on the items on the following table.

Item Reviewed	Acceptable	Acceptable With Discussion	Acceptable With Qualification	Not Acceptable
Holding Times	√			
Sample Condition Upon Receipt	√			
Blank Analysis Results	√			
MS/MSD Recoveries and Precision	√			
LCS Recoveries	√			
Detection Limits/Sensitivity	√			
Calibrations	√			
Field Duplicate Precision	√			
Analytical Sequence	√			
Sample Preparation	√			
Quantitation of Positive Results	√			
A Critical Evaluation of Instrumental Raw Data	√			

No findings were observed for the mercury fraction.

D. Wet Chemistry Analysis

Four samples were analyzed for chloride, fluoride, nitrate nitrogen, nitrite nitrogen, and sulfate by US EPA Method 300.0; for alkalinity by Standard Method 2320B; for pH by Standard Method 4500-H,B; and for TDS by Standard Method 2540C. Six samples (including QC samples) were analyzed for TOC by Standard Method 5310B. The findings offered in this report for this fraction are based on the items on the following table.

Item Reviewed	Acceptable	Acceptable With Discussion	Acceptable With Qualification	Not Acceptable
Holding Times			√	
Sample Condition Upon Receipt		√		
Blank Analysis Results	√			
MS/MSD Recoveries and Precision	√			
LCS Recoveries	√			

Item Reviewed	Acceptable	Acceptable With Discussion	Acceptable With Qualification	Not Acceptable
Detection Limits/Sensitivity	√			
Calibrations	√			
Field Duplicate Precision			√	
Analytical Sequence	√			
Sample Preparation	√			
Quantitation of Results	√			
Evaluation of Raw Data	√			

Holding Times: Project Number IRJ1080 sample OU4-UEP-08-GW was analyzed for pH beyond the 24-hour holding time from sample collection to analysis and for nitrate nitrogen and nitrite nitrogen beyond the 48-hour holding time from sample collection to analysis. The detection limits for nitrate nitrogen, nitrite nitrogen, and nitrate/nitrite nitrogen in this sample may be higher than reported, and the "not-detected" results have been flagged "UJ" on the data tables. In addition, the positive result for pH in this sample should be considered estimated and has been flagged "J" on the data tables.

All Project Number IRJ1354 samples were analyzed for pH beyond the 24-hour holding time from sample collection to analysis. Project Number IRJ1354 samples OU4-UEP-10-GW and OU4-UEP-10-GW-FD were analyzed for nitrate nitrogen and nitrite nitrogen beyond the 48-hour holding time from sample collection to analysis. The positive results for pH in all Project Number IRJ1354 samples should be considered estimated and have been flagged "J" on the data tables. The detection limits for nitrate nitrogen, nitrite nitrogen, and nitrate/nitrite nitrogen in Project Number IRJ1354 samples OU4-UEP-10-GW and OU4-UEP-10-GW-FD may be higher than reported, and the "not-detected" results have been flagged "UJ" on the data tables.

Sample Condition Upon Receipt: The samples in Project Number IRJ1080 were received at a temperature of 8.4ºC. According to Table 4-1 of the QAPP, aqueous samples to be analyzed for wet chemistry parameters must be preserved to ≤ 6ºC. The data reviewer does not believe that the minor temperature exceedance affected data quality; therefore, data were not qualified due to this issue.

Field Duplicate Precision: Acceptable precision and sample representativeness were not observed (difference > the RL) between the TOC positive results reported in Project Number IRJ1354 sample OU4-UEP-10-GW and its field duplicate, sample OU4-UEP-10-GW-FD. The positive results for TOC in the field duplicate samples should be considered estimated and have been flagged "J" on the data tables.

3.0 Qualifier Summary Tables

A. ICP Metals Analysis

Analyte(s)	Project Number(s)	Sample(s)	Validation Qualifier	Reason for Qualification
aluminum, lithium, and potassium	IRJ1354	OU4-UEP-10-GW-FD	J/UJ	4L – Low MS/MSD recoveries
aluminum	IRJ1080 IRJ1354	OU4-UEP-08-GW OU4-FEP-13-GW	J	5 – MS/MSD precision outside of limits

All positive results reported between the MDL and RL have been flagged "J." (Valid Reason Code: T)

B. ICP/MS Metals Analysis

Analyte(s)	Project Number	Samples	Validation Qualifier	Reason for Qualification
cobalt and nickel	IRJ1354	OU4-UEP-10-GW and OU4-UEP-10-GW-FD	J	8 – Field duplicate precision outside of limits
antimony	IRJ1354	OU4-UEP-10-GW and OU4-UEP-10-GW-FD	UJ	Y – Continuing calibration blank contamination
copper	IRJ1354	OU4-UEP-10-GW and OU4-UEP-10-GW-FD	UJ	7 – Equipment blank contamination

All positive results reported between the MDL and RL have been flagged "J." (Valid Reason Code: T)

C. Mercury Analysis

Analyte	Project Number	Sample	Validation Qualifier	Reason(s) for Qualification
Qualification of Data Was Not Warranted				

D. Wet Chemistry Analyses

Analyte	Report Number(s)	Sample(s)	Validation Qualifier	Reason(s) for Qualification
pH	IRJ1080 IRJ1354	OU4-UEP-08-GW All samples	J	1 – Exceeded holding time
nitrate nitrogen, nitrite nitrogen, and nitrate/nitrite nitrogen	IRJ1080 IRJ1354	OU4-UEP-08-GW OU4-UEP-10-GW and OU4-UEP-10-GW-FD	UJ	1 – Exceeded holding time

Analyte	Report Number(s)	Sample(s)	Validation Qualifier	Reason(s) for Qualification
TOC	IRJ1354	OU4-UEP-10-GW and OU4-UEP-10-GW-FD	J	8 – Field duplicate precision outside of limits

4.0 Overall Assessment

Based on this quality assurance review, the results for antimony and copper in two samples were qualified as "not-detected" due to blank contamination. The results for nitrate nitrogen, nitrite nitrogen, nitrate/nitrite nitrogen, and pH in a few samples were qualified as estimated due to exceeded holding time. The results for aluminum, lithium, and potassium in one sample were qualified as estimated due to low MS/MSD recoveries. The results for aluminum in two samples were qualified as estimated due to out-of-criteria MS/MSD precision. The results for cobalt, nickel, and total organic carbon in two samples were qualified as estimated due to field duplicate imprecision. In addition, several metals results were qualified as estimated because the reported results were between the MDL and RL.

5.0 Inorganic Data Qualifiers and Valid Reason Codes

Inorganic Data Qualifiers

U Analyte not detected at the detection limit concentration.

J Reported value is an estimated concentration.

UJ Analyte not detected at an estimated detection limit concentration.

R These data were rejected and were not used for any purposes.

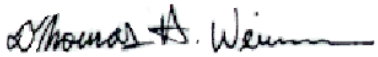
UR The analyte was not detected. The detection limit is unreliable and may be representative of a false negative. These data were rejected and are not usable for any purpose.

Valid Reason Codes

1	Holding time violation
2	Method blank contamination
3	Surrogate recovery
4	Matrix spike/matrix spike duplicate recovery
5	Matrix spike/matrix spike duplicate precision outside limits
6	Laboratory control sample recovery
7	Field blank contamination
8	Field duplicate precision outside limits
9	Other deficiencies (including cooler temperature)
A	Absence of supporting QC
S	ICV, CCV or column performance check problem
Y	Initial and continuing calibration blank problem
M	Interference check samples problem
O	Post-digestion spike outside of 85-115%
F	MSA correlation coefficient <0.995, or MSA not done
G	Serial dilution problem
K	DFTPP or BFB tuning problem
Q	Initial calibration problem
X	Internal standard recovery problem
V	Second source standard calibration verification problem
L	Low bias
Z	Retention time problem
N	Counting time error (radionuclide chemistry)
W	Detector instability (radionuclide chemistry)
C	Co-elution of compounds
E	Value exceeds linear calibration range
I	Interferences present during analysis
T	Trace level compound, poor quantitation
P	1C/2C precision outside of limits
B	LCS/LCSD precision outside limits
D	Lab Dup/Rep precision outside limits
H	High bias

6.0 Signatures

Report prepared by:



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Date: 2/12/09

7.0 ANALYTICAL RESULTS

Arco - Yerington
SDG: IRJ1080

Lab Sample	IRJ1080-01
Field Sample	OU4-UEP-08-GW
Collect Date	2008-10-08 15:30:00
Type	N
Parent	

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert
E200.7	AL	ALUMINUM	D	MG/L	1100	J / 5	0.8	1	0
	B	BORON	D	MG/L	7.9		0.4	1	0
	CA	CALCIUM	D	MG/L	460		1	2	0
	FE	IRON	D	MG/L	3500		0.3	0.8	0
	K	POTASSIUM	D	MG/L	15		7.4	10	0
	LI	LITHIUM	D	MG/L	1.6		0.6	1	0
	MG	MAGNESIUM	D	MG/L	1300		0.24	0.4	0
	NA	SODIUM	D	MG/L	1700		3.8	10	0
	P	PHOSPHORUS, TOTAL (A	D	MG/L	7.7		0.4	0.8	0
	SI	SILICON	D	MG/L	110		0.56	2.2	0
	SN	TIN	D	MG/L	0.24	U	0.24	2	0
	SR	STRONTIUM	D	MG/L	4		0.1	0.4	0
	TI	TITANIUM	D	MG/L	0.04	U	0.04	0.1	0
E200.8	AG	SILVER	D	UG/L	30	U	30	100	0
	AS	ARSENIC	D	UG/L	70	U	70	100	0
	BA	BARIUM	D	UG/L	40	U	40	100	0
	BE	BERYLLIUM	D	UG/L	160		20	50	0
	CD	CADMIUM	D	UG/L	84	J / T	11	100	0
	CO	COBALT	D	UG/L	4200		15	100	0
	CR	CHROMIUM, TOTAL	D	UG/L	900		70	200	0
	CU	COPPER	D	UG/L	92000		380	1000	0
	MN	MANGANESE	D	UG/L	140000		380	500	0
	MO	MOLYBDENUM	D	UG/L	47	J / T	20	200	0
	NI	NICKEL	D	UG/L	4300		90	200	0
	PB	LEAD	D	UG/L	30	U	30	100	0
	SB	ANTIMONY	D	UG/L	20	U	20	200	0
	SE	SELENIUM	D	UG/L	91	J / T	30	200	0
	TL	THALLIUM	D	UG/L	20	U	20	100	0
	U	URANIUM	D	UG/L	2500		50	100	0
	V	VANADIUM	D	UG/L	2200		70	200	0
	ZN	ZINC	D	UG/L	16000		250	2000	0

Lab Sample	IRJ1080-01
Field Sample	OU4-UEP-08-GW
Collect Date	2008-10-08 15:30:00
Type	N
Parent	

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert
E245.1	HG	MERCURY	D	MG/L	0.00023		0.0001	0.0002	0
E300	CL	CHLORIDE (AS CL)	T	MG/L	320		25	50	0
	NO2N	NITROGEN, NITRITE (AS	T	MG/L	1.8	UJ / 1	1.8	3	0
	NO3N	NITROGEN, NITRATE (AS	T	MG/L	1.2	UJ / 1	1.2	2.2	0
	NO3NO2N	NITROGEN, NITRATE-NIT	T	MG/L	3	UJ / 1	3	5.2	0
	SO4	SULFATE (AS SO4)	T	MG/L	23000		200	500	0
SM2320B	ALK	ALKALINITY, TOTAL (AS (	T	MG/L	2	U	2	2	0
	ALKB	ALKALINITY, BICARBONA	T	MG/L	2	U	2	2	0
	ALKC	ALKALINITY, CARBONAT	T	MG/L	2	U	2	2	0
	ALKH	ALKALINITY, HYDROXIDE	T	MG/L	2	U	2	2	0
SM2540C	TDS	TOTAL DISSOLVED SOLI	T	MG/L	15000		10	10	0
SM4500	PH	pH	T	PH UNITS	3.83	J / 1	0.1	0.1	0
SM5310B	TOC	TOTAL ORGANIC CARBC	T	MG/L	16		0.5	1	0

Arco - Yerington
SDG: IRJ1354

				Lab Sample	IRJ1354-01					IRJ1354-02				
				Field Sample	OU4-UEP-10-GW					OU4-UEP-10-GW-FD				
				Collect Date	2008-10-12 12:00:00					2008-10-12 12:00:00				
				Type	N					FD				
				Parent						OU4-UEP-10-GW				
Method	**CAS Number**	**Chemical Name**	**Total or Dissolved**	**Units**	**Result**	**Qual / Reason**	**MDL**	**RDL**	**Uncert**	**Result**	**Qual / Reason**	**MDL**	**RDL**	**Uncert**
E200.7	AL	ALUMINUM	D	MG/L	0.2	U	0.2	0.25	0	0.04	UJ / 4L	0.04	0.05	0
	B	BORON	D	MG/L	11		0.1	0.25	0	10		0.02	0.05	0
	CA	CALCIUM	D	MG/L	430		0.25	0.5	0	410		0.05	0.1	0
	FE	IRON	D	MG/L	25		0.075	0.2	0	23		0.015	0.04	0
	K	POTASSIUM	D	MG/L	3.3		1.8	2.5	0	4.4	J / 4L	1.8	2.5	0
	LI	LITHIUM	D	MG/L	0.2	J / T	0.15	0.25	0	0.12	J / 4L	0.03	0.05	0
	MG	MAGNESIUM	D	MG/L	190		0.06	0.1	0	190		0.06	0.1	0
	NA	SODIUM	D	MG/L	2200		0.95	2.5	0	2200		0.95	2.5	0
	P	PHOSPHORUS, TOTAL (I	D	MG/L	0.1	U	0.1	0.2	0	0.02	U	0.02	0.04	0
	SI	SILICON	D	MG/L	33		0.14	0.55	0	33		0.028	0.11	0
	SN	TIN	D	MG/L	0.06	U	0.06	0.5	0	0.012	U	0.012	0.1	0
	SR	STRONTIUM	D	MG/L	7		0.025	0.1	0	6.9		0.005	0.02	0
	TI	TITANIUM	D	MG/L	0.01	U	0.01	0.025	0	0.002	U	0.002	0.005	0
E200.8	AG	SILVER	D	UG/L	1.5	U	1.5	5	0	0.6	U	0.6	2	0
	AS	ARSENIC	D	UG/L	6.7		3.5	5	0	5.3		1.4	2	0
	BA	BARIUM	D	UG/L	39		2	5	0	43		0.8	2	0
	BE	BERYLLIUM	D	UG/L	1	U	1	2.5	0	0.4	U	0.4	1	0
	CD	CADMIUM	D	UG/L	0.59	J / T	0.55	5	0	0.62	J / T	0.22	2	0
	CO	COBALT	D	UG/L	45	J / 8	0.75	5	0	32	J / 8	0.3	2	0
	CR	CHROMIUM, TOTAL	D	UG/L	3.5	U	3.5	10	0	1.4	U	1.4	4	0
	CU	COPPER	D	UG/L	10	UJ / 7	10	41	0	15	UJ / 7	15	41	0
	MN	MANGANESE	D	UG/L	5400		7.5	10	0	5200		15	20	0
	MO	MOLYBDENUM	D	UG/L	220		1	10	0	200		0.4	4	0
	NI	NICKEL	D	UG/L	82	J / 8	4.5	10	0	63	J / 8	1.8	4	0
	PB	LEAD	D	UG/L	1.5	U	1.5	5	0	0.6	U	0.6	2	0
	SB	ANTIMONY	D	UG/L	1.2	UJ / Y	1.2	10	0	1.3	UJ / Y	1.3	4	0
	SE	SELENIUM	D	UG/L	6.1	J / T	1.5	10	0	3.6	J / T	0.6	4	0
	TL	THALLIUM	D	UG/L	1	U	1	5	0	0.44	J / T	0.4	2	0
	U	URANIUM	D	UG/L	440		2.5	5	0	420		1	2	0
	V	VANADIUM	D	UG/L	3.5	U	3.5	10	0	1.4	U	1.4	4	0
	ZN	ZINC	D	UG/L	29	J / T	12	100	0	38	J / T	5	40	0

				Lab Sample	IRJ1354-01					IRJ1354-02				
				Field Sample	OU4-UEP-10-GW					OU4-UEP-10-GW-FD				
				Collect Date	2008-10-12 12:00:00					2008-10-12 12:00:00				
				Type	N					FD				
				Parent						OU4-UEP-10-GW				
Method	**CAS Number**	**Chemical Name**	**Total or Dissolved**	**Units**	**Result**	**Qual / Reason**	**MDL**	**RDL**	**Uncert**	**Result**	**Qual / Reason**	**MDL**	**RDL**	**Uncert**
E245.1	HG	MERCURY	D	MG/L	0.0001	U	0.0001	0.0002	0	0.0001	U	0.0001	0.0002	0
E300	CL	CHLORIDE (AS CL)	T	MG/L	160		2.5	5	0	170		2.5	5	0
	F	FLUORIDE	T	MG/L	6.8		1.5	5	0	7.1		1.5	5	0
	NO2N	NITROGEN, NITRITE (AS	T	MG/L	0.9	UJ / 1	0.9	1.5	0	0.9	UJ / 1	0.9	1.5	0
	NO3N	NITROGEN, NITRATE (AS	T	MG/L	0.6	UJ / 1	0.6	1.1	0	0.6	UJ / 1	0.6	1.1	0
	NO3NO2N	NITROGEN, NITRATE-NIT	T	MG/L	1.5	UJ / 1	1.5	2.6	0	1.5	UJ / 1	1.5	2.6	0
	SO4	SULFATE (AS SO4)	T	MG/L	5300		100	250	0	5200		100	250	0
SM2320B	ALK	ALKALINITY, TOTAL (AS (	T	MG/L	700		2	2	0	720		2	2	0
	ALKB	ALKALINITY, BICARBONA	T	MG/L	700		2	2	0	720		2	2	0
	ALKC	ALKALINITY, CARBONAT	T	MG/L	2	U	2	2	0	2	U	2	2	0
	ALKH	ALKALINITY, HYDROXIDE	T	MG/L	2	U	2	2	0	2	U	2	2	0
SM2540C	TDS	TOTAL DISSOLVED SOLI	T	MG/L	8900		10	10	0	9500		10	10	0
SM4500	PH	pH	T	PH UNITS	7.12	J / 1	0.1	0.1	0	7.14	J / 1	0.1	0.1	0
SM5310B	TOC	TOTAL ORGANIC CARBC	T	MG/L	4.4	J / 8	0.5	1	0	2.4	J / 8	0.5	1	0

Lab Sample	IRJ1354-03
Field Sample	OU4-FEP-13-GW
Collect Date	2008-10-13 09:00:00
Type	N
Parent	

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert
E200.7	AL	ALUMINUM	D	MG/L	240	J / 5	0.8	1	0
	B	BORON	D	MG/L	2		0.4	1	0
	CA	CALCIUM	D	MG/L	430		1	2	0
	FE	IRON	D	MG/L	3200		0.3	0.8	0
	K	POTASSIUM	D	MG/L	60		7.4	10	0
	LI	LITHIUM	D	MG/L	0.77	J / T	0.6	1	0
	MG	MAGNESIUM	D	MG/L	520		0.24	0.4	0
	NA	SODIUM	D	MG/L	620		3.8	10	0
	P	PHOSPHORUS, TOTAL (A	D	MG/L	2.5		0.4	0.8	0
	SI	SILICON	D	MG/L	14		0.56	2.2	0
	SN	TIN	D	MG/L	0.24	U	0.24	2	0
	SR	STRONTIUM	D	MG/L	9		0.1	0.4	0
	TI	TITANIUM	D	MG/L	0.04	U	0.04	0.1	0
E200.8	AG	SILVER	D	UG/L	12	U	12	40	0
	AS	ARSENIC	D	UG/L	170		28	40	0
	BA	BARIUM	D	UG/L	27	J / T	16	40	0
	BE	BERYLLIUM	D	UG/L	33		8	20	0
	CD	CADMIUM	D	UG/L	50		4.4	40	0
	CO	COBALT	D	UG/L	1500		6	40	0
	CR	CHROMIUM, TOTAL	D	UG/L	95		28	80	0
	CU	COPPER	D	UG/L	3400		30	80	0
	MN	MANGANESE	D	UG/L	96000		150	200	0
	MO	MOLYBDENUM	D	UG/L	8	U	8	80	0
	NI	NICKEL	D	UG/L	920		36	80	0
	PB	LEAD	D	UG/L	12	U	12	40	0
	SB	ANTIMONY	D	UG/L	8	U	8	80	0
	SE	SELENIUM	D	UG/L	19	J / T	12	80	0
	TL	THALLIUM	D	UG/L	20	J / T	8	40	0
	U	URANIUM	D	UG/L	380		20	40	0
	V	VANADIUM	D	UG/L	950		28	80	0
	ZN	ZINC	D	UG/L	5300		100	800	0

Lab Sample	IRJ1354-03
Field Sample	OU4-FEP-13-GW
Collect Date	2008-10-13 09:00:00
Type	N
Parent	

Method	CAS Number	Chemical Name	Total or Dissolved	Units	Result	Qual / Reason	MDL	RDL	Uncert
E245.1	HG	MERCURY	D	MG/L	0.0001	U	0.0001	0.0002	0
E300	CL	CHLORIDE (AS CL)	T	MG/L	130		2.5	5	0
	F	FLUORIDE	T	MG/L	100		1.5	5	0
	NO2N	NITROGEN, NITRITE (AS	T	MG/L	0.9	U	0.9	1.5	0
	NO3N	NITROGEN, NITRATE (AS	T	MG/L	0.6	U	0.6	1.1	0
	NO3NO2N	NITROGEN, NITRATE-NIT	T	MG/L	1.5	U	1.5	2.6	0
	SO4	SULFATE (AS SO4)	T	MG/L	11000		100	250	0
SM2320B	ALK	ALKALINITY, TOTAL (AS (	T	MG/L	2	U	2	2	0
	ALKB	ALKALINITY, BICARBONA	T	MG/L	2	U	2	2	0
	ALKC	ALKALINITY, CARBONAT	T	MG/L	2	U	2	2	0
	ALKH	ALKALINITY, HYDROXIDE	T	MG/L	2	U	2	2	0
SM2540C	TDS	TOTAL DISSOLVED SOLI	T	MG/L	9300		10	10	0
SM4500	PH	pH	T	PH UNITS	4.03	J / 1	0.1	0.1	0
SM5310B	TOC	TOTAL ORGANIC CARBC	T	MG/L	6.4		0.5	1	0

8.0 SUPPORTING DOCUMENTATION

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/8/2008
Project:	BP Yerington, NV BP Yerington, NV, 134557	**Date Received:**	10/10/2008
Lab:	IRJ1080		

SAMPLE RECEIPT: Samples were received intact, on ice, with custody seals and chain of custody documentation. The sample temperature was measured at 8.4° C upon receipt at the laboratory.

QAPP Table 4-1
wet chem ≤ 6°C

HOLDING TIMES: EPA 300.0 sample IRJ1080-01 analysis was performed past method specified holding time.

The holding time for SM4500-H,B is immediate. The analysis was performed in the laboratory as soon as possible after receipt.

no qual unless > 10°C

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: Lithium was detected in the Method Blank of batch 8J22088.

Silicon was detected in the Method Blank of batch 8J22088.

The MS and/or MSD recoveries for Arsenic were above acceptance limits due to sample matrix interference for EPA 200.8-Diss QC batch 8J22087. See LCS.

Copper results exceeded the linear range in the MS/MSD and therefore are not available for reporting for EPA 200.8-Diss QC batch 8J22087. The batch was accepted based on acceptable recovery in the LCS.

Manganese results exceeded the linear range in the MS/MSD and therefore are not available for reporting for EPA 200.8-Diss QC batch 8J22087. The batch was accepted based on acceptable recovery in the LCS.

Due to high levels of Boron in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Boron in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/8/2008
Project:	BP Yerington, NV BP Yerington, NV, 134557	**Date Received:**	10/10/2008
Lab:	IRJ1080		

Due to high levels of Calcium in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Calcium in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Iron in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Iron in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Magnesium in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Magnesium in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Silicon in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Silicon in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Sodium in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Sodium in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/8/2008
Project:	BP Yerington, NV BP Yerington, NV, 134557	**Date Received:**	10/10/2008
Lab:	IRJ1080		

Due to high levels of Strontium in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Strontium in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Chromium in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Chromium in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Cobalt in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Cobalt in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Nickel in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Nickel in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Uranium in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Uranium in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

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THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/8/2008
Project:	BP Yerington, NV BP Yerington, NV, 134557	**Date Received:**	10/10/2008
Lab:	IRJ1080		

Due to high levels of Vanadium in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Vanadium in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Zinc in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Zinc in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

The MS/MSD RPD for Aluminum exceeded the acceptance limits due to sample matrix effects for EPA 200.7-Diss QC batch 8J22088. The individual analyte QA/QC recoveries were within acceptance limits.

OBSERVATIONS: Results that fall between the MDL and RL are 'J' flagged.

Tin reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1080-01.

Titanium reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1080-01.

Antimony reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1080-01.

Arsenic reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1080-01.

Barium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1080-01.

Cadmium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1080-01.

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/8/2008
Project:	BP Yerington, NV BP Yerington, NV, 134557	**Date Received:**	10/10/2008
Lab:	IRJ1080		

Lead reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1080-01.

Molybdenum reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1080-01.

Selenium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1080-01.

Silver reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1080-01.

Thallium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1080-01.

Nitrate-N reporting limit was raised due to sample matrix effects for EPA 300.0 sample IRJ1080-01.

Nitrite-N reporting limit was raised due to sample matrix effects for EPA 300.0 sample IRJ1080-01.

TestAmerica Irvine

Patty Mata
Project Manager
bb

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

Prepared For: Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project: BP Yerington, NV, 134557

Sampled: 10/08/08
Received: 10/10/08
Issued: 11/03/08 17:03

NELAP #01108CA Nevada #CA-72

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.
This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
IRJ1080-01	OU4-UEP-08-GW	Water

assoc. with FB-01 (IRJ1930)
and EQ-01 (IRJ1213)

Reviewed By:

TestAmerica Irvine

Patty Mata
Project Manager

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

Project Name: OU4 Phase I
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: EPA Region 9
Requested Due Date (mm/dd/yy): NA

IRV
Water Geochemical

COC # YER 2017A

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name:	Test America-Irvine	BP/AR Facility No.:		Consultant/Contractor:	Brown and Caldwell
Address:	Derian Avenue, Suite	BP/AR Facility Address:	Yerington, NV	Address:	3264 Goni Rd
	Irvine, CA 92614	Site Lat/Long:	NA		Carson City, NV 89706
Lab PM:	Patty Mata	California Global ID No	NA	Consultant/Contractor Project No.:	136259
Tele/Fax:	949-261-1022 (x213)	Enfos Project No.:	001KF-0193	Consultant/Contractor PM:	Penny Bassett
BP/AR EBM:	Roy Thun	Provision or OOC (circle one)		Tele/Fax:	775-315-4343
Address:	6 Centerpoint Avenue	Phase/WBS:	32	Report Type & QC Level:	LEVEL IV
	La Palma, CA 90623	Sub Phase/Task:	03	E-mail EDD To:	skocsis@brwncald.com
Tele/Fax:	661-287-3855	Cost Element:	05	Invoice to:	Consultant or BP or Atlantic Richfield Co. (circle one)

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: Alkalinity (2320B)	Requested Analysis: Chloride, flouride, nitrate, nitrite, sulfate (300.0)	Requested Analysis: PH, TDS (2540C)	Requested Analysis: Dissolved Metals (200.7/200.8)	Requested Analysis: TOC (5310B)	Sample Point Lat/Long and Comments
							IRJ 1080												
1	OU4-UEP-08-GW	1530	10/8/08		X			1	X					X	X	X			17-20' bgs
2								1			X						X		
3								1				X						X	No Preservative
4																			
5																			
6																			
7																			MS: 10/10/08
8																			
9																			
10																			12:50

		Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name:	Penny Bassett	Penny Bassett	10-8	1600	R Barringer	10-8	1600
Sampler's Company:	Brown + Caldwell	R Barringer	10-9	1300			
Shipment Date:	10-9-08						
Shipment Method:	Fedex						
Shipment Tracking No:	864643261570				V. Bank	10/10/08	10:25

Special Instructions:

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 9.1/8.4 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP COC Rev. 5 10/11/2006

044

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THE LEADER IN ENVIRONMENTAL TESTING
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Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 134557
Report Number: IRJ1080

Sampled: 10/08/08
Received: 10/10/08

DISSOLVED METALS

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRJ1080-01 (OU4-UEP-08-GW - Water)									
Reporting Units: mg/l									
Aluminum	EPA 200.7-Diss	8J22088	0.80	1.0	**1100**	20	10/22/08	10/26/08	
Mercury	EPA 245.1-Diss	8J21102	0.00010	0.00020	**0.00023**	1	10/21/08	10/21/08	
Boron	EPA 200.7-Diss	8J22088	0.40	1.0	**7.9**	20	10/22/08	10/24/08	
Calcium	EPA 200.7-Diss	8J22088	1.0	2.0	**460**	20	10/22/08	10/24/08	
Iron	EPA 200.7-Diss	8J22088	0.30	0.80	**3500**	20	10/22/08	10/24/08	
Lithium	EPA 200.7-Diss	8J22088	0.60	1.0	**1.6**	20	10/22/08	10/24/08	
Magnesium	EPA 200.7-Diss	8J22088	0.24	0.40	**1300**	20	10/22/08	10/24/08	
Phosphorus	EPA 200.7-Diss	8J22088	0.40	0.80	**7.7**	20	10/22/08	10/24/08	
Potassium	EPA 200.7-Diss	8J22088	7.4	10	**15**	20	10/22/08	10/24/08	
Sodium	EPA 200.7-Diss	8J22088	3.8	10	**1700**	20	10/22/08	10/24/08	
Strontium	EPA 200.7-Diss	8J22088	0.10	0.40	**4.0**	20	10/22/08	10/24/08	
Tin	EPA 200.7-Diss	8J22088	0.24	2.0	ND	20	10/22/08	10/24/08	RL1
Titanium	EPA 200.7-Diss	8J22088	0.040	0.10	ND	20	10/22/08	10/24/08	RL1
Sample ID: IRJ1080-01 (OU4-UEP-08-GW - Water)									
Reporting Units: mg/l as Silica									
Silicon	EPA 200.7-Diss	8J22088	0.56	2.2	**110**	20	10/22/08	10/24/08	
Sample ID: IRJ1080-01 (OU4-UEP-08-GW - Water)									
Reporting Units: ug/l									
Uranium	EPA 200.8-Diss	8J22087	50	100	**2500**	100	10/22/08	10/23/08	MHA
Antimony	EPA 200.8-Diss	8J22087	20	200	ND	100	10/22/08	10/23/08	RL1
Arsenic	EPA 200.8-Diss	8J22087	70	100	ND	100	10/22/08	10/23/08	M1, RL1
Barium	EPA 200.8-Diss	8J22087	40	100	ND	100	10/22/08	10/23/08	RL1
Beryllium	EPA 200.8-Diss	8J22087	20	50	**160**	100	10/22/08	10/23/08	
Cadmium	EPA 200.8-Diss	8J22087	11	100	**84**	100	10/22/08	10/23/08	RL1, J
Chromium	EPA 200.8-Diss	8J22087	70	200	**900**	100	10/22/08	10/23/08	MHA
Cobalt	EPA 200.8-Diss	8J22087	15	100	**4200**	100	10/22/08	10/23/08	MHA
Copper	EPA 200.8-Diss	8J22087	380	1000	**92000**	500	10/22/08	10/23/08	M-3
Lead	EPA 200.8-Diss	8J22087	30	100	ND	100	10/22/08	10/23/08	RL1
Manganese	EPA 200.8-Diss	8J22087	380	500	**140000**	500	10/22/08	10/23/08	M-3
Molybdenum	EPA 200.8-Diss	8J22087	20	200	**47**	100	10/22/08	10/23/08	RL1, J
Nickel	EPA 200.8-Diss	8J22087	90	200	**4300**	100	10/22/08	10/23/08	MHA
Selenium	EPA 200.8-Diss	8J22087	30	200	**91**	100	10/22/08	10/23/08	RL1, J
Silver	EPA 200.8-Diss	8J22087	30	100	ND	100	10/22/08	10/23/08	RL1
Thallium	EPA 200.8-Diss	8J22087	20	100	ND	100	10/22/08	10/23/08	RL1
Vanadium	EPA 200.8-Diss	8J22087	70	200	**2200**	100	10/22/08	10/23/08	MHA
Zinc	EPA 200.8-Diss	8J22087	250	2000	**16000**	100	10/22/08	10/23/08	MHA

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Project Manager

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Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 134557
Report Number: IRJ1080

Sampled: 10/08/08
Received: 10/10/08

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRJ1080-01 (OU4-UEP-08-GW - Water) - cont.									
Reporting Units: mg/l									
Nitrate/Nitrite-N	EPA 300.0	[CALC]	3.0	5.2	ND	20	10/10/08	10/10/08	
Alkalinity as CaCO3	SM2320B	8J14052	2.0	2.0	ND	1	10/14/08	10/14/08	
Bicarbonate Alkalinity as CaCO3	SM2320B	8J14052	2.0	2.0	ND	1	10/14/08	10/14/08	
Carbonate Alkalinity as CaCO3	SM2320B	8J14052	2.0	2.0	ND	1	10/14/08	10/14/08	
Hydroxide Alkalinity as CaCO3	SM2320B	8J14052	2.0	2.0	ND	1	10/14/08	10/14/08	
Chloride	EPA 300.0	8J10052	25	50	**320**	100	10/10/08	10/10/08	
Fluoride	EPA 300.0	8J10052	15	50	**160**	100	10/10/08	10/10/08	
Nitrate-N	EPA 300.0	8J10052	1.2	2.2	ND	20	10/10/08	10/10/08	H, RL1
Nitrite-N	EPA 300.0	8J10052	1.8	3.0	ND	20	10/10/08	10/10/08	H, RL1
Sulfate	EPA 300.0	8J10052	200	500	**23000**	1000	10/10/08	10/10/08	
Total Dissolved Solids	SM2540C	8J11032	10	10	**15000**	1	10/11/08	10/11/08	
Total Organic Carbon	SM5310B	8J14030	0.50	1.0	**16**	1	10/14/08	10/14/08	

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Sampled: 10/08/08
Received: 10/10/08

INORGANICS

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRJ1080-01 (OU4-UEP-08-GW - Water) - cont.									
Reporting Units: pH Units									
pH	SM4500-H,B	8J10096	0.100	0.100	**3.83**	1	10/10/08	10/10/08	HFT

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Sampled: 10/08/08
Received: 10/10/08

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: OU4-UEP-08-GW (IRJ1080-01) - Water					
EPA 300.0	2	10/08/2008 15:30	10/10/2008 10:25	10/10/2008 18:30	10/10/2008 18:40
SM4500-H,B	0	10/08/2008 15:30	10/10/2008 10:25	10/10/2008 13:00	10/10/2008 13:00

pH > 24
NO$_x$ > 48

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Inorganic Analyses Support Documentation

Environmental Standards Project Name: Arco - Yerington
Sample Collection Dates: 10/8/08
Job Number: 200850471.A
Project Manager: Diya
Laboratory: TestAmerica

Reviewed By: THW
Approved By: KW
Completion Date: 2/11/09

Applicable Sample No's.: ☑ Refer to Table 1 in the Quality Assurance Review

Deliverables: CLP ☐ Tier I ☑ Tier II ☐ Limited ☐ Other ____

Sample No.	Lab. Control No.
IRJ1080	

The following table indicates criteria which were examined, the identified problems, and support documentation attachments.

	Criteria Examined in Detail					Problems Identified					Support Documentation Attachments				
	ICP or A.A Metals	Furnace Metals	Cold Vapor Mercury	Cyanide	Other Method(s) wet chem	ICP or A.A Metals	Furnace Metals	Cold Vapor Mercury	Cyanide	Other Method(s) wet chem	ICP or A.A Metals	Furnace Metals	Cold Vapor Mercury	Cyanide	Other Method(s) wet chem
Holding Times	✓		✓		✓					✓	✓		✓		✓
Blank Analysis Results	✓		✓		✓	✓					✓		✓		✓
Matrix Spike (Predigestion) Results	✓		✓								✓		✓		
Duplicate Analysis Results ☐ Field ☒ Lab				✓											✓
Quantitation of Results	✓		✓		✓						✓		✓		✓
Detection Limits / Sensitivity	✓		✓		✓						✓		✓		✓
Initial Calibrations	✓		✓		✓						✓		✓		✓
Continuing Calibrations	✓		✓		✓						✓		✓		✓
Laboratory Control Standards (LCS)	✓		✓		✓						✓		✓		✓
ICP Linear Range Analysis															
ICP Interference Checks	✓										✓				
ICP Serial Dilutions															
ICP Post-Digestion Spike															
GFAA Post-Digestion Spikes															
GFAA Duplicate Injections															
ICP Multiple Exposures															
GFAA Standard Additions															
CRDL Standards	✓		✓								✓		✓		
Others: condition on receipt	✓		✓		✓						✓		✓		✓

Comments: ____

ENVIRONMENTAL STANDARDS

BLANK ANALYSIS RESULTS FOR INORGANIC PARAMETERS

MATRIX (Aq., S)	BLANK TYPE (✓)						BLANK SAMPLE NUMBER	CONTAMINANT	CONCENTRATION (units)	QUALIFICATION LIMIT FOR AQUEOUS SAMPLES (ug/L)	QUALIFICATION LIMIT FOR SOLID SAMPLES (mg/Kg)
	METHOD			TRIP	EQUIPMENT	FIELD					
	ICB	CCB	PREP.								
									mg/L	5x	5x
Aq			✓				BJ220885-BLK1	lithium	0.0315	0.1575	
	✓							silicon	0.0357	0.1785	
		✓					IJ82306-ICB1	magnesium	0.0161	0.0805	
							IJ82306-CCB4	sodium	0.26	1.3	
							IJ82310-CCB2	antimony mg/L	0.327	1.635	

Aq. = Aqueous; S = Solid

Notes: _____

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Attention: Penny Bassett

Project ID: BP Yerington, NV, 134557
Report Number: IRJ1080

Sampled: 10/08/08
Received: 10/10/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J21102 Extracted: 10/21/08											
Blank Analyzed: 10/21/2008 (8J21102-BLK1)											
Mercury	ND	0.00020	0.00010	mg/l							
LCS Analyzed: 10/21/2008 (8J21102-BS1)											
Mercury	0.00790	0.00020	0.00010	mg/l	0.00800		99	85-115			
Matrix Spike Analyzed: 10/21/2008 (8J21102-MS1)						**Source: IRJ1080-01**					
Mercury	0.00785	0.00020	0.00010	mg/l	0.00800	0.000226	95	70-130			
Matrix Spike Dup Analyzed: 10/21/2008 (8J21102-MSD1)						**Source: IRJ1080-01**					
Mercury	0.00791	0.00020	0.00010	mg/l	0.00800	0.000226	96	70-130	1	20	
Batch: 8J22087 Extracted: 10/22/08											
Blank Analyzed: 10/23/2008 (8J22087-BLK1)											
Uranium	ND	1.0	0.50	ug/l							
Antimony	ND	2.0	0.20	ug/l							
Arsenic	ND	1.0	0.70	ug/l							
Barium	ND	1.0	0.40	ug/l							
Beryllium	ND	0.50	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Chromium	ND	2.0	0.70	ug/l							
Cobalt	ND	1.0	0.15	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Manganese	ND	1.0	0.75	ug/l							
Molybdenum	ND	2.0	0.20	ug/l							
Nickel	ND	2.0	0.90	ug/l							
Selenium	ND	2.0	0.30	ug/l							
Silver	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
Vanadium	ND	2.0	0.70	ug/l							
Zinc	ND	20	2.5	ug/l							

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Received: 10/10/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J22087 Extracted: 10/22/08											
LCS Analyzed: 10/23/2008 (8J22087-BS1)											
Uranium	79.9	1.0	0.50	ug/l	80.0		100	85-115			
Antimony	73.1	2.0	0.20	ug/l	80.0		91	85-115			
Arsenic	75.0	1.0	0.70	ug/l	80.0		94	85-115			
Barium	73.2	1.0	0.40	ug/l	80.0		92	85-115			
Beryllium	78.4	0.50	0.20	ug/l	80.0		98	85-115			
Cadmium	72.2	1.0	0.11	ug/l	80.0		90	85-115			
Chromium	80.7	2.0	0.70	ug/l	80.0		101	85-115			
Cobalt	72.7	1.0	0.15	ug/l	80.0		91	85-115			
Copper	78.4	2.0	0.75	ug/l	80.0		98	85-115			*M-3*
Lead	78.2	1.0	0.30	ug/l	80.0		98	85-115			
Manganese	78.2	1.0	0.75	ug/l	80.0		98	85-115			*M-3*
Molybdenum	76.0	2.0	0.20	ug/l	80.0		95	85-115			
Nickel	79.3	2.0	0.90	ug/l	80.0		99	85-115			
Selenium	70.3	2.0	0.30	ug/l	80.0		88	85-115			
Silver	76.7	1.0	0.30	ug/l	80.0		96	85-115			
Thallium	77.3	1.0	0.20	ug/l	80.0		97	85-115			
Vanadium	70.1	2.0	0.70	ug/l	80.0		88	85-115			
Zinc	74.5	20	2.5	ug/l	80.0		93	85-115			
Matrix Spike Analyzed: 10/23/2008 (8J22087-MS1)						**Source: IRJ1080-01**					
Uranium	2500	100	50	ug/l	80.0	2480	29	70-130			*MHA*
Antimony	68.8	200	20	ug/l	80.0	ND	86	70-130			*J*
Arsenic	114	100	70	ug/l	80.0	ND	142	70-130	NO		*M1*
Barium	94.5	100	40	ug/l	80.0	ND	118	70-130			*J*
Beryllium	223	50	20	ug/l	80.0	161	77	70-130			
Cadmium	148	100	11	ug/l	80.0	84.1	80	70-130			
Chromium	978	200	70	ug/l	80.0	902	96	70-130			*MHA*
Cobalt	4190	100	15	ug/l	80.0	4170	30	70-130			*MHA*
Lead	83.4	100	30	ug/l	80.0	ND	104	70-130			*J*
Molybdenum	117	200	20	ug/l	80.0	46.9	87	70-130			*J*
Nickel	4390	200	90	ug/l	80.0	4340	63	70-130			*MHA*
Selenium	156	200	30	ug/l	80.0	90.9	81	70-130			*J*
Silver	65.4	100	30	ug/l	80.0	ND	82	70-130			*J*
Thallium	77.7	100	20	ug/l	80.0	ND	97	70-130			*J*
Vanadium	2210	200	70	ug/l	80.0	2160	68	70-130			*MHA*
Zinc	15900	2000	250	ug/l	80.0	16000	-178	70-130			*MHA*

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Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 134557
Report Number: IRJ1080

Sampled: 10/08/08
Received: 10/10/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J22087 Extracted: 10/22/08											
Matrix Spike Dup Analyzed: 10/23/2008 (8J22087-MSD1)						**Source: IRJ1080-01**					
Uranium	2440	100	50	ug/l	80.0	2480	-50	70-130	3	20	*MHA*
Antimony	67.4	200	20	ug/l	80.0	ND	84	70-130	2	20	*J*
Arsenic	112	100	70	ug/l	80.0	ND	140	70-130	2	20	*M1*
Barium	91.5	100	40	ug/l	80.0	ND	114	70-130	3	20	*J*
Beryllium	222	50	20	ug/l	80.0	161	77	70-130	0	20	
Cadmium	146	100	11	ug/l	80.0	84.1	77	70-130	2	20	
Chromium	942	200	70	ug/l	80.0	902	50	70-130	4	20	*MHA*
Cobalt	4080	100	15	ug/l	80.0	4170	-109	70-130	3	20	*MHA*
Lead	81.7	100	30	ug/l	80.0	ND	102	70-130	2	20	*J*
Molybdenum	112	200	20	ug/l	80.0	46.9	82	70-130	4	20	*J*
Nickel	4290	200	90	ug/l	80.0	4340	-64	70-130	2	20	*MHA*
Selenium	152	200	30	ug/l	80.0	90.9	76	70-130	2	20	*J*
Silver	70.1	100	30	ug/l	80.0	ND	88	70-130	7	20	*J*
Thallium	74.7	100	20	ug/l	80.0	ND	93	70-130	4	20	*J*
Vanadium	2140	200	70	ug/l	80.0	2160	-18	70-130	3	20	*MHA*
Zinc	15500	2000	250	ug/l	80.0	16000	-613	70-130	2	20	*MHA*
Batch: 8J22088 Extracted: 10/22/08											
Blank Analyzed: 10/24/2008-10/26/2008 (8J22088-BLK1)											
Aluminum	ND	0.050	0.040	mg/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	ND	0.10	0.050	mg/l							
Iron	ND	0.040	0.015	mg/l							
Lithium	0.0315	0.050	0.030	mg/l							*J*
Magnesium	ND	0.020	0.012	mg/l							
Phosphorus	ND	0.040	0.020	mg/l							
Potassium	ND	0.50	0.37	mg/l							
Silicon	0.0357	0.11	0.028	mg/l as Silica							*J*
Sodium	ND	0.50	0.19	mg/l							
Strontium	ND	0.020	0.0050	mg/l							
Tin	ND	0.10	0.012	mg/l							
Titanium	ND	0.0050	0.0020	mg/l							

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METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J22088 Extracted: 10/22/08											
LCS Analyzed: 10/24/2008-10/26/2008 (8J22088-BS1)											
Aluminum	0.546	0.050	0.040	mg/l	0.500		109	85-115			
Boron	0.496	0.050	0.020	mg/l	0.500		99	85-115			
Calcium	2.49	0.10	0.050	mg/l	2.50		100	85-115			
Iron	0.505	0.040	0.015	mg/l	0.500		101	85-115			
Lithium	0.553	0.050	0.030	mg/l	0.500		111	85-115			
Magnesium	2.51	0.020	0.012	mg/l	2.50		100	85-115			
Phosphorus	0.486	0.040	0.020	mg/l	0.500		97	85-115			
Potassium	5.06	0.50	0.37	mg/l	5.00		101	85-115			
Silicon	4.90	0.11	0.028	mg/l as Silica	5.35		92	85-115			
Sodium	5.15	0.50	0.19	mg/l	5.00		103	85-115			
Strontium	0.516	0.020	0.0050	mg/l	0.500		103	85-115			
Tin	0.496	0.10	0.012	mg/l	0.500		99	85-115			
Titanium	0.504	0.0050	0.0020	mg/l	0.500		101	85-115			
Matrix Spike Analyzed: 10/24/2008-10/26/2008 (8J22088-MS1)						**Source: IRJ1354-01**					
Aluminum	0.573	0.25	0.20	mg/l	0.500	ND	115	70-130			
Boron	10.4	0.25	0.10	mg/l	0.500	10.6	-41	70-130			*MHA*
Calcium	417	0.50	0.25	mg/l	2.50	432	-609	70-130			*MHA*
Iron	23.5	0.20	0.075	mg/l	0.500	24.6	-232	70-130			*MHA*
Lithium	0.649	0.25	0.15	mg/l	0.500	0.203	89	70-130			
Magnesium	179	0.10	0.060	mg/l	2.50	189	-385	70-130			*MHA*
Phosphorus	0.505	0.20	0.10	mg/l	0.500	ND	101	70-130			
Potassium	8.91	2.5	1.8	mg/l	5.00	3.33	112	70-130			
Silicon	36.3	0.55	0.14	mg/l as Silica	5.35	33.5	53	70-130			*MHA*
Sodium	2130	2.5	0.95	mg/l	5.00	2220	-1780	70-130			*MHA*
Strontium	7.39	0.10	0.025	mg/l	0.500	7.05	68	70-130			*MHA*
Tin	0.502	0.50	0.060	mg/l	0.500	ND	100	70-130			
Titanium	0.500	0.025	0.010	mg/l	0.500	ND	100	70-130			

TestAmerica Irvine

Patty Mata
Project Manager

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 134557
Report Number: IRJ1080

Sampled: 10/08/08
Received: 10/10/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J22088 Extracted: 10/22/08											
Matrix Spike Dup Analyzed: 10/24/2008-10/26/2008 (8J22088-MSD1)						**Source: IRJ1354-01**					
Aluminum	0.437	0.25	0.20	mg/l	0.500	ND	87	70-130	27	20	*R*
Boron	11.1	0.25	0.10	mg/l	0.500	10.6	93	70-130	6	20	*MHA*
Calcium	434	0.50	0.25	mg/l	2.50	432	95	70-130	4	20	*MHA*
Iron	24.9	0.20	0.075	mg/l	0.500	24.6	49	70-130	6	20	*MHA*
Lithium	0.609	0.25	0.15	mg/l	0.500	0.203	81	70-130	6	20	
Magnesium	190	0.10	0.060	mg/l	2.50	189	42	70-130	6	20	*MHA*
Phosphorus	0.493	0.20	0.10	mg/l	0.500	ND	99	70-130	2	20	
Potassium	9.45	2.5	1.8	mg/l	5.00	3.33	123	70-130	6	20	
Silicon	38.3	0.55	0.14	mg/l as Silica	5.35	33.5	89	70-130	5	20	*MHA*
Sodium	2240	2.5	0.95	mg/l	5.00	2220	369	70-130	5	20	*MHA*
Strontium	7.53	0.10	0.025	mg/l	0.500	7.05	96	70-130	2	20	*MHA*
Tin	0.514	0.50	0.060	mg/l	0.500	ND	103	70-130	2	20	
Titanium	0.523	0.025	0.010	mg/l	0.500	ND	105	70-130	4	20	

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Report Number: IRJ1080

Sampled: 10/08/08
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METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J10052 Extracted: 10/10/08											
Blank Analyzed: 10/10/2008 (8J10052-BLK1)											
Chloride	ND	0.50	0.25	mg/l							
Fluoride	ND	0.50	0.15	mg/l							
Nitrate-N	ND	0.11	0.060	mg/l							
Nitrite-N	ND	0.15	0.090	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 10/10/2008 (8J10052-BS1)											
Chloride	5.08	0.50	0.25	mg/l	5.00		102	90-110			
Fluoride	5.08	0.50	0.15	mg/l	5.00		102	90-110			
Nitrate-N	1.20	0.11	0.060	mg/l	1.13		106	90-110			
Nitrite-N	1.50	0.15	0.090	mg/l	1.52		98	90-110			
Sulfate	10.7	0.50	0.20	mg/l	10.0		107	90-110			
Matrix Spike Analyzed: 10/10/2008 (8J10052-MS1)						**Source: IRJ1062-11**					
Chloride	89.8	5.0	2.5	mg/l	50.0	43.4	93	80-120			
Fluoride	47.0	5.0	1.5	mg/l	50.0	0.517	93	80-120			
Nitrate-N	11.7	1.1	0.60	mg/l	11.3	0.568	99	80-120			
Nitrite-N	13.5	1.5	0.90	mg/l	15.2	ND	89	80-120			
Sulfate	166	5.0	2.0	mg/l	100	64.0	102	80-120			
Matrix Spike Analyzed: 10/11/2008 (8J10052-MS2)						**Source: IRJ1101-01**					
Chloride	4.80	0.50	0.25	mg/l	5.00	ND	96	80-120			
Fluoride	4.71	0.50	0.15	mg/l	5.00	ND	94	80-120			
Nitrate-N	1.11	0.11	0.060	mg/l	1.13	ND	98	80-120			
Nitrite-N	1.40	0.15	0.090	mg/l	1.52	ND	92	80-120			
Sulfate	10.3	0.50	0.20	mg/l	10.0	ND	103	80-120			
Matrix Spike Dup Analyzed: 10/10/2008 (8J10052-MSD1)						**Source: IRJ1062-11**					
Chloride	91.2	5.0	2.5	mg/l	50.0	43.4	96	80-120	2	20	
Fluoride	47.7	5.0	1.5	mg/l	50.0	0.517	94	80-120	2	20	
Nitrate-N	11.9	1.1	0.60	mg/l	11.3	0.568	100	80-120	1	20	
Nitrite-N	14.0	1.5	0.90	mg/l	15.2	ND	92	80-120	3	20	
Sulfate	167	5.0	2.0	mg/l	100	64.0	103	80-120	1	20	

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Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 134557
Report Number: IRJ1080

Sampled: 10/08/08
Received: 10/10/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J10096 Extracted: 10/10/08											
Duplicate Analyzed: 10/10/2008 (8J10096-DUP1)						**Source: IRJ1080-01**					
pH	3.84	0.100	0.100	pH Units		3.83			0	5	*HFT*
Batch: 8J11032 Extracted: 10/11/08											
Blank Analyzed: 10/11/2008 (8J11032-BLK1)											
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 10/11/2008 (8J11032-BS1)											
Total Dissolved Solids	978	10	10	mg/l	1000		98	90-110			
Duplicate Analyzed: 10/11/2008 (8J11032-DUP1)						**Source: IRJ1062-01**					
Total Dissolved Solids	3680	10	10	mg/l		3740			2	10	
Batch: 8J14030 Extracted: 10/14/08											
Blank Analyzed: 10/14/2008 (8J14030-BLK1)											
Total Organic Carbon	ND	1.0	0.50	mg/l							
LCS Analyzed: 10/14/2008 (8J14030-BS1)											
Total Organic Carbon	10.7	1.0	0.50	mg/l	10.0		107	90-110			
Matrix Spike Analyzed: 10/14/2008 (8J14030-MS1)						**Source: IRJ0759-01**					
Total Organic Carbon	14.2	1.0	0.50	mg/l	5.00	9.00	103	80-120			
Matrix Spike Dup Analyzed: 10/14/2008 (8J14030-MSD1)						**Source: IRJ0759-01**					
Total Organic Carbon	13.8	1.0	0.50	mg/l	5.00	9.00	95	80-120	3	20	

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Report Number: IRJ1080

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METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J14052 Extracted: 10/14/08											
Blank Analyzed: 10/14/2008 (8J14052-BLK1)											
Alkalinity as CaCO3	ND	2.0	2.0	mg/l							
Bicarbonate Alkalinity as CaCO3	ND	2.0	2.0	mg/l							
Carbonate Alkalinity as CaCO3	ND	2.0	2.0	mg/l							
Hydroxide Alkalinity as CaCO3	ND	2.0	2.0	mg/l							
Duplicate Analyzed: 10/14/2008 (8J14052-DUP1)						**Source: IRJ1246-01**					
Alkalinity as CaCO3	266	2.0	2.0	mg/l		264			1	20	
Bicarbonate Alkalinity as CaCO3	266	2.0	2.0	mg/l		264			1	20	
Carbonate Alkalinity as CaCO3	ND	2.0	2.0	mg/l		ND				20	
Hydroxide Alkalinity as CaCO3	ND	2.0	2.0	mg/l		ND				20	
Reference Analyzed: 10/14/2008 (8J14052-SRM1)											
Alkalinity as CaCO3	180	2.0	2.0	mg/l	179		101	90-110			

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Project ID: BP Yerington, NV, 134557

Report Number: IRJ1080

Sampled: 10/08/08
Received: 10/10/08

DATA QUALIFIERS AND DEFINITIONS

H	Sample analysis performed past method-specified holding time.
HFT	The holding time for this test is immediate. It was analyzed in the laboratory as soon as possible after receipt.
J	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
M-3	Results exceeded the linear range in the MS/MSD and therefore are not available for reporting. The batch was accepted based on acceptable recovery in the Blank Spike (LCS).
MHA	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
RL1	Reporting limit raised due to sample matrix effects.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

TestAmerica Irvine

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INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ICP5
Calibration: I8J2302
Control Limt: +/- 10.00%
Sequence: IJ82306

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82306-ICV1	Potassium (dissolved)	20.0	20.5	102	mg/l	EPA 200.7-Diss	10/22/08 9:26
	Sodium (dissolved)	20.0	19.7	99	mg/l	EPA 200.7-Diss	10/22/08 9:26
	Strontium (dissolved)	2.00	1.99	100	mg/l	EPA 200.7-Diss	10/22/08 9:26
	Boron (dissolved)	2.00	2.01	100	mg/l	EPA 200.7-Diss	10/22/08 9:27
	Calcium (dissolved)	2.00	2.01	101	mg/l	EPA 200.7-Diss	10/22/08 9:27
	Iron (dissolved)	2.00	2.04	102	mg/l	EPA 200.7-Diss	10/22/08 9:27
	Magnesium (dissolved)	2.00	2.06	103	mg/l	EPA 200.7-Diss	10/22/08 9:27
	Silicon (dissolved)	10.0	10.3	103	mg/l	EPA 200.7-Diss	10/22/08 9:27
	Titanium (dissolved)	2.00	2.05	103	mg/l	EPA 200.7-Diss	10/22/08 9:27
	Lithium (dissolved)	2.00	1.93	97	mg/l	EPA 200.7-Diss	10/22/08 9:28
	Phosphorus (dissolved)	2.00	2.02	101	mg/l	EPA 200.7-Diss	10/22/08 9:28
	Tin (dissolved)	2.00	2.01	101	mg/l	EPA 200.7-Diss	10/22/08 9:28
IJ82306-CCV1	Potassium (dissolved)	10.0	9.69	97	mg/l	EPA 200.7-Diss	10/22/08 11:17
	Sodium (dissolved)	10.0	10.0	100	mg/l	EPA 200.7-Diss	10/22/08 11:17
	Strontium (dissolved)	1.00	1.03	103	mg/l	EPA 200.7-Diss	10/22/08 11:17
	Boron (dissolved)	1.00	0.990	99	mg/l	EPA 200.7-Diss	10/22/08 11:18
	Calcium (dissolved)	10.0	10.1	101	mg/l	EPA 200.7-Diss	10/22/08 11:18
	Iron (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/22/08 11:18
	Magnesium (dissolved)	1.00	1.04	104	mg/l	EPA 200.7-Diss	10/22/08 11:18
	Silicon (dissolved)	5.00	4.93	99	mg/l	EPA 200.7-Diss	10/22/08 11:18
	Titanium (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/22/08 11:18
	Lithium (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/22/08 11:19
	Phosphorus (dissolved)	1.00	0.984	98	mg/l	EPA 200.7-Diss	10/22/08 11:19
	Tin (dissolved)	1.00	0.995	99	mg/l	EPA 200.7-Diss	10/22/08 11:19
IJ82306-CCV2	Potassium (dissolved)	10.0	9.85	99	mg/l	EPA 200.7-Diss	10/22/08 13:29
	Sodium (dissolved)	10.0	9.98	100	mg/l	EPA 200.7-Diss	10/22/08 13:29
	Strontium (dissolved)	1.00	1.03	103	mg/l	EPA 200.7-Diss	10/22/08 13:29
	Calcium (dissolved)	10.0	10.3	103	mg/l	EPA 200.7-Diss	10/22/08 13:30
	Titanium (dissolved)	1.00	1.03	103	mg/l	EPA 200.7-Diss	10/22/08 13:30
	Boron (dissolved)	1.00	1.02	102	mg/l	EPA 200.7-Diss	10/22/08 13:31
	Iron (dissolved)	1.00	1.04	104	mg/l	EPA 200.7-Diss	10/22/08 13:31
	Magnesium (dissolved)	1.00	1.08	108	mg/l	EPA 200.7-Diss	10/22/08 13:31
	Phosphorus (dissolved)	1.00	1.02	102	mg/l	EPA 200.7-Diss	10/22/08 13:31
	Silicon (dissolved)	5.00	5.11	102	mg/l	EPA 200.7-Diss	10/22/08 13:31
	Tin (dissolved)	1.00	1.03	103	mg/l	EPA 200.7-Diss	10/22/08 13:31
	Lithium (dissolved)	1.00	1.04	104	mg/l	EPA 200.7-Diss	10/22/08 13:32
IJ82306-CCV3	Potassium (dissolved)	10.0	10.0	100	mg/l	EPA 200.7-Diss	10/22/08 14:55
	Sodium (dissolved)	10.0	10.0	100	mg/l	EPA 200.7-Diss	10/22/08 14:55
	Strontium (dissolved)	1.00	1.05	105	mg/l	EPA 200.7-Diss	10/22/08 14:55
	Boron (dissolved)	1.00	1.02	102	mg/l	EPA 200.7-Diss	10/22/08 14:57
	Calcium (dissolved)	10.0	10.3	103	mg/l	EPA 200.7-Diss	10/22/08 14:57
	Iron (dissolved)	1.00	1.07	107	mg/l	EPA 200.7-Diss	10/22/08 14:57
	Magnesium (dissolved)	1.00	1.09	109	mg/l	EPA 200.7-Diss	10/22/08 14:57
	Phosphorus (dissolved)	1.00	1.02	102	mg/l	EPA 200.7-Diss	10/22/08 14:57
	Silicon (dissolved)	5.00	5.15	103	mg/l	EPA 200.7-Diss	10/22/08 14:57
	Tin (dissolved)	1.00	1.03	103	mg/l	EPA 200.7-Diss	10/22/08 14:57

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ICP5
Calibration: I8J2302
Control Limt: +/- 10.00%
Sequence: IJ82306

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82306-CCV3	Titanium (dissolved)	1.00	1.04	104	mg/l	EPA 200.7-Diss	10/22/08 14:57
	Lithium (dissolved)	1.00	1.06	106	mg/l	EPA 200.7-Diss	10/22/08 14:58
IJ82306-CCV4	Potassium (dissolved)	10.0	9.81	98	mg/l	EPA 200.7-Diss	10/22/08 16:07
	Sodium (dissolved)	10.0	10.4	104	mg/l	EPA 200.7-Diss	10/22/08 16:07
	Strontium (dissolved)	1.00	1.02	102	mg/l	EPA 200.7-Diss	10/22/08 16:07
	Boron (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/22/08 16:08
	Calcium (dissolved)	10.0	10.1	101	mg/l	EPA 200.7-Diss	10/22/08 16:08
	Iron (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/22/08 16:08
	Magnesium (dissolved)	1.00	1.06	106	mg/l	EPA 200.7-Diss	10/22/08 16:08
	Silicon (dissolved)	5.00	4.98	100	mg/l	EPA 200.7-Diss	10/22/08 16:08
	Titanium (dissolved)	1.00	1.00	100	mg/l	EPA 200.7-Diss	10/22/08 16:08
	Phosphorus (dissolved)	1.00	0.998	100	mg/l	EPA 200.7-Diss	10/22/08 16:09
	Tin (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/22/08 16:09
	Lithium (dissolved)	1.00	1.04	104	mg/l	EPA 200.7-Diss	10/22/08 16:10
IJ82306-CCV5	Potassium (dissolved)	10.0	9.69	97	mg/l	EPA 200.7-Diss	10/22/08 17:21
	Sodium (dissolved)	10.0	10.4	104	mg/l	EPA 200.7-Diss	10/22/08 17:21
	Strontium (dissolved)	1.00	1.04	104	mg/l	EPA 200.7-Diss	10/22/08 17:21
	Boron (dissolved)	1.00	0.991	99	mg/l	EPA 200.7-Diss	10/22/08 17:22
	Calcium (dissolved)	10.0	10.2	102	mg/l	EPA 200.7-Diss	10/22/08 17:22
	Iron (dissolved)	1.00	1.00	100	mg/l	EPA 200.7-Diss	10/22/08 17:22
	Magnesium (dissolved)	1.00	1.07	107	mg/l	EPA 200.7-Diss	10/22/08 17:22
	Silicon (dissolved)	5.00	4.99	100	mg/l	EPA 200.7-Diss	10/22/08 17:22
	Titanium (dissolved)	1.00	1.00	100	mg/l	EPA 200.7-Diss	10/22/08 17:22
	Phosphorus (dissolved)	1.00	0.998	100	mg/l	EPA 200.7-Diss	10/22/08 17:23
	Tin (dissolved)	1.00	1.00	100	mg/l	EPA 200.7-Diss	10/22/08 17:23
	Lithium (dissolved)	1.00	1.05	105	mg/l	EPA 200.7-Diss	10/22/08 17:24
IJ82306-CCV6	Potassium (dissolved)	10.0	9.42	94	mg/l	EPA 200.7-Diss	10/22/08 18:52
	Sodium (dissolved)	10.0	9.30	93	mg/l	EPA 200.7-Diss	10/22/08 18:52
	Strontium (dissolved)	1.00	0.925	93	mg/l	EPA 200.7-Diss	10/22/08 18:52
	Boron (dissolved)	1.00	0.953	95	mg/l	EPA 200.7-Diss	10/22/08 18:53
	Calcium (dissolved)	10.0	9.53	95	mg/l	EPA 200.7-Diss	10/22/08 18:53
	Iron (dissolved)	1.00	0.974	97	mg/l	EPA 200.7-Diss	10/22/08 18:53
	Magnesium (dissolved)	1.00	1.00	100	mg/l	EPA 200.7-Diss	10/22/08 18:53
	Silicon (dissolved)	5.00	4.79	96	mg/l	EPA 200.7-Diss	10/22/08 18:53
	Titanium (dissolved)	1.00	0.968	97	mg/l	EPA 200.7-Diss	10/22/08 18:53
	Lithium (dissolved)	1.00	0.983	98	mg/l	EPA 200.7-Diss	10/22/08 18:54
	Phosphorus (dissolved)	1.00	0.960	96	mg/l	EPA 200.7-Diss	10/22/08 18:54
	Tin (dissolved)	1.00	0.964	96	mg/l	EPA 200.7-Diss	10/22/08 18:54

* Values outside of QC limits

CRDL STANDARD

EPA 200.7-Diss

Laboratory: TestAmerica Irvine SDG:

Client: Brown and Caldwell - NV Project: BP Yerington, NV

Instrument ID: ICP5 Calibration: I8J2302

Sequence: IJ82306 Injection Date: 10/22/08 09:38

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82306-CRL1	Potassium (dissolved)	1.00	0.967	97	mg/l	50 - 150
	Sodium (dissolved)	1.00	1.02	102	mg/l	50 - 150
	Strontium (dissolved)	0.0100	0.0104	104	mg/l	50 - 150
	Boron (dissolved)	0.100	0.0989	99	mg/l	50 - 150
	Calcium (dissolved)	0.110	0.242	220 *	mg/l	50 - 150
	Iron (dissolved)	0.0800	0.0822	103	mg/l	50 - 150
	Magnesium (dissolved)	0.0400	0.0512	128	mg/l	50 - 150
	Silicon (dissolved)	0.0500	0.0465	93	mg/l	50 - 150
	Titanium (dissolved)	0.0100	0.0106	106	mg/l	50 - 150
	Lithium (dissolved)	0.0100	0.00880	88	mg/l	50 - 150
	Phosphorus (dissolved)	0.0100	0.0123	123	mg/l	50 - 150
	Tin (dissolved)	0.0100	0.0106	106	mg/l	50 - 150
IJ82306-CRL2	Potassium (dissolved)	0.200	0.298	149	mg/l	50 - 150
	Sodium (dissolved)	0.200	0.175	87	mg/l	50 - 150
	Strontium (dissolved)	0.0200	0.0208	104	mg/l	50 - 150
	Boron (dissolved)	0.0200	0.0221	111	mg/l	50 - 150
	Calcium (dissolved)	0.200	0.222	111	mg/l	50 - 150
	Iron (dissolved)	0.0200	0.0215	108	mg/l	50 - 150
	Magnesium (dissolved)	0.0200	0.0315	157 *	mg/l	50 - 150
	Phosphorus (dissolved)	0.0200	0.0206	103	mg/l	50 - 150
	Silicon (dissolved)	0.100	0.104	104	mg/l	50 - 150
	Tin (dissolved)	0.0200	0.0219	109	mg/l	50 - 150
	Titanium (dissolved)	0.0200	0.0213	107	mg/l	50 - 150
	Lithium (dissolved)	0.0200	0.0185	93	mg/l	50 - 150
IJ82306-CRL3	Potassium (dissolved)	1.00	1.02	102	mg/l	50 - 150
	Sodium (dissolved)	1.00	1.02	102	mg/l	50 - 150
	Strontium (dissolved)	0.0100	0.00988	99	mg/l	50 - 150
	Boron (dissolved)	0.100	0.101	101	mg/l	50 - 150

Ca + Mg sample results >> spike, no impact

CRDL STANDARD

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ICP5
Calibration: I8J2302
Sequence: IJ82306
Injection Date: 10/22/08 18:11

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82306-CRL3	Calcium (dissolved)	0.110	0.252	229 *	mg/l	50 - 150
	Iron (dissolved)	0.0800	0.0892	111	mg/l	50 - 150
	Magnesium (dissolved)	0.0400	0.0576	144	mg/l	50 - 150
	Silicon (dissolved)	0.0500	0.0486	97	mg/l	50 - 150
	Titanium (dissolved)	0.0100	0.00999	100	mg/l	50 - 150
	Lithium (dissolved)	0.0100	0.0120	120	mg/l	50 - 150
spike < MDL (0.02)	Phosphorus (dissolved)	0.0100	0.0182	182 *	mg/l	50 - 150
	Tin (dissolved)	0.0100	0.0114	114	mg/l	50 - 150
IJ82306-CRL4	Potassium (dissolved)	0.200	0.255	127	mg/l	50 - 150
	Sodium (dissolved)	0.200	0.226	113	mg/l	50 - 150
	Strontium (dissolved)	0.0200	0.0198	99	mg/l	50 - 150
	Calcium (dissolved)	0.200	0.216	108	mg/l	50 - 150
	Iron (dissolved)	0.0200	0.0246	123	mg/l	50 - 150
	Magnesium (dissolved)	0.0200	0.0325	163 *	mg/l	50 - 150
	Silicon (dissolved)	0.100	0.0997	100	mg/l	50 - 150
	Titanium (dissolved)	0.0200	0.0202	101	mg/l	50 - 150
	Boron (dissolved)	0.0200	0.0253	126	mg/l	50 - 150
	Lithium (dissolved)	0.0200	0.0216	108	mg/l	50 - 150
	Phosphorus (dissolved)	0.0200	0.0214	107	mg/l	50 - 150
	Tin (dissolved)	0.0200	0.0208	104	mg/l	50 - 150

* Values outside of QC limits

same

BLANKS
EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: ICP5
Project: BP Yerington, NV
Sequence: IJ82306
Calibration: I8J2302

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82306-ICB1	Potassium (dissolved)	0.117	0.50	mg/l		EPA 200.7-Diss	10/22/08 9:32
	Sodium (dissolved)	-0.0328	0.50	mg/l		EPA 200.7-Diss	10/22/08 9:32
	Strontium (dissolved)	0.00106	0.020	mg/l		EPA 200.7-Diss	10/22/08 9:32
	Calcium (dissolved)	0.00450	0.10	mg/l		EPA 200.7-Diss	10/22/08 9:33
	Iron (dissolved)	0.000368	0.040	mg/l		EPA 200.7-Diss	10/22/08 9:33
	Magnesium (dissolved)	0.0161	0.020	mg/l		EPA 200.7-Diss	10/22/08 9:33
	Silicon (dissolved)	0.00769	0.051	mg/l		EPA 200.7-Diss	10/22/08 9:33
	Titanium (dissolved)	0.000954	0.0050	mg/l		EPA 200.7-Diss	10/22/08 9:33
	Boron (dissolved)	0.00402	0.050	mg/l		EPA 200.7-Diss	10/22/08 9:34
	Phosphorus (dissolved)	-0.00185	0.040	mg/l		EPA 200.7-Diss	10/22/08 9:34
	Tin (dissolved)	0.00265	0.10	mg/l		EPA 200.7-Diss	10/22/08 9:34
	Lithium (dissolved)	-0.00374	0.050	mg/l		EPA 200.7-Diss	10/22/08 9:34
IJ82306-CCB1	Potassium (dissolved)	0.0889	0.50	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Sodium (dissolved)	-0.0297	0.50	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Strontium (dissolved)	0.000756	0.020	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Calcium (dissolved)	0.00578	0.10	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Iron (dissolved)	-0.000195	0.040	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Magnesium (dissolved)	0.00972	0.020	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Silicon (dissolved)	0.00922	0.051	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Titanium (dissolved)	0.000245	0.0050	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Boron (dissolved)	0.00155	0.050	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Phosphorus (dissolved)	-0.00976	0.040	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Tin (dissolved)	-0.00102	0.10	mg/l		EPA 200.7-Diss	10/22/08 11:2
	Lithium (dissolved)	-0.00401	0.050	mg/l		EPA 200.7-Diss	10/22/08 11:2
IJ82306-CCB2	Potassium (dissolved)	0.102	0.50	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Sodium (dissolved)	-0.0218	0.50	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Strontium (dissolved)	0.000413	0.020	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Calcium (dissolved)	0.00685	0.10	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Iron (dissolved)	0.000770	0.040	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Magnesium (dissolved)	0.00260	0.020	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Silicon (dissolved)	0.0112	0.051	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Titanium (dissolved)	0.000603	0.0050	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Boron (dissolved)	0.00127	0.050	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Phosphorus (dissolved)	-0.00356	0.040	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Tin (dissolved)	0.00121	0.10	mg/l		EPA 200.7-Diss	10/22/08 13:3
	Lithium (dissolved)	-0.00457	0.050	mg/l		EPA 200.7-Diss	10/22/08 13:3
IJ82306-CCB3	Potassium (dissolved)	0.0987	0.50	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Sodium (dissolved)	-0.0504	0.50	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Strontium (dissolved)	0.000949	0.020	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Calcium (dissolved)	0.0124	0.10	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Iron (dissolved)	0.00125	0.040	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Magnesium (dissolved)	0.00796	0.020	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Silicon (dissolved)	0.0208	0.051	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Titanium (dissolved)	0.000727	0.0050	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Boron (dissolved)	0.00132	0.050	mg/l		EPA 200.7-Diss	10/22/08 15:0

BLANKS
EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: ICP5
Project: BP Yerington, NV
Sequence: IJ82306
Calibration: I8J2302

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82306-CCB3	Phosphorus (dissolved)	-0.00956	0.040	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Tin (dissolved)	0.00252	0.10	mg/l		EPA 200.7-Diss	10/22/08 15:0
	Lithium (dissolved)	-0.00279	0.050	mg/l		EPA 200.7-Diss	10/22/08 15:0
IJ82306-CCB4	Potassium (dissolved)	0.208	0.50	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Sodium (dissolved)	0.260	0.50	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Strontium (dissolved)	0.000267	0.020	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Calcium (dissolved)	0.00820	0.10	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Iron (dissolved)	0.000482	0.040	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Magnesium (dissolved)	0.00378	0.020	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Silicon (dissolved)	0.00490	0.051	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Titanium (dissolved)	0.0000207	0.0050	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Boron (dissolved)	0.0190	0.050	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Phosphorus (dissolved)	-0.00828	0.040	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Tin (dissolved)	0.00221	0.10	mg/l		EPA 200.7-Diss	10/22/08 16:1
	Lithium (dissolved)	0.00282	0.050	mg/l		EPA 200.7-Diss	10/22/08 16:1
IJ82306-CCB5	Potassium (dissolved)	0.176	0.50	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Sodium (dissolved)	0.164	0.50	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Strontium (dissolved)	0.000512	0.020	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Calcium (dissolved)	0.0116	0.10	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Iron (dissolved)	0.000650	0.040	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Magnesium (dissolved)	0.00469	0.020	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Silicon (dissolved)	0.00396	0.051	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Titanium (dissolved)	0.000384	0.0050	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Boron (dissolved)	0.00886	0.050	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Phosphorus (dissolved)	-0.00294	0.040	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Tin (dissolved)	0.00102	0.10	mg/l		EPA 200.7-Diss	10/22/08 17:2
	Lithium (dissolved)	-0.00122	0.050	mg/l		EPA 200.7-Diss	10/22/08 17:3
IJ82306-CCB6	Potassium (dissolved)	-0.0460	0.50	mg/l		EPA 200.7-Diss	10/22/08 18:5
	Sodium (dissolved)	-0.00495	0.50	mg/l		EPA 200.7-Diss	10/22/08 18:5
	Strontium (dissolved)	0.000738	0.020	mg/l		EPA 200.7-Diss	10/22/08 18:5
	Calcium (dissolved)	0.00825	0.10	mg/l		EPA 200.7-Diss	10/22/08 18:5
	Iron (dissolved)	0.00131	0.040	mg/l		EPA 200.7-Diss	10/22/08 18:5
	Magnesium (dissolved)	0.00858	0.020	mg/l		EPA 200.7-Diss	10/22/08 18:5
	Silicon (dissolved)	0.00434	0.051	mg/l		EPA 200.7-Diss	10/22/08 18:5
	Titanium (dissolved)	0.000357	0.0050	mg/l		EPA 200.7-Diss	10/22/08 18:5
	Boron (dissolved)	0.00348	0.050	mg/l		EPA 200.7-Diss	10/22/08 19:0
	Phosphorus (dissolved)	0.00150	0.040	mg/l		EPA 200.7-Diss	10/22/08 19:0
	Tin (dissolved)	-0.000608	0.10	mg/l		EPA 200.7-Diss	10/22/08 19:0
	Lithium (dissolved)	0.000192	0.050	mg/l		EPA 200.7-Diss	10/22/08 19:0
8J22088-BLK1	Potassium (dissolved)	-0.0232	0.50	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Sodium (dissolved)	0.00424	0.50	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Strontium (dissolved)	0.0000894	0.020	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Boron (dissolved)	0.0158	0.050	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Calcium (dissolved)	0.0225	0.10	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Iron (dissolved)	0.0135	0.040	mg/l		EPA 200.7-Diss	10/24/08 15:0

BLANKS
EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: ICP5
Project: BP Yerington, NV
Sequence: IJ82306
Calibration: I8J2302

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
8J22088-BLK1	Magnesium (dissolved)	0.00599	0.020	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Silicon (dissolved)	0.0357	0.11	mg/l as Silica		EPA 200.7-Diss	10/24/08 15:0
	Titanium (dissolved)	-0.000286	0.0050	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Phosphorus (dissolved)	0.000821	0.040	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Tin (dissolved)	0.00166	0.10	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Lithium (dissolved)	0.0315	0.050	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Aluminum (dissolved)	-0.00676	0.050	mg/l		EPA 200.7-Diss	10/26/08 19:3

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ICP5
Calibration: I8J2302
Sequence: IJ82306
Check Nbr: 1

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Boron (dissolved)	NA	NA	-0.0776	NA		NA
Boron (dissolved)	NA	0.500		NA	0.450 –	90 –
Calcium (dissolved)	NA	500		NA	467	93
Calcium (dissolved)	500	NA	467 –	93 –		NA
Iron (dissolved)	NA	200		NA	180 –	90 –
Iron (dissolved)	200	NA	180	90		NA
Lithium (dissolved)	NA	NA	-0.0332	NA		NA
Lithium (dissolved)	NA	0.500		NA	0.415	83
Magnesium (dissolved)	NA	500		NA	501	100
Magnesium (dissolved)	500	NA	502 –	100 –		NA
Phosphorus (dissolved)	NA	NA	-0.0403	NA		NA
Phosphorus (dissolved)	NA	0.500		NA	0.467 –	93 –
Potassium (dissolved)	NA	NA	-0.00503	NA		NA
Potassium (dissolved)	NA	10.0		NA	11.8	118
Silicon (dissolved)	NA	NA	0.0238	NA		NA
Silicon (dissolved)	NA	2.50		NA	2.45	98
Sodium (dissolved)	NA	NA	-0.0930	NA		NA
Sodium (dissolved)	NA	10.0		NA	10.9	109
Strontium (dissolved)	NA	NA	0.000690	NA		NA
Strontium (dissolved)	NA	0.500		NA	0.529	106
Tin (dissolved)	NA	NA	0.0208	NA		NA
Tin (dissolved)	NA	0.500		NA	0.514 –	103 –
Titanium (dissolved)	NA	NA	-0.000462	NA		NA
Titanium (dissolved)	NA	0.500		NA	0.517	103

no impact

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.7-Diss

Laboratory: TestAmerica Irvine

SDG:

Client: Brown and Caldwell - NV

Project: BP Yerington, NV

Instrument ID: ICP5

Calibration: I8J2302

Sequence: IJ82306

Check Nbr: 2

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Boron (dissolved)	NA	NA	-0.0933	NA		NA
Boron (dissolved)	NA	0.500		NA	0.428	86
Calcium (dissolved)	NA	500		NA	460 –	92 –
Calcium (dissolved)	500	NA	463	93		NA
Iron (dissolved)	NA	200		NA	181	91
Iron (dissolved)	200	NA	183 –	92 –		NA
Lithium (dissolved)	NA	NA	-0.0438	NA		NA
Lithium (dissolved)	NA	0.500		NA	0.415 –	83 –
Magnesium (dissolved)	NA	500		NA	505	101
Magnesium (dissolved)	500	NA	514	103		NA
Phosphorus (dissolved)	NA	NA	-0.0406	NA		NA
Phosphorus (dissolved)	NA	0.500		NA	0.469	94
Potassium (dissolved)	NA	NA	0.0728	NA		NA
Potassium (dissolved)	NA	10.0		NA	11.8	118
Silicon (dissolved)	NA	NA	0.0268	NA		NA
Silicon (dissolved)	NA	2.50		NA	2.44 –	98 –
Sodium (dissolved)	NA	NA	-0.0259	NA		NA
Sodium (dissolved)	NA	10.0		NA	10.6	106
Strontium (dissolved)	NA	NA	0.000294	NA		NA
Strontium (dissolved)	NA	0.500		NA	0.494	99
Tin (dissolved)	NA	NA	0.0155	NA		NA
Tin (dissolved)	NA	0.500		NA	0.512	102
Titanium (dissolved)	NA	NA	0.0000619	NA		NA
Titanium (dissolved)	NA	0.500		NA	0.508	102

* Values outside of QC limits

no impact

Form 5
ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Sequence: IJ82306
Instrument: ICP5
Calibration: I8J2302

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	IJ82306-CAL1	081022-1-001	10/22/08 08:40
Cal Standard	IJ82306-CAL1	081022-1-001	10/22/08 08:42
Cal Standard	IJ82306-CAL1	081022-1-001	10/22/08 08:43
Cal Standard	IJ82306-CAL2	081022-1-002	10/22/08 08:46
Cal Standard	IJ82306-CAL2	081022-1-002	10/22/08 08:47
Cal Standard	IJ82306-CAL3	081022-1-003	10/22/08 08:51
Cal Standard	IJ82306-CAL3	081022-1-003	10/22/08 08:52
Cal Standard	IJ82306-CAL3	081022-1-003	10/22/08 08:53
Cal Standard	IJ82306-CAL3	081022-1-003	10/22/08 08:54
Cal Standard	IJ82306-CAL4	081022-1-004	10/22/08 08:57
Cal Standard	IJ82306-CAL4	081022-1-004	10/22/08 08:58
Cal Standard	IJ82306-CAL4	081022-1-004	10/22/08 08:59
Cal Standard	IJ82306-CAL4	081022-1-004	10/22/08 09:00
Interference Check A	IJ82306-IFA1	081022-1-005	10/22/08 09:08
Interference Check A	IJ82306-IFA1	081022-1-005	10/22/08 09:09
Interference Check A	IJ82306-IFA1	081022-1-005	10/22/08 09:10
Interference Check B	IJ82306-IFB1	081022-1-006	10/22/08 09:14
Interference Check B	IJ82306-IFB1	081022-1-006	10/22/08 09:15
Interference Check B	IJ82306-IFB1	081022-1-006	10/22/08 09:16
Interference Check B	IJ82306-IFB1	081022-1-006	10/22/08 09:17
Initial Cal Check	IJ82306-ICV1	081022-1-008	10/22/08 09:26
Initial Cal Check	IJ82306-ICV1	081022-1-008	10/22/08 09:27
Initial Cal Check	IJ82306-ICV1	081022-1-008	10/22/08 09:28
Initial Cal Blank	IJ82306-ICB1	081022-1-009	10/22/08 09:32
Initial Cal Blank	IJ82306-ICB1	081022-1-009	10/22/08 09:33
Initial Cal Blank	IJ82306-ICB1	081022-1-009	10/22/08 09:34
MRL Check	IJ82306-CRL1	081022-1-010	10/22/08 09:38
MRL Check	IJ82306-CRL1	081022-1-010	10/22/08 09:39
MRL Check	IJ82306-CRL1	081022-1-010	10/22/08 09:40
MRL Check	IJ82306-CRL2	081022-1-011	10/22/08 09:44
MRL Check	IJ82306-CRL2	081022-1-011	10/22/08 09:45

Form 5
ANALYSIS BATCH (SEQUENCE) SUMMARY
EPA 200.7-Diss

Laboratory: TestAmerica Irvine
Client: Brown and Caldwell - NV
Sequence: IJ82306

SDG:
Project: BP Yerington, NV
Instrument: ICP5
Calibration: I8J2302

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MRL Check	IJ82306-CRL2	081022-1-011	10/22/08 09:46
Calibration Check	IJ82306-CCV1	081022-1-020	10/22/08 11:17
Calibration Check	IJ82306-CCV1	081022-1-020	10/22/08 11:18
Calibration Check	IJ82306-CCV1	081022-1-020	10/22/08 11:19
Calibration Blank	IJ82306-CCB1	081022-1-021	10/22/08 11:23
Calibration Blank	IJ82306-CCB1	081022-1-021	10/22/08 11:24
Calibration Blank	IJ82306-CCB1	081022-1-021	10/22/08 11:25
Calibration Check	IJ82306-CCV2	081022-1-032	10/22/08 13:29
Calibration Check	IJ82306-CCV2	081022-1-032	10/22/08 13:30
Calibration Check	IJ82306-CCV2	081022-1-032	10/22/08 13:31
Calibration Check	IJ82306-CCV2	081022-1-032	10/22/08 13:32
Calibration Blank	IJ82306-CCB2	081022-1-033	10/22/08 13:35
Calibration Blank	IJ82306-CCB2	081022-1-033	10/22/08 13:36
Calibration Blank	IJ82306-CCB2	081022-1-033	10/22/08 13:37
Calibration Blank	IJ82306-CCB2	081022-1-033	10/22/08 13:38
Calibration Check	IJ82306-CCV3	081022-1-044	10/22/08 14:55
Calibration Check	IJ82306-CCV3	081022-1-044	10/22/08 14:57
Calibration Check	IJ82306-CCV3	081022-1-044	10/22/08 14:58
Calibration Blank	IJ82306-CCB3	081022-1-045	10/22/08 15:01
Calibration Blank	IJ82306-CCB3	081022-1-045	10/22/08 15:02
Calibration Blank	IJ82306-CCB3	081022-1-045	10/22/08 15:03
Calibration Blank	IJ82306-CCB3	081022-1-045	10/22/08 15:04
Calibration Check	IJ82306-CCV4	081022-1-056	10/22/08 16:07
Calibration Check	IJ82306-CCV4	081022-1-056	10/22/08 16:08
Calibration Check	IJ82306-CCV4	081022-1-056	10/22/08 16:09
Calibration Check	IJ82306-CCV4	081022-1-056	10/22/08 16:10
Calibration Blank	IJ82306-CCB4	081022-1-057	10/22/08 16:13
Calibration Blank	IJ82306-CCB4	081022-1-057	10/22/08 16:14
Calibration Blank	IJ82306-CCB4	081022-1-057	10/22/08 16:15
Calibration Check	IJ82306-CCV5	081022-1-067	10/22/08 17:21
Calibration Check	IJ82306-CCV5	081022-1-067	10/22/08 17:22

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
Client: Brown and Caldwell - NV
Sequence: IJ82306

SDG:
Project: BP Yerington, NV
Instrument: ICP5
Calibration: I8J2302

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	IJ82306-CCV5	081022-1-067	10/22/08 17:23
Calibration Check	IJ82306-CCV5	081022-1-067	10/22/08 17:24
Calibration Blank	IJ82306-CCB5	081022-1-068	10/22/08 17:27
Calibration Blank	IJ82306-CCB5	081022-1-068	10/22/08 17:28
Calibration Blank	IJ82306-CCB5	081022-1-068	10/22/08 17:29
Calibration Blank	IJ82306-CCB5	081022-1-068	10/22/08 17:30
MRL Check	IJ82306-CRL3	081022-1-073	10/22/08 18:10
MRL Check	IJ82306-CRL3	081022-1-073	10/22/08 18:11
MRL Check	IJ82306-CRL3	081022-1-073	10/22/08 18:12
MRL Check	IJ82306-CRL4	081022-1-074	10/22/08 18:16
MRL Check	IJ82306-CRL4	081022-1-074	10/22/08 18:17
MRL Check	IJ82306-CRL4	081022-1-074	10/22/08 18:18
Interference Check A	IJ82306-IFA2	081022-1-075	10/22/08 18:22
Interference Check A	IJ82306-IFA2	081022-1-075	10/22/08 18:23
Interference Check A	IJ82306-IFA2	081022-1-075	10/22/08 18:24
Interference Check B	IJ82306-IFB2	081022-1-076	10/22/08 18:29
Interference Check B	IJ82306-IFB2	081022-1-076	10/22/08 18:30
Interference Check B	IJ82306-IFB2	081022-1-076	10/22/08 18:31
Interference Check B	IJ82306-IFB2	081022-1-076	10/22/08 18:32
Calibration Check	IJ82306-CCV6	081022-1-079	10/22/08 18:52
Calibration Check	IJ82306-CCV6	081022-1-079	10/22/08 18:53
Calibration Check	IJ82306-CCV6	081022-1-079	10/22/08 18:54
Calibration Blank	IJ82306-CCB6	081022-1-080	10/22/08 18:58
Calibration Blank	IJ82306-CCB6	081022-1-080	10/22/08 18:59
Calibration Blank	IJ82306-CCB6	081022-1-080	10/22/08 19:00
Blank	8J22088-BLK1	081024-1-059	10/24/08 15:05
Blank	8J22088-BLK1	081024-1-059	10/24/08 15:06
Blank	8J22088-BLK1	081024-1-059	10/24/08 15:07
Blank	8J22088-BLK1	081024-1-059	10/24/08 15:08
LCS	8J22088-BS1	081024-1-060	10/24/08 15:11
LCS	8J22088-BS1	081024-1-060	10/24/08 15:12

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
Client: Brown and Caldwell - NV
Sequence: IJ82306

SDG:
Project: BP Yerington, NV
Instrument: ICP5
Calibration: I8J2302

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
LCS	8J22088-BS1	081024-1-060	10/24/08 15:13
LCS	8J22088-BS1	081024-1-060	10/24/08 15:14
Matrix Spike	8J22088-MS1	081024-1-062	10/24/08 15:24
Matrix Spike	8J22088-MS1	081024-1-062	10/24/08 15:25
Matrix Spike	8J22088-MS1	081024-1-062	10/24/08 15:26
Matrix Spike Dup	8J22088-MSD1	081024-1-063	10/24/08 15:30
Matrix Spike Dup	8J22088-MSD1	081024-1-063	10/24/08 15:31
Matrix Spike Dup	8J22088-MSD1	081024-1-063	10/24/08 15:32
OU4-UEP-08-GW	IRJ1080-01	081024-1-065	10/24/08 15:42
OU4-UEP-08-GW	IRJ1080-01	081024-1-065	10/24/08 15:43
OU4-UEP-08-GW	IRJ1080-01	081024-1-065	10/24/08 15:44
Blank	8J22088-BLK1	081026-1-063	10/26/08 19:37
LCS	8J22088-BS1	081026-1-064	10/26/08 19:43
Matrix Spike	8J22088-MS1	081026-1-066	10/26/08 19:54
Matrix Spike Dup	8J22088-MSD1	081026-1-067	10/26/08 20:00

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ICP4
Calibration: I8J2805
Control Limt: +/- 10.00%
Sequence: IJ82808

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82808-ICV1	Aluminum (dissolved)	2.00	1.98	99	mg/l	EPA 200.7-Diss	10/26/08 11:31
IJ82808-CCV1	Aluminum (dissolved)	1.00	0.997	100	mg/l	EPA 200.7-Diss	10/26/08 13:12
IJ82808-CCV2	Aluminum (dissolved)	1.00	0.998	100	mg/l	EPA 200.7-Diss	10/26/08 16:37
IJ82808-CCV3	Aluminum (dissolved)	1.00	0.992	99	mg/l	EPA 200.7-Diss	10/26/08 17:55
IJ82808-CCV4	Aluminum (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/26/08 19:09
IJ82808-CCV5	Aluminum (dissolved)	1.00	0.968	97	mg/l	EPA 200.7-Diss	10/26/08 20:17
IJ82808-CCV6	Aluminum (dissolved)	1.00	0.958	96	mg/l	EPA 200.7-Diss	10/26/08 21:25
IJ82808-CCV7	Aluminum (dissolved)	1.00	0.944	94	mg/l	EPA 200.7-Diss	10/26/08 22:10

* Values outside of QC limits

CRDL STANDARD

EPA 200.7-Diss

Laboratory: TestAmerica Irvine — SDG:

Client: Brown and Caldwell - NV — Project: BP Yerington, NV

Instrument ID: ICP4 — Calibration: I8J2805

Sequence: IJ82808 — Injection Date: 10/26/08 11:43

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82808-CRL1	Aluminum (dissolved)	0.100	0.0920	92	mg/l	50 - 150
IJ82808-CRL2	Aluminum (dissolved)	0.100	0.00461	5 *	mg/l	50 - 150
IJ82808-CRL3	Aluminum (dissolved)	0.0200	0.103	516 *	mg/l	50 - 150
IJ82808-CRL4	Aluminum (dissolved)	0.0200	0.0224	112	mg/l	50 - 150
IJ82808-CRL5	Aluminum (dissolved)	0.0200	0.0518	259 *	mg/l	50 - 150
IJ82808-CRL6	Aluminum (dissolved)	0.0200	-0.0362	*	mg/l	50 - 150

* Values outside of QC limits

spike < MDL (0.04)

Al sample result >> spike, no impact

BLANKS
EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: ICP4
Project: BP Yerington, NV
Sequence: IJ82808
Calibration: I8J2805

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82808-ICB1	Aluminum (dissolved)	-0.0119	0.050	mg/l		EPA 200.7-Diss	10/26/08 11:3
IJ82808-CCB1	Aluminum (dissolved)	-0.00831	0.050	mg/l		EPA 200.7-Diss	10/26/08 13:1
IJ82808-CCB2	Aluminum (dissolved)	0.000359	0.050	mg/l		EPA 200.7-Diss	10/26/08 16:4
IJ82808-CCB3	Aluminum (dissolved)	-0.00440	0.050	mg/l		EPA 200.7-Diss	10/26/08 18:0
IJ82808-CCB4	Aluminum (dissolved)	0.0000900	0.050	mg/l		EPA 200.7-Diss	10/26/08 19:1
IJ82808-CCB5	Aluminum (dissolved)	-0.0110	0.050	mg/l		EPA 200.7-Diss	10/26/08 20:2
IJ82808-CCB6	Aluminum (dissolved)	-0.0476	0.050	mg/l		EPA 200.7-Diss	10/26/08 21:3
IJ82808-CCB7	Aluminum (dissolved)	-0.0526	0.050	mg/l		EPA 200.7-Diss	10/26/08 22:1

< 2+ MDL

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.7-Diss

Laboratory: TestAmerica Irvine

SDG:

Client: Brown and Caldwell - NV

Project: BP Yerington, NV

Instrument ID: ICP4

Calibration: I8J2805

Sequence: IJ82808

Check Nbr: 1

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Aluminum (dissolved)	NA	500		NA	449 –	90 –
Aluminum (dissolved)	500	NA	444 –	89 –		NA

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.7-Diss

Laboratory: TestAmerica Irvine

SDG:

Client: Brown and Caldwell - NV

Project: BP Yerington, NV

Instrument ID: ICP4

Calibration: I8J2805

Sequence: IJ82808

Check Nbr: 2

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Aluminum (dissolved)	NA	500		NA	450	90
Aluminum (dissolved)	500	NA	439	88		NA

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.7-Diss

Laboratory: TestAmerica Irvine

SDG:

Client: Brown and Caldwell - NV

Project: BP Yerington, NV

Instrument ID: ICP4

Calibration: I8J2805

Sequence: IJ82808

Check Nbr: 3

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Aluminum (dissolved)	NA	500		NA	443	89
Aluminum (dissolved)	500	NA	443	89		NA

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ICP4
Calibration: I8J2805
Sequence: IJ82808
Check Nbr: 4

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Aluminum (dissolved)	NA	500		NA	454	91

* Values outside of QC limits

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Sequence: IJ82808
Instrument: ICP4
Calibration: I8J2805

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	IJ82808-CAL1	081026-1-001	10/26/08 10:47
Cal Standard	IJ82808-CAL2	081026-1-002	10/26/08 10:52
Cal Standard	IJ82808-CAL3	081026-1-003	10/26/08 10:59
Cal Standard	IJ82808-CAL4	081026-1-004	10/26/08 11:04
Interference Check A	IJ82808-IFA1	081026-1-005	10/26/08 11:13
Interference Check B	IJ82808-IFB1	081026-1-006	10/26/08 11:20
Initial Cal Check	IJ82808-ICV1	081026-1-008	10/26/08 11:31
Initial Cal Blank	IJ82808-ICB1	081026-1-009	10/26/08 11:37
MRL Check	IJ82808-CRL1	081026-1-010	10/26/08 11:43
MRL Check	IJ82808-CRL2	081026-1-011	10/26/08 11:49
Calibration Check	IJ82808-CCV1	081026-1-021	10/26/08 13:12
Calibration Blank	IJ82808-CCB1	081026-1-022	10/26/08 13:17
MRL Check	IJ82808-CRL3	081026-1-023	10/26/08 13:53
MRL Check	IJ82808-CRL4	081026-1-024	10/26/08 13:59
Interference Check A	IJ82808-IFA2	081026-1-025	10/26/08 14:05
Interference Check B	IJ82808-IFB2	081026-1-026	10/26/08 14:11
Calibration Check	IJ82808-CCV2	081026-1-034	10/26/08 16:37
Calibration Blank	IJ82808-CCB2	081026-1-035	10/26/08 16:43
Calibration Check	IJ82808-CCV3	081026-1-046	10/26/08 17:55
Calibration Blank	IJ82808-CCB3	081026-1-047	10/26/08 18:01
Interference Check B	IJ82808-IFB3	081026-1-048	10/26/08 18:11
Calibration Check	IJ82808-CCV4	081026-1-058	10/26/08 19:09
Calibration Blank	IJ82808-CCB4	081026-1-059	10/26/08 19:15
OU4-UEP-08-GW	IRJ1080-01	081026-1-069	10/26/08 20:11
Calibration Check	IJ82808-CCV5	081026-1-070	10/26/08 20:17
Calibration Blank	IJ82808-CCB5	081026-1-071	10/26/08 20:22
Calibration Check	IJ82808-CCV6	081026-1-082	10/26/08 21:25
Calibration Blank	IJ82808-CCB6	081026-1-083	10/26/08 21:31
Calibration Check	IJ82808-CCV7	081026-1-090	10/26/08 22:10
Calibration Blank	IJ82808-CCB7	081026-1-091	10/26/08 22:16
MRL Check	IJ82808-CRL5	081026-1-092	10/26/08 22:21

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.7-Diss

Laboratory:	TestAmerica Irvine	SDG:	
Client:	Brown and Caldwell - NV	Project:	BP Yerington, NV
Sequence:	IJ82808	Instrument:	ICP4
		Calibration:	I8J2805

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MRL Check	IJ82808-CRL6	081026-1-093	10/26/08 22:27
Interference Check A	IJ82808-IFA3	081026-1-094	10/26/08 22:33
Interference Check B	IJ82808-IFB4	081026-1-095	10/26/08 22:38

PREPARATION BENCH SHEET

8J22088

TestAmerica Irvine

Printed: 10/22/2008 3:00:56PM

Matrix: Water | **Prepared using: Metals - EPA 200.2 ICP** | **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike I	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
8J22088-BLK1		QC	10/22/08 09:25	50	50								
8J22088-BS1		QC	10/22/08 09:25	50	50		8090397	250					
8J22088-MS1		QC	10/22/08 09:25	50	50	IRJ1354-01	8090397	250					
8J22088-MSD1		QC	10/22/08 09:25	50	50	IRJ1354-01	8090397	250					
IRJ1080-01	C	Phosphorus-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Tin-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Sodium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Boron-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Calcium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered
IRJ1080-01	C	Iron-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Magnesium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Potassium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Silica-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Strontium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Aluminum-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered
IRJ1080-01	C	Titanium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Lithium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.

Spiking Witnessed By NA Date

Preparation Reviewed By 10/22/08 Date

Extracts Received By 10/20/08 Date

MDL STUDY
METALS BY ICP - EPA 6010B / 200.7

Analyt Method: EPA 6010B / 200.7 — Instruments: **ICP4**
Prep Method: EPA 3005A / 200.2 — Standard Conc: **Na,K**: 10x - **Si**: 5x - **Ag**: 0.5x
Matrix: **Water** (50ml-->50ml) — **Ca,Mg**: 1x
Units: **mg/L**

Reviewed: T. Vu (Jun/18/07)

#	Analyte	Spike(mg/l)		MDL Runs - (mg/L)								Calc Data (mg/L)			final	*current* **LIMS** (mg/L)			Validation Criteria				Comm't
		recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	StdDev	MDL	MDL	MDL	RL_1	RL_2	MDL<RL	Ch'g	Ratio (1-10)	%Rec	Grubbs Test
1	Aluminum	0.05	0.05	0.049	0.058	0.052	0.057	0.031	0.034	0.030	0.031	0.043	0.013	0.038	0.038	0.040	0.050	0.050	OK	-6%	1.3	85%	
2	Antimony	0.01	0.01	0.010	0.009	0.010	0.012	0.013	0.016	0.009	0.015	0.012	0.003	0.008	0.008	0.007	0.010	0.010	OK	13%	1.3	119%	
3	Arsenic	0.01	0.01	0.008	0.007	0.013	0.009	0.010	0.010	0.010	0.014	0.010	0.002	0.007	0.007	0.0065	0.010	0.010	OK	6%	1.4	102%	
4	Barium	0.01	0.01	0.011	0.010	0.011	0.011	0.011	0.011	0.010	0.010	0.010	0.000	0.000	0.000	0.006	0.010	0.010	OK	-93%	25	105%	
5	Beryllium	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.000	0.000	0.000	0.0009	0.004	0.004	OK	-67%	17	98%	
6	Boron	0.05	0.05	0.078	0.080	0.079	0.079	0.064	0.071	0.071	0.070	0.074	0.006	0.017	0.017	0.017	0.050	0.050	OK	no ch'g	3	148%	
7	Cadmium	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.000	0.000	0.000	0.002	0.005	0.005	OK	-80%	13	101%	
8	Calcium	0.1	0.05	0.026	0.035	0.028	0.036	0.052	0.060	0.052	0.056	0.043	0.013	0.040	0.040	0.050	0.10	0.10	OK	-20%	1.2	87%	
9	Chromium	0.005	0.005	0.006	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.000	0.001	0.001	0.002	0.005	0.005	OK	-50%	5	103%	
10	Cobalt	0.01	0.01	0.011	0.011	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.000	0.001	0.001	0.002	0.010	0.010	OK	-50%	10	105%	
11	Copper	0.01	0.01	0.012	0.011	0.012	0.011	0.012	0.012	0.011	0.011	0.012	0.001	0.002	0.002	0.003	0.010	0.010	OK	-47%	6	116%	
12	Iron	0.04	0.02	0.020	0.020	0.020	0.020	0.021	0.021	0.020	**0.023**	0.021	0.001	0.003	0.003	0.015	0.04	0.02	OK	-80%	7	104%	2.33
13	Lead	0.005	0.005	0.005	0.005	0.003	0.006	0.003	0.004	0.004	0.005	0.004	0.001	0.003	0.003	0.003	0.005	0.005	OK	no ch'g	2	86%	
14	Lithium	0.05	0.05	0.069	0.068	0.068	0.070	0.050	0.047	0.050	0.048	0.059	0.011	0.032	0.032	0.030	0.050	0.050	OK	8%	2	118%	
15	Magnesium	0.02	0.02	0.018	0.019	0.024	0.012	0.022	0.016	0.017	0.015	0.018	0.004	0.011	0.011	0.008	0.020	0.020	OK	41%	2	90%	
16	Manganese	0.02	0.02	0.023	0.021	0.021	0.021	0.021	0.022	0.021	0.022	0.021	0.001	0.002	0.002	0.007	0.020	0.020	OK	-74%	11	107%	
17	Molybdenum	0.02	0.02	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.021	0.000	0.001	0.001	0.002	0.020	0.020	OK	-45%	18	104%	
18	Nickel	0.01	0.01	0.011	0.011	0.011	0.011	0.011	0.011	0.010	0.011	0.011	0.000	0.001	0.001	0.002	0.010	0.010	OK	-50%	10	109%	
19	Phosphorus	0.5	0.05	0.045	0.047	0.052	0.055	0.046	0.043	0.053	0.056	0.050	0.005	0.015	0.015	0.02	0.50	0.50	OK	-26%	3	99%	
20	Potassium	0.5	0.5	0.672	0.763	0.681	0.655	0.482	0.532	0.447	0.439	0.584	0.124	0.371	0.37	0.15	0.50	0.50	OK	147%	1.3	117%	
21	Selenium	0.01	0.01	0.015	0.014	0.016	0.011	0.010	0.013	0.018	0.014	0.014	0.002	0.008	0.008	0.008	0.010	0.010	OK	-6%	1.3	139%	
22	Silicon	0.05	0.05	0.061	0.062	0.063	0.063	0.065	0.061	0.062	0.060	0.062	0.002	0.005	0.005	0.013	0.050	0.050	OK	-65%	11	124%	
23	Silver	0.01	0.01	0.010	0.009	0.010	0.007	0.009	0.008	0.009	0.009	0.009	0.001	0.002	0.002	0.006	0.010	0.007	OK	-60%	4	89%	
24	Sodium	0.5	0.5	0.554	0.561	0.527	0.522	0.441	0.474	0.457	0.480	0.502	0.045	0.135	0.14	0.19	0.50	0.50	OK	-29%	4	100%	
25	Strontium	0.02	0.01	0.011	0.010	0.010	0.011	0.011	0.011	0.011	0.011	0.011	0.000	0.001	0.001	0.005	0.020	0.020	OK	-80%	10	108%	
26	Thallium	0.01	0.01	0.009	0.008	0.011	0.009	0.008	0.013	0.009	0.013	0.010	0.002	0.005	0.005	0.007	0.010	0.010	OK	-23%	2	100%	
27	Tin	0.1	0.05	0.055	0.057	0.057	0.056	0.049	0.049	0.050	0.049	0.053	0.004	0.012	0.012	0.01	0.10	0.10	OK	19%	4	105%	
28	Titanium	0.005	0.005	0.005	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.000	0.001	0.001	0.002	0.005	0.005	OK	-45%	5	105%	
29	Vanadium	0.01	0.01	0.012	0.012	0.011	0.012	0.012	0.012	**0.010**	0.012	0.011	0.001	0.002	0.002	0.003	0.010	0.010	OK	-40%	6	115%	2.21
30	Zinc	0.02	0.02	0.020	0.020	0.019	0.019	0.024	0.020	0.020	0.022	0.020	0.002	0.005	0.005	0.004	0.020	0.020	OK	33%	4	102%	
31	Zirconium	0.2														0.012	0.20	0.20					

MDL STUDY
METALS BY ICP - EPA 6010B / 200.7

Analyt. Method: EPA 6010B / 200.7 — Instruments: **WinLabICP5**
Prep Method: EPA 3005A / 200.2 — Standard Conc: **Na,K**: 10x - **Si**: 5x - **Ag**: 0.5x
Matrix: **Water** (50ml-->50ml)
Units: **mg/L**

Reviewed: T.Vu (Jan/10&23/08)

#	Analyte	Spike(mg/l)		MDL Runs - (mg/L)								Calc Data (mg/L)			final	*current* LIMS (mg/L)			Validation Criteria				Comm't
		recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	StdDev	MDL	MDL	MDL	RL_1	RL_2	MDL<Rl	Ch'g	Ratio (1-10)	%Rec	Grubbs Test
1	Aluminum	0.05	0.05	0.0477	0.0522	0.0519	0.0519	0.049	0.0513	0.0488	0.06	1:14	0.00	0.010	0.010	0.040	0.050	0.050	OK	-75%	5	103%	2.13
2	Antimony	0.01	0.01	0.012	0.010	0.007	0.008	0.007	0.005	0.007	0.005	0.008	0.002	0.007	0.007	0.007	0.010	0.010	OK	no ch'g	1.4	76%	
3	Arsenic	0.01	0.01	0.009	0.010	0.008	0.010	0.010	0.008	0.009	0.007	0.009	0.001	0.003	0.003	0.0065	0.010	0.010	OK	-52%	3	89%	
4	Barium	0.01	0.005	0.0051	0.0051	0.0051	0.0051	0.005	0.0049	0.005	0.005	0.01	0.0001	0.000	0.000	0.006	0.010	0.010	OK	-95%	17	100%	
5	Beryllium	0.004	0.005	0.0048	0.0049	0.0049	0.0048	0.0047	0.0046	0.0046	0.005	0.00	0.0002	0.001	0.001	0.0009	0.004	0.004	OK	-44%	10	95%	
6	Boron	0.05	0.005	0.0177	0.0161	0.0166	0.0155	0.0152	0.0169	0.0167	0.017	0.02	0.0008	0.002	0.002	0.017	0.050	0.050	OK	-86%	2	329%	
7	Cadmium	0.005	0.005	0.0052	0.0052	0.0053	0.0053	0.005	0.005	0.005	0.005	0.01	0.0001	0.000	0.000	0.002	0.005	0.005	OK	-80%	13	102%	
8	Calcium	0.1	0.1	0.1214	0.117	0.1186	0.1178	0.1325	0.1292	0.1131	0.14	0.12	0.01	0.030	0.03	0.050	0.10	0.10	OK	-40%	3	124%	
9	Chromium	0.005	0.005	0.0059	0.0059	0.0059	0.0059	0.0053	0.0048	0.0052	0.005	0.01	0.0004	0.001	0.001	0.002	0.005	0.005	OK	-35%	4	110%	
10	Cobalt	0.01	0.01	0.011	0.010	0.010	0.011	0.010	0.010	0.010	0.010	0.010	0.000	0.001	0.001	0.002	0.010	0.010	OK	-70%	17	103%	
11	Copper	0.01	0.01	0.011	0.010	0.011	0.009	0.012	0.011	0.011	0.011	0.011	0.001	0.003	0.003	0.003	0.010	0.010	OK	-17%	4	107%	
12	Iron	0.04	0.005	0.0066	0.005	0.006	0.0088	0.007	0.0069	0.0085	0.007	0.01	0.0012	0.004	0.004	0.015	0.04	0.02	OK	-75%	1	139%	
13	Lead	0.005	0.005	0.004	0.005	0.004	0.005	0.003	0.005	0.005	0.005	0.00	0.0008	0.003	0.003	0.003	0.005	0.005	OK	-17%	2	92%	
14	Lithium	0.05	0.05	0.0661	0.0641	0.0677	0.0631	0.0501	0.0509	0.049	0.05	0.06	0.0084	0.025	0.03	0.030	0.050	0.050	OK	-16%	2	115%	
15	Magnesium	0.02	0.02	0.0213	0.0243	0.0241	0.0272	0.0207	0.018	0.0133	0.0201	0.02	0.0043	0.013	0.013	0.012	0.020	0.020	OK	7%	2	106%	
16	Manganese	0.02	0.005	0.0055	0.0055	0.0055	0.0056	0.0054	0.005	0.0052	0.005	0.01	0.0003	0.001	0.001	0.007	0.020	0.020	OK	-89%	6	107%	
17	Molybdenum	0.02	0.005	0.0053	0.0054	0.0053	0.0064	0.004	0.0044	0.0039	0.004	0.00	0.0009	0.003	0.003	0.002	0.020	0.020	OK	35%	2	97%	
18	Nickel	0.01	0.005	0.0051	0.0053	0.005	0.0052	0.0049	0.0053	0.0049	0.005	0.01	0.0002	0.001	0.001	0.002	0.010	0.010	OK	-65%	7	101%	
19	Phosphorus	0.5	0.1	0.0889	0.093	0.0951	0.0845	0.089	0.0898	0.0869	0.09	0.09	0.0033	0.010	0.01	0.02	0.50	0.50	OK	-51%	10	90%	
20	Potassium	0.5	0.2	0.1801	0.2287	0.1879	0.1629	0.0952	0.1129	0.0864	0.04	0.14	0.0632	0.189	0.189	0.37	0.50	0.50	OK	-49%	1	68%	
21	Selenium	0.01	0.01	0.011	0.009	0.011	0.011	0.019	0.014	0.015	0.012	0.013	0.003	0.009	0.009	0.008	0.010	0.010	OK	10%	1.1	127%	
22	Silicon	0.05	0.05	0.046	0.047	0.047	0.046	0.048	0.049	0.044	0.045	0.05	0.00	0.005	0.005	0.013	0.050	0.050	OK	-60%	10	93%	
23	Silver	0.01	0.0025	0.0021	0.0018	0.001	0.0018	0.0017	0.0027	0.0022	0.00	0.00	0.0005	0.002	0.002	0.006	0.010	0.007	OK	-75%	2	78%	
24	Sodium	0.5	0.5	0.6693	0.598	0.6291	0.5962	0.6126	0.5704	0.5705	0.552	0.60	0.0376	0.113	0.11	0.19	0.50	0.50	OK	-41%	4	120%	
25	Strontium	0.02	0.005	0.0047	0.0047	0.0049	0.0047	0.0052	0.0051	0.0052	0.005	0.00	0.0002	0.001	0.001	0.005	0.020	0.020	OK	-86%	7	99%	
26	Thallium	0.01	0.01	0.009	0.007	0.010	0.010	0.009	0.006	0.007	0.007	0.008	0.002	0.005	0.005	0.007	0.010	0.010	OK	-33%	2	81%	
27	Tin	0.1	0.1	0.1004	0.0986	0.0945	0.0936	0.0901	0.0968	0.0892	0.0901	0.09	0.0042	0.013	0.013	0.012	0.10	0.10	OK	5%	8	94%	
28	Titanium	0.005	0.005	0.0054	0.0056	0.0054	0.0054	0.0051	0.0049	0.0053	0.005	0.01	0.0002	0.001	0.001	0.002	0.005	0.005	OK	-65%	7	105%	
29	Vanadium	0.01	0.01	0.010	0.010	0.010	0.010	0.009	0.008	0.008	0.008	0.009	0.001	0.003	0.003	0.003	0.010	0.010	OK	no ch'g	3	90%	
30	Zinc	0.02	0.01	0.011	0.011	0.011	0.011	0.010	0.011	0.010	0.010	0.011	0.001	0.002	0.002	0.006	0.020	0.020	OK	-72%	6	109%	
31	Zirconium	0.2	0.005													0.012	0.20	0.20					

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2303
Control Limt: +/- 10.00%
Sequence: IJ82310

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82310-ICV1	Antimony (dissolved)	25.0	25.8	103	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Arsenic (dissolved)	25.0	25.1	100	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Barium (dissolved)	25.0	25.6	102	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Beryllium (dissolved)	25.0	24.9	100	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Cadmium (dissolved)	25.0	26.5	106	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Chromium (dissolved)	25.0	26.7	107	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Cobalt (dissolved)	25.0	24.1	96	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Copper (dissolved)	25.0	25.6	102	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Lead (dissolved)	25.0	25.7	103	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Manganese (dissolved)	25.0	23.9	95	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Molybdenum (dissolved)	25.0	25.9	104	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Nickel (dissolved)	25.0	25.9	103	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Selenium (dissolved)	25.0	25.6	102	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Silver (dissolved)	25.0	26.6	106	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Thallium (dissolved)	25.0	25.8	103	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Uranium (dissolved)	25.0	24.3	97	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Vanadium (dissolved)	25.0	23.0	92	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Zinc (dissolved)	25.0	25.0	100	ug/l	EPA 200.8-Diss	10/23/08 10:32
IJ82310-CCV1	Antimony (dissolved)	50.0	45.9	92	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Arsenic (dissolved)	50.0	49.0	98	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Barium (dissolved)	50.0	46.2	92	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Beryllium (dissolved)	50.0	48.0	96	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Cadmium (dissolved)	50.0	47.0	94	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Chromium (dissolved)	50.0	52.1	104	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Cobalt (dissolved)	50.0	47.5	95	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Copper (dissolved)	50.0	51.0	102	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Lead (dissolved)	50.0	49.6	99	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Manganese (dissolved)	50.0	47.3	95	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Molybdenum (dissolved)	50.0	48.2	96	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Nickel (dissolved)	50.0	51.1	102	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Selenium (dissolved)	50.0	48.3	97	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Silver (dissolved)	50.0	50.0	100	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Thallium (dissolved)	50.0	48.0	96	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Uranium (dissolved)	50.0	49.9	100	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Vanadium (dissolved)	50.0	45.8	92	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Zinc (dissolved)	50.0	48.4	97	ug/l	EPA 200.8-Diss	10/23/08 12:11
IJ82310-CCV2	Antimony (dissolved)	50.0	51.6	103	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Arsenic (dissolved)	50.0	48.7	97	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Barium (dissolved)	50.0	51.3	103	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Beryllium (dissolved)	50.0	48.7	97	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Cadmium (dissolved)	50.0	52.2	104	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Chromium (dissolved)	50.0	51.2	102	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Cobalt (dissolved)	50.0	46.5	93	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Copper (dissolved)	50.0	50.3	101	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Lead (dissolved)	50.0	48.7	97	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Manganese (dissolved)	50.0	45.8	92	ug/l	EPA 200.8-Diss	10/23/08 12:57

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
Client: Brown and Caldwell - NV
Instrument ID: Elan2
Control Limt: +/- 10.00%

SDG:
Project: BP Yerington, NV
Calibration: I8J2303
Sequence: IJ82310

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82310-CCV2	Molybdenum (dissolved)	50.0	51.4	103	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Nickel (dissolved)	50.0	49.5	99	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Selenium (dissolved)	50.0	49.6	99	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Silver (dissolved)	50.0	53.7	107	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Thallium (dissolved)	50.0	47.1	94	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Uranium (dissolved)	50.0	47.5	95	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Vanadium (dissolved)	50.0	44.0	88 *	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Zinc (dissolved)	50.0	49.1	98	ug/l	EPA 200.8-Diss	10/23/08 12:57

* Values outside of QC limits

does not bracket project sample
no impact

CRDL STANDARD

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2303
Sequence: IJ82310
Injection Date: 10/23/08 10:43

Lab Sample ID	Analyte MDL	True	Found	%R	Units	QC Limts
IJ82310-CRL1	Antimony (dissolved)	0.200	0.271	136	ug/l	50 - 150
	Arsenic (dissolved) 0.7	0.200	0.344	172 *	ug/l	50 - 150
	Barium (dissolved)	0.200	0.162 -	81 -	ug/l	50 - 150
	Beryllium (dissolved)	0.200	0.245	122	ug/l	50 - 150
	Cadmium (dissolved)	0.200	0.212	106	ug/l	50 - 150
	Chromium (dissolved) 0.7	0.200	-0.00116	*	ug/l	50 - 150
	Cobalt (dissolved)	0.200	0.214	107	ug/l	50 - 150
	Copper (dissolved)	0.200	0.226 -	113 -	ug/l	50 - 150
	Lead (dissolved)	0.200	0.232	116	ug/l	50 - 150
	Manganese (dissolved)	0.200	0.231	115	ug/l	50 - 150
	Molybdenum (dissolved) 0.2	0.200	0.0344	17 *	ug/l	50 - 150
	Nickel (dissolved)	0.200	0.226	113	ug/l	50 - 150
	Selenium (dissolved)	0.200	0.123	61	ug/l	50 - 150
	Silver (dissolved)	0.200	0.219 -	109 -	ug/l	50 - 150
	Thallium (dissolved)	0.200	0.219	109	ug/l	50 - 150
	Uranium (dissolved)	0.200	0.233	117	ug/l	50 - 150
	Vanadium (dissolved)	0.200	0.173	86	ug/l	50 - 150
	Zinc (dissolved) 2.5	0.200	-0.564	*	ug/l	50 - 150
IJ82310-CRL2	Antimony (dissolved)	2.00	1.94	97	ug/l	50 - 150
	Arsenic (dissolved)	2.00	2.08 -	104 -	ug/l	50 - 150
	Barium (dissolved)	2.00	1.79	90	ug/l	50 - 150
	Beryllium (dissolved)	2.00	2.08	104	ug/l	50 - 150
	Cadmium (dissolved)	2.00	1.92	96	ug/l	50 - 150
	Chromium (dissolved)	2.00	1.82 -	91 -	ug/l	50 - 150
	Cobalt (dissolved)	2.00	1.89	94	ug/l	50 - 150
	Copper (dissolved)	2.00	1.98	99	ug/l	50 - 150
	Lead (dissolved)	2.00	2.08	104	ug/l	50 - 150
	Manganese (dissolved)	2.00	1.91	95	ug/l	50 - 150

CRDL STANDARD

EPA 200.8-Diss

Laboratory: TestAmerica Irvine SDG:

Client: Brown and Caldwell - NV Project: BP Yerington, NV

Instrument ID: Elan2 Calibration: I8J2303

Sequence: IJ82310 Injection Date: 10/23/08 10:48

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82310-CRL2	Molybdenum (dissolved)	2.00	1.70	85	ug/l	50 - 150
	Nickel (dissolved)	2.00	1.97	98	ug/l	50 - 150
	Selenium (dissolved)	2.00	1.85	93	ug/l	50 - 150
	Silver (dissolved)	2.00	2.03	102	ug/l	50 - 150
	Thallium (dissolved)	2.00	1.97	99	ug/l	50 - 150
	Uranium (dissolved)	2.00	2.05	102	ug/l	50 - 150
	Vanadium (dissolved)	2.00	1.63	81	ug/l	50 - 150
	Zinc (dissolved)	2.00	1.15	58	ug/l	50 - 150
IJ82310-CRL3	Antimony (dissolved)	2.00	2.14	107	ug/l	50 - 150
	Arsenic (dissolved)	2.00	1.85	92	ug/l	50 - 150
	Barium (dissolved)	2.00	1.94	97	ug/l	50 - 150
	Beryllium (dissolved)	2.00	1.89	95	ug/l	50 - 150
	Cadmium (dissolved)	2.00	2.03	101	ug/l	50 - 150
	Chromium (dissolved)	2.00	2.09	104	ug/l	50 - 150
	Cobalt (dissolved)	2.00	1.85	92	ug/l	50 - 150
	Copper (dissolved)	2.00	1.98	99	ug/l	50 - 150
	Lead (dissolved)	2.00	2.01	101	ug/l	50 - 150
	Manganese (dissolved)	2.00	1.84	92	ug/l	50 - 150
	Molybdenum (dissolved)	2.00	1.78	89	ug/l	50 - 150
	Nickel (dissolved)	2.00	1.89	94	ug/l	50 - 150
	Selenium (dissolved)	2.00	1.94	97	ug/l	50 - 150
	Silver (dissolved)	2.00	2.11	105	ug/l	50 - 150
	Thallium (dissolved)	2.00	1.95	97	ug/l	50 - 150
	Uranium (dissolved)	2.00	1.94	97	ug/l	50 - 150
	Vanadium (dissolved)	2.00	1.44	72	ug/l	50 - 150
	Zinc (dissolved)	2.00	1.17	59	ug/l	50 - 150

* Values outside of QC limits

BLANKS
EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: Elan2
Project: BP Yerington, NV
Sequence: IJ82310
Calibration: I8J2303

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82310-ICB1	Antimony (dissolved)	0.0541	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Arsenic (dissolved)	0.170	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Barium (dissolved)	0.00221	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Beryllium (dissolved)	0.00494	0.50	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Cadmium (dissolved)	0.00108	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Chromium (dissolved)	-0.182	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Cobalt (dissolved)	0.00227	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Copper (dissolved)	0.00110	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Lead (dissolved)	0.00302	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Manganese (dissolved)	0.00132	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Molybdenum (dissolved)	-0.0472	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Nickel (dissolved)	0.00332	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Selenium (dissolved)	-0.0257	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Silver (dissolved)	0.00137	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Thallium (dissolved)	0.139	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Uranium (dissolved)	0.0528	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Vanadium (dissolved)	-0.120	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Zinc (dissolved)	0.0679	20	ug/l		EPA 200.8-Diss	10/23/08 10:3
8J22087-BLK1	Antimony (dissolved)	0.0637	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Arsenic (dissolved)	0.326	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Barium (dissolved)	-0.0169	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Beryllium (dissolved)	0.00228	0.50	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Cadmium (dissolved)	-0.0112	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Chromium (dissolved)	0.0746	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Cobalt (dissolved)	0.00332	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Copper (dissolved)	0.0975	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Lead (dissolved)	0.0181	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Manganese (dissolved)	0.0487	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Molybdenum (dissolved)	0.0432	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Nickel (dissolved)	0.0354	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Selenium (dissolved)	-0.0660	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Silver (dissolved)	0.00261	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Thallium (dissolved)	0.127	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Uranium (dissolved)	0.0979	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Vanadium (dissolved)	-0.291	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Zinc (dissolved)	-0.314	20	ug/l		EPA 200.8-Diss	10/23/08 11:3
IJ82310-CCB1	Antimony (dissolved)	0.284	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Arsenic (dissolved)	0.198	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Barium (dissolved)	-0.0656	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Beryllium (dissolved)	-0.00255	0.50	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Cadmium (dissolved)	-0.0136	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Chromium (dissolved)	-0.376	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Cobalt (dissolved)	-0.00426	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Copper (dissolved)	0.191	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Lead (dissolved)	-0.00784	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1

BLANKS
EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: Elan2
Project: BP Yerington, NV
Sequence: IJ82310
Calibration: I8J2303

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82310-CCB1	Manganese (dissolved)	-0.0432	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Molybdenum (dissolved)	-0.0410	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Nickel (dissolved)	0.298	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1.
	Selenium (dissolved)	0.0582	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Silver (dissolved)	-0.000520	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Thallium (dissolved)	0.0368	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Uranium (dissolved)	0.0886	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Vanadium (dissolved)	-0.124	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Zinc (dissolved)	-0.870	20	ug/l		EPA 200.8-Diss	10/23/08 12:1:
IJ82310-CCB2	Antimony (dissolved)	0.327	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Arsenic (dissolved)	0.00244	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Barium (dissolved)	-0.0577	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Beryllium (dissolved)	-0.00194	0.50	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Cadmium (dissolved)	-0.0123	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Chromium (dissolved)	0.144	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Cobalt (dissolved)	-0.00304	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Copper (dissolved)	0.0302	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Lead (dissolved)	-0.00471	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Manganese (dissolved)	-0.0434	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Molybdenum (dissolved)	-0.0430	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Nickel (dissolved)	0.240	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Selenium (dissolved)	-0.00102	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Silver (dissolved)	0.00105	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Thallium (dissolved)	0.0450	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Uranium (dissolved)	0.0743	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Vanadium (dissolved)	-0.439	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Zinc (dissolved)	-0.976	20	ug/l		EPA 200.8-Diss	10/23/08 13:0

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine

SDG:

Client: Brown and Caldwell - NV

Project: BP Yerington, NV

Instrument ID: Elan2

Calibration: I8J2303

Sequence: IJ82310

Check Nbr: 1

	True		Found			
Analyte	Sol A	Sol B	Sol A	%R	Sol B	%R
Antimony (dissolved)	NA	NA	NA	NA	0.0191	NA
Antimony (dissolved)	NA	NA	0.0424	NA	NA	NA
Arsenic (dissolved)	NA	NA	-0.310	NA	NA	NA
Arsenic (dissolved)	NA	20.0	NA	NA	14.8	74
Barium (dissolved)	NA	NA	NA	NA	0.439	NA
Barium (dissolved)	NA	NA	0.454	NA	NA	NA
Beryllium (dissolved)	NA	NA	NA	NA	0.00085	NA
Beryllium (dissolved)	NA	NA	0.0129	NA	NA	NA
Cadmium (dissolved)	NA	NA	2.67	NA	NA	NA
Cadmium (dissolved)	NA	20.0	NA	NA	16.7	84
Chromium (dissolved)	NA	NA	1.70	NA	NA	NA
Chromium (dissolved)	NA	20.0	NA	NA	17.9	89
Cobalt (dissolved)	NA	NA	0.174	NA	NA	NA
Cobalt (dissolved)	NA	20.0	NA	NA	14.6	73
Copper (dissolved)	NA	NA	2.18	NA	NA	NA
Copper (dissolved)	NA	20.0	NA	NA	16.8	84
Lead (dissolved)	NA	NA	NA	NA	0.488	NA
Lead (dissolved)	NA	NA	0.504	NA	NA	NA
Manganese (dissolved)	NA	NA	1.93	NA	NA	NA
Manganese (dissolved)	NA	20.0	NA	NA	17.2	86
Molybdenum (dissolved)	NA	2000	NA	NA	1800	90
Molybdenum (dissolved) mg/L	2000	NA	1780	89	NA	NA
Nickel (dissolved)	NA	NA	0.535	NA	NA	NA
Nickel (dissolved)	NA	20.0	NA	NA	14.8	74
Selenium (dissolved)	NA	NA	NA	NA	0.349	NA
Selenium (dissolved)	NA	NA	0.372	NA	NA	NA
Silver (dissolved)	NA	NA	0.0570	NA	NA	NA
Silver (dissolved)	NA	20.0	NA	NA	14.7	73
Thallium (dissolved)	NA	NA	NA	NA	0.00675	NA
Thallium (dissolved)	NA	NA	0.0301	NA	NA	NA
Uranium (dissolved)	NA	NA	NA	NA	-0.00442	NA
Uranium (dissolved)	NA	NA	0.0117	NA	NA	NA
Vanadium (dissolved)	NA	NA	NA	NA	-0.277	NA
Vanadium (dissolved)	NA	NA	0.338	NA	NA	NA
Zinc (dissolved)	NA	NA	4.61	NA	NA	NA
Zinc (dissolved)	NA	20.0	NA	NA	18.2	91

* Values outside of QC limits

Mo low in sample, no impact

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine

SDG:

Client: Brown and Caldwell - NV

Project: BP Yerington, NV

Instrument ID: Elan2

Calibration: I8J2303

Sequence: IJ82310

Check Nbr: 2

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Antimony (dissolved)	NA	NA	NA	NA	0.0459	NA
Antimony (dissolved)	NA	NA	0.0852	NA	NA	NA
Arsenic (dissolved)	NA	NA	-0.463	NA	NA	NA
Arsenic (dissolved)	NA	20.0	NA	NA	14.7	73
Barium (dissolved)	NA	NA	NA	NA	0.447	NA
Barium (dissolved)	NA	NA	0.461	NA	NA	NA
Beryllium (dissolved)	NA	NA	NA	NA	0.00214	NA
Beryllium (dissolved)	NA	NA	0.0160	NA	NA	NA
Cadmium (dissolved)	NA	NA	2.66	NA	NA	NA
Cadmium (dissolved)	NA	20.0	NA	NA	16.9	85
Chromium (dissolved)	NA	NA	2.98	NA	NA	NA
Chromium (dissolved)	NA	20.0	NA	NA	18	90
Cobalt (dissolved)	NA	NA	0.196	NA	NA	NA
Cobalt (dissolved)	NA	20.0	NA	NA	14.7	74
Copper (dissolved)	NA	NA	2.25	NA	NA	NA
Copper (dissolved)	NA	20.0	NA	NA	16.5	83
Lead (dissolved)	NA	NA	NA	NA	0.466	NA
Lead (dissolved)	NA	NA	0.474	NA	NA	NA
Manganese (dissolved)	NA	NA	1.91	NA	NA	NA
Manganese (dissolved)	NA	20.0	NA	NA	17.2	86
Molybdenum (dissolved)	NA	2000	NA	NA	1840	92
Molybdenum (dissolved)	2000	NA	1810	90	NA	NA
Nickel (dissolved)	NA	NA	0.743	NA	NA	NA
Nickel (dissolved)	NA	20.0	NA	NA	14.9	75
Selenium (dissolved)	NA	NA	NA	NA	0.377	NA
Selenium (dissolved)	NA	NA	0.374	NA	NA	NA
Silver (dissolved)	NA	NA	0.0618	NA	NA	NA
Silver (dissolved)	NA	20.0	NA	NA	14.9	75
Thallium (dissolved)	NA	NA	NA	NA	0.011	NA
Thallium (dissolved)	NA	NA	0.0374	NA	NA	NA
Uranium (dissolved)	NA	NA	NA	NA	-0.00338	NA
Uranium (dissolved)	NA	NA	0.0225	NA	NA	NA
Vanadium (dissolved)	NA	NA	NA	NA	-0.229	NA
Vanadium (dissolved)	NA	NA	0.417	NA	NA	NA
Zinc (dissolved)	NA	NA	4.63	NA	NA	NA
Zinc (dissolved)	NA	20.0	NA	NA	17.8	89

* Values outside of QC limits

same

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Sequence: IJ82310
Instrument: Elan2
Calibration: I8J2303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	IJ82310-CAL1	081023-1-010	10/23/08 10:12
Cal Standard	IJ82310-CAL2	081023-1-011	10/23/08 10:17
Cal Standard	IJ82310-CAL3	081023-1-012	10/23/08 10:23
Cal Standard	IJ82310-CAL4	081023-1-013	10/23/08 10:27
Initial Cal Check	IJ82310-ICV1	081023-1-014	10/23/08 10:32
Initial Cal Blank	IJ82310-ICB1	081023-1-015	10/23/08 10:37
MRL Check	IJ82310-CRL1	081023-1-016	10/23/08 10:43
MRL Check	IJ82310-CRL2	081023-1-017	10/23/08 10:48
Interference Check A	IJ82310-IFA1	081023-1-018	10/23/08 10:54
Interference Check B	IJ82310-IFB1	081023-1-019	10/23/08 10:59
Interference Check B	IJ82310-IFB2	081023-1-021	10/23/08 11:10
LCS	8J22087-BS1	081023-1-023	10/23/08 11:30
Blank	8J22087-BLK1	081023-1-024	10/23/08 11:34
OU4-UEP-08-GW	IRJ1080-01	081023-1-025	10/23/08 11:40
OU4-UEP-08-GW	8J22087-MS1	081023-1-026	10/23/08 11:43
OU4-UEP-08-GW	8J22087-MSD1	081023-1-027	10/23/08 11:47
OU4-UEP-08-GW	IRJ1080-01	081023-1-030	10/23/08 11:59
Calibration Check	IJ82310-CCV1	081023-1-033	10/23/08 12:11
Calibration Blank	IJ82310-CCB1	081023-1-034	10/23/08 12:15
Calibration Check √ ↓	IJ82310-CCV2	081023-1-044	10/23/08 12:57
Calibration Blank	IJ82310-CCB2	081023-1-045	10/23/08 13:01
MRL Check	IJ82310-CRL3	081023-1-046	10/23/08 13:05
Interference Check A	IJ82310-IFA2	081023-1-047	10/23/08 13:10
Interference Check B	IJ82310-IFB3	081023-1-048	10/23/08 13:14

PREPARATION BENCH SHEET

8J22087

TestAmerica Irvine

Printed: 10/22/2008 3:14:13PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICPMS** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
8J22087-BLK1		QC	10/22/08 09:21	50	50								
8J22087-BS1		QC	10/22/08 09:21	50	50		8090815	400					
8J22087-MS1		QC	10/22/08 09:21	50	50	IRJ1080-01	8090815	400					
8J22087-MSD1		QC	10/22/08 09:21	50	50	IRJ1080-01	8090815	400					
IRJ1080-01	C	Manganese-200.8,Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Zinc-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Vanadium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Uranium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Thallium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Silver-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Selenium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Molybdenum-200.8,Dis	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Beryllium-200.8,Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Antimony-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Nickel-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Barium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Lead-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.

N/A — Spiking Witnessed By — Date

AN — Preparation Reviewed By — 10/22/08 — Date

AN — Extracts Received By — 10/22/08 — Date

PREPARATION BENCH SHEET

8J22087

TestAmerica Irvine

Printed: 10/22/2008 3:14:13PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICPMS** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
IRJ1080-01	C	Cadmium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Chromium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Cobalt-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Copper-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Arsenic-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Cobalt-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Antimony-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Arsenic-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Barium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Beryllium-200.8,Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Cadmium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Ficld Filtered.
IRJ1354-01	C	Copper-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Vanadium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Chromium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Zinc-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Uranium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.

Spiking Witnessed By Date Preparation Reviewed By Date Extracts Received By Date

SEMI-ANNUAL MDL STUDY

Metals by ICPMS - EPA 6020/200.8

Analytical Method: EPA 6020 / 200.8 — Instruments: **Elan2**
Prep Method: EPA 3005A / 200.2
Matrix: **Water** (50ml-->50ml) — Cu [63]: alternative line
Units: **ug/L** — **Fe:** 10 x nominal conc

#	Analyte	Spike(mg/l)		MDL Runs - (ug/L)								Calc Data (ug/L)			final	LIMS Data (ug/L)			Validation Criteria				Grubbs	Symbol
		recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	StdDev	MDL	MDL	MDL	RL_1	RL_2	MDL<RL	Ch'g	Ratio 1-10	%Rec	Comm't	
1	Aluminum	<=10	10	10.83	10.73	10.41	10.14	12.33	12.09	15.96	12.54	11.88	1.89	5.66	5.7	6.0	10		OK	-6%	2	119%	2.16	Al [27]
2	Antimony	<=1	1	1.133	1.114	1.131	1.121	1.226	1.223	1.235	1.222	1.18	0.05	0.16	0.2	0.2	2	1	OK	-18%	6	118%		Sb [121]
3	Arsenic	<=1	1	1.427	1.359	1.504	1.296	1.125	1.104	1.065	0.959	1.23	0.19	0.58	0.6	0.70	1		OK	-17%	2	123%		As [75]
4	Barium	<=1	1	1.076	1.085	1.040	1.050	1.174	1.159	1.176	1.205	1.12	0.06	0.19	0.2	0.4	1		OK	-52%	5	112%		Ba [135]
5	Beryllium	<=0.2	0.2	0.219	0.221	0.214	0.209	0.284	0.259	0.256	0.253	0.24	0.03	0.08	0.1	0.2	0.5	0.2	OK	-59%	2	120%		Be [9]
6	Cadmium	<=0.2	0.2	0.212	0.208	0.203	0.209	0.264	0.267	0.247	0.246	0.23	0.03	0.08	0.1	0.11	1	0.2	OK	-27%	2	116%		Cd [114]
7	Cerium	<=1	1	1.031	1.036	1.027	1.031	1.010	1.007	0.991	1.011	1.02	0.02	0.05	0.0	0.35	1		OK	-87%	21	102%		Ce [140]
8	Chromium	<=1	1	1.831	1.849	1.844	1.842	2.223	2.152	2.095	2.269	2.01	0.19	0.57	0.6	0.70	2	1	OK	-19%	2	201%		Cr [52]
9	Cobalt	<=1	1	1.124	1.126	1.117	1.114	1.120	1.130	1.111	1.119	1.12	0.01	0.02	0.0	0.15	1		OK	-87%	52	112%		Co [59]
10	Copper	<=1	1	1.126	1.117	contam.	1.155	1.128	1.144	1.26	1.139	1.15	0.05	0.15	0.2	0.75	2	1	OK	-80%	7	115%	2.19	Cu [65]
11	Copper[63]	<=1	1	1.149	1.149	contam.	1.169	1.152	1.149	1.25	1.156	1.17	0.04	0.12	0.1	0.30	2	1	OK	-60%	8	117%	2.23	Cu [63]
12	Lead	<=1	1	1.177	1.171	1.167	1.162	1.123	1.127	1.129	1.138	1.15	0.02	0.07	0.1	0.3	1		OK	-78%	15	115%		Pb [208]
13	Manganese	<=1	1	1.140	1.067	1.061	1.42	1.066	1.076	1.082	1.100	1.13	0.12	0.36	0.4	0.75	1		OK	-52%	3	113%	2.42	Mn [55]
14	Molybdenum	<=1	1	1.083	1.071	1.059	1.041	1.175	1.180	1.190	1.207	1.13	0.07	0.20	0.2	0.2	2	1	OK	no ch'g	5	113%		Mo [98]
15	Nickel	<=1	1	1.134	1.112	1.32	1.071	1.089	1.107	1.112	1.122	1.13	0.08	0.23	0.2	0.90	2	1	OK	-74%	4	113%	2.4	Ni [60]
16	Selenium	<=1	1	1.022	0.899	0.958	0.882	1.005	1.091	0.974	1.012	0.98	0.07	0.20	0.2	0.3	2	1	OK	-32%	5	98%		Se [82]
17	Silver	<=1	1	1.170	1.133	1.140	1.117	1.217	1.225	1.237	1.218	1.18	0.05	0.14	0.14	0.3	1		OK	-52%	7	118%		Ag [107]
18	Thallium	<=1	1	1.169	1.200	1.190	1.187	1.104	1.109	1.107	1.106	1.15	0.04	0.13	0.1	0.2	1		OK	-35%	8	115%		Tl [205]
19	Uranium	<=1	1	1.170	1.159	1.158	1.155	1.089	1.119	1.100	1.114	1.13	0.03	0.09	0.1	0.5	1		OK	-81%	11	113%		U [238]
20	Vanadium	<=1	2	1.606	1.672	1.415	1.413	1.847	1.701	2.032	1.439	1.64	0.22	0.67	0.7	0.7	2	1	OK	no ch'g	3	82%		V [51]
21	Zinc	<=5	2	2.929	2.838	2.905	2.776	2.917	4.14	3.284	3.321	3.14	0.45	1.36	1.4	2.5	10	5	OK	-46%	1	157%	2.22	Zn [66]
22	Tungsten	<=2														0.5	2							W [184]
	For 0.1ppb MDL																							
17	Silver	<=1	0.2	0.229	0.225	0.230	0.222	0.245	0.243	0.248	0.242	0.24	0.01	0.03	0.03	0.2	1		OK	-85%	7	118%		Ag [107]
9	Cobalt	<=1	0.2	0.218	0.217	0.216	0.221	0.270	0.273	0.250	0.250	0.24	0.02	0.07	0.07	0.15	1		OK	-52%	3	120%		Co [59]
7	Cerium	<=1	0.2	0.201	0.202	0.203	0.203	0.183	0.186	0.181	0.183	0.19	0.01	0.03	0.03	0.35	1		OK	-91%	7	96%		Ce [140]
12	Lead	<=1	0.2	0.243	0.236	0.229	0.237	0.259	0.262	0.254	0.255	0.25	0.01	0.04	0.04	0.10	1		OK	-63%	5	123%		Pb [208]

1ppb	*filename:*	080312-2	080312-2	080312-2	080312-2	080313-1	080313-1	080313-1	080313-1-021	
	labnumber:	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PPB-8	
	date:	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/13/0E	Mar/13/0E	Mar/13/0E	Mar/13/08	
	time:	14:41	14:45	14:49	14:53	10:37	10:40	10:44	10:48	
0.2ppb	*filename:*	080312-2	080312-2	080312-2	080312-2	080313-1	080313-1	080313-1	080313-1-017	
	labnumber:	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0.2PPB-8	
	date:	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/13/0E	Mar/13/0E	Mar/13/0E	Mar/13/08	
	time:	14:26	14:30	14:34	14:37	10:21	10:25	10:29	10:33	
2ppb	*filename:*	080312-2	080312-2	080312-2	080312-2	080313-1	080313-1	080313-1	080313-1-027	
	labnumber:	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PPB-8	
	date:	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/13/0E	Mar/13/0E	Mar/13/0E	Mar/13/08	
	time:	15:06	15:10	15:13	15:17	11:00	11:04	11:08	11:11	
10ppb	*filename:*	080312-2	080312-2	080312-2	080312-2	080313-1	080313-1	080313-1	080313-1-031	

INITIAL AND CONTINUOUS CALIBRATION CHECK

EPA 245.1/7470A/7471A - MERCURY

CV-Hg2 | 10/21/2008 | ICV Spike: 8
Units: ug/L | CCV Spike: 4
RL: 0.2 | Sequence: 081021-3-007

Analyte									
	labnumber:	**ICV**	**ICB**	**.2PPB**	**CCV**	**CCB**	**CCV**	**CCB**	**BP CHK**
	filename:	081021-3-007	081021-3-008	081021-3-009	081021-3-021	081021-3-022	081021-3-025	081021-3-026	081021-3-027
	analyzed:	Oct/21/08	Oct/21/08	Oct/21/08	Oct/21/08	Oct/21/08	Oct/21/08	Oct/21/08	Oct/21/08
	time:	6:57:54 PM	6:59:54 PM	7:01:54 PM	7:46:55 PM	7:48:56 PM	8:14:47 PM	8:16:48 PM	8:18:48 PM
Hg 253.7		7.9	-0.02	0.16	4.14	-0.03	4.15	-0.02	0.17
	Spike:	8		0.2	4		4		
	Rec (%):	99		80	103		104		85%
	Limits (%):	90-110		50-150	90-110		90-110		

RUN LOG

Intrument: ***CV-Hg2***

Calib.file #: 081021-3 Calib. date: 10/21/2008

#	File_Name	Lab_Number	Dilution	Analyzed	Time
1	081021-3-001	Calibration Blank	1	Oct/21/08	6:33:57 PM
2	081021-3-002	0.2ppb	1	Oct/21/08	6:35:53 PM
3	081021-3-003	1.0ppb	1	Oct/21/08	6:37:50 PM
4	081021-3-004	5.0ppb	1	Oct/21/08	6:39:49 PM
5	081021-3-005	10.0ppb	1	Oct/21/08	6:41:48 PM
6	081021-3-006	15.0ppb	1	Oct/21/08	6:43:48 PM
7	081021-3-007	ICV	1	Oct/21/08	6:57:54 PM
8	081021-3-008	ICB	1	Oct/21/08	6:59:54 PM
9	081021-3-009	.2PPB	1	Oct/21/08	7:01:54 PM
10	081021-3-010	8J21102-BLK1	1	Oct/21/08	7:04:35 PM
11	081021-3-011	8J21102-BS1	1	Oct/21/08	7:06:32 PM
12	081021-3-012	IRJ1080-01	1	Oct/21/08	7:08:28 PM
13	081021-3-013	8J21102-MS1	1	Oct/21/08	7:10:25 PM
14	081021-3-014	8J21102-MSD1	1	Oct/21/08	7:12:22 PM
15	081021-3-015	IRJ1480-01	1	Oct/21/08	7:14:21 PM
16	081021-3-016	IRJ1480-02	1	Oct/21/08	7:16:19 PM
17	081021-3-017	IRJ1480-03	1	Oct/21/08	7:18:18 PM
18	081021-3-018	IRJ1655-01	1	Oct/21/08	7:20:17 PM
19	081021-3-019	CCV	1	Oct/21/08	7:22:18 PM
20	081021-3-020	CCB	1	Oct/21/08	7:24:20 PM
21	081021-3-021	CCV	1	Oct/21/08	7:46:55 PM
22	081021-3-022	CCB	1	Oct/21/08	7:48:56 PM
23	081021-3-023	IRJ1655-02	1	Oct/21/08	7:50:57 PM
24	081021-3-024	IRJ1930-01	1	Oct/21/08	7:52:57 PM
25	081021-3-025	CCV	1	Oct/21/08	8:14:47 PM
26	081021-3-026	CCB	1	Oct/21/08	8:16:48 PM
27	081021-3-027	BP CHK	1	Oct/21/08	8:18:48 PM

PREPARATION BENCH SHEET

8J21102

TestAmerica Irvine

Printed: 10/21/2008 3:54:11PM

Matrix: Water **Prepared using: Metals - EPA 245.1** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Surrogate	Initials		Extraction Comments
8J21102-BLK1		QC	10/21/08 15:49	20	20							
8J21102-BS1		QC	10/21/08 15:49	20	20		8100446	160				
8J21102-MS1		QC	10/21/08 15:49	20	20	IRJ1080-01	8100446	160				
8J21102-MSD1		QC	10/21/08 15:49	20	20	IRJ1080-01	8100446	160				
IRJ1080-01	C	Mercury - 245.1, Diss	10/21/08 15:49	20	20							BP Sequence. J flag. Field Filtered.
IRJ1480-01	C	Mercury - 245.1, Diss	10/21/08 15:49	20	20							BP Sequence. J flag. Field Filtered.
IRJ1480-02	C	Mercury - 245.1, Diss	10/21/08 15:49	20	20							BP Sequence. J flag. Field Filtered.
IRJ1480-03	C	Mercury - 245.1, Diss	10/21/08 15:49	20	20							BP Sequence. J flag. Field Filtered.
IRJ1655-01	C	Mercury - 245.1, Diss	10/21/08 15:49	20	20							BP Sequence. J flag. Field Filtered.
IRJ1655-02	C	Mercury - 245.1, Diss	10/21/08 15:49	20	20							BP Sequence. J flag. Field Filtered.
IRJ1930-01	C	Mercury - 245.1, Diss	10/21/08 15:49	20	20							BP Sequence. J flag. Field Filtered.

Reagents used in Batch

Reagent	Description	Solvent

N/A — Spiking Witnessed By — Date

DB — Preparation Reviewed By — 10/21/08 — Date

DB — Extracts Received By — 10/21/08 — Date

MDL STUDY
METALS BY COLD VAPOR ATOMIC ABSORPTION
EPA 7470A / 7471A / 245.1

Matrix	Units	Specific Met	Prep Method	Factor
Water	mg/L	245.1/7471A	20ml --> 20ml	**1**
All Leachates	mg/L	1311/1312/STLC/DIWET	2 ml --> 20ml	**10**

Analyte	FIMS1		FIMS2		Water (mg/L)					Leachates (mg/L)			
	MDL calc.	MDL Verif	MDL calc.	MDL Verif	max MDL	%	New MDL	LIMS MDL	MRL	calc. MDL	New MDL	LIMS MDL	MRL
	Jul/18/08	Jul/18/08	Sep/18/08	Sep/18/08			N/A	13-Mar-07			N/A		
Mercury	0.00007	0.00010	0.00003	0.00010	0.00010	no ch'g		0.00010	0.00020			0.0010	0.0020

Reviewed: T. Vu (Sept/04/08)

Matrix	Units	Specific Met	Prep Method	
Soil, Oil, Product	mg/Kg	7471A	0.5g --> 50ml	1
Wipe	ug		1w --> 50ml	**0.5**
CVS-STLC	ug/Kg		2g --> 200ml	**1000**

Analyte	FIMS1		FIMS2		Soil (mg/Kg)					Wipe (ug)				CVS-STLC (ug/Kg)	
	MDL calc.	MDL Verif	MDL calc.	MDL Verif	max MDL	%	New MDL	LIMS MDL	MRL	calc. MDL	New MDL	LIMS MDL	MRL	calc. MDL	New MDL
	Jul/29/08	Jul/29/08	Sep/18/08	Sep/18/08			N/A	16-Jul-07			N/A				N/A
Mercury	0.010	0.012	0.004	0.012	0.012	no ch'g		0.012	0.020			0.006	0.010		

Reviewed: T. Vu (Sept/19/08)

5/22/2008 5:26:41 PM Method: H:\DATA\IC5\IC5RE22.mth

Draw baselines
Include timed event annotations
Automatically set plot start and end times to data limits

Plot Scale : 130.000
Number of Pages : 1
Plot Title : Chromatogram
X-Axis Label : Time [min]
Y-Axis Label : Response [mV]
Orientation : Landscape
Retention Labels : Top of Plot
Component Labels : Actual Time

User Programs
No user programs will be executed

Global Sample Information
Default Sample Volume : 1.000 uL
Quantitation Units : PPM
Void Time : 0.000 min
Correct amounts during calibration : Yes
Convert unknowns to concentration units : Yes
Reject outliers during calibration : No

An External Standard calibration will be used
Unknown peaks will be quantitated using a response factor of 1.000000e+06
First peak will be relative retention reference

Component Information
FLUORIDE
Component Type : Single Peak Component
Retention Time : 2.698 min
Search Window : 2.00 s, 10.90 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	2327.06	266.31			1
2	0.2000	36276.90	4621.36			1
3	0.5000	87288.94	11732.04			1
4	5.0000	917082.18	113305.74			1
5	10.0000	1980107.43	228934.96			1
6	20.0000	4108892.41	448046.38			1
7	30.0000	6210730.20	646148.55			1

Calibration Curve : y = (-16794.948139) + (196392.404377)x + (390.986494)x^2 + (0.000000)x^3
R-squared : 0.999829

CHLORIDE
Component Type : Single Peak Component
Retention Time : 3.761 min
Search Window : 4.00 s, 7.60 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit

5/22/2008 5:26:41 PM Method: H:\DATA\IC5\IC5RE22.mth

Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	5625.08	342.91	———	———	1
2	0.2000	24885.16	2770.77	———	———	1
3	0.5000	67228.11	6953.15	———	———	1
4	5.0000	574259.74	60709.39	———	———	1
5	10.0000	1249345.21	126494.19	———	———	1
6	20.0000	2755461.06	277606.74	———	———	1
7	30.0000	4415734.65	446335.67	———	———	1

Calibration Curve : y = (-887.789782) + (114917.235792)x + (1086.571614)x^2 + (0.000000)x^3
R-squared : 0.999910

NITRITE
Component Type : Single Peak Component
Retention Time : 4.504 min
Search Window : 2.00 s, 5.80 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	0.00	0.00	———	———	0
2	0.2000	13621.06	1163.76	———	———	1
3	0.5000	37797.03	3379.51	———	———	1
4	5.0000	363897.69	30682.64	———	———	1
5	10.0000	759313.86	61618.55	———	———	1
6	20.0000	1611421.45	129040.90	———	———	1
7	30.0000	2493865.68	200854.31	———	———	1

Calibration Curve : y = (-2807.460764) + (73598.985362)x + (325.623763)x^2 + (0.000000)x^3
R-squared : 0.999943

BROMIDE
Component Type : Single Peak Component
Retention Time : 5.593 min
Search Window : 3.00 s, 6.10 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression

5/22/2008 5:26:41 PM Method: H:\DATA\IC5\IC5RE22.mth

Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	0.00	0.00			0
2	0.2000	10329.70	800.52			1
3	0.5000	23420.79	1884.33			1
4	5.0000	238045.50	17298.58			1
5	10.0000	496694.72	34726.02			1
6	20.0000	1042592.24	73324.56			1
7	30.0000	1626267.99	117982.80			1

Calibration Curve : y = (-819.535836) + (47526.616754)x + (224.925608)x^2 + (0.000000)x^3
R-squared : 0.999986

NITRATE
Component Type : Single Peak Component
Retention Time : 6.588 min
Search Window : 5.08 s, 4.90 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	2744.06	206.05			1
2	0.2000	17766.50	878.21			1
3	0.5000	32097.03	2151.53			1
4	5.0000	312008.96	18596.88			1
5	10.0000	641769.97	37257.03			1
6	20.0000	1355583.83	78195.86			1
7	30.0000	2114476.90	125112.97			1

Calibration Curve : y = (2040.968806) + (61216.589325)x + (308.866561)x^2 + (0.000000)x^3
R-squared : 0.999981

PHOSPHATE
Component Type : Single Peak Component
Retention Time : 8.771 min
Search Window : 5.00 s, 4.30 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1

5/22/2008 5:26:41 PM Method: H:\DATA\IC5\IC5RE22.mth

Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	0.00	0.00	———	———	0
3	0.5000	12624.42	675.66	———	———	1
4	5.0000	155471.55	6690.73	———	———	1
5	10.0000	327566.10	13691.64	———	———	1
6	20.0000	676045.54	28521.38	———	———	1
7	30.0000	1048565.84	45470.24	———	———	1

Calibration Curve : y = (-2306.866363) + (31660.894973)x + (112.487542)x^2 + (0.000000)x^3
R-squared : 0.999975

SULFATE
Component Type : Single Peak Component
Retention Time : 10.372 min
Search Window : 2.00 s, 4.95 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	0.00	0.00	———	———	0
2	0.4000	41692.08	1538.51	———	———	1
3	1.0000	84831.02	3552.55	———	———	1
4	10.0000	813622.11	32087.32	———	———	1
5	20.0000	1707690.76	67009.10	———	———	1
6	40.0000	3714762.71	145796.45	———	———	1
7	60.0000	5897209.24	234943.19	———	———	1

Calibration Curve : y = (-406.262043) + (79966.434916)x + (307.841599)x^2 + (0.000000)x^3
R-squared : 0.999959

Calibration Replicate Lists
Component : FLUORIDE
Level : 1

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
2327.06	266.31	0.0001	———	———	5/22/2008	5:25:04 PM	H:\DATA\IC5\20080522\20080522011A.rst

Level : 2

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
36276.90	4621.36	0.2000	———	———	5/22/2008	5:25:05 PM	H:\DATA\IC5\20080522\20080522005.rst

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	8J10052-BS1	
Calibration File:	IC5RE22C	Filename:	20081010002-0	
Data Sequence:	20081010	Analyzed:	Oct/10/08	1:00:08 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	5	5.13	102.6	90-110	
2	Chloride	5	5.08	101.6	90-110	
3	Fluoride	5	5.08	101.6	90-110	
4	Nitrate-NO3	5	5.3	106	90-110	
5	Nitrite-NO2	5	4.92	98.4	90-110	
6	Phosphate (PO4)	5	0	0	90-110	*
7	Sulfate	10	10.75	107.5	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081010014-0	
Data Sequence:	20081010	Analyzed:	Oct/10/08	3:33:32 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.09	101	90-110	
2	Chloride	10	10.18	102	90-110	
3	Fluoride	10	10.2	102	90-110	
4	Nitrate-NO3	10	10.23	102	90-110	
5	Nitrite-NO2	10	9.56	96	90-110	
6	Phosphate (PO4)	10	2.74	27	90-110	*
7	Sulfate	20	21.6	108	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081010026-0	
Data Sequence:	20081010	Analyzed:	Oct/10/08	6:09:36 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.01	100	90-110	
2	Chloride	10	10.2	102	90-110	
3	Fluoride	10	10.22	102	90-110	
4	Nitrate-NO3	10	10.4	104	90-110	
5	Nitrite-NO2	10	9.59	96	90-110	
6	Phosphate (PO4)	10	2.67	27	90-110	*
7	Sulfate	20	21.67	108	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081010038-0	
Data Sequence:	20081010	Analyzed:	Oct/10/08	8:49:03 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.01	100	90-110	
2	Chloride	10	10.23	102	90-110	
3	Fluoride	10	10.24	102	90-110	
4	Nitrate-NO3	10	10.39	104	90-110	
5	Nitrite-NO2	10	9.65	97	90-110	
6	Phosphate (PO4)	10	3.96	40	90-110	*
7	Sulfate	20	21.47	107	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081010061-0	
Data Sequence:	20081010	Analyzed:	Oct/11/08	1:46:13 AM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.11	101	90-110	
2	Chloride	10	10.29	103	90-110	
3	Fluoride	10	10.26	103	90-110	
4	Nitrate-NO3	10	10.5	105	90-110	
5	Nitrite-NO2	10	9.72	97	90-110	
6	Phosphate (PO4)	10	3.5	35	90-110	*
7	Sulfate	20	21.64	108	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081010050-0	
Data Sequence:	20081010	Analyzed:	Oct/10/08	11:24:36 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.13	101	90-110	
2	Chloride	10	10.29	103	90-110	
3	Fluoride	10	10.2	102	90-110	
4	Nitrate-NO3	10	10.45	105	90-110	
5	Nitrite-NO2	10	9.72	97	90-110	
6	Phosphate (PO4)	10	3.42	34	90-110	*
7	Sulfate	20	21.62	108	90-110	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081010039-0	
Data Sequence:	20081010	Analyzed:	Oct/10/08	9:02:59 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0	
3	Fluoride	0.5	0	
4	Nitrate-NO3	0.5	0.01	
5	Nitrite-NO2	0.5	0	
6	Phosphate (PO4)	0.5	0.18	
7	Sulfate	0.5	0	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB
Calibration File:	IC5RE22C	Filename:	20081010051-0
Data Sequence:	20081010	Analyzed:	Oct/10/08 11:37:28 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found √	
1	Bromide	0.5	0.08	
2	Chloride	0.5	0.04	
3	Fluoride	0.5	0.1	
4	Nitrate-NO3	0.5	0.01	
5	Nitrite-NO2	0.5	0.06	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	8J10052-BLK1	
Calibration File:	IC5RE22C	Filename:	20081010003-0	
Data Sequence:	20081010	Analyzed:	Oct/10/08	1:13:01 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found √	
1	Bromide	0.5	0	
2	Chloride	0.5	0	
3	Fluoride	0.5	0	
4	Nitrate-NO3	0.5	0	
5	Nitrite-NO2	0.5	0	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081010015-0	
Data Sequence:	20081010	Analyzed:	Oct/10/08	3:46:24 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found √	
1	Bromide	0.5	0	
2	Chloride	0.5	0.03	
3	Fluoride	0.5	0.1	
4	Nitrate-NO3	0.5	0	
5	Nitrite-NO2	0.5	0	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081010027-0	
Data Sequence:	20081010	Analyzed:	Oct/10/08	6:22:29 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0.05	
3	Fluoride	0.5	0.09	
4	Nitrate-NO3	0.5	0	
5	Nitrite-NO2	0.5	0.08	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0.15	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081010062-0	
Data Sequence:	20081010	Analyzed:	Oct/11/08	1:59:05 AM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0.05	
3	Fluoride	0.5	0.1	
4	Nitrate-NO3	0.5	0	
5	Nitrite-NO2	0.5	0.09	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0	

No D

(*) = Out of range

RUN LOG

Intrument: ***ICDNX5A***

Calib.file #: IC5RE22C Calib. date: 5/22/2008

#	File_Name	Lab_Number	Dilution	Analyzed	Time
1	20081010001-0	IB	1	Oct/10/08	12:47:16 PM
2	20081010002-0	8J10052-BS1	1	Oct/10/08	1:00:08 PM
3	20081010003-0	8J10052-BLK1	1	Oct/10/08	1:13:01 PM
4	20081010004-0	[sample]	1	Oct/10/08	1:25:53 PM
5	20081010005-0	IRJ1013-02	50	Oct/10/08	1:38:45 PM
6	20081010006-0	IRJ1013-09	50	Oct/10/08	1:51:38 PM
7	20081010007A-0	IRJ0798-01	1	Oct/10/08	2:04:30 PM
8	20081010007-0	IRJ0798-01	1	Oct/10/08	2:04:30 PM
9	20081010008-0	BLK	1	Oct/10/08	2:17:22 PM
10	20081010009-0	IRJ0570-01	1	Oct/10/08	2:30:15 PM
11	20081010010-0	IRJ1062-05	1	Oct/10/08	2:42:02 PM
12	20081010011-0	IRJ1062-06	1	Oct/10/08	2:54:55 PM
13	20081010012-0	IRJ1062-07	1	Oct/10/08	3:07:47 PM
14	20081010013-0	IRJ1062-08	1	Oct/10/08	3:20:40 PM
15	20081010014-0	CCV	1	Oct/10/08	3:33:32 PM
16	20081010015-0	CCB	1	Oct/10/08	3:46:24 PM
17	20081010016-0	IRJ1062-09	1	Oct/10/08	4:00:54 PM
18	20081010017-0	IRJ1062-05	20	Oct/10/08	4:13:46 PM
19	20081010018-0	IRJ1062-06	50	Oct/10/08	4:26:37 PM
20	20081010019-0	IRJ1062-07	100	Oct/10/08	4:39:29 PM
21	20081010020-0	IRJ1062-08	50	Oct/10/08	4:52:22 PM
22	20081010021-0	IRJ1062-09	50	Oct/10/08	5:05:14 PM
23	20081010022-0	IRJ1062-10	1	Oct/10/08	5:18:07 PM
24	20081010023-0	IRJ1062-11	1	Oct/10/08	5:30:59 PM
25	20081010024-0	IRJ1062-12	1	Oct/10/08	5:43:52 PM
26	20081010025-0	IRJ1062-13	1	Oct/10/08	5:56:44 PM
27	20081010026-0	CCV	1	Oct/10/08	6:09:36 PM
28	20081010027-0	CCB	1	Oct/10/08	6:22:29 PM
29	20081010028A-0	IRJ1080-01	20	Oct/10/08	6:40:20 PM
30	20081010028-0	IRJ1080-01	20	Oct/10/08	6:40:20 PM
31	20081010029-0	IRJ0886-02	50	Oct/10/08	6:53:13 PM
32	20081010030-0	IRJ0886-02	1000	Oct/10/08	7:06:05 PM
33	20081010031-0	IRJ1062-11	10	Oct/10/08	7:18:56 PM
34	20081010032-0	8J10052-MS1	10	Oct/10/08	7:31:48 PM
35	20081010033-0	8J10052-MSD1	10	Oct/10/08	7:44:41 PM
36	20081010034-0	IRJ1062-12	50	Oct/10/08	7:57:33 PM
37	20081010035-0	IRJ1062-13	50	Oct/10/08	8:10:26 PM
38	20081010036-0	8J10125-BS1	1	Oct/10/08	8:23:18 PM
39	20081010037-0	8J10125-BLK1	1	Oct/10/08	8:36:10 PM
40	20081010038-0	CCV	1	Oct/10/08	8:49:03 PM
41	20081010039-0	CCB	1	Oct/10/08	9:02:59 PM
42	20081010040-0	IRJ1154-01	5	Oct/10/08	9:15:52 PM
43	20081010041-0	IRJ1154-02	5	Oct/10/08	9:28:44 PM
44	20081010042-0	IRJ1101-01	1	Oct/10/08	9:41:37 PM
45	20081010043-0	IRJ1159-01	5	Oct/10/08	9:54:29 PM
46	20081010044-0	IRJ1080-01	100	Oct/10/08	10:07:21 PM
47	20081010045-0	IRJ1080-01	1000	Oct/10/08	10:20:14 PM
48	20081010046-0	IRJ1162-02	2	Oct/10/08	10:33:06 PM
49	20081010047-0	IRJ1162-02	100	Oct/10/08	10:45:59 PM
50	20081010048-0	IRJ1162-03	2	Oct/10/08	10:58:51 PM
51	20081010049-0	IRJ1162-03	100	Oct/10/08	11:11:43 PM
52	20081010050-0	CCV	1	Oct/10/08	11:24:36 PM
53	20081010051-0	CCB	1	Oct/10/08	11:37:28 PM
54	20081010052-0	IRJ1162-04	2	Oct/10/08	11:50:21 PM
55	20081010053-0	IRJ1162-04	100	Oct/11/08	12:03:13 AM
56	20081010054-0	8J10052-MS2	1	Oct/11/08	12:16:06 AM
57	20081010055a-0	IRJ1171-01	1	Oct/11/08	12:28:58 AM
58	20081010055-0	IRJ1171-01	1	Oct/11/08	12:28:58 AM
59	20081010056-0	IRJ1171-01	5	Oct/11/08	12:41:51 AM
60	20081010057-0	8J10125-MS1	5	Oct/11/08	12:54:43 AM
61	20081010058-0	8J10125-MSD1	5	Oct/11/08	1:07:35 AM
62	20081010059a-0	IRJ1174-01	1	Oct/11/08	1:20:28 AM
63	20081010059-0	IRJ1174-01	1	Oct/11/08	1:20:28 AM

64	20081010060-0	IRJ1174-01	5	Oct/11/08	1:33:20 AM
65	20081010061-0	CCV	1	Oct/11/08	1:46:13 AM
66	20081010062-0	CCB	1	Oct/11/08	1:59:05 AM
67	20081010063a-0	IRJ1176-01	1	Oct/11/08	2:11:58 AM
68	20081010063-0	IRJ1176-01	1	Oct/11/08	2:11:58 AM
69	20081010064-0	IRJ1176-01	5	Oct/11/08	2:24:50 AM
70	20081010065a-0	IRJ1178-01	1	Oct/11/08	2:37:43 AM
71	20081010065-0	IRJ1178-01	1	Oct/11/08	2:37:43 AM
72	20081010066-0	IRJ1178-01	5	Oct/11/08	2:50:35 AM
73	20081010067a-0	IRJ1178-02	1	Oct/11/08	3:03:27 AM
74	20081010067-0	IRJ1178-02	1	Oct/11/08	3:03:27 AM
75	20081010068-0	IRJ1178-02	5	Oct/11/08	3:16:20 AM
76	20081010069a-0	IRJ1178-03	1	Oct/11/08	3:29:12 AM
77	20081010069-0	IRJ1178-03	1	Oct/11/08	3:29:12 AM
78	20081010070-0	IRJ1178-03	5	Oct/11/08	3:42:05 AM
79	20081010071-0	IRJ1158-01	1	Oct/11/08	3:54:57 AM
80	20081010072-0	IRJ1158-01	5	Oct/11/08	4:07:50 AM
81	20081010073-0	CCV	1	Oct/11/08	4:20:42 AM
82	20081010074-0	CCB	1	Oct/11/08	4:33:34 AM
83	20081010075-0	IRJ1158-02	1	Oct/11/08	4:46:27 AM
84	20081010076-0	IRJ1158-02	5	Oct/11/08	4:59:19 AM
85	20081010077-0	IRJ1158-03	1	Oct/11/08	5:12:12 AM
86	20081010078-0	IRJ1158-03	5	Oct/11/08	5:25:04 AM
87	20081010079-0	IRJ1158-04	1	Oct/11/08	5:37:56 AM
88	20081010080-0	IRJ1158-04	5	Oct/11/08	5:50:49 AM
89	20081010081a-0	IRJ1158-05	1	Oct/11/08	6:03:41 AM
90	20081010081-0	IRJ1158-05	1	Oct/11/08	6:03:41 AM
91	20081010082-0	IRJ1158-05	5	Oct/11/08	6:16:34 AM
92	20081010083a-0	IRJ1158-06	1	Oct/11/08	6:29:26 AM
93	20081010083-0	IRJ1158-06	1	Oct/11/08	6:29:26 AM
94	20081010084-0	IRJ1158-06	5	Oct/11/08	6:42:19 AM
95	20081010085-0	CCV	1	Oct/11/08	6:55:11 AM
96	20081010086-0	CCB	1	Oct/11/08	7:08:03 AM
97	20081010087a-0	IRJ1158-07	1	Oct/11/08	7:20:56 AM
98	20081010087-0	IRJ1158-07	1	Oct/11/08	7:20:56 AM
99	20081010086-0	IRJ1158-07	5	Oct/11/08	7:33:48 AM
100	20081010089-0	IRJ1158-08	1	Oct/11/08	7:46:41 AM
101	20081010090-0	IRJ1158-08	5	Oct/11/08	7:59:33 AM
102	20081010091-0	IRJ1158-09	1	Oct/11/08	8:12:26 AM
103	20081010092-0	IRJ1158-09	5	Oct/11/08	8:25:18 AM
104	20081010093-0	8J10125-MS2	5	Oct/11/08	8:38:10 AM
105	20081010094-0	IRJ1185-01	1	Oct/11/08	8:51:03 AM
106	20081010095-0	IRJ1185-01	20	Oct/11/08	9:03:55 AM
107	20081010096-0	CCV	1	Oct/11/08	9:16:48 AM
108	20081010097-0	CCB	1	Oct/11/08	9:29:40 AM

PREPARATION BENCH SHEET

8J10052

TestAmerica Irvine **Printed: 10/11/2008 1:09:22PM**

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials			Extraction Comments
8J10052-BLK1		QC	10/10/08 12:45	10	10										
8J10052-BS1		QC	10/10/08 12:45	10	10		8090124	50							
8J10052-MS1		QC	10/10/08 19:30	10	10	IRJ1062-11	8090124	500							
8J10052-MS2		QC	10/10/08 21:30	10	10	IRJ1101-01	8090124	50							
8J10052-MSD1		QC	10/10/08 19:30	10	10	IRJ1062-11	8090124	500							
IRJ0886-02	B	Fluoride-300.0	10/10/08 18:45	10	10										BP Sequence. J flag.
IRJ0886-02	B	Sulfate-300.0	10/10/08 18:45	10	10										BP Sequence. J flag.
IRJ1013-02	F	Nitrate-N, 300.0	10/10/08 13:30	10	10										
IRJ1013-09	F	Nitrate-N, 300.0	10/10/08 13:30	10	10										
IRJ1062-05	A	Sulfate-300.0 CA DW	10/10/08 14:30	10	10										
IRJ1062-05	A	Chloride - 300.0 CA D	10/10/08 14:30	10	10										
IRJ1062-05	A	Nitrate-NO3, 300.0 CA	10/10/08 14:30	10	10										
IRJ1062-06	A	Chloride - 300.0 CA D	10/10/08 14:30	10	10										
IRJ1062-06	A	Nitrate-NO3, 300.0 CA	10/10/08 14:30	10	10										
IRJ1062-06	A	Sulfate-300.0 CA DW	10/10/08 14:30	10	10										
IRJ1062-07	A	Chloride - 300.0 CA D	10/10/08 14:30	10	10										
IRJ1062-07	A	Nitrate-NO3, 300.0 CA	10/10/08 14:30	10	10										
IRJ1062-07	A	Sulfate-300.0 CA DW	10/10/08 14:30	10	10										
IRJ1062-08	A	Chloride - 300.0 CA D	10/10/08 14:30	10	10										
IRJ1062-08	A	Nitrate-NO3, 300.0 CA	10/10/08 14:30	10	10										

Spiking Witnessed By Date

Preparation Reviewed By Date

L 10/13/08

Extracts Received By Date

PREPARATION BENCH SHEET

8J10052

TestAmerica Irvine

Printed: 10/11/2008 1:09:22PM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials			Extraction Comments
IRJ1062-08	A	Sulfate-300.0 CA DW	10/10/08 14:30	10	10										
IRJ1062-09	A	Chloride - 300.0 CA D	10/10/08 14:30	10	10										
IRJ1062-09	A	Nitrate-NO3, 300.0 CA	10/10/08 14:30	10	10										
IRJ1062-09	A	Sulfate-300.0 CA DW	10/10/08 14:30	10	10										
IRJ1062-10	A	Chloride - 300.0 CA D	10/10/08 14:30	10	10										
IRJ1062-10	A	Nitrate-NO3, 300.0 CA	10/10/08 14:30	10	10										
IRJ1062-10	A	Sulfate-300.0 CA DW	10/10/08 14:30	10	10										
IRJ1062-11	A	Chloride - 300.0	10/10/08 14:30	10	10										Added for BatchQC in: 8J10052
IRJ1062-11	A	Nitrogen, NO3+NO2 -N	10/10/08 14:30	10	10										Added for BatchQC in: 8J10052
IRJ1062-11	A	Nitrite-N, 300.0 CA DW	10/10/08 14:30	10	10										Added for BatchQC in: 8J10052
IRJ1062-11	A	Nitrite-N, 300.0	10/10/08 14:30	10	10										Added for BatchQC in: 8J10052
IRJ1062-11	A	Nitrate-NO3, 300.0 CA	10/10/08 14:30	10	10										
IRJ1062-11	A	Nitrate-NO3, 300.0	10/10/08 14:30	10	10										Added for BatchQC in: 8J10052
IRJ1062-11	A	Nitrate-N, 300.0 CA D	10/10/08 14:30	10	10										Added for BatchQC in: 8J10052
IRJ1062-11	A	Nitrate-N, 300.0	10/10/08 14:30	10	10										Added for BatchQC in: 8J10052
IRJ1062-11	A	Chloride - 300.0 CA D	10/10/08 14:30	10	10										
IRJ1062-11	A	Sulfate-300.0 CA DW	10/10/08 14:30	10	10										
IRJ1062-11	A	Fluoride-300.0	10/10/08 14:30	10	10										Added for BatchQC in: 8J10052
IRJ1062-11	A	Sulfate-300.0	10/10/08 14:30	10	10										Added for BatchQC in: 8J10052
IRJ1062-12	A	Chloride - 300.0 CA D	10/10/08 14:30	10	10										

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BENCH SHEET

8J10052

TestAmerica Irvine

Printed: 10/11/2008 1:09:22PM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
IRJ1062-12	A	Nitrate-NO3, 300.0 CA	10/10/08 14:30	10	10								
IRJ1062-12	A	Sulfate-300.0 CA DW	10/10/08 14:30	10	10								
IRJ1062-13	A	Chloride - 300.0 CA D	10/10/08 14:30	10	10								
IRJ1062-13	A	Nitrate-NO3, 300.0 CA	10/10/08 14:30	10	10								
IRJ1062-13	A	Sulfate-300.0 CA DW	10/10/08 14:30	10	10								
IRJ1080-01	B	Chloride - 300.0	10/10/08 18:30	10	10								BP Sequence. J flag.
IRJ1080-01	B	Sulfate-300.0	10/10/08 18:30	10	10								BP Sequence. J flag.
IRJ1080-01	B	Nitrite-N, 300.0	10/10/08 18:30	10	10								BP Sequence. J flag.
IRJ1080-01	B	Fluoride-300.0	10/10/08 18:30	10	10								BP Sequence. J flag.
IRJ1080-01	B	Nitrate-N, 300.0	10/10/08 18:30	10	10								BP Sequence. J flag.
IRJ1101-01	AD	Nitrate-NO3, 300.0 CA	10/10/08 21:00	10	10								Added for BatchQC in: 8J10052
IRJ1101-01	AD	Sulfate-300.0	10/10/08 21:00	10	10								Added for BatchQC in: 8J10052
IRJ1101-01	AD	Nitrogen, NO3+NO2 -N	10/10/08 21:00	10	10								
IRJ1101-01	AD	Sulfate-300.0 CA DW	10/10/08 21:00	10	10								
IRJ1101-01	AD	Nitrite-N, 300.0	10/10/08 21:00	10	10								Added for BatchQC in: 8J10052
IRJ1101-01	AD	Nitrate-N, 300.0 CA D	10/10/08 21:00	10	10								
IRJ1101-01	AD	Nitrate-N, 300.0	10/10/08 21:00	10	10								Added for BatchQC in: 8J10052
IRJ1101-01	AD	Fluoride-300.0	10/10/08 21:00	10	10								Added for BatchQC in: 8J10052
IRJ1101-01	AD	Chloride - 300.0 CA D	10/10/08 21:00	10	10								
IRJ1101-01	AD	Chloride - 300.0	10/10/08 21:00	10	10								Added for BatchQC in: 8J10052

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

BIANNUAL MDL STUDY

INORGANIC ANIONS BY IC - EPA 300.0 / SM 4110B / SW9056

Analyt. Method: EPA 300.0 / SW 9056 / SM 4110b — Instrument: ICDNX5A
Prep Method: 10-->10ml — Low Cal.: 0.2 mg/L
Matrix: Water (10ml-->10ml) — (o-P:0.5, SO4: 0.4)
Units: mg/L

Reviewed: T.Vu (Jul/29/08)

#	Analyte	oc Spike(mg/l)		MDL Runs - (mg/L oc)							Calc Data (mg/L-oc)			final	LIMS (mg/L)			Validation Criteria				Comm't
		recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Avrg	StdDev	MDL	MDL	MDL	RL	lowRL	MDL<RL	Ch'g	Ratio (1-10)	%Rec	Grubbs test
	filename:			200805230	200805230	200805230	200805240	200805240	200805250	20080525032-20080527-142450-0												
	labnumber:			0.5	0.5	0.5	0.5	0.5	0.5	0.5												
	date:			May/23/08	May/23/08	May/23/08	May/24/08	May/24/08	May/25/08	May/25/08												
	time:			19:28	19:43	19:57	12:20	12:34	19:56	20:11												
1	Bromide	0.5	0.50	0.463	0.583	0.649	0.599	0.489	0.421	0.566	0.539	0.082	0.26	0.26	0.35	0.50	0.50	OK	-26%	2	108%	
2	Chloride	0.5	0.50	0.516	0.504	0.488	0.524	0.482	0.510	0.522	0.507	0.016	0.05	0.05	0.25	0.50	0.50	OK	-80%	10	101%	
3	Fluoride	0.5	0.25	0.302	0.307	0.326	0.313	0.299	0.308	0.395	0.321	0.033	0.11	0.11	0.15	0.50	0.50	OK	-30%	2	128%	
4	Nitrate-NO3	0.5	0.50	0.596	0.488	0.513	0.434	0.504	0.424	0.452	0.487	0.059	0.19	0.19	0.25	0.50	0.50	OK	-26%	3	97%	
5	Nitrite-NO2	0.5	0.50	0.531	0.567	0.542	0.551	0.508	0.520	0.515	0.533	0.021	0.07	0.07	0.30	0.50	0.50	OK	-78%	8	107%	
6	Orthophosphate - PO4	0.5	0.50	0.724	0.428	0.764	0.585	0.716	0.675	0.467	0.623	0.132	0.42	0.42	0.40	0.50	0.50	OK	no ch'g	1.2	125%	
7	Sulfate	0.5	1.0	1.022	1.0331	1.0806	0.9835	1.0398	1.0614	1.0533	1.039	0.031	0.10	0.10	0.2	0.50	0.50	OK	-51%	10	104%	
	For Reference:																					
3	Fluoride	0.5	0.50	0.483	0.506	0.508	0.508	0.497	0.519	0.508	0.504	0.011	0.04	0.04	0.15	0.50	0.50	OK	-76%	14	101%	

ALKALINITY

(EPA 310.1 & SM 2320B)

Analyst: DC
Date: 10.14.2008
HCL Normality: **0.02**
0.02 HCL ID: ####### 8100029

2° Review: ✓
Date: 10/16/08
Batches: 8J14052

Lab Sample ID:	Vol / Wt	Matrix	Initial	Vol	Vol	Vol	(P) Alk	(T) Total Alk	HCO3		CO3		OH	
				@ pH	@ pH	@ pH	as mg/l	as mg/l	as mg/l	as mg/l	as mg/l	as mg/l	as mg/l	as mg/l
	ml / g	W / S	pH	8.3	4.5	4.2	CaCO3	CaCO3	CaCO3	HCO3	CaCO3	CO3	CaCO3	OH
LCS (8090571)	25.00	W	9.00	2.85	4.50		114.0	180.0	0.0	0.00	132.0	79.14	48.0	16.31
BLK	100.00	W	5.41	0.00	0.10		0.0	1.0	1.0	1.22	0.0	0.00	0.0	0.00
IRJ1111-01	100.00	W	7.32	0.00	1.40		0.0	14.0	14.0	17.07	0.0	0.00	0.0	0.00
IRJ1080-01	25.00	W	3.74	0.00	0.00		0.0	0.0	0	0.00	0.0	0.00	0.0	0.00
IRJ1101-01	100.00	W	6.10	0.00	0.20		0.0	2.0	2.0	2.44	0.0	0.00	0.0	0.00
IRJ1185-01	25.00	W	7.21	0.00	4.30		0.0	172.0	172.0	209.71	0.0	0.00	0.0	0.00
IRJ1284-01	25.00	W	7.46	0.00	4.40		0.0	176.0	176.0	214.59	0.0	0.00	0.0	0.00
IRJ1213-01	100.00	W	6.00	0.00	0.15		0.0	1.5	1.5	1.83	0.0	0.00	0.0	0.00
IRJ1246-01	25.00	W	7.23	0.00	6.60		0.0	264.0	264.0	321.88	0.0	0.00	0.0	0.00
IRJ1246-01DUP	25.00	W	7.26	0.00	6.65		0.0	266.0	266.0	324.32	0.0	0.00	0.0	0.00
IRJ1247-01	100.00	W	5.73	0.00	0.60		0.0	6.0	6.0	7.32	0.0	0.00	0.0	0.00
IRJ1248-01	5.00	W	7.29	0.00	5.60		0.0	1120.0	1120.0	1365.55	0.0	0.00	0.0	0.00

Legend:

P: 8.3 pH endpoint Alkalinity
T: 4.5 pH endpoint Alkalinity

PREPARATION BENCH SHEET

8J14052

TestAmerica Irvine

Printed: 11/5/2008 8:18:40AM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Surrogate	Initials		Extraction Comments
8J14052-BLK1		QC	10/14/08 09:09	25	25							
8J14052-DUP1		QC	10/14/08 09:09	25	25	IRJ1246-01						
8J14052-SRM1		QC	10/14/08 09:09	25	25		8090571	25000				
IRJ1080-01	B	Alkalinity-All forms (as	10/14/08 09:09	25	25							BP Sequence. J flag
IRJ1101-01	AC	Alkalinity-Bicarb CA D	10/14/08 09:09	25	25							
IRJ1101-01	AC	Alkalinity-Carb CA DW	10/14/08 09:09	25	25							
IRJ1101-01	AC	Alkalinity-Hydroxide C	10/14/08 09:09	25	25							
IRJ1101-01	AC	Alkalinity-Total CA DW	10/14/08 09:09	25	25							
IRJ1111-01	B	Alkalinity-All forms (as	10/14/08 09:09	25	25							
IRJ1185-01	C	Alkalinity-Total CA DW	10/14/08 09:09	25	25							
IRJ1185-01	C	Alkalinity-All forms (as	10/14/08 09:09	25	25							
IRJ1213-01	B	Alkalinity-All forms (as	10/14/08 09:09	25	25							BP Sequence. J flag
IRJ1246-01	A	Alkalinity-All forms (as	10/14/08 09:09	25	25							Added for BatchQC in: 8J14052
IRJ1246-01	A	Alkalinity-All forms (as	10/14/08 09:09	25	25							
IRJ1246-01	A	Alkalinity-Bicarb CA D	10/14/08 09:09	25	25							Added for BatchQC in: 8J14052
IRJ1246-01	A	Alkalinity-Carb CA DW	10/14/08 09:09	25	25							Added for BatchQC in: 8J14052
IRJ1246-01	A	Alkalinity-Hydroxide C	10/14/08 09:09	25	25							Added for BatchQC in: 8J14052
IRJ1246-01	A	Alkalinity-SM2320B, T	10/14/08 09:09	25	25							Added for BatchQC in: 8J14052
IRJ1246-01	A	Alkalinity-Total CA DW	10/14/08 09:09	25	25							Added for BatchQC in: 8J14052
IRJ1247-01	A	Alkalinity-All forms (as	10/14/08 09:09	25	25							sub to TA-I

N/A
Spiking Witnessed By Date

Im 11/6/08
Preparation Reviewed By Date

Extracts Received By Date

574

TOTAL DISSOLVED / SUSPENDED SOLIDS
(EPA 160.1/160.2 & SM 2540C,D)

Log Book / Page: TDS/30
Analysis Date: 10/11/2008 8J11032
Analyst: MC
Reviewd by: 10/17/08

Lab ID	Initial Sample (S) (g)	Initial Sample (W) (ml)	Dish or Filter (g)	Dish/Filter & Spl (#1) (g)	Dish/Filter & Spl (#2) (g)	Dryness Check (|1-2|) (Diff:<0.5mg)		Result (W) (mg/L)	Result (S) (mg/Kg)
-BLK		100.0	67.2134	67.2137	67.2136	0.1	OK	2.0	
LCS(8090180)		50.0	67.0695	67.1185	67.1184	0.1	OK	978.0	
DUP 1062-01		20.0	64.9296	65.0031	65.0031	0.0	OK	3675.0	
IRJ 1062-01		20.0	79.0527	79.1276	79.1276	0.0	OK	3745.0	
IRJ 1062-02		100.0	64.7622	64.7970	64.7969	0.1	OK	347.0	
IRJ 1062-03		100.0	77.7043	77.7392	77.7391	0.1	OK	348.0	
IRJ 1062-04		100.0	76.1548	76.2069	76.2068	0.1	OK	520.0	
IRJ 1062-05		50.0	75.9421	75.9805	75.9804	0.1	OK	766.0	
IRJ 1062-06		20.0	67.9452	68.0259	68.0257	0.2	OK	4025.0	
IRJ 1062-07		10.0	73.1510	73.1951	73.1950	0.1	OK	4400.0	
IRJ 1062-08		50.0	64.7221	64.8580	64.8580	0.0	OK	2718.0	
IRJ 1062-09		50.0	66.2840	66.4180	66.4180	0.0	OK	2680.0	
IRJ 1062-10		100.0	75.1415	75.1426	75.1425	0.1	OK	10.0	
IRJ 0963-01		100.0	79.3320	79.4146	79.4145	0.1	OK	825.0	
IRJ 1202-01		10.0	85.4399	85.5255	85.5254	0.1	OK	8550.0	
IRJ 1024-01		100.0	66.0964	66.1727	66.1725	0.2	OK	761.0	
IRJ 1024-02		50.0	72.4505	72.4883	72.4881	0.2	OK	752.0	
IRJ 1027-01		100.0	67.4897	67.5351	67.5350	0.1	OK	453.0	
IRJ 1027-02		100.0	74.2442	74.3822	74.3820	0.2	OK	1378.0	
IRJ 1109-01		100.0	65.9583	66.0117	66.0117	0.0	OK	534.0	
IRJ 1111-01		50.0	67.0983	67.1447	67.1447	0.0	OK	928.0	
IRJ 1080-01		5.0	76.1994	76.2733	76.2730	0.3	OK	14720.0	
IRJ 1101-01		100.0	76.0543	76.0544	76.0544	0.0	OK	1.0	

$$\text{TDS / TSS (mg/L)} = \frac{[(\text{Dish \& Spl}) - \text{Dish}] \times 1{,}000{,}000}{\text{Initial Spl (W)}}$$

$$\text{TDS (mg/Kg)} = \frac{[(\text{Dish \& Spl}) - \text{Dish}] \times 1{,}000{,}000}{\text{Initial Spl (S)}}$$

PREPARATION BENCH SHEET

8J11032

TestAmerica Irvine

Printed: 11/5/2008 8:18:23AM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Surrogate	Initials		Extraction Comments
8J11032-BLK1		QC	10/11/08 08:14	100	100							
8J11032-BS1		QC	10/11/08 08:14	50	50		8090180	50000				
8J11032-DUP1		QC	10/11/08 08:14	100	100	IRJ1062-01						
IRJ0963-01	F	TDS - SM 2540C	10/11/08 08:14	100	100							J flag.
IRJ1024-01	B	TDS - EPA 160.1	10/11/08 08:14	100	100							
IRJ1024-02	A	TDS - EPA 160.1	10/11/08 08:14	100	100							
IRJ1027-01	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1027-02	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-01	A	TDS - EPA 160.1	10/11/08 08:14	100	100							Added for BatchQC in: 8J11032
IRJ1062-01	A	TDS - SM 2540C	10/11/08 08:14	100	100							Added for BatchQC in: 8J11032
IRJ1062-01	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-02	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-03	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-04	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-05	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-06	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-07	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-08	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-09	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
IRJ1062-10	A	TDS - SM 2540C CA D	10/11/08 08:14	100	100							

N/A
Spiking Witnessed By Date

Preparation Reviewed By 11/6/08
Date

Extracts Received By Date

PREPARATION BENCH SHEET

8J11032

TestAmerica Irvine

Printed: 11/5/2008 8:18:23AM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Surrogate	Initials		Extraction Comments
1RJ1080-01	B	TDS - SM 2540C	10/11/08 08:14	100	100							BP Sequence. J flag.
1RJ1101-01	AC	TDS - SM 2540C CA D	10/11/08 08:14	100	100							
1RJ1109-01	A	TDS - SM 2540C	10/11/08 08:14	100	100							
1RJ1111-01	A	TDS - SM 2540C	10/11/08 08:14	100	100							
1RJ1202-01	A	TDS - SM 2540C	10/11/08 08:14	100	100							

Reagents used in Batch

Reagent	Description	Solvent

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

590

TOC-Control

General Information

Organization:	dma
User:	inorg1
Title:	TOC
Instrument ID:	toc1
Filename:	C:\TOCCNTR\DATA\081007.TOC
Comment:	

Instrument Conditions

Instrument Attachments:	TOC-5000 + ASI 5000
TC-Cat Type:	Normal sense TC catalyst
Bubble Removal:	OFF
Syringe Size:	250 µl
Injection Speed:	STD
Syringe Wash:	STD
Vial Size:	Normal sense Vials
Rinse:	ON
Rinse After Acid Addition:	OFF
No. Of Needle Washes:	0
No. Of Flow Line Washes:	2

Calibration Curves

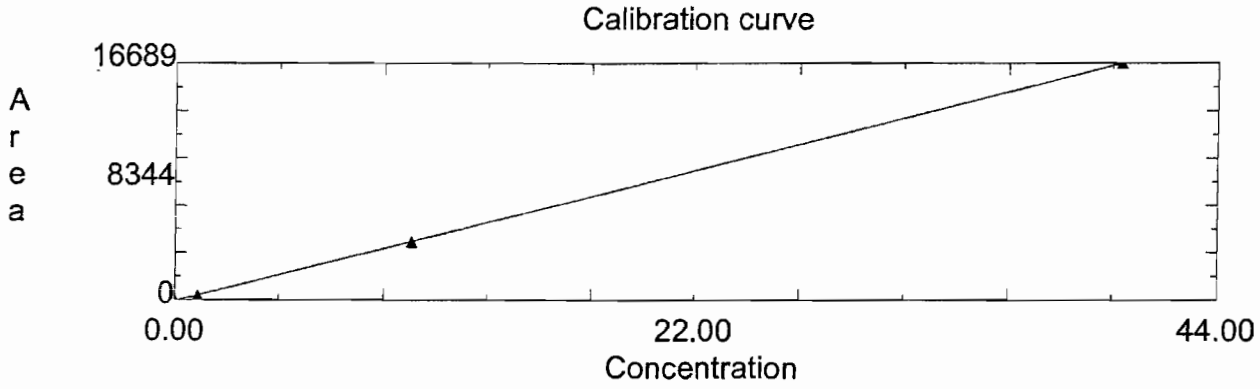
Filename:	2001007.cal
Title:	TOC-CAL
Calculation method:	Lin. regression without zero shift
Catalyst:	Normal sense TC catalyst

Analysis	No. of Washes	Unit	Range	Inj.Vol	Max SD	Max CV
NPOC	4	ppm	1	50	200	2.00%

Sample Name	Sample ID	Vial	Conc.	No. of Inj.	Max No. of Inj.	Mean Area	SD	CV
TOC-CAL	STD 1	S	0.000	2	4	0	0	0.00%
TOC-CAL	STD 2	S	1.000	2	4	304	2	.930%
TOC-CAL	STD 3	S	10.00	2	4	4054	4	1.08%
TOC-CAL	STD 4	S	40.00	2	4	16689	163	.979%

TOC-Control

Slope: 418.79
Intercept: -77.918
R^2: 0.999941 ✓



Calibration Curves

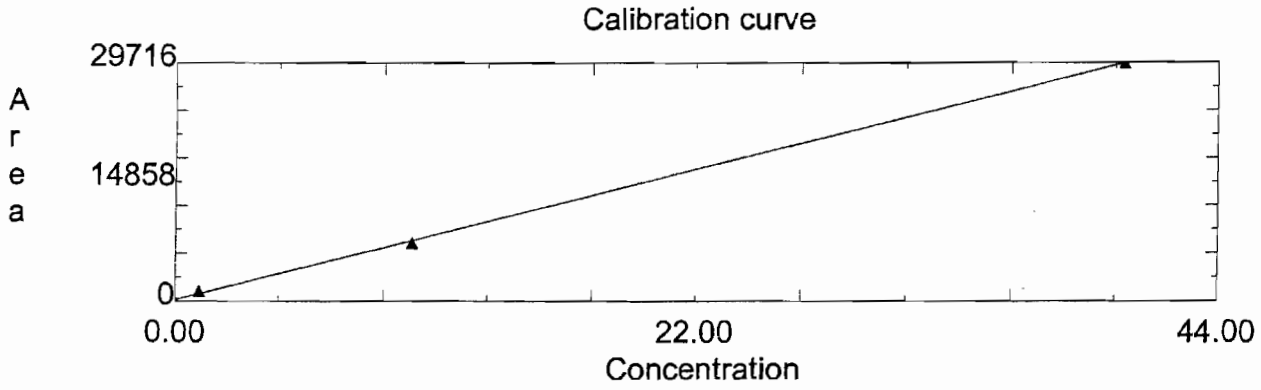
Filename: 20081006.cal
Title: TOC-CAL
Calculation method: Lin. regression without zero shift
Catalyst: Normal sense TC catalyst

Analysis	No. of Washes	Unit	Range	Inj.Vol	Max SD	Max CV
NPOC	4	ppm	1	50	200	2.00%

Sample Name	Sample ID	Vial	Conc.	No. of Inj.	Max No. of Inj.	Mean Area	SD	CV
TOC-CAL	STD 1	S	0.000	2	4	0	0	0.00%
TOC-CAL	STD 2	S	1.000	2	4	1231	4	3.39%
TOC-CAL	STD 3	S	10.00	2	4	7284	2	.340%
TOC-CAL	STD 4	S	40.00	2	4	29716	284	.959%

Slope: 737.82
Intercept: 150.23
R^2: 0.999646 ✓

TOC-Control


Calibration curve
29716
14858
0
Area
0.00
22.00
44.00
Concentration

TOC
2nd SOURCE CALIBRATION VERIFICATION SUMMARY

Instrument: **Shimadzu SSM5000A**
Calibration File: **081007.MET** ICV Std ID: 8050152

	Sample Name	Analyte	Conc (mg/Kg)		% Rec	% Limits	Q	Analyzed:
			True	Found				
1	ICV	Total Organic Carbon	10	10.04	100	90-110		10/7/2008

Q (*): denotes "Out of range"

TOC
CALIBRATION VERIFICATION SUMMARY

Instrument: **Shimadzu SSM5000A** CCV Std ID: 8050154
Calibration File: **081007.MET**

	Sample Name	Analyte	Conc (mg/Kg) True	Conc (mg/Kg) Found	% Rec	% Limits	Q	Analyzed:	Time
1	CCV1	Total Organic Carbon	10	10.48	105	90-110		10/14/2008	8:19:18 AM

Q (*): denotes "Out of range"

TOC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument: **Shimadzu SSM5000A**
Calibration File: **081007.MET**

	Sample Name	Analyte	Conc (mg/Kg)		Q	Analyzed:	Time
			MRL	Found			
1	CCB1	Total Organic Carbon	1	0.1861		10/14/2008	8:26:07 AM

Q (*): denotes "Out of range"

< MDL

	Sample Name	Sample ID	Analysis	Dilution	Date / Time	Conc.	Mean Area
1	TOC-CAL	STD 1	NPOC	1.000	10/07/08 09:	0.000 ppm	0
2	TOC-CAL	STD 2	NPOC	1.000	10/07/08 09:	1.000 ppm	304
3	TOC-CAL	STD 3	NPOC	1.000	10/07/08 09:	10.00 ppm	4054
4	TOC-CAL	STD 4	NPOC	1.000	10/07/08 10:	40.00 ppm	16688
5	IB	TOC	NPOC	1.000	10/14/08 06:	0.1861 ppm	0
6	MP (ID 8050	TOC	NPOC	1.000	10/14/08 06:	20.30 ppm	8422
7	8J14030-BS1	TOC	NPOC	1.000	10/14/08 06:	10.73 ppm	4416
8	8J14030-BLK	TOC	NPOC	1.000	10/14/08 06:	0.1861 ppm	0
9	30 PPM	TOC	NPOC	1.000	10/14/08 06:	29.76 ppm	12387
10	IRJ0759-01	TOC	NPOC	1.000	10/14/08 07:	8.997 ppm	3690
11	8J14030-MS	TOC	NPOC	1.000	10/14/08 07:	14.16 ppm	5853
12	8J14030-MS	TOC	NPOC	1.000	10/14/08 07:	13.75 ppm	5679
13	IRJ0759-02	TOC	NPOC	1.000	10/14/08 07:	6.410 ppm	2606
14	IRJ0759-03	TOC	NPOC	1.000	10/14/08 07:	6.507 ppm	2647
15	IRJ1080-01	TOC	NPOC	1.000	10/14/08 07:	15.97 ppm	6611
16	IRJ1213-01	TOC	NPOC	1.000	10/14/08 07:	0.1861 ppm	0
17	IRJ0658-03	TOC	NPOC	1.000	10/14/08 08:	1.625 ppm	602
18	IRJ0742-06	TOC	NPOC	1.000	10/14/08 08:	1.799 ppm	675
19	CCV1	TOC	NPOC	1.000	10/14/08 08:	10.48 ppm	4311
20	CCB1	TOC	NPOC	1.000	10/14/08 08:	0.1861 ppm	0
21	IRJ0582-01	TOC	NPOC	1.000	10/14/08 08:	4.876 ppm	1964
22	IRJ0582-02	TOC	NPOC	1.000	10/14/08 08:	11.08 ppm	4563
23	IRJ0658-11	TOC	NPOC	10.00	10/14/08 09:	123.3 ppm	5087
24	IRJ0658-12	TOC	NPOC	1.000	10/14/08 09:	27.78 ppm	11554
25	IRJ0658-13	TOC	NPOC	1.000	10/14/08 09:	0.1861 ppm	0
26	IRJ0742-02	TOC	NPOC	1.000	10/14/08 09:	4.503 ppm	1808
27	IRJ0658-06	TOC	NPOC	1.000	10/14/08 09:	5.327 ppm	2153
28	IRJ0721-01	TOC	NPOC	5.000	10/14/08 09:	53.47 ppm	4400
29	IRJ0722-01	TOC	NPOC	1.000	10/14/08 09:	8.933 ppm	3663
30	IRJ1034-03	TOC	NPOC	1.000	10/14/08 10:	0.1861 ppm	0
31	8J14031-BS1	TOC	NPOC	1.000	10/14/08 10:	10.28 ppm	4228
32	8J14031-BLK	TOC	NPOC	1.000	10/14/08 10:	0.1861 ppm	0
33	IRJ1071-01	TOC	NPOC	1.000	10/14/08 10:	0.1861 ppm	0
34	8J14031-MS	TOC	NPOC	1.000	10/14/08 10:	5.433 ppm	2197
35	8J14031-MS	TOC	NPOC	1.000	10/14/08 10:	5.648 ppm	2287
36	IRJ1071-02	TOC	NPOC	1.000	10/14/08 10:	0.1861 ppm	0
37	IRJ1071-03	TOC	NPOC	1.000	10/14/08 11:	0.1861 ppm	0
38	IRJ1071-04	TOC	NPOC	1.000	10/14/08 11:	0.1861 ppm	0
39	IRJ1071-05	TOC	NPOC	1.000	10/14/08 11:	0.3556 ppm	71
40	IRJ0705-08	TOC	NPOC	1.000	10/14/08 11:	5.275 ppm	2131
41	IRJ0705-10	TOC	NPOC	1.000	10/14/08 11:	4.846 ppm	1951
42	IRJ0705-12	TOC	NPOC	1.000	10/14/08 11:	3.837 ppm	1529
43	CCV1	TOC	NPOC	1.000	10/14/08 11:	10.39 ppm	4274
44	CCB1	TOC	NPOC	1.000	10/14/08 11:	0.1861 ppm	0
45	IRJ0464-04	TOC	NPOC	1.000	10/14/08 12:	1.140 ppm	399
46	IRJ0464-05	TOC	NPOC	1.000	10/14/08 12:	1.090 ppm	378
47	IRJ0464-06	TOC	NPOC	1.000	10/14/08 12:	0.1861 ppm	0
48	IRJ0723-01	TOC	NPOC	1.000	10/14/08 13:	1.588 ppm	587
49	IRJ0723-02	TOC	NPOC	1.000	10/14/08 13:	0.1861 ppm	0

R 10.15.08

	Sample Name	Sample ID	Analysis	Dilution	Date / Time	Conc.	Mean Area
50	IRJ0720-01	TOC	NPOC	20.00	10/14/08 13:	331.2 ppm	6856
51	IRJ0720-02	TOC	NPOC	20.00	10/14/08 13:	218.6 ppm	4499
52	IRJ0720-03	TOC	NPOC	20.00	10/14/08 14:	228.4 ppm	4705
53	IRJ0720-04	TOC	NPOC	20.00	10/14/08 14:	225.7 ppm	4648
54	IRJ1239-01	TOC	NPOC	1.000	10/14/08 14:	1.825 ppm	686
55	8J15002-BS1	TOC	NPOC	1.000	10/14/08 14:	10.24 ppm	4212
56	8J15002-BLK	TOC	NPOC	1.000	10/14/08 14:	0.1861 ppm	0
57	IRJ0911-01	TOC	NPOC	1.000	10/14/08 14:	1.392 ppm	505
58	IRJ0911-01	TOC	NPOC	1.000	10/14/08 14:	1.675 ppm	623
59	IRJ0913-01	TOC	NPOC	1.000	10/14/08 14:	0.1861 ppm	0
60	IRJ0913-01	TOC	NPOC	1.000	10/14/08 15:	0.5239 ppm	141
61	IRJ0920-01	TOC	NPOC	1.000	10/14/08 15:	1.516 ppm	557
62	IRJ0920-01	TOC	NPOC	1.000	10/14/08 15:	1.472 ppm	538
63	IRJ0926-01	TOC	NPOC	1.000	10/14/08 15:	1.612 ppm	597
64	IRJ0926-01	TOC	NPOC	1.000	10/14/08 15:	1.462 ppm	534
65	IRJ0928-01	TOC	NPOC	1.000	10/14/08 15:	1.873 ppm	706
66	IRJ0928-01	TOC	NPOC	1.000	10/14/08 15:	1.742 ppm	651
67	CCV1	TOC	NPOC	1.000	10/14/08 15:	9.992 ppm	4106
68	CCB1	TOC	NPOC	1.000	10/14/08 16:	0.1861 ppm	0
69	IRJ0910-01	TOC	NPOC	1.000	10/14/08 16:	1.493 ppm	547
~~70~~	~~IRJ0879-06~~	~~TOC~~	~~NPOC~~	~~1.000~~	~~10/14/08 16:~~	~~4.655 ppm~~	~~1871~~
71	IRJ0879-09	TOC	NPOC	1.000	10/14/08 16:	4.288 ppm	1718
72	IRJ0879-15	TOC	NPOC	1.000	10/14/08 16:	2.483 ppm	962
73	IRJ0779-01	TOC	NPOC	10.00	10/14/08 16:	69.84 ppm	2847
74	IRJ0779-02	TOC	NPOC	1.000	10/14/08 17:	7.760 ppm	3172
75	8J15002-MS	TOC	NPOC	1.000	10/14/08 17:	12.34 ppm	5091
76	8J15002-MS	TOC	NPOC	1.000	10/14/08 17:	18.27 ppm	7572
77	IRJ0779-03	TOC	NPOC	1.000	10/14/08 17:	7.254 ppm	2960
78	IRJ0781-01	TOC	NPOC	1.000	10/14/08 17:	6.080 ppm	2468
79	CCV2	TOC	NPOC	1.000	10/14/08 17:	10.43 ppm	4291
80	CCB2	TOC	NPOC	1.000	10/14/08 17:	0.1861 ppm	0

RR

PREPARATION BENCH SHEET

8J14030

TestAmerica Irvine

Printed: 10/15/2008 5:37:19AM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
8J14030-BLK1		QC	10/14/08 06:25	10	10								
8J14030-BS1		QC	10/14/08 06:25	10	10		8050154	100					
8J14030-MS1		QC	10/14/08 06:25	10	10	IRJ0759-01	8050154	50					
8J14030-MSD1		QC	10/14/08 06:25	10	10	IRJ0759-01	8050154	50					
IRJ0582-01	A	TOC - SM5310B	10/14/08 06:25	10	10								BP Sequence. J flag.
IRJ0582-02	A	TOC - SM5310B	10/14/08 06:25	10	10								BP Sequence. J flag.
IRJ0658-03	D	TOC - 415.1	10/14/08 06:25	10	10								J flag, Charnock, Level 4
IRJ0658-06	D	TOC - 415.1	10/14/08 06:25	10	10								J flag, Charnock, Level 4
IRJ0658-11	D	TOC - 415.1	10/14/08 06:25	10	10								J flag, Charnock, Level 4
IRJ0658-12	D	TOC - 415.1	10/14/08 06:25	10	10								J flag, Charnock, Level 4
IRJ0658-13	D	TOC - 415.1	10/14/08 06:25	10	10								J flag, Charnock, Level 4
IRJ0721-01	A	TOC - SM5310B	10/14/08 06:25	10	10								Irvine
IRJ0722-01	A	TOC - SM5310B	10/14/08 06:25	10	10								Irvine
IRJ0742-02	B	TOC - 415.1	10/14/08 06:25	10	10								J flag, Charnock, Level 4
IRJ0742-06	C	TOC - 415.1	10/14/08 06:25	10	10								J flag, Charnock, Level 4
IRJ0759-01	A	TOC - 415.1	10/14/08 06:25	10	10								Added for BatchQC in: 8J14030
IRJ0759-01	A	TOC - SM5310B	10/14/08 06:25	10	10								BP Sequence. J flag. Preserve prior to running.
IRJ0759-02	A	TOC - SM5310B	10/14/08 06:25	10	10								BP Sequence. J flag. Preserve prior to running.
IRJ0759-03	A	TOC - SM5310B	10/14/08 06:25	10	10								BP Sequence. J flag. Preserve prior to running.
IRJ1034-03	A	TOC - 415.1	10/14/08 06:25	10	10								J Flag.

Spiking Witnessed By Date

Preparation Reviewed By Date 10/15/08

Extracts Received By Date

PREPARATION BENCH SHEET

8J14030

TestAmerica Irvine

Printed: 10/15/2008 5:37:19AM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials			Extraction Comments
IRJ1080-01	A	TOC - SM5310B	10/14/08 06:25	10	10										BP Sequence. J flag.
IRJ1213-01	A	TOC - SM5310B	10/14/08 06:25	10	10										BP Sequence. J flag.

Reagents used in Batch

Reagent	Description	Solvent

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

MDL STUDY

TOC - SM 5310B / EPA 415.1 / SW9060
by Catalytic Combustion-Infrared Method
(N/A for low RL and CADW TOC)

Analyt. Method: EPA 415.1 / 9060 & SM 5310B — Instrument: Shimadzu TOC-5000A
Prep Method: N/A — Method Sum: Acidify, purge volatile
Matrix: **Water** (10ml-->10ml). **Wipe** (1-->50ml) — TOC, remove TIC)
Soil (0.1g)
Units: W (mg/L) - S (mg/Kg) — Cal: 1 / 10 / 40 ppm

Reviewed: T. Vu (Jun/14/07)

Analyte	Spike (mg/L)		MDL Runs (mg/L)								Calc. Data			LIMS (mg/L)		Validation Criteria				Grubbs
(WATER)	recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	Std Dev	**MDL**	MDL	RL	MDL<RL	Ch'g	Ratio (1-10)	%Rec	Comm't
labnumber:			IQE2464-(	IQE2464-(	IQE2464-(	IQE2464-(	IQE2464-(	IQE2464-(	IQE2464-07											
date:			Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07											
time:			16:25	16:25	16:25	17:54	17:54	17:54	17:54											
TOC	1.0	1.0	1.009	0.952	1.159	1.087	1.319	1.250	1.154		1.133	0.129	0.41	0.5	1.0	OK	-19%	2	113%	PASS

Analyte	Spike (mg/Kg)		MDL Runs (mg/Kg)								Calc. Data			LIMS (mg/kg)		Validation Criteria				Grubbs
(SOIL)	recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	Std Dev	**MDL**	MDL	RL	MDL<RL	Ch'g	Ratio (1-10)	%Rec	Comm't
labnumber:			IQE2464-(	IQE2464-	IQE2464-	IQE2464-	IQE2464-	IQE2464-	IQE2464-15											
date:			Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07											
time:			16:30	16:30	16:30	16:30	16:30	16:30	16:30											
TOC	5000	5000	4552	4730	4751	5162	4713	5096	5003		4858	228	717	2200	5000	OK	-67%	7	97%	PASS

pH
EPA Method 150.1/9040/SM4500-H,B (water)
EPA Method 9045 (soil)

Reviewed: BP
10/10/08

		Calibration	
	Standard ID	Temperature	pH
Buffer: pH 4 -	8080283	21.7	4.00
pH 7 -	80600 84	21.8	7.00
pH 10 -	7040226	21.7	10.04

Analyst Initials: MDR 8:40
Analysis Date: 10-10-08

Bottle	Sample Number	Batch Number	Matrix	Temperature #1 (°C)	pH #1	Temperature #2 (°C)	pH #2
–	PH 7	8J10067	BUFR	22.7	7.05	–	–
A	IRJ 1024-01		W	22.1	7.48	22.2	7.51
A	1024-01 DUP			22.0	7.47	22.0	7.48
B	1024-02			22.1	7.48	22.1	7.49
A	1028-01			22.2	7.78	22.3	7.80
A	1029-01			22.7	7.57	22.7	7.59
–	PH 7		BUFR	22.8	7.05	–	–
		–					
B	IRJ 1080-01	8J10096	W	23.1	3.83	22.9	3.83
B	IRJ 1080-01 DUP		W	22.5	3.84	22.6	3.84
–	PH 1		BUFR	22.1	1.05	–	–
–	PH 7		BUFR	23.8	6.95	–	–

360

642

If pH is <4 or >10 ensure sample is NOT preserved.

PREPARATION BENCH SHEET

8J10096

TestAmerica Irvine

Printed: 10/10/2008 3:01:12PM

Matrix: Water **Prepared using: Inorganics Prep - GEN PREP** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike I	ul Spike	ul Surrogate	Initials		Extraction Comments
8J10096-DUP1		QC	10/10/08 13:00	50	50	IRJ1080-01						
IRJ1080-01	B	pH - SM4500-H,B	10/10/08 13:00	50	50							BP Sequence. J flag.

N/A
Spiking Witnessed By Date

BP 10/10/08
Preparation Reviewed By Date

N/A
Extracts Received By Date

644

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation. The sample temperature was measured at 6° C upon receipt at the laboratory.

HOLDING TIMES: EPA 300.0 sample IRJ1354-01 analysis was performed past method specified holding time.

EPA 300.0 sample IRJ1354-02 analysis was performed past method specified holding time.

The holding time for SM4500-H,B is immediate. The analysis was performed in the laboratory as soon as possible after receipt.

PROBLEMS ENCOUNTERED: No problems were encountered during sample analysis.

QA/QC CRITERIA: Boron was detected in the Method Blank of batch 8J23158.

Calcium was detected in the Method Blank of batch 8J23158.

Lithium was detected in the Method Blank of batch 8J22088.

Silicon was detected in the Method Blank of batch 8J22088.

Sodium was detected in the Method Blank of batch 8J23158.

Zinc was detected in the Method Blank of batch 8J23162.

The MS and/or MSD recoveries for Arsenic were above acceptance limits due to sample matrix interference for EPA 200.8-Diss QC batch 8J22087. See LCS.

The MS and/or MSD recoveries for Aluminum were below acceptance limits due to sample matrix interference for EPA 200.7-Diss QC batch 8J23158. See LCS.

17461 Derian Avenue, Suite 100 Irvine, CA 92614 (949) 261-1022 (949) 260-3297

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

The MS and/or MSD recoveries for Lithium were below acceptance limits due to sample matrix interference for EPA 200.7-Diss QC batch 8J23158. See LCS.

The MS and/or MSD recoveries for Potassium were below acceptance limits due to sample matrix interference for EPA 200.7-Diss QC batch 8J23158. See LCS.

Copper results exceeded the linear range in the MS/MSD and therefore are not available for reporting for EPA 200.8-Diss QC batch 8J22087. The batch was accepted based on acceptable recovery in the LCS.

Manganese results exceeded the linear range in the MS/MSD and therefore are not available for reporting for EPA 200.8-Diss QC batch 8J22087. The batch was accepted based on acceptable recovery in the LCS.

Manganese results exceeded the linear range in the MS/MSD and therefore are not available for reporting for EPA 200.8-Diss QC batch 8J23162. The batch was accepted based on acceptable recovery in the LCS.

Due to high levels of Boron in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Boron in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Calcium in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Calcium in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

Due to high levels of Calcium in the source, sample 8J23158-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Calcium in the source, sample 8J23158-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Iron in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Iron in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Iron in the source, sample 8J23158-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Iron in the source, sample 8J23158-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Magnesium in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Magnesium in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Magnesium in the source, sample 8J23158-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Magnesium in the source, sample 8J23158-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

Due to high levels of Silicon in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Silicon in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Silicon in the source, sample 8J23158-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Silicon in the source, sample 8J23158-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Sodium in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Sodium in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Sodium in the source, sample 8J23158-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Sodium in the source, sample 8J23158-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Strontium in the source, sample 8J22088-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

Due to high levels of Strontium in the source, sample 8J22088-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J22088. See LCS.

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

Due to high levels of Strontium in the source, sample 8J23158-MS1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Strontium in the source, sample 8J23158-MSD1 does not provide useful spike recovery information for EPA 200.7-Diss QC batch 8J23158. See LCS.

Due to high levels of Chromium in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Chromium in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Cobalt in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Cobalt in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Nickel in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Nickel in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Uranium in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Uranium in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

Due to high levels of Uranium in the source, sample 8J23162-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J23162. See LCS.

Due to high levels of Uranium in the source, sample 8J23162-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J23162. See LCS.

Due to high levels of Vanadium in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Vanadium in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Zinc in the source, sample 8J22087-MS1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Zinc in the source, sample 8J22087-MSD1 does not provide useful spike recovery information for EPA 200.8-Diss QC batch 8J22087. See LCS.

Due to high levels of Sulfate in the source, sample 8J14046-MS2 does not provide useful spike recovery information for EPA 300.0 QC batch 8J14046. See LCS.

The MS/MSD RPD for Aluminum exceeded the acceptance limits due to sample matrix effects for EPA 200.7-Diss QC batch 8J22088. The individual analyte QA/QC recoveries were within acceptance limits.

OBSERVATIONS: Results that fall between the MDL and RL are 'J' flagged.

Aluminum reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1354-01.

Lithium reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1354-01.

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

Lithium reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1354-03.

Phosphorus reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1354-01.

Tin reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1354-01.

Tin reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1354-03.

Titanium reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1354-01.

Titanium reporting limit was raised due to sample matrix effects for EPA 200.7-Diss sample IRJ1354-03.

Antimony reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-03.

Antimony reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

Barium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-03.

Beryllium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-01.

Beryllium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

Cadmium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-01.

Cadmium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

Chromium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-01.

Chromium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

Lead reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-01.

Lead reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-03.

Lead reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

Molybdenum reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-03.

Selenium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-01.

Selenium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-03.

Selenium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

Silver reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-01.

Silver reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-03.

Silver reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

Thallium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-01.

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CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

Thallium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-03.

Thallium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

Vanadium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-01.

Vanadium reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

Zinc reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-01.

Zinc reporting limit was raised due to sample matrix effects for EPA 200.8-Diss sample IRJ1354-02.

Nitrate-N reporting limit was raised due to sample matrix effects for EPA 300.0 sample IRJ1354-01.

Nitrate-N reporting limit was raised due to sample matrix effects for EPA 300.0 sample IRJ1354-02.

Nitrate-N reporting limit was raised due to sample matrix effects for EPA 300.0 sample IRJ1354-03.

Nitrite-N reporting limit was raised due to sample matrix effects for EPA 300.0 sample IRJ1354-01.

Nitrite-N reporting limit was raised due to sample matrix effects for EPA 300.0 sample IRJ1354-02.

Nitrite-N reporting limit was raised due to sample matrix effects for EPA 300.0 sample IRJ1354-03.

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THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

Client:	Brown and Caldwell	**Date Sampled:**	10/12/2008 to 10/13/2008
Project:	BP Yerington, NV BP Yerington, NV, 136259	**Date Received:**	10/14/2008
Lab:	IRJ1354		

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

TestAmerica Irvine

Patty Mata
Project Manager
BB

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17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

Prepared For: Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project:BP Yerington, NV, 136259

Sampled: 10/12/08-10/13/08
Received: 10/14/08
Issued: 11/10/08 14:03

NELAP #01108CA Nevada #CA-72

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.
This entire report was reviewed and approved for release.

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 6°C, on ice and with chain of custody documentation.

HOLDING TIMES: Not all holding times were met. Results were qualified where the sample analysis did not occur within method specified holding time requirements. EPA 300.0 Nitrate/Nitrite analyses of samples IRJ1354-01 and -02 were done outside of the 48-hour hold time. Samples were received with less than half of the hold time left.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: Results that fall between the MDL and RL are 'J' flagged.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

LABORATORY ID	CLIENT ID	MATRIX
IRJ1354-01	OU4-UEP-10-GW	Water
IRJ1354-02	OU4-UEP-10-GW-FD	Water
IRJ1354-03	OU4-FEP-13-GW	Water

associat. with FB-02 (IRJ2038) and EQ-02 (IRJ1655)

Reviewed By:

TestAmerica Irvine

Patty Mata
Project Manager

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

Project Name: OU4 Phase I
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: EPA Region 9
Requested Due Date (mm/dd/yy): NA

IRVINE Water Geochemical COC # YER2026 A

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name:	Test America-Irvine	BP/AR Facility No.:		Consultant/Contractor:	Brown and Caldwell
Address:	Derian Avenue, Suite	BP/AR Facility Address:	Yerington, NV	Address:	3264 Goni Rd
	Irvine, CA 92614	Site Lat/Long:	NA		Carson City, NV 89706
Lab PM:	Patty Mata	California Global ID No	NA	Consultant/Contractor Project No.:	136259
Tele/Fax:	949-261-1022 (x213)	Enfos Project No.:	001KF-0193	Consultant/Contractor PM:	Penny Bassett
BP/AR EBM:	Roy Thun	Provision or OOC (circle one)		Tele/Fax:	775-315-4343
Address:	6 Centerpoint Avenue	Phase/WBS:	32	Report Type & QC Level:	LEVEL 2 (4)
	La Palma, CA 90623	Sub Phase/Task:	03	E-mail EDD To:	skocsis@brwncald.com
Tele/Fax:	661-287-3855	Cost Element:	05	Invoice to:	Consultant or BP or Atlantic Richfield Co. (circle one)

Lab Bottle Order No: IRJ354

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: Alkalinity (2320B)	Requested Analysis: Chloride, flouride, nitrate, nitrite, sulfate (300.0)	Requested Analysis: PH, TDS (2540C)	Requested Analysis: Dissolved Metals (200.7/200.8)	Requested Analysis: TOC (5310B)	Requested Analysis: FILTERED	Sample Point Lat/Long and Comments
1	OU4-FEP-13-GW	0900	10/13		X			1	X					X	X	X			N	50-53'
2	↓	↓	↓					1			X						X		Y	
3								1	X			HA						X	N	
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Sampler's Name:	CHAD T HALEY	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	Brown & Caldwell		10/13	1000	Penny Bassett	10/13	10:30
Shipment Date:	10/13/08	Penny Bassett	10/13	1200			
Shipment Method:	Fed Ex Air						
Shipment Tracking No:	8146 4326 1569				Vu Bang	10/14/08	10:35

Special Instructions: 6.8/6.0 ✓

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: ____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

#037

6.8/6.0

BP COC Rev. 5 10/17/2006

Atlantic Richfield Company
bp
A BP affiliated company

Chain of Custody Record

Project Name: OU4 Phase I
BP BU/AR Region/Enfos Segment:
State or Lead Regulatory Agency: EPA Region 9
Requested Due Date (mm/dd/yy): NA

IRVINE Water Geochemical COC # YER 2025 A

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name:	Test America-Irvine	BP/AR Facility No.:		Consultant/Contractor:	Brown and Caldwell
Address:	Derian Avenue, Suite	BP/AR Facility Address:	Yerington, NV	Address:	3264 Goni Rd
	Irvine, CA 92614	Site Lat/Long:	NA		Carson City, NV 89706
Lab PM:	Patty Mata	California Global ID No	NA	Consultant/Contractor Project No.:	136259
Tele/Fax:	949-261-1022 (x213)	Enfos Project No.:	001KF-0193	Consultant/Contractor PM:	Penny Bassett
BP/AR EBM:	Roy Thun	Provision or OOC (circle one)		Tele/Fax:	775-315-4343
Address:	6 Centerpoint Avenue	Phase/WBS:	32	Report Type & QC Level:	LEVEL 2 (4)
	La Palma, CA 90623	Sub Phase/Task:	03	E-mail EDD To:	skocsis@brwncald.com
Tele/Fax:	661-287-3855	Cost Element:	05	Invoice to:	Consultant or BP or Atlantic Richfield Co. (circle one)

Lab Bottle Order No:

Item No.	Sample Description	Time	Date	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Air	Laboratory No.	No. of Containers	Preservative: Unpreserved	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: HCl	Preservative: Methanol	Requested Analysis: Alkalinity (2320B)	Requested Analysis: Chloride, flouride, nitrate, nitrite, sulfate (300.0)	Requested Analysis: PH, TDS (2540C)	Requested Analysis: Dissolved Metals (200.7/200.8)	Requested Analysis: TOC (5310B)	Requested Analysis: FILTERED	Sample Point Lat/Long and Comments
1	OU4-UEP-10-GW	12:00	10/12		X		IR51354	1	X					X	X	X			N	23-25'
2	↓	↓	↓					1			X						X		Y	
3								1	X									X	N	
4	OU4-UEP-10-GW-FD	12:00	10/12		X				X					X	X	X			N	23-25'
5	↓	↓	↓								X						X		Y	
6									X									X	Y	
7																				
8																				
9																				
10																				

0.0
10/14/08
12:30

		Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name:	Penny Bassett	Penny Bassett	10/13	1200			
Sampler's Company:	Brown & Caldwell						
Shipment Date:	10/13/08						
Shipment Method:	Fed Ex Air						
Shipment Tracking No:	8646 4326 1569				VanBaull	10/14/08	

Special Instructions:

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 6.8/6.0 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP COC Rev. 5 10/11/2006

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Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 136259

Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

DISSOLVED METALS

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRJ1354-01 (OU4-UEP-10-GW - Water)					**Sampled: 10/12/08**				
Reporting Units: mg/l									
Aluminum	EPA 200.7-Diss	8J22088	0.20	0.25	ND	5	10/22/08	10/26/08	RL1
Mercury	EPA 245.1-Diss	8J15121	0.00010	0.00020	ND	1	10/15/08	10/16/08	
Boron	EPA 200.7-Diss	8J22088	0.10	0.25	**11**	5	10/22/08	10/24/08	MHA
Calcium	EPA 200.7-Diss	8J22088	0.25	0.50	**430**	5	10/22/08	10/24/08	MHA
Iron	EPA 200.7-Diss	8J22088	0.075	0.20	**25**	5	10/22/08	10/24/08	MHA
Lithium	EPA 200.7-Diss	8J22088	0.15	0.25	**0.20**	5	10/22/08	10/24/08	RL1, J
Magnesium	EPA 200.7-Diss	8J22088	0.060	0.10	**190**	5	10/22/08	10/24/08	MHA
Phosphorus	EPA 200.7-Diss	8J22088	0.10	0.20	ND	5	10/22/08	10/24/08	RL1
Potassium	EPA 200.7-Diss	8J22088	1.8	2.5	**3.3**	5	10/22/08	10/24/08	
Sodium	EPA 200.7-Diss	8J22088	0.95	2.5	**2200**	5	10/22/08	10/24/08	MHA
Strontium	EPA 200.7-Diss	8J22088	0.025	0.10	**7.0**	5	10/22/08	10/24/08	MHA
Tin	EPA 200.7-Diss	8J22088	0.060	0.50	ND	5	10/22/08	10/24/08	RL1
Titanium	EPA 200.7-Diss	8J22088	0.010	0.025	ND	5	10/22/08	10/24/08	RL1
Sample ID: IRJ1354-02 (OU4-UEP-10-GW-FD - Water)					**Sampled: 10/12/08**				
Reporting Units: mg/l									
Aluminum	EPA 200.7-Diss	8J23158	0.040	0.050	ND	1	10/23/08	10/26/08	M2
Mercury	EPA 245.1-Diss	8J15121	0.00010	0.00020	ND	1	10/15/08	10/16/08	
Boron	EPA 200.7-Diss	8J23158	0.020	0.050	**10**	1	10/23/08	10/26/08	
Calcium	EPA 200.7-Diss	8J23158	0.050	0.10	**410**	1	10/23/08	10/26/08	MHA
Iron	EPA 200.7-Diss	8J23158	0.015	0.040	**23**	1	10/23/08	10/26/08	MHA
Lithium	EPA 200.7-Diss	8J23158	0.030	0.050	**0.12**	1	10/23/08	10/26/08	M2
Magnesium	EPA 200.7-Diss	8J23158	0.060	0.10	**190**	5	10/23/08	10/27/08	MHA
Phosphorus	EPA 200.7-Diss	8J23158	0.020	0.040	ND	1	10/23/08	10/26/08	
Potassium	EPA 200.7-Diss	8J23158	1.8	2.5	**4.4**	5	10/23/08	10/27/08	M2
Sodium	EPA 200.7-Diss	8J23158	0.95	2.5	**2200**	5	10/23/08	10/27/08	MHA
Strontium	EPA 200.7-Diss	8J23158	0.0050	0.020	**6.9**	1	10/23/08	10/26/08	MHA
Tin	EPA 200.7-Diss	8J23158	0.012	0.10	ND	1	10/23/08	10/26/08	
Titanium	EPA 200.7-Diss	8J23158	0.0020	0.0050	ND	1	10/23/08	10/26/08	

TestAmerica Irvine

Patty Mata
Project Manager

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Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 136259
Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

DISSOLVED METALS

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRJ1354-03 (OU4-FEP-13-GW - Water)					**Sampled: 10/13/08**				
Reporting Units: mg/l									
Aluminum	EPA 200.7-Diss	8J22088	0.80	1.0	**240**	20	10/22/08	10/26/08	
Mercury	EPA 245.1-Diss	8J15121	0.00010	0.00020	ND	1	10/15/08	10/16/08	
Boron	EPA 200.7-Diss	8J22088	0.40	1.0	**2.0**	20	10/22/08	10/24/08	
Calcium	EPA 200.7-Diss	8J22088	1.0	2.0	**430**	20	10/22/08	10/24/08	
Iron	EPA 200.7-Diss	8J22088	0.30	0.80	**3200**	20	10/22/08	10/24/08	
Lithium	EPA 200.7-Diss	8J22088	0.60	1.0	**0.77**	20	10/22/08	10/24/08	RL1, J
Magnesium	EPA 200.7-Diss	8J22088	0.24	0.40	**520**	20	10/22/08	10/24/08	
Phosphorus	EPA 200.7-Diss	8J22088	0.40	0.80	**2.5**	20	10/22/08	10/24/08	
Potassium	EPA 200.7-Diss	8J22088	7.4	10	**60**	20	10/22/08	10/24/08	
Sodium	EPA 200.7-Diss	8J22088	3.8	10	**620**	20	10/22/08	10/24/08	
Strontium	EPA 200.7-Diss	8J22088	0.10	0.40	**9.0**	20	10/22/08	10/24/08	
Tin	EPA 200.7-Diss	8J22088	0.24	2.0	ND	20	10/22/08	10/24/08	RL1
Titanium	EPA 200.7-Diss	8J22088	0.040	0.10	ND	20	10/22/08	10/24/08	RL1
Sample ID: IRJ1354-01 (OU4-UEP-10-GW - Water)					**Sampled: 10/12/08**				
Reporting Units: mg/l as Silica									
Silicon	EPA 200.7-Diss	8J22088	0.14	0.55	**33**	5	10/22/08	10/24/08	MHA
Sample ID: IRJ1354-02 (OU4-UEP-10-GW-FD - Water)					**Sampled: 10/12/08**				
Reporting Units: mg/l as Silica									
Silicon	EPA 200.7-Diss	8J23158	0.028	0.11	**33**	1	10/23/08	10/26/08	MHA
Sample ID: IRJ1354-03 (OU4-FEP-13-GW - Water)					**Sampled: 10/13/08**				
Reporting Units: mg/l as Silica									
Silicon	EPA 200.7-Diss	8J22088	0.56	2.2	**14**	20	10/22/08	10/24/08	
Sample ID: IRJ1354-01 (OU4-UEP-10-GW - Water)					**Sampled: 10/12/08**				
Reporting Units: ug/l									
Uranium	EPA 200.8-Diss	8J22087	2.5	5.0	**440**	5	10/22/08	10/23/08	
Antimony	EPA 200.8-Diss	8J22087	1.0	10	**B 1.2**	5	10/22/08	10/23/08	J
Arsenic	EPA 200.8-Diss	8J22087	3.5	5.0	**6.7**	5	10/22/08	10/23/08	
Barium	EPA 200.8-Diss	8J22087	2.0	5.0	**39**	5	10/22/08	10/23/08	
Beryllium	EPA 200.8-Diss	8J22087	1.0	2.5	ND	5	10/22/08	10/23/08	RL1
Cadmium	EPA 200.8-Diss	8J22087	0.55	5.0	**0.59**	5	10/22/08	10/23/08	RL1, J
Chromium	EPA 200.8-Diss	8J22087	3.5	10	ND	5	10/22/08	10/23/08	RL1
Cobalt	EPA 200.8-Diss	8J22087	0.75	5.0	**45**	5	10/22/08	10/23/08	
Copper	EPA 200.8-Diss	8J22087	3.8	10	**40**	5	10/22/08	10/23/08	
Lead	EPA 200.8-Diss	8J22087	1.5	5.0	ND	5	10/22/08	10/23/08	RL1
Manganese	EPA 200.8-Diss	8J22087	7.5	10	**5400**	10	10/22/08	10/23/08	
Molybdenum	EPA 200.8-Diss	8J22087	1.0	10	**220**	5	10/22/08	10/23/08	
Nickel	EPA 200.8-Diss	8J22087	4.5	10	**82**	5	10/22/08	10/23/08	
Selenium	EPA 200.8-Diss	8J22087	1.5	10	**6.1**	5	10/22/08	10/23/08	RL1, J
Silver	EPA 200.8-Diss	8J22087	1.5	5.0	ND	5	10/22/08	10/23/08	RL1

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Project ID: BP Yerington, NV, 136259
Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

DISSOLVED METALS

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRJ1354-01 (OU4-UEP-10-GW - Water) - cont.					**Sampled: 10/12/08**				
Reporting Units: ug/l									
Thallium	EPA 200.8-Diss	8J22087	1.0	5.0	ND	5	10/22/08	10/23/08	RL1
Vanadium	EPA 200.8-Diss	8J22087	3.5	10	ND	5	10/22/08	10/23/08	RL1
Zinc	EPA 200.8-Diss	8J22087	12	100	**29**	5	10/22/08	10/23/08	RL1, J
Sample ID: IRJ1354-02 (OU4-UEP-10-GW-FD - Water)					**Sampled: 10/12/08**				
Reporting Units: ug/l									
Uranium	EPA 200.8-Diss	8J23162	1.0	2.0	**420**	2	10/23/08	10/24/08	MHA
Antimony	EPA 200.8-Diss	8J23162	0.40	4.0	B **1.3**	2	10/23/08	10/24/08	J, RL1
Arsenic	EPA 200.8-Diss	8J23162	1.4	2.0	**5.3**	2	10/23/08	10/24/08	
Barium	EPA 200.8-Diss	8J23162	0.80	2.0	**43**	2	10/23/08	10/24/08	
Beryllium	EPA 200.8-Diss	8J23162	0.40	1.0	ND	2	10/23/08	10/27/08	RL1
Cadmium	EPA 200.8-Diss	8J23162	0.22	2.0	**0.62**	2	10/23/08	10/24/08	RL1, J
Chromium	EPA 200.8-Diss	8J23162	1.4	4.0	ND	2	10/23/08	10/24/08	RL1
Cobalt	EPA 200.8-Diss	8J23162	0.30	2.0	**32**	2	10/23/08	10/24/08	
Copper	EPA 200.8-Diss	8J23162	1.5	4.0	**15**	2	10/23/08	10/24/08	
Lead	EPA 200.8-Diss	8J23162	0.60	2.0	ND	2	10/23/08	10/24/08	RL1
Manganese	EPA 200.8-Diss	8J23162	15	20	**5200**	20	10/23/08	10/24/08	M-3
Molybdenum	EPA 200.8-Diss	8J23162	0.40	4.0	**200**	2	10/23/08	10/24/08	
Nickel	EPA 200.8-Diss	8J23162	1.8	4.0	**63**	2	10/23/08	10/24/08	
Selenium	EPA 200.8-Diss	8J23162	0.60	4.0	**3.6**	2	10/23/08	10/24/08	RL1, J
Silver	EPA 200.8-Diss	8J23162	0.60	2.0	ND	2	10/23/08	10/24/08	RL1
Thallium	EPA 200.8-Diss	8J23162	0.40	2.0	**0.44**	2	10/23/08	10/24/08	RL1, J
Vanadium	EPA 200.8-Diss	8J23162	1.4	4.0	ND	2	10/23/08	10/24/08	RL1
Zinc	EPA 200.8-Diss	8J23162	5.0	40	**38**	2	10/23/08	10/24/08	RL1, J
Sample ID: IRJ1354-03 (OU4-FEP-13-GW - Water)					**Sampled: 10/13/08**				
Reporting Units: ug/l									
Uranium	EPA 200.8-Diss	8J22087	20	40	**380**	40	10/22/08	10/23/08	
Antimony	EPA 200.8-Diss	8J22087	8.0	80	ND	40	10/22/08	10/23/08	RL1
Arsenic	EPA 200.8-Diss	8J22087	28	40	**170**	40	10/22/08	10/23/08	
Barium	EPA 200.8-Diss	8J22087	16	40	**27**	40	10/22/08	10/23/08	RL1, J
Beryllium	EPA 200.8-Diss	8J22087	8.0	20	**33**	40	10/22/08	10/23/08	
Cadmium	EPA 200.8-Diss	8J22087	4.4	40	**50**	40	10/22/08	10/23/08	
Chromium	EPA 200.8-Diss	8J22087	28	80	**95**	40	10/22/08	10/23/08	
Cobalt	EPA 200.8-Diss	8J22087	6.0	40	**1500**	40	10/22/08	10/23/08	
Copper	EPA 200.8-Diss	8J22087	30	80	**3400**	40	10/22/08	10/23/08	
Lead	EPA 200.8-Diss	8J22087	12	40	ND	40	10/22/08	10/23/08	RL1
Manganese	EPA 200.8-Diss	8J22087	150	200	**96000**	200	10/22/08	10/23/08	
Molybdenum	EPA 200.8-Diss	8J22087	8.0	80	ND	40	10/22/08	10/23/08	RL1
Nickel	EPA 200.8-Diss	8J22087	36	80	**920**	40	10/22/08	10/23/08	
Selenium	EPA 200.8-Diss	8J22087	12	80	**19**	40	10/22/08	10/23/08	RL1, J
Silver	EPA 200.8-Diss	8J22087	12	40	ND	40	10/22/08	10/23/08	RL1

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Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 136259
Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

DISSOLVED METALS

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRJ1354-03 (OU4-FEP-13-GW - Water) - cont.					**Sampled: 10/13/08**				
Reporting Units: ug/l									
Thallium	EPA 200.8-Diss	8J22087	8.0	40	**20**	40	10/22/08	10/23/08	RL1, J
Vanadium	EPA 200.8-Diss	8J22087	28	80	**950**	40	10/22/08	10/24/08	
Zinc	EPA 200.8-Diss	8J22087	100	800	**5300**	40	10/22/08	10/23/08	

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INORGANICS

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRJ1354-01 (OU4-UEP-10-GW - Water)					**Sampled: 10/12/08**				
Reporting Units: mg/l									
Nitrate/Nitrite-N	EPA 300.0	[CALC]	1.5	2.6	ND	10	10/14/08	10/14/08	
Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	**700**	1	10/15/08	10/15/08	
Bicarbonate Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	**700**	1	10/15/08	10/15/08	
Carbonate Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	ND	1	10/15/08	10/15/08	
Hydroxide Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	ND	1	10/15/08	10/15/08	
Chloride	EPA 300.0	8J14046	2.5	5.0	**160**	10	10/14/08	10/14/08	
Fluoride	EPA 300.0	8J14046	1.5	5.0	**6.8**	10	10/14/08	10/14/08	
Nitrate-N	EPA 300.0	8J14046	0.60	1.1	ND	10	10/14/08	10/14/08	H, RL1
Nitrite-N	EPA 300.0	8J14046	0.90	1.5	ND	10	10/14/08	10/14/08	H, RL1
Sulfate	EPA 300.0	8J14046	100	250	**5300**	500	10/14/08	10/15/08	
Total Dissolved Solids	SM2540C	8J15037	10	10	**8900**	1	10/15/08	10/15/08	
Total Organic Carbon	SM5310B	8J22010	0.50	1.0	**4.4**	1	10/22/08	10/22/08	
Sample ID: IRJ1354-02 (OU4-UEP-10-GW-FD - Water)					**Sampled: 10/12/08**				
Reporting Units: mg/l									
Nitrate/Nitrite-N	EPA 300.0	[CALC]	1.5	2.6	ND	10	10/14/08	10/14/08	
Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	**720**	1	10/15/08	10/15/08	
Bicarbonate Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	**720**	1	10/15/08	10/15/08	
Carbonate Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	ND	1	10/15/08	10/15/08	
Hydroxide Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	ND	1	10/15/08	10/15/08	
Chloride	EPA 300.0	8J14046	2.5	5.0	**170**	10	10/14/08	10/14/08	
Fluoride	EPA 300.0	8J14046	1.5	5.0	**7.1**	10	10/14/08	10/14/08	
Nitrate-N	EPA 300.0	8J14046	0.60	1.1	ND	10	10/14/08	10/14/08	H, RL1
Nitrite-N	EPA 300.0	8J14046	0.90	1.5	ND	10	10/14/08	10/14/08	H, RL1
Sulfate	EPA 300.0	8J14046	100	250	**5200**	500	10/14/08	10/15/08	
Total Dissolved Solids	SM2540C	8J15037	10	10	**9500**	1	10/15/08	10/15/08	
Total Organic Carbon	SM5310B	8J22010	0.50	1.0	**2.4**	1	10/22/08	10/22/08	

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Project ID: BP Yerington, NV, 136259
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Sampled: 10/12/08-10/13/08
Received: 10/14/08

INORGANICS

Analyte	Method	Batch	MDL	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IRJ1354-03 (OU4-FEP-13-GW - Water)					**Sampled: 10/13/08**				
Reporting Units: mg/l									
Nitrate/Nitrite-N	EPA 300.0	[CALC]	1.5	2.6	ND	10	10/14/08	10/14/08	
Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	ND	1	10/15/08	10/15/08	
Bicarbonate Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	ND	1	10/15/08	10/15/08	
Carbonate Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	ND	1	10/15/08	10/15/08	
Hydroxide Alkalinity as CaCO3	SM2320B	8J15048	2.0	2.0	ND	1	10/15/08	10/15/08	
Chloride	EPA 300.0	8J14046	2.5	5.0	**130**	10	10/14/08	10/14/08	
Fluoride	EPA 300.0	8J14046	1.5	5.0	**100**	10	10/14/08	10/14/08	
Nitrate-N	EPA 300.0	8J14046	0.60	1.1	ND	10	10/14/08	10/14/08	RL1
Nitrite-N	EPA 300.0	8J14046	0.90	1.5	ND	10	10/14/08	10/14/08	RL1
Sulfate	EPA 300.0	8J14046	100	250	**11000**	500	10/14/08	10/15/08	
Total Dissolved Solids	SM2540C	8J15037	10	10	**9300**	1	10/15/08	10/15/08	
Total Organic Carbon	SM5310B	8J22010	0.50	1.0	**6.4**	1	10/22/08	10/22/08	
Sample ID: IRJ1354-01 (OU4-UEP-10-GW - Water)					**Sampled: 10/12/08**				
Reporting Units: pH Units									
pH	SM4500-H,B	8J15074	0.100	0.100	**7.12**	1	10/15/08	10/15/08	HFT
Sample ID: IRJ1354-02 (OU4-UEP-10-GW-FD - Water)					**Sampled: 10/12/08**				
Reporting Units: pH Units									
pH	SM4500-H,B	8J15074	0.100	0.100	**7.14**	1	10/15/08	10/15/08	HFT
Sample ID: IRJ1354-03 (OU4-FEP-13-GW - Water)					**Sampled: 10/13/08**				
Reporting Units: pH Units									
pH	SM4500-H,B	8J15074	0.100	0.100	**4.03**	1	10/15/08	10/15/08	HFT

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SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: OU4-UEP-10-GW (IRJ1354-01) - Water					
EPA 300.0	2	10/12/2008 12:00	10/14/2008 10:35	10/14/2008 15:15	10/14/2008 17:10
SM4500-H,B	0	10/12/2008 12:00	10/14/2008 10:35	10/15/2008 09:45	10/15/2008 09:45
Sample ID: OU4-UEP-10-GW-FD (IRJ1354-02) - Water					
EPA 300.0	2	10/12/2008 12:00	10/14/2008 10:35	10/14/2008 15:15	10/14/2008 17:23
SM4500-H,B	0	10/12/2008 12:00	10/14/2008 10:35	10/15/2008 09:45	10/15/2008 09:45
Sample ID: OU4-FEP-13-GW (IRJ1354-03) - Water					
EPA 300.0	2	10/13/2008 09:00	10/14/2008 10:35	10/14/2008 15:15	10/14/2008 18:14
SM4500-H,B	0	10/13/2008 09:00	10/14/2008 10:35	10/15/2008 09:45	10/15/2008 09:45

all pH > 24

NO_x > 48 for 1 + 2

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Inorganic Analyses Support Documentation

Environmental Standards Project Name: Arco - Yerington
Sample Collection Dates: 10/12-13/08
Job Number: 20085047.A
Project Manager: Dina
Laboratory: Test America

Reviewed By: THW
Approved By:
Completion Date:

Applicable Sample No's.: ☑ Refer to Table 1 in the Quality Assurance Review

Sample No.	Lab. Control No.
IRJ1354	

Deliverables:
- CLP ☐
- Tier I ☑
- Tier II ☐
- Limited ☐
- Other

The following table indicates criteria which were examined, the identified problems, and support documentation attachments.

	Criteria Examined in Detail (Check (✓) If Yes or Footnote Letter for Comments Below)					Problems Identified (Check (✓) If Yes or Footnote Number for Comments Below)					Support Documentation Attachments (Check (✓) If Yes — or Identify Attachment No.)				
	ICP or A.A Metals	Furnace Metals	Cold Vapor Mercury	Cyanide	Other Method(s) wet chem	ICP or A.A Metals	Furnace Metals	Cold Vapor Mercury	Cyanide	Other Method(s) wet chem	ICP or A.A Metals	Furnace Metals	Cold Vapor Mercury	Cyanide	Other Method(s) wet chem
Holding Times	✓		✓		✓	✓				✓	✓		✓		✓
Blank Analysis Results	✓		✓		✓	✓					✓		✓		✓
Matrix Spike (Predigestion) Results	✓				✓	✓					✓				✓
Duplicate Analysis Results ☒ Field ☒ Lab	✓		✓		✓	✓				✓	✓		✓		✓
Quantitation of Results	✓		✓		✓						✓		✓		✓
Detection Limits / Sensitivity	✓		✓		✓						✓		✓		✓
Initial Calibrations	✓		✓		✓						✓		✓		✓
Continuing Calibrations	✓		✓		✓						✓		✓		✓
Laboratory Control Standards (LCS)	✓		✓		✓						✓		✓		✓
ICP Linear Range Analysis															
ICP Interference Checks	✓										✓				
ICP Serial Dilutions															
ICP Post-Digestion Spike															
GFAA Post-Digestion Spikes															
GFAA Duplicate Injections															
ICP Multiple Exposures															
GFAA Standard Additions															
CRDL Standards	✓		✓								✓		✓		
Others: condition on receipt	✓		✓		✓						✓		✓		✓

Comments:

BLANK ANALYSIS RESULTS FOR INORGANIC PARAMETERS

MATRIX (Aq., S)	BLANK TYPE (✓) METHOD IOB	METHOD CCB	METHOD PREP.	TRIP	EQUIPMENT	FIELD	BLANK SAMPLE NUMBER	CONTAMINANT	CONCENTRATION (units)	QUALIFICATION LIMIT FOR AQUEOUS SAMPLES (ug/L)	QUALIFICATION LIMIT FOR SOLID SAMPLES (mg/Kg)
									mg/L	5x	5x
Aq			✓				8522088-BLK1	silicon	0.0857	0.178	
		✓					10/24 CCBs	lithium	0.0815	0.158	
								sodium	0.0368	0.184	
			✓				8523158-BLK1	lithium	0.0313	0.156	
								boron	0.0278	0.139	
								calcium	0.0641	0.32	
								sodium	0.234	1.17	
		✓					10/23 CCBs	antimony ug/L	0.327	1.64	
							10/24 CCBs	antimony	0.411	2.06	
			✓				8523162-BLK1	zinc	4.2	21	

Aq. = Aqueous; S = Solid

Notes: _____

EVALUATION OF INORGANIC DUPLICATE ANALYSIS PRECISION

Units mg/L	PRECISION OBJECTIVES*	
	Analyte > or = 5 X RL	RPD < or = 20
	Analyte < 5 X RL	Difference < or = RL Times 1

* Enter the project-specific or default acceptance criteria

ANALYTE	OU4-UEP-10-GW Analyte Concentration	Qual	RL	OU4-UEP-10-GW-FD Analyte Concentration	Qual	RL	Difference	RPD	Notes
boron	11		0.25	10		0.05	NA	9.52%	IN
calcium	430		0.5	410		0.1	NA	4.76%	IN
iron	25		0.2	23		0.04	NA	8.33%	IN
lithium	0.2	J	0.25	0.12		0.05	0.08	NA	IN
magnesium	190		0.1	190		0.1	NA	0.00%	IN
potassium	3.3		2.5	4.4		2.5	1.1	NA	IN
sodium	2200		2.5	2200		2.5	NA	0.00%	IN
strontium	7		0.1	6.9		0.02	NA	1.44%	IN
silicon	33		0.55	33		0.11	NA	0.00%	IN
uranium	440		5	420		2	NA	4.65%	IN
antimony	1.2	U*	10	1.3	U*	4	0.1	NA	IN
arsenic	6.7		5	5.3		2	1.4	NA	IN
barium	39		5	43		2	NA	9.76%	IN
cadmium	0.59	J	5	0.62	J	2	0.03	NA	IN
cobalt	45		5	32		2	NA	33.77%	1
copper	10		~~10~~	15		4	5	NA	IN
manganese	5400		10	5200		20	NA	3.77%	IN
molybdenum	220		~~10~~	200		4	NA	9.52%	IN
nickel	82		~~10~~	63		4	NA	26.21%	1
selenium	6.1	J	~~10~~	3.6	J	4	2.5	NA	IN
thallium	5	U	5	0.44	J	2	4.56	NA	IN
zinc	29	J	100	38	J	40	9	NA	IN
alkalinity	700		2	720		2	NA	2.82%	IN
chloride	160		5	170		5	NA	6.06%	IN
fluoride	6.8		5	7.1		5	0.3	NA	IN
sulfate	5300		250	5200		250	NA	1.90%	IN
TDS	8900		10	9500		10	NA	6.52%	IN
TOC	4.4		1	2.4		1	2	NA	2

NOTES:

Qual) Column to enter J, U, U*, or B

RPD) Relative Percent Difference

RL) Reporting Limit

J) The analyte concentration should be considered estimated.

EVALUATION OF INORGANIC DUPLICATE ANALYSIS PRECISION

U) The analyte was not-detected in the sample. The numerical value will be used for comparison purposes.
U* or B) The result was blank qualified. The numerical value will be used for comparison purposes.
NA) The RPD or Difference is not applicable.
1) Both results are > or = 5 X RL and RPD over acceptance limit, flag positive results "J".
2) At least one of the results is < 5 X RL and difference is over acceptance limit, flag positive results "J" and "not-detected" results "UJ".
Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
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Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 136259
Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J15121 Extracted: 10/15/08											
Blank Analyzed: 10/16/2008 (8J15121-BLK1)											
Mercury	ND	0.00020	0.00010	mg/l							
LCS Analyzed: 10/16/2008 (8J15121-BS1)											
Mercury	0.00818	0.00020	0.00010	mg/l	0.00800		102	85-115			
Matrix Spike Analyzed: 10/16/2008 (8J15121-MS1)						**Source: IRJ0886-01**					
Mercury	0.00670	0.00020	0.00010	mg/l	0.00800	0.000210	81	70-130			
Matrix Spike Dup Analyzed: 10/16/2008 (8J15121-MSD1)						**Source: IRJ0886-01**					
Mercury	0.00673	0.00020	0.00010	mg/l	0.00800	0.000210	81	70-130	1	20	
Batch: 8J22087 Extracted: 10/22/08											
Blank Analyzed: 10/23/2008 (8J22087-BLK1)											
Uranium	ND	1.0	0.50	ug/l							
Antimony	ND	2.0	0.20	ug/l							
Arsenic	ND	1.0	0.70	ug/l							
Barium	ND	1.0	0.40	ug/l							
Beryllium	ND	0.50	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Chromium	ND	2.0	0.70	ug/l							
Cobalt	ND	1.0	0.15	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Manganese	ND	1.0	0.75	ug/l							
Molybdenum	ND	2.0	0.20	ug/l							
Nickel	ND	2.0	0.90	ug/l							
Selenium	ND	2.0	0.30	ug/l							
Silver	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
Vanadium	ND	2.0	0.70	ug/l							
Zinc	ND	20	2.5	ug/l							

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Patty Mata
Project Manager

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METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J22087 Extracted: 10/22/08											
LCS Analyzed: 10/23/2008 (8J22087-BS1)											
Uranium	79.9	1.0	0.50	ug/l	80.0		100	85-115			
Antimony	73.1	2.0	0.20	ug/l	80.0		91	85-115			
Arsenic	75.0	1.0	0.70	ug/l	80.0		94	85-115			
Barium	73.2	1.0	0.40	ug/l	80.0		92	85-115			
Beryllium	78.4	0.50	0.20	ug/l	80.0		98	85-115			
Cadmium	72.2	1.0	0.11	ug/l	80.0		90	85-115			
Chromium	80.7	2.0	0.70	ug/l	80.0		101	85-115			
Cobalt	72.7	1.0	0.15	ug/l	80.0		91	85-115			
Copper	78.4	2.0	0.75	ug/l	80.0		98	85-115			*M-3*
Lead	78.2	1.0	0.30	ug/l	80.0		98	85-115			
Manganese	78.2	1.0	0.75	ug/l	80.0		98	85-115			*M-3*
Molybdenum	76.0	2.0	0.20	ug/l	80.0		95	85-115			
Nickel	79.3	2.0	0.90	ug/l	80.0		99	85-115			
Selenium	70.3	2.0	0.30	ug/l	80.0		88	85-115			
Silver	76.7	1.0	0.30	ug/l	80.0		96	85-115			
Thallium	77.3	1.0	0.20	ug/l	80.0		97	85-115			
Vanadium	70.1	2.0	0.70	ug/l	80.0		88	85-115			
Zinc	74.5	20	2.5	ug/l	80.0		93	85-115			
Matrix Spike Analyzed: 10/23/2008 (8J22087-MS1)						**Source: IRJ1080-01**					
Uranium	2500	100	50	ug/l	80.0	2480	29	70-130			*MHA*
Antimony	68.8	200	20	ug/l	80.0	ND	86	70-130			*J*
Arsenic	114	100	70	ug/l	80.0	ND	142	70-130			*M1*
Barium	94.5	100	40	ug/l	80.0	ND	118	70-130			*J*
Beryllium	223	50	20	ug/l	80.0	161	77	70-130			
Cadmium	148	100	11	ug/l	80.0	84.1	80	70-130			
Chromium	978	200	70	ug/l	80.0	902	96	70-130			*MHA*
Cobalt	4190	100	15	ug/l	80.0	4170	30	70-130			*MHA*
Lead	83.4	100	30	ug/l	80.0	ND	104	70-130			*J*
Molybdenum	117	200	20	ug/l	80.0	46.9	87	70-130			*J*
Nickel	4390	200	90	ug/l	80.0	4340	63	70-130			*MHA*
Selenium	156	200	30	ug/l	80.0	90.9	81	70-130			*J*
Silver	65.4	100	30	ug/l	80.0	ND	82	70-130			*J*
Thallium	77.7	100	20	ug/l	80.0	ND	97	70-130			*J*
Vanadium	2210	200	70	ug/l	80.0	2160	68	70-130			*MHA*
Zinc	15900	2000	250	ug/l	80.0	16000	-178	70-130			*MHA*

100x

Arsenic spiked below the RL

out sample

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Project Manager

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Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 136259
Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J22087 Extracted: 10/22/08											
Matrix Spike Dup Analyzed: 10/23/2008 (8J22087-MSD1)						Source: IRJ1080-01					
Uranium	2440	100	50	ug/l	80.0	2480	-50	70-130	3	20	*MHA*
Antimony	67.4	200	20	ug/l	80.0	ND	84	70-130	2	20	*J*
Arsenic	112	100	70	ug/l	80.0	ND	140	70-130	2	20	*M1*
Barium	91.5	100	40	ug/l	80.0	ND	114	70-130	3	20	*J*
Beryllium	222	50	20	ug/l	80.0	161	77	70-130	0	20	
Cadmium	146	100	11	ug/l	80.0	84.1	77	70-130	2	20	
Chromium	942	200	70	ug/l	80.0	902	50	70-130	4	20	*MHA*
Cobalt	4080	100	15	ug/l	80.0	4170	-109	70-130	3	20	*MHA*
Lead	81.7	100	30	ug/l	80.0	ND	102	70-130	2	20	*J*
Molybdenum	112	200	20	ug/l	80.0	46.9	82	70-130	4	20	*J*
Nickel	4290	200	90	ug/l	80.0	4340	-64	70-130	2	20	*MHA*
Selenium	152	200	30	ug/l	80.0	90.9	76	70-130	2	20	*J*
Silver	70.1	100	30	ug/l	80.0	ND	88	70-130	7	20	*J*
Thallium	74.7	100	20	ug/l	80.0	ND	93	70-130	4	20	*J*
Vanadium	2140	200	70	ug/l	80.0	2160	-18	70-130	3	20	*MHA*
Zinc	15500	2000	250	ug/l	80.0	16000	-613	70-130	2	20	*MHA*
Batch: 8J22088 Extracted: 10/22/08											
Blank Analyzed: 10/24/2008-10/26/2008 (8J22088-BLK1)											
Aluminum	ND	0.050	0.040	mg/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	ND	0.10	0.050	mg/l							
Iron	ND	0.040	0.015	mg/l							
Lithium	0.0315	0.050	0.030	mg/l							*J*
Magnesium	ND	0.020	0.012	mg/l							
Phosphorus	ND	0.040	0.020	mg/l							
Potassium	ND	0.50	0.37	mg/l							
Silicon	0.0357	0.11	0.028	mg/l as Silica							*J*
Sodium	ND	0.50	0.19	mg/l							
Strontium	ND	0.020	0.0050	mg/l							
Tin	ND	0.10	0.012	mg/l							
Titanium	ND	0.0050	0.0020	mg/l							

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DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J22088 Extracted: 10/22/08											
LCS Analyzed: 10/24/2008-10/26/2008 (8J22088-BS1)											
Aluminum	0.546	0.050	0.040	mg/l	0.500		109	85-115			
Boron	0.496	0.050	0.020	mg/l	0.500		99	85-115			
Calcium	2.49	0.10	0.050	mg/l	2.50		100	85-115			
Iron	0.505	0.040	0.015	mg/l	0.500		101	85-115			
Lithium	0.553	0.050	0.030	mg/l	0.500		111	85-115			
Magnesium	2.51	0.020	0.012	mg/l	2.50		100	85-115			
Phosphorus	0.486	0.040	0.020	mg/l	0.500		97	85-115			
Potassium	5.06	0.50	0.37	mg/l	5.00		101	85-115			
Silicon	4.90	0.11	0.028	mg/l as Silica	5.35		92	85-115			
Sodium	5.15	0.50	0.19	mg/l	5.00		103	85-115			
Strontium	0.516	0.020	0.0050	mg/l	0.500		103	85-115			
Tin	0.496	0.10	0.012	mg/l	0.500		99	85-115			
Titanium	0.504	0.0050	0.0020	mg/l	0.500		101	85-115			
Matrix Spike Analyzed: 10/24/2008-10/26/2008 (8J22088-MS1)						**Source: IRJ1354-01**					
Aluminum	0.573	0.25	0.20	mg/l	0.500	ND	115	70-130			
Boron	10.4	0.25	0.10	mg/l	0.500	10.6	-41	70-130			*MHA*
Calcium	417	0.50	0.25	mg/l	2.50	432	-609	70-130			*MHA*
Iron	23.5	0.20	0.075	mg/l	0.500	24.6	-232	70-130			*MHA*
Lithium	0.649	0.25	0.15	mg/l	0.500	0.203	89	70-130			
Magnesium	179	0.10	0.060	mg/l	2.50	189	-385	70-130			*MHA*
Phosphorus	0.505	0.20	0.10	mg/l	0.500	ND	101	70-130			
Potassium	8.91	2.5	1.8	mg/l	5.00	3.33	112	70-130			
Silicon	36.3	0.55	0.14	mg/l as Silica	5.35	33.5	53	70-130			*MHA*
Sodium	2130	2.5	0.95	mg/l	5.00	2220	-1780	70-130			*MHA*
Strontium	7.39	0.10	0.025	mg/l	0.500	7.05	68	70-130			*MHA*
Tin	0.502	0.50	0.060	mg/l	0.500	ND	100	70-130			
Titanium	0.500	0.025	0.010	mg/l	0.500	ND	100	70-130			

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METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J22088 Extracted: 10/22/08											
Matrix Spike Dup Analyzed: 10/24/2008-10/26/2008 (8J22088-MSD1)						**Source: IRJ1354-01**					
Aluminum	0.437	0.25	0.20	mg/l	0.500	ND	87	70-130	27	20	*R*
Boron	11.1	0.25	0.10	mg/l	0.500	10.6	93	70-130	6	20	*MHA*
Calcium	434	0.50	0.25	mg/l	2.50	432	95	70-130	4	20	*MHA*
Iron	24.9	0.20	0.075	mg/l	0.500	24.6	49	70-130	6	20	*MHA*
Lithium	0.609	0.25	0.15	mg/l	0.500	0.203	81	70-130	6	20	
Magnesium	190	0.10	0.060	mg/l	2.50	189	42	70-130	6	20	*MHA*
Phosphorus	0.493	0.20	0.10	mg/l	0.500	ND	99	70-130	2	20	
Potassium	9.45	2.5	1.8	mg/l	5.00	3.33	123	70-130	6	20	
Silicon	38.3	0.55	0.14	mg/l as Silica	5.35	33.5	89	70-130	5	20	*MHA*
Sodium	2240	2.5	0.95	mg/l	5.00	2220	369	70-130	5	20	*MHA*
Strontium	7.53	0.10	0.025	mg/l	0.500	7.05	96	70-130	2	20	*MHA*
Tin	0.514	0.50	0.060	mg/l	0.500	ND	103	70-130	2	20	
Titanium	0.523	0.025	0.010	mg/l	0.500	ND	105	70-130	4	20	
Batch: 8J23158 Extracted: 10/23/08											
Blank Analyzed: 10/26/2008-10/27/2008 (8J23158-BLK1)											
Aluminum	ND	0.050	0.040	mg/l							
Boron	0.0278	0.050	0.020	mg/l							*J*
Calcium	0.0641	0.10	0.050	mg/l							*J*
Iron	ND	0.040	0.015	mg/l							
Lithium	ND	0.050	0.030	mg/l							
Magnesium	ND	0.020	0.012	mg/l							
Phosphorus	ND	0.040	0.020	mg/l							
Potassium	ND	0.50	0.37	mg/l							
Silicon	ND	0.11	0.028	mg/l as Silica							
Sodium	0.234	0.50	0.19	mg/l							*J*
Strontium	ND	0.020	0.0050	mg/l							
Tin	ND	0.10	0.012	mg/l							
Titanium	ND	0.0050	0.0020	mg/l							

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Received: 10/14/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J23158 Extracted: 10/23/08											
LCS Analyzed: 10/26/2008-10/27/2008 (8J23158-BS1)											
Aluminum	0.501	0.050	0.040	mg/l	0.500		100	85-115			
Boron	0.493	0.050	0.020	mg/l	0.500		99	85-115			
Calcium	2.58	0.10	0.050	mg/l	2.50		103	85-115			
Iron	0.518	0.040	0.015	mg/l	0.500		104	85-115			
Lithium	0.490	0.050	0.030	mg/l	0.500		98	85-115			
Magnesium	2.57	0.020	0.012	mg/l	2.50		103	85-115			
Phosphorus	0.491	0.040	0.020	mg/l	0.500		98	85-115			
Potassium	5.20	0.50	0.37	mg/l	5.00		104	85-115			
Silicon	5.01	0.11	0.028	mg/l as Silica	5.35		94	85-115			
Sodium	4.93	0.50	0.19	mg/l	5.00		99	85-115			
Strontium	0.504	0.020	0.0050	mg/l	0.500		101	85-115			
Tin	0.502	0.10	0.012	mg/l	0.500		100	85-115			
Titanium	0.501	0.0050	0.0020	mg/l	0.500		100	85-115			
Matrix Spike Analyzed: 10/26/2008-10/27/2008 (8J23158-MS1)						**Source: IRJ1354-02**					
Aluminum	0.323	0.050	0.040	mg/l	0.500	ND	65	70-130			*M2*
Boron	10.8	0.050	0.020	mg/l	0.500	10.2	118	70-130			
Calcium	421	0.10	0.050	mg/l	2.50	411	401	70-130			*MHA*
Iron	23.6	0.040	0.015	mg/l	0.500	22.8	148	70-130			*MHA*
Lithium	0.442	0.050	0.030	mg/l	0.500	0.124	64	70-130			*M2*
Magnesium	39.0	0.020	0.012	mg/l	2.50	186	-5870	70-130			*MHA*
Phosphorus	0.572	0.040	0.020	mg/l	0.500	ND	114	70-130			
Potassium	2.20	0.50	0.37	mg/l	5.00	4.41	-44	70-130			*M2*
Silicon	37.7	0.11	0.028	mg/l as Silica	5.35	32.5	97	70-130			*MHA*
Sodium	456	0.50	0.19	mg/l	5.00	2180	-34600	70-130			*MHA*
Strontium	7.60	0.020	0.0050	mg/l	0.500	6.94	132	70-130			*MHA*
Tin	0.482	0.10	0.012	mg/l	0.500	ND	96	70-130			
Titanium	0.498	0.0050	0.0020	mg/l	0.500	ND	100	70-130			

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Brown and Caldwell - NV
3264 Goni Rd, Ste 153
Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 136259

Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J23158 Extracted: 10/23/08											
Matrix Spike Dup Analyzed: 10/26/2008-10/27/2008 (8J23158-MSD1)						**Source: IRJ1354-02**					
Aluminum	0.316	0.050	0.040	mg/l	0.500	ND	63	70-130	2	20	*M2*
Boron	10.6	0.050	0.020	mg/l	0.500	10.2	73	70-130	2	20	
Calcium	407	0.10	0.050	mg/l	2.50	411	-146	70-130	3	20	*MHA*
Iron	23.2	0.040	0.015	mg/l	0.500	22.8	71	70-130	2	20	*MHA*
Lithium	0.433	0.050	0.030	mg/l	0.500	0.124	62	70-130	2	20	*M2*
Magnesium	37.9	0.020	0.012	mg/l	2.50	186	-5910	70-130	3	20	*MHA*
Phosphorus	0.545	0.040	0.020	mg/l	0.500	ND	109	70-130	5	20	
Potassium	2.25	0.50	0.37	mg/l	5.00	4.41	-43	70-130	2	20	*M2*
Silicon	37.0	0.11	0.028	mg/l as Silica	5.35	32.5	84	70-130	2	20	*MHA*
Sodium	450	0.50	0.19	mg/l	5.00	2180	-34700	70-130	1	20	*MHA*
Strontium	7.42	0.020	0.0050	mg/l	0.500	6.94	95	70-130	2	20	*MHA*
Tin	0.466	0.10	0.012	mg/l	0.500	ND	93	70-130	3	20	
Titanium	0.485	0.0050	0.0020	mg/l	0.500	ND	97	70-130	3	20	
Batch: 8J23162 Extracted: 10/23/08											
Blank Analyzed: 10/24/2008-10/27/2008 (8J23162-BLK1)											
Uranium	ND	1.0	0.50	ug/l							
Antimony	ND	2.0	0.20	ug/l							
Arsenic	ND	1.0	0.70	ug/l							
Barium	ND	1.0	0.40	ug/l							
Beryllium	ND	0.50	0.20	ug/l							
Cadmium	ND	1.0	0.11	ug/l							
Chromium	ND	2.0	0.70	ug/l							
Cobalt	ND	1.0	0.15	ug/l							
Copper	ND	2.0	0.75	ug/l							
Lead	ND	1.0	0.30	ug/l							
Manganese	ND	1.0	0.75	ug/l							
Molybdenum	ND	2.0	0.20	ug/l							
Nickel	ND	2.0	0.90	ug/l							
Selenium	ND	2.0	0.30	ug/l							
Silver	ND	1.0	0.30	ug/l							
Thallium	ND	1.0	0.20	ug/l							
Vanadium	ND	2.0	0.70	ug/l							
Zinc	4.20	20	2.5	ug/l							*J*

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Project ID: BP Yerington, NV, 136259

Report Number: IRJ1354

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Received: 10/14/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J23162 Extracted: 10/23/08											
LCS Analyzed: 10/24/2008-10/27/2008 (8J23162-BS1)											
Uranium	79.5	1.0	0.50	ug/l	80.0		99	85-115			
Antimony	84.0	2.0	0.20	ug/l	80.0		105	85-115			
Arsenic	78.5	1.0	0.70	ug/l	80.0		98	85-115			
Barium	91.3	1.0	0.40	ug/l	80.0		114	85-115			
Beryllium	78.6	0.50	0.20	ug/l	80.0		98	85-115			
Cadmium	81.2	1.0	0.11	ug/l	80.0		102	85-115			
Chromium	76.8	2.0	0.70	ug/l	80.0		96	85-115			
Cobalt	74.2	1.0	0.15	ug/l	80.0		93	85-115			
Copper	77.8	2.0	0.75	ug/l	80.0		97	85-115			
Lead	78.4	1.0	0.30	ug/l	80.0		98	85-115			
Manganese	72.7	1.0	0.75	ug/l	80.0		91	85-115			*M-3*
Molybdenum	80.0	2.0	0.20	ug/l	80.0		100	85-115			
Nickel	73.5	2.0	0.90	ug/l	80.0		92	85-115			
Selenium	71.1	2.0	0.30	ug/l	80.0		89	85-115			
Silver	83.8	1.0	0.30	ug/l	80.0		105	85-115			
Thallium	80.0	1.0	0.20	ug/l	80.0		100	85-115			
Vanadium	78.3	2.0	0.70	ug/l	80.0		98	85-115			
Zinc	77.8	20	2.5	ug/l	80.0		97	85-115			
Matrix Spike Analyzed: 10/24/2008-10/27/2008 (8J23162-MS1)						**Source: IRJ1354-02**					
Uranium	504	2.0	1.0	ug/l	80.0	421	103	70-130			*MHA*
Antimony	78.1	4.0	0.40	ug/l	80.0	1.26	96	70-130			
Arsenic	83.8	2.0	1.4	ug/l	80.0	5.33	98	70-130			
Barium	120	2.0	0.80	ug/l	80.0	43.1	96	70-130			
Beryllium	61.9	1.0	0.40	ug/l	80.0	ND	77	70-130			
Cadmium	67.3	2.0	0.22	ug/l	80.0	0.620	83	70-130			
Chromium	75.6	4.0	1.4	ug/l	80.0	ND	95	70-130			
Cobalt	103	2.0	0.30	ug/l	80.0	31.8	89	70-130			
Copper	82.4	4.0	1.5	ug/l	80.0	14.7	85	70-130			
Lead	68.3	2.0	0.60	ug/l	80.0	ND	85	70-130			
Molybdenum	278	4.0	0.40	ug/l	80.0	200	97	70-130			
Nickel	132	4.0	1.8	ug/l	80.0	63.2	86	70-130			
Selenium	85.6	4.0	0.60	ug/l	80.0	3.64	102	70-130			
Silver	66.4	2.0	0.60	ug/l	80.0	ND	83	70-130			
Thallium	70.8	2.0	0.40	ug/l	80.0	0.438	88	70-130			
Vanadium	80.6	4.0	1.4	ug/l	80.0	ND	101	70-130			

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Brown and Caldwell - NV
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Carson City, NV 89706
Attention: Penny Bassett

Project ID: BP Yerington, NV, 136259
Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J23162 Extracted: 10/23/08											
Matrix Spike Analyzed: 10/24/2008-10/27/2008 (8J23162-MS1)						**Source: IRJ1354-02**					
Zinc	99.8	40	5.0	ug/l	80.0	37.9	77	70-130			
Matrix Spike Dup Analyzed: 10/24/2008-10/27/2008 (8J23162-MSD1)						**Source: IRJ1354-02**					
Uranium	491	2.0	1.0	ug/l	80.0	421	88	70-130	3	20	*MHA*
Antimony	76.2	4.0	0.40	ug/l	80.0	1.26	94	70-130	3	20	
Arsenic	83.8	2.0	1.4	ug/l	80.0	5.33	98	70-130	0	20	
Barium	115	2.0	0.80	ug/l	80.0	43.1	89	70-130	5	20	
Beryllium	62.1	1.0	0.40	ug/l	80.0	ND	78	70-130	0	20	
Cadmium	66.3	2.0	0.22	ug/l	80.0	0.620	82	70-130	1	20	
Chromium	75.6	4.0	1.4	ug/l	80.0	ND	95	70-130	0	20	
Cobalt	103	2.0	0.30	ug/l	80.0	31.8	89	70-130	0	20	
Copper	82.6	4.0	1.5	ug/l	80.0	14.7	85	70-130	0	20	
Lead	68.0	2.0	0.60	ug/l	80.0	ND	85	70-130	1	20	
Molybdenum	273	4.0	0.40	ug/l	80.0	200	90	70-130	2	20	
Nickel	131	4.0	1.8	ug/l	80.0	63.2	85	70-130	1	20	
Selenium	83.9	4.0	0.60	ug/l	80.0	3.64	100	70-130	2	20	
Silver	65.4	2.0	0.60	ug/l	80.0	ND	82	70-130	2	20	
Thallium	70.0	2.0	0.40	ug/l	80.0	0.438	87	70-130	1	20	
Vanadium	80.9	4.0	1.4	ug/l	80.0	ND	101	70-130	0	20	
Zinc	104	40	5.0	ug/l	80.0	37.9	82	70-130	4	20	

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Attention: Penny Bassett

Project ID: BP Yerington, NV, 136259
Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J14046 Extracted: 10/14/08											
Blank Analyzed: 10/14/2008 (8J14046-BLK1)											
Chloride	ND	0.50	0.25	mg/l							
Fluoride	ND	0.50	0.15	mg/l							
Nitrate-N	ND	0.11	0.060	mg/l							
Nitrite-N	ND	0.15	0.090	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 10/14/2008 (8J14046-BS1)											
Chloride	4.84	0.50	0.25	mg/l	5.00		97	90-110			
Fluoride	4.84	0.50	0.15	mg/l	5.00		97	90-110			
Nitrate-N	1.08	0.11	0.060	mg/l	1.13		95	90-110			
Nitrite-N	1.50	0.15	0.090	mg/l	1.52		99	90-110			
Sulfate	10.3	0.50	0.20	mg/l	10.0		103	90-110			
Matrix Spike Analyzed: 10/14/2008 (8J14046-MS1)						**Source: IRJ1347-02**					
Chloride	22.5	0.50	0.25	mg/l	5.00	17.9	94	80-120			
Fluoride	4.92	0.50	0.15	mg/l	5.00	0.214	94	80-120			
Nitrate-N	1.08	0.11	0.060	mg/l	1.13	ND	96	80-120			
Nitrite-N	1.68	0.15	0.090	mg/l	1.52	ND	111	80-120			
Sulfate	10.9	0.50	0.20	mg/l	10.0	0.993	99	80-120			
Matrix Spike Analyzed: 10/15/2008 (8J14046-MS2)						**Source: IRJ1395-01**					
Chloride	50.3	25	12	mg/l	50.0	4.43	92	80-120			
Fluoride	49.7	25	7.5	mg/l	50.0	7.06	85	80-120			
Nitrate-N	10.1	5.5	3.0	mg/l	11.3	ND	89	80-120			
Nitrite-N	14.8	7.5	4.5	mg/l	15.2	ND	97	80-120			
Sulfate	1660	25	10	mg/l	100	1650	16	80-120			*MHA*
Matrix Spike Dup Analyzed: 10/14/2008 (8J14046-MSD1)						**Source: IRJ1347-02**					
Chloride	22.6	0.50	0.25	mg/l	5.00	17.9	95	80-120	0	20	
Fluoride	4.92	0.50	0.15	mg/l	5.00	0.214	94	80-120	0	20	
Nitrate-N	1.08	0.11	0.060	mg/l	1.13	ND	96	80-120	0	20	
Nitrite-N	1.67	0.15	0.090	mg/l	1.52	ND	110	80-120	1	20	
Sulfate	10.8	0.50	0.20	mg/l	10.0	0.993	98	80-120	1	20	

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Report Number: IRJ1354

Sampled: 10/12/08-10/13/08
Received: 10/14/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J15037 Extracted: 10/15/08											
Blank Analyzed: 10/15/2008 (8J15037-BLK1)											
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 10/15/2008 (8J15037-BS1)											
Total Dissolved Solids	1040	10	10	mg/l	1000		104	90-110			
Duplicate Analyzed: 10/15/2008 (8J15037-DUP1)						Source: IRJ1433-01					
Total Dissolved Solids	121	10	10	mg/l		119			2	10	
Batch: 8J15048 Extracted: 10/15/08											
Blank Analyzed: 10/15/2008 (8J15048-BLK1)											
Alkalinity as CaCO3	ND	2.0	2.0	mg/l							
Bicarbonate Alkalinity as CaCO3	ND	2.0	2.0	mg/l							
Carbonate Alkalinity as CaCO3	ND	2.0	2.0	mg/l							
Hydroxide Alkalinity as CaCO3	ND	2.0	2.0	mg/l							
Duplicate Analyzed: 10/15/2008 (8J15048-DUP1)						Source: IRJ1347-02					
Alkalinity as CaCO3	314	2.0	2.0	mg/l		312			1	20	
Bicarbonate Alkalinity as CaCO3	314	2.0	2.0	mg/l		312			1	20	
Carbonate Alkalinity as CaCO3	ND	2.0	2.0	mg/l		ND				20	
Hydroxide Alkalinity as CaCO3	ND	2.0	2.0	mg/l		ND				20	
Reference Analyzed: 10/15/2008 (8J15048-SRM1)											
Alkalinity as CaCO3	232	2.0	2.0	mg/l	223		104	90-110			
Batch: 8J15074 Extracted: 10/15/08											
Duplicate Analyzed: 10/15/2008 (8J15074-DUP1)						Source: IRJ1354-01					
pH	7.14	0.100	0.100	pH Units		7.12			0	5	*HFT*

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Report Number: IRJ1354

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Received: 10/14/08

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 8J22010 Extracted: 10/14/08											
Blank Analyzed: 10/22/2008 (8J22010-BLK1)											
Total Organic Carbon	ND ✓	1.0	0.50	mg/l							
LCS Analyzed: 10/22/2008 (8J22010-BS1)											
Total Organic Carbon	9.26 ✓	1.0	0.50	mg/l	10.0		93 ✓	90-110			
Matrix Spike Analyzed: 10/22/2008 (8J22010-MS1)						**Source: IRJ1354-01** ✓					
Total Organic Carbon	8.58 ✓	1.0	0.50	mg/l	5.00	4.40	84 ✓	80-120			
Matrix Spike Dup Analyzed: 10/22/2008 (8J22010-MSD1)						**Source: IRJ1354-01**					
Total Organic Carbon	8.65 ✓	1.0	0.50	mg/l	5.00	4.40	85 ✓	80-120	1 ✓	20	

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Report Number: IRJ1354

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Received: 10/14/08

DATA QUALIFIERS AND DEFINITIONS

H	Sample analysis performed past method-specified holding time.
HFT	The holding time for this test is immediate. It was analyzed in the laboratory as soon as possible after receipt.
J	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
M2	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
M-3	Results exceeded the linear range in the MS/MSD and therefore are not available for reporting. The batch was accepted based on acceptable recovery in the Blank Spike (LCS).
MHA	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
RL1	Reporting limit raised due to sample matrix effects.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

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INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ICP5
Calibration: I8J2302
Control Limt: +/- 10.00%
Sequence: IJ82306

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82306-ICV1	Potassium (dissolved)	20.0	20.3	102	mg/l	EPA 200.7-Diss	10/24/08 9:36
	Sodium (dissolved)	20.0	19.4	97	mg/l	EPA 200.7-Diss	10/24/08 9:36
	Strontium (dissolved)	2.00	1.97	99	mg/l	EPA 200.7-Diss	10/24/08 9:36
	Boron (dissolved)	2.00	2.01	101	mg/l	EPA 200.7-Diss	10/24/08 9:37
	Calcium (dissolved)	2.00	1.96	98	mg/l	EPA 200.7-Diss	10/24/08 9:37
	Iron (dissolved)	2.00	2.02	101	mg/l	EPA 200.7-Diss	10/24/08 9:37
	Magnesium (dissolved)	2.00	2.03	102	mg/l	EPA 200.7-Diss	10/24/08 9:37
	Silicon (dissolved)	10.0	10.3	103	mg/l	EPA 200.7-Diss	10/24/08 9:37
	Titanium (dissolved)	2.00	1.99	99	mg/l	EPA 200.7-Diss	10/24/08 9:37
	Lithium (dissolved)	2.00	1.92	96	mg/l	EPA 200.7-Diss	10/24/08 9:38
	Phosphorus (dissolved)	2.00	1.94	97	mg/l	EPA 200.7-Diss	10/24/08 9:38
	Tin (dissolved)	2.00	1.97	99	mg/l	EPA 200.7-Diss	10/24/08 9:38
IJ82306-CCV1	Potassium (dissolved)	10.0	10.0	100	mg/l	EPA 200.7-Diss	10/24/08 11:08
	Sodium (dissolved)	10.0	10.1	101	mg/l	EPA 200.7-Diss	10/24/08 11:08
	Strontium (dissolved)	1.00	1.06	106	mg/l	EPA 200.7-Diss	10/24/08 11:08
	Boron (dissolved)	1.00	0.994	99	mg/l	EPA 200.7-Diss	10/24/08 11:09
	Calcium (dissolved)	10.0	10.1	101	mg/l	EPA 200.7-Diss	10/24/08 11:09
	Iron (dissolved)	1.00	1.02	102	mg/l	EPA 200.7-Diss	10/24/08 11:09
	Magnesium (dissolved)	1.00	1.05	105	mg/l	EPA 200.7-Diss	10/24/08 11:09
	Silicon (dissolved)	5.00	4.94	99	mg/l	EPA 200.7-Diss	10/24/08 11:09
	Titanium (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/24/08 11:09
	Phosphorus (dissolved)	1.00	0.996	100	mg/l	EPA 200.7-Diss	10/24/08 11:10
	Tin (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/24/08 11:10
	Lithium (dissolved)	1.00	1.09	109	mg/l	EPA 200.7-Diss	10/24/08 11:11
IJ82306-CCV2	Potassium (dissolved)	10.0	9.59	96	mg/l	EPA 200.7-Diss	10/24/08 12:17
	Sodium (dissolved)	10.0	9.96	100	mg/l	EPA 200.7-Diss	10/24/08 12:17
	Strontium (dissolved)	1.00	1.04	104	mg/l	EPA 200.7-Diss	10/24/08 12:17
	Boron (dissolved)	1.00	0.983	98	mg/l	EPA 200.7-Diss	10/24/08 12:18
	Calcium (dissolved)	10.0	9.84	98	mg/l	EPA 200.7-Diss	10/24/08 12:18
	Iron (dissolved)	1.00	0.991	99	mg/l	EPA 200.7-Diss	10/24/08 12:18
	Magnesium (dissolved)	1.00	1.02	102	mg/l	EPA 200.7-Diss	10/24/08 12:18
	Silicon (dissolved)	5.00	4.88	98	mg/l	EPA 200.7-Diss	10/24/08 12:18
	Titanium (dissolved)	1.00	0.994	99	mg/l	EPA 200.7-Diss	10/24/08 12:18
	Lithium (dissolved)	1.00	1.05	105	mg/l	EPA 200.7-Diss	10/24/08 12:19
	Phosphorus (dissolved)	1.00	0.961	96	mg/l	EPA 200.7-Diss	10/24/08 12:19
	Tin (dissolved)	1.00	0.977	98	mg/l	EPA 200.7-Diss	10/24/08 12:19
IJ82306-CCV3	Potassium (dissolved)	10.0	9.53	95	mg/l	EPA 200.7-Diss	10/24/08 13:24
	Sodium (dissolved)	10.0	9.82	98	mg/l	EPA 200.7-Diss	10/24/08 13:24
	Strontium (dissolved)	1.00	1.06	106	mg/l	EPA 200.7-Diss	10/24/08 13:24
	Boron (dissolved)	1.00	0.952	95	mg/l	EPA 200.7-Diss	10/24/08 13:25
	Calcium (dissolved)	10.0	9.68	97	mg/l	EPA 200.7-Diss	10/24/08 13:25
	Iron (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/24/08 13:25
	Magnesium (dissolved)	1.00	0.990	99	mg/l	EPA 200.7-Diss	10/24/08 13:25
	Silicon (dissolved)	5.00	4.77	95	mg/l	EPA 200.7-Diss	10/24/08 13:25
	Titanium (dissolved)	1.00	0.982	98	mg/l	EPA 200.7-Diss	10/24/08 13:25
	Lithium (dissolved)	1.00	1.05	105	mg/l	EPA 200.7-Diss	10/24/08 13:26

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
Client: Brown and Caldwell - NV
Instrument ID: ICP5
Control Limt: +/- 10.00%

SDG:
Project: BP Yerington, NV
Calibration: I8J2302
Sequence: IJ82306

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82306-CCV3	Phosphorus (dissolved)	1.00	0.958	96	mg/l	EPA 200.7-Diss	10/24/08 13:26
	Tin (dissolved)	1.00	0.973	97	mg/l	EPA 200.7-Diss	10/24/08 13:26
IJ82306-CCV4	Potassium (dissolved)	10.0	9.84	98	mg/l	EPA 200.7-Diss	10/24/08 14:37
	Sodium (dissolved)	10.0	10.0	100	mg/l	EPA 200.7-Diss	10/24/08 14:37
	Strontium (dissolved)	1.00	1.05	105	mg/l	EPA 200.7-Diss	10/24/08 14:37
	Boron (dissolved)	1.00	0.974	97	mg/l	EPA 200.7-Diss	10/24/08 14:38
	Calcium (dissolved)	10.0	9.77	98	mg/l	EPA 200.7-Diss	10/24/08 14:38
	Iron (dissolved)	1.00	0.984	98	mg/l	EPA 200.7-Diss	10/24/08 14:38
	Magnesium (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/24/08 14:38
	Silicon (dissolved)	5.00	4.83	97	mg/l	EPA 200.7-Diss	10/24/08 14:38
	Titanium (dissolved)	1.00	0.989	99	mg/l	EPA 200.7-Diss	10/24/08 14:38
	Lithium (dissolved)	1.00	1.04	104	mg/l	EPA 200.7-Diss	10/24/08 14:39
	Phosphorus (dissolved)	1.00	0.970	97	mg/l	EPA 200.7-Diss	10/24/08 14:39
	Tin (dissolved)	1.00	0.989	99	mg/l	EPA 200.7-Diss	10/24/08 14:39
IJ82306-CCV5	Potassium (dissolved)	10.0	9.62	96	mg/l	EPA 200.7-Diss	10/24/08 15:48
	Sodium (dissolved)	10.0	9.77	98	mg/l	EPA 200.7-Diss	10/24/08 15:48
	Strontium (dissolved)	1.00	1.03	103	mg/l	EPA 200.7-Diss	10/24/08 15:48
	Boron (dissolved)	1.00	0.966	97	mg/l	EPA 200.7-Diss	10/24/08 15:49
	Calcium (dissolved)	10.0	9.56	96	mg/l	EPA 200.7-Diss	10/24/08 15:49
	Iron (dissolved)	1.00	0.996	100	mg/l	EPA 200.7-Diss	10/24/08 15:49
	Magnesium (dissolved)	1.00	1.00	100	mg/l	EPA 200.7-Diss	10/24/08 15:49
	Silicon (dissolved)	5.00	4.73	95	mg/l	EPA 200.7-Diss	10/24/08 15:49
	Titanium (dissolved)	1.00	0.989	99	mg/l	EPA 200.7-Diss	10/24/08 15:49
	Phosphorus (dissolved)	1.00	0.961	96	mg/l	EPA 200.7-Diss	10/24/08 15:50
	Tin (dissolved)	1.00	0.983	98	mg/l	EPA 200.7-Diss	10/24/08 15:50
	Lithium (dissolved)	1.00	1.06	106	mg/l	EPA 200.7-Diss	10/24/08 15:51
IJ82306-CCV6	Potassium (dissolved)	10.0	9.64	96	mg/l	EPA 200.7-Diss	10/24/08 17:24
	Sodium (dissolved)	10.0	9.89	99	mg/l	EPA 200.7-Diss	10/24/08 17:24
	Strontium (dissolved)	1.00	1.06	106	mg/l	EPA 200.7-Diss	10/24/08 17:24
	Boron (dissolved)	1.00	0.968	97	mg/l	EPA 200.7-Diss	10/24/08 17:25
	Calcium (dissolved)	10.0	9.67	97	mg/l	EPA 200.7-Diss	10/24/08 17:25
	Iron (dissolved)	1.00	1.00	100	mg/l	EPA 200.7-Diss	10/24/08 17:25
	Magnesium (dissolved)	1.00	1.00	100	mg/l	EPA 200.7-Diss	10/24/08 17:25
	Silicon (dissolved)	5.00	4.75	95	mg/l	EPA 200.7-Diss	10/24/08 17:25
	Titanium (dissolved)	1.00	1.00	100	mg/l	EPA 200.7-Diss	10/24/08 17:25
	Phosphorus (dissolved)	1.00	0.960	96	mg/l	EPA 200.7-Diss	10/24/08 17:26
	Tin (dissolved)	1.00	0.983	98	mg/l	EPA 200.7-Diss	10/24/08 17:26
	Lithium (dissolved)	1.00	1.04	104	mg/l	EPA 200.7-Diss	10/24/08 17:27

* Values outside of QC limits

Sequence No.: 5
Sample ID: SEQUENCE-CRL1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/24/2008 9:46:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-CRL1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.030	12580765.7	99.84	%	0.108				0.11%
Ag328.068†	807.2	0.0052	mg/L	0.00070	0.0052	mg/L	0.00070	13.54%
Al308.215†	2952.4	0.1176	mg/L	0.00046	0.1176	mg/L	0.00046	0.39%
As188.979†	16.7	0.0104	mg/L	0.00207	0.0104	mg/L	0.00207	19.90%
B 249.773†	4526.1	0.1004	mg/L	0.00006	0.1004	mg/L	0.00006	0.06%
Ba 233.527†	1923.8	0.0106	mg/L	0.00007	0.0106	mg/L	0.00007	0.69%
Be 313.107†	26005.3	0.0103	mg/L	0.00013	0.0103	mg/L	0.00013	1.25%
Ca 315.887†	37162.0	0.2189	mg/L	0.00196	0.2189	mg/L	0.00196	0.90%
Cd 214.438†	1967.9	0.0103	mg/L	0.00008	0.0103	mg/L	0.00008	0.75%
Co 228.616†	614.1	0.0105	mg/L	0.00000	0.0105	mg/L	0.00000	0.00%
Cr 205.552†	192.6	0.0106	mg/L	0.00001	0.0106	mg/L	0.00001	0.11%
Cu324.754†	1858.8	0.0106	mg/L	0.00036	0.0106	mg/L	0.00036	3.40%
Fe238.204†	13871.2	0.0795	mg/L	0.00056	0.0795	mg/L	0.00056	0.70%
K 766.490†	2086.3	0.9980	mg/L	0.02794	0.9980	mg/L	0.02794	2.80%
Li 610.362†	6296.6	0.0153	mg/L	0.00098	0.0153	mg/L	0.00098	6.42%
Mg279.079†	784.4	0.0459	mg/L	0.00424	0.0459	mg/L	0.00424	9.23%
Mn257.610†	13418.4	0.0105	mg/L	0.00004	0.0105	mg/L	0.00004	0.41%
Mo202.030†	80.3	0.0100	mg/L	0.00022	0.0100	mg/L	0.00022	2.23%
Na 589.592†	6628.1	1.006	mg/L	0.0105	1.006	mg/L	0.0105	1.05%
Ni231.604†	311.5	0.0104	mg/L	0.00028	0.0104	mg/L	0.00028	2.69%
P 214.914†	21.7	0.0095	mg/L	0.00365	0.0095	mg/L	0.00365	38.46%
Pb220.353†	85.0	0.0121	mg/L	0.00071	0.0121	mg/L	0.00071	5.84%
Sb 206.833†	31.3	0.0111	mg/L	0.00162	0.0111	mg/L	0.00162	14.63%
Se 196.026†	7.6	0.0043	mg/L	0.00005	0.0043	mg/L	0.00005	1.13%
Si251.611†	2781.3	0.0539	mg/L	0.00154	0.0539	mg/L	0.00154	2.85%
Sn189.933†	47.8	0.0120	mg/L	0.00005	0.0120	mg/L	0.00005	0.45%
Sr 421.552rad†	3039.2	0.0101	mg/L	0.00004	0.0101	mg/L	0.00004	0.39%
Ti 334.941†	10333.9	0.0103	mg/L	0.00016	0.0103	mg/L	0.00016	1.55%
Tl 190.800†	11.6	0.0086	mg/L	0.00081	0.0086	mg/L	0.00081	9.38%
V 292.402†	1106.1	0.0110	mg/L	0.00055	0.0110	mg/L	0.00055	5.04%
Zn 213.856†	904.6	0.0105	mg/L	0.00005	0.0105	mg/L	0.00005	0.48%

199%

spike < RL

all w/i 50-150%

etc. Ca

Ca in samples >> spike, no impact

Sequence No.: 6
Sample ID: SEQUENCE-CRL2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 10/24/2008 9:52:36 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-CRL2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.030	12683877.9	100.7	%	1.13				1.13%
Ag328.068†	1648.6	0.0106	mg/L	0.00039	0.0106	mg/L	0.00039	3.69%
Al308.215†	655.2	0.0272	mg/L	0.00022	0.0272	mg/L	0.00022	0.82%
As188.979†	36.7	0.0228	mg/L	0.00104	0.0228	mg/L	0.00104	4.56%
B 249.773†	1026.2	0.0225	mg/L	0.00014	0.0225	mg/L	0.00014	0.62%
Ba 233.527†	3853.0	0.0212	mg/L	0.00019	0.0212	mg/L	0.00019	0.88%
Be 313.107†	52812.6	0.0209	mg/L	0.00008	0.0209	mg/L	0.00008	0.39%
Ca 315.887†	34478.2	0.2029	mg/L	0.00111	0.2029	mg/L	0.00111	0.55%
Cd 214.438†	3948.6	0.0207	mg/L	0.00020	0.0207	mg/L	0.00020	0.98%
Co 228.616†	1236.8	0.0212	mg/L	0.00026	0.0212	mg/L	0.00026	1.24%
Cr 205.552†	377.9	0.0207	mg/L	0.00040	0.0207	mg/L	0.00040	1.94%
Cu324.754†	3495.2	0.0199	mg/L	0.00058	0.0199	mg/L	0.00058	2.90%
Fe238.204†	3638.1	0.0209	mg/L	0.00008	0.0209	mg/L	0.00008	0.37%
K 766.490†	354.5	0.1688	mg/L	0.01673	0.1688	mg/L	0.01673	9.91%
Li 610.362†	11385.0	0.0276	mg/L	0.00039	0.0276	mg/L	0.00039	1.40%
Mg279.079†	408.4	0.0242	mg/L	0.00082	0.0242	mg/L	0.00082	3.38%
Mn257.610†	26779.6	0.0209	mg/L	0.00007	0.0209	mg/L	0.00007	0.34%
Mo202.030†	163.1	0.0203	mg/L	0.00060	0.0203	mg/L	0.00060	2.93%
Na 589.592†	1492.8	0.2261	mg/L	0.01474	0.2261	mg/L	0.01474	6.52%
Ni231.604†	628.4	0.0209	mg/L	0.00014	0.0209	mg/L	0.00014	0.66%
P 214.914†	52.7	0.0230	mg/L	0.00196	0.0230	mg/L	0.00196	8.53%
Pb220.353†	155.0	0.0221	mg/L	0.00139	0.0221	mg/L	0.00139	6.28%
Sb 206.833†	56.1	0.0199	mg/L	0.00035	0.0199	mg/L	0.00035	1.77%
Se 196.026†	28.4	0.0163	mg/L	0.00042	0.0163	mg/L	0.00042	2.58%
Si251.611†	5101.1	0.0987	mg/L	0.00097	0.0987	mg/L	0.00097	0.98%
Sn189.933†	86.1	0.0216	mg/L	0.00098	0.0216	mg/L	0.00098	4.56%
Sr 421.552rad†	6241.1	0.0208	mg/L	0.00069	0.0208	mg/L	0.00069	3.33%
Ti 334.941†	20315.2	0.0202	mg/L	0.00021	0.0202	mg/L	0.00021	1.04%
Tl 190.800†	25.9	0.0193	mg/L	0.00126	0.0193	mg/L	0.00126	6.52%
V 292.402†	2177.3	0.0216	mg/L	0.00021	0.0216	mg/L	0.00021	0.98%
Zn 213.856†	1734.2	0.0202	mg/L	0.00021	0.0202	mg/L	0.00021	1.04%

all w/i 50-150 %

BLANKS
EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: ICP5
Project: BP Yerington, NV
Sequence: IJ82306
Calibration: I8J2302

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82306-ICB1	Potassium (dissolved)	-0.0219	0.50	mg/l		EPA 200.7-Diss	10/24/08 9:42
	Sodium (dissolved)	0.00773	0.50	mg/l		EPA 200.7-Diss	10/24/08 9:42
	Strontium (dissolved)	0.000306	0.020	mg/l		EPA 200.7-Diss	10/24/08 9:42
	Calcium (dissolved)	0.00160	0.10	mg/l		EPA 200.7-Diss	10/24/08 9:43
	Iron (dissolved)	0.00125	0.040	mg/l		EPA 200.7-Diss	10/24/08 9:43
	Magnesium (dissolved)	0.00511	0.020	mg/l		EPA 200.7-Diss	10/24/08 9:43
	Silicon (dissolved)	0.0105	0.051	mg/l		EPA 200.7-Diss	10/24/08 9:43
	Titanium (dissolved)	0.000730	0.0050	mg/l		EPA 200.7-Diss	10/24/08 9:43
	Boron (dissolved)	0.00476	0.050	mg/l		EPA 200.7-Diss	10/24/08 9:44
	Phosphorus (dissolved)	0.00225	0.040	mg/l		EPA 200.7-Diss	10/24/08 9:44
	Tin (dissolved)	0.00174	0.10	mg/l		EPA 200.7-Diss	10/24/08 9:44
	Lithium (dissolved)	0.00147	0.050	mg/l		EPA 200.7-Diss	10/24/08 9:44
IJ82306-CCB1	Potassium (dissolved)	-0.0577	0.50	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Sodium (dissolved)	-0.00692	0.50	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Strontium (dissolved)	0.000245	0.020	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Boron (dissolved)	0.00407	0.050	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Calcium (dissolved)	0.00441	0.10	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Iron (dissolved)	0.00140	0.040	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Magnesium (dissolved)	0.00346	0.020	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Silicon (dissolved)	0.00876	0.051	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Titanium (dissolved)	0.0000895	0.0050	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Phosphorus (dissolved)	0.00504	0.040	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Tin (dissolved)	0.00166	0.10	mg/l		EPA 200.7-Diss	10/24/08 11:1
	Lithium (dissolved)	0.0432	0.050	mg/l		EPA 200.7-Diss	10/24/08 11:1
IJ82306-CCB2	Potassium (dissolved)	0.0270	0.50	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Sodium (dissolved)	0.0915	0.50	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Strontium (dissolved)	0.000364	0.020	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Calcium (dissolved)	0.00577	0.10	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Iron (dissolved)	0.00132	0.040	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Magnesium (dissolved)	0.00691	0.020	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Silicon (dissolved)	0.00155	0.051	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Titanium (dissolved)	0.000184	0.0050	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Boron (dissolved)	0.00449	0.050	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Phosphorus (dissolved)	-0.000672	0.040	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Tin (dissolved)	0.00135	0.10	mg/l		EPA 200.7-Diss	10/24/08 12:2
	Lithium (dissolved)	0.0157	0.050	mg/l		EPA 200.7-Diss	10/24/08 12:2
IJ82306-CCB3	Potassium (dissolved)	-0.0402	0.50	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Sodium (dissolved)	0.00771	0.50	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Strontium (dissolved)	0.000822	0.020	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Calcium (dissolved)	0.00447	0.10	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Iron (dissolved)	0.00145	0.040	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Magnesium (dissolved)	0.00240	0.020	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Silicon (dissolved)	0.00478	0.051	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Titanium (dissolved)	-0.0000494	0.0050	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Boron (dissolved)	0.00348	0.050	mg/l		EPA 200.7-Diss	10/24/08 13:3

BLANKS
EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: ICP5
Project: BP Yerington, NV
Sequence: IJ82306
Calibration: I8J2302

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82306-CCB3	Phosphorus (dissolved)	-0.00239	0.040	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Tin (dissolved)	-0.000273	0.10	mg/l		EPA 200.7-Diss	10/24/08 13:3
	Lithium (dissolved)	0.0286	0.050	mg/l		EPA 200.7-Diss	10/24/08 13:3
IJ82306-CCB4	Potassium (dissolved)	-0.0301	0.50	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Sodium (dissolved)	0.0216	0.50	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Strontium (dissolved)	0.000698	0.020	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Boron (dissolved)	0.00752	0.050	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Calcium (dissolved)	0.00514	0.10	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Iron (dissolved)	0.00105	0.040	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Magnesium (dissolved)	0.00715	0.020	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Silicon (dissolved)	0.00653	0.051	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Titanium (dissolved)	-0.0000850	0.0050	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Phosphorus (dissolved)	-0.00190	0.040	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Tin (dissolved)	0.00187	0.10	mg/l		EPA 200.7-Diss	10/24/08 14:4
	Lithium (dissolved)	0.0307	0.050	mg/l		EPA 200.7-Diss	10/24/08 14:4
8J22088-BLK1	Potassium (dissolved)	-0.0232	0.50	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Sodium (dissolved)	0.00424	0.50	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Strontium (dissolved)	0.0000894	0.020	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Boron (dissolved)	0.0158	0.050	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Calcium (dissolved)	0.0225	0.10	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Iron (dissolved)	0.0135	0.040	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Magnesium (dissolved)	0.00599	0.020	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Silicon (dissolved)	0.0357	0.11	mg/l as Silica		EPA 200.7-Diss	10/24/08 15:0
	Titanium (dissolved)	-0.000286	0.0050	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Phosphorus (dissolved)	0.000821	0.040	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Tin (dissolved)	0.00166	0.10	mg/l		EPA 200.7-Diss	10/24/08 15:0
	Lithium (dissolved)	0.0315	0.050	mg/l		EPA 200.7-Diss	10/24/08 15:0
IJ82306-CCB5	Potassium (dissolved)	0.0246	0.50	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Sodium (dissolved)	0.0368	0.50	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Strontium (dissolved)	0.000292	0.020	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Calcium (dissolved)	0.00568	0.10	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Iron (dissolved)	0.00186	0.040	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Magnesium (dissolved)	0.00590	0.020	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Silicon (dissolved)	0.00287	0.051	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Titanium (dissolved)	-0.0000861	0.0050	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Boron (dissolved)	0.00945	0.050	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Phosphorus (dissolved)	-0.00297	0.040	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Tin (dissolved)	0.000840	0.10	mg/l		EPA 200.7-Diss	10/24/08 15:5
	Lithium (dissolved)	0.0313	0.050	mg/l		EPA 200.7-Diss	10/24/08 15:5
IJ82306-CCB6	Potassium (dissolved)	-0.0202	0.50	mg/l		EPA 200.7-Diss	10/24/08 17:3
	Sodium (dissolved)	-0.0151	0.50	mg/l		EPA 200.7-Diss	10/24/08 17:3
	Strontium (dissolved)	0.000250	0.020	mg/l		EPA 200.7-Diss	10/24/08 17:3
	Calcium (dissolved)	0.00623	0.10	mg/l		EPA 200.7-Diss	10/24/08 17:3
	Iron (dissolved)	0.00182	0.040	mg/l		EPA 200.7-Diss	10/24/08 17:3
	Magnesium (dissolved)	0.00257	0.020	mg/l		EPA 200.7-Diss	10/24/08 17:3

Sequence No.: 5
Sample ID: SEQUENCE-IFA1
Analyst:
Initial Sample Wt:
Dilution:

ICSA

Autosampler Location: 11
Date Collected: 10/24/2008 9:15:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-IFA1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.030	11709583.3	92.93	%	0.130				0.14%
Ag328.068†	-3517.5	-0.0041	mg/L	0.00054	-0.0041	mg/L	0.00054	12.95%
Al308.215†	12699915.3	503.0	mg/L	2.66	503.0	mg/L	2.66	0.53%
As188.979†	-1.8	-0.0064	mg/L	0.00193	-0.0064	mg/L	0.00193	30.24%
B 249.773†	12653.1	-0.0698	mg/L	0.01094	-0.0698	mg/L	0.01094	15.67%
Ba 233.527†	874.1	0.0048	mg/L	0.00006	0.0048	mg/L	0.00006	1.15%
Be 313.107†	-585.8	-0.0002	mg/L	0.00005	-0.0002	mg/L	0.00005	20.30%
Ca 315.887†	77748606.3	458.3	mg/L	2.52	458.3	mg/L	2.52	0.55%
Cd 214.438†	654.2	-0.0024	mg/L	0.00001	-0.0024	mg/L	0.00001	0.60%
Co 228.616†	159.0	0.0028	mg/L	0.00021	0.0028	mg/L	0.00021	7.77%
Cr 205.552†	273.4	0.0055	mg/L	0.00073	0.0055	mg/L	0.00073	13.28%
Cu324.754†	262.5	0.0015	mg/L	0.00140	0.0015	mg/L	0.00140	93.28%
Fe238.204†	30203709.5	173.1	mg/L	1.14	173.1	mg/L	1.14	0.66%
K 766.490†	75.4	0.0096	mg/L	0.01406	0.0096	mg/L	0.01406	146.10%
Li 610.362†	-81317.5	-0.0695	mg/L	0.00229	-0.0695	mg/L	0.00229	3.30%
Mg279.079†	8442479.8	492.2	mg/L	3.62	492.2	mg/L	3.62	0.74%
Mn257.610†	12335.7	-0.0049	mg/L	0.00024	-0.0049	mg/L	0.00024	4.81%
Saturated outside survey window (code 6)								
Mo202.030†	-16.3	-0.0020	mg/L	0.00081	-0.0020	mg/L	0.00081	40.34%
Na 589.592†	273.3	-0.0394	mg/L	0.01099	-0.0394	mg/L	0.01099	27.89%
Ni231.604†	-1330.3	-0.0089	mg/L	0.00006	-0.0089	mg/L	0.00006	0.64%
P 214.914†	-480.2	-0.0391	mg/L	0.00390	-0.0391	mg/L	0.00390	9.96%
Pb220.353†	136.9	0.0042	mg/L	0.00155	0.0042	mg/L	0.00155	36.41%
Sb 206.833†	18.0	-0.0011	mg/L	0.00066	-0.0011	mg/L	0.00066	60.49%
Se 196.026†	-9.2	0.0073	mg/L	0.00723	0.0073	mg/L	0.00723	99.65%
Si251.611†	516.9	0.0064	mg/L	0.00087	0.0064	mg/L	0.00087	13.52%
Sn189.933†	-93.1	0.0225	mg/L	0.00177	0.0225	mg/L	0.00177	7.89%
Sr 421.552rad†	4683.0	0.0013	mg/L	0.00002	0.0013	mg/L	0.00002	1.95%
Ti 334.941†	-15925.6	0.0002	mg/L	0.00034	0.0002	mg/L	0.00034	193.61%
Tl 190.800†	-46.8	0.0039	mg/L	0.00022	0.0039	mg/L	0.00022	5.63%
V 292.402†	-539.3	0.0025	mg/L	0.00076	0.0025	mg/L	0.00076	29.69%
Zn 213.856†	3806.7	-0.0049	mg/L	0.00012	-0.0049	mg/L	0.00012	2.43%

all < RL

Analysis Begun

Start Time: 10/24/2008 9:22:24 AM
Logged In Analyst: inorg
Spectrometer Model: Optima 5300 DV, S/N 077N5112802
Plasma On Time: 10/24/2008 7:10:20 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\inorg\Sample Information\081024-1.sif
Batch ID:
Results Data Set: 081024-1
Results Library: C:\pe\inorg\Results\Results.mdb

Sequence No.: 1
Sample ID: SEQUENCE-IFB1
Analyst:
Initial Sample Wt:
Dilution:

ICS A3

Autosampler Location: 12
Date Collected: 10/24/2008 9:22:25 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-IFB1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.030	11806512.2	93.70	%	0.359				0.38%
Ag328.068†	38188.5	0.2624	mg/L	0.00027	0.2624	mg/L	0.00027	0.10%
Al308.215†	12509186.2	495.4	mg/L	1.85	495.4	mg/L	1.85	0.37%
As188.979†	828.6	0.5103	mg/L	0.00365	0.5103	mg/L	0.00365	0.72%
B 249.773†	35312.6	0.4329	mg/L	0.00651	0.4329	mg/L	0.00651	1.50%
Ba 233.527†	92344.9	0.5083	mg/L	0.00389	0.5083	mg/L	0.00389	0.77%
Be 313.107†	1298993.7	0.5147	mg/L	0.00390	0.5147	mg/L	0.00390	0.76%
Ca 315.887†	76220947.7	449.2	mg/L	2.43	449.2	mg/L	2.43	0.54%
Cd 214.438†	93826.3	0.4853	mg/L	0.00384	0.4853	mg/L	0.00384	0.79%
Co 228.616†	29041.5	0.4969	mg/L	0.00467	0.4969	mg/L	0.00467	0.94%
Cr 205.552†	9400.3	0.5056	mg/L	0.00223	0.5056	mg/L	0.00223	0.44%
Cu324.754†	96042.5	0.5469	mg/L	0.00417	0.5469	mg/L	0.00417	0.76%
Fe238.204†	29751263.9	170.6	mg/L	0.74	170.6	mg/L	0.74	0.43%
K 766.490†	25068.5	11.95	mg/L	0.208	11.95	mg/L	0.208	1.74%
Li 610.362†	120712.0	0.4146	mg/L	0.00306	0.4146	mg/L	0.00306	0.74%
Mg279.079†	8251346.1	481.1	mg/L	2.99	481.1	mg/L	2.99	0.62%
Mn257.610†	657046.4	0.4989	mg/L	0.00451	0.4989	mg/L	0.00451	0.90%
Mo202.030†	4020.3	0.5012	mg/L	0.00207	0.5012	mg/L	0.00207	0.41%
Na 589.592†	72207.5	10.87	mg/L	0.015	10.87	mg/L	0.015	0.14%
Ni231.604†	13243.0	0.4745	mg/L	0.00180	0.4745	mg/L	0.00180	0.38%
P 214.914†	686.6	0.4652	mg/L	0.00020	0.4652	mg/L	0.00020	0.04%
Pb220.353†	3577.1	0.4945	mg/L	0.00443	0.4945	mg/L	0.00443	0.90%
Sb 206.833†	1453.3	0.5079	mg/L	0.00996	0.5079	mg/L	0.00996	1.96%
Se 196.026†	849.8	0.4996	mg/L	0.01074	0.4996	mg/L	0.01074	2.15%
Si251.611†	124092.9	2.395	mg/L	0.0247	2.395	mg/L	0.0247	1.03%
Sn189.933†	1879.0	0.5153	mg/L	0.00235	0.5153	mg/L	0.00235	0.46%
Sr 421.552rad†	163487.4	0.5319	mg/L	0.00862	0.5319	mg/L	0.00862	1.62%
Ti 334.941†	499641.3	0.5136	mg/L	0.00468	0.5136	mg/L	0.00468	0.91%
Tl 190.800†	603.5	0.4873	mg/L	0.00196	0.4873	mg/L	0.00196	0.40%
V 292.402†	51396.2	0.5175	mg/L	0.00418	0.5175	mg/L	0.00418	0.81%
Zn 213.856†	46320.4	0.4905	mg/L	0.00165	0.4905	mg/L	0.00165	0.34%

all w/i 80-120 %

Sample Information Detail Report
Document Name: 081024-1

File Description
6010/200.7 ICP5 081024MECAL

Parameters Common to All Samples

Batch ID	
Volume Units	mL
Weight Units	g

Parameters That Vary By Sample

Sample No	A/S Location	Sample ID	Batch ID	Analysis Requested
1	1	Calib Blank 1	081024MECAL	0.00 PPM
2	2	Calib Std 1	081024MECAL	0.005 PPM
3	3	Calib Std 2	081024MECAL	0.1 PPM
4	4	Calib Std 3	081024MECAL	1.0 PPM
5	11	SEQUENCE-IFA1		
6	12	SEQUENCE-IFB1		
7	10	RINSE		
8	7	SEQUENCE-ICV1 mL 200.7		
9	8	SEQUENCEICB1		
10	6	SEQUENCE-CRL1		
11	9	SEQUENCE-CRL2		
12	13	8J23167-BLK1	8J23167	CAM SOIL
13	14	8J23167-BS1	8J23167	CAM SOIL
14	15	IRJ1613-18	8J23167	CAM SOIL
15	16	8J23167-MS1	8J23167	CAM SOIL
16	17	8J23167-MSD1	8J23167	CAM SOIL
17	18	IRJ1613-16	8J23167	CAM SOIL
18	19	8J23167-MS2	8J23167	CAM SOIL
19	20	8J23167-MSD2	8J23167	CAM SOIL
20	21	IRJ1613-08	8J23167	PB SOIL
21	22	IRJ1613-14	8J23167	PB SOIL
22	4	SEQUENCE-CCV1 AL		
23	8	SEQUENCECCB1		
24	37	8J23135-BLK1	8J23135	CAMGNAK 200.7
25	38	8J23135-BS1	8J23135	CAMGNAK 200.7
26	39	IRJ2340-01	8J23135	CAMGNAK 200.7
27	40	8J23135-MS1	8J23135	CAMGNAK 200.7
28	41	8J23135-MSD1	8J23135	CAMGNAK 200.7
29	42	IRJ2098-01@5	8J23132	CAM SOIL
30	54	IRJ1739-02	8J18047	K WATER
31	4	SEQUENCE-CCV2		
32	8	SEQUENCECCB2		
33	23	IRJ1613-15	8J23167	PB SOIL
34	24	IRJ1613-20	8J23167	PB SOIL
35	25	IRJ1808-29	8J23167	CAM SOIL
36	26	IRJ1808-30	8J23167	CAM SOIL
37	27	IRJ1808-32	8J23167	CAM SOIL
38	28	~~IRJ1550-01~~ Cu 20X	8J23167	CAM SOIL

Sample Information Detail Report
Document Name: 081024-1

39	29	IRJ1550-02 rerun	8J23167	CAM SOIL
40	30	IRJ1808-28	8J23167	CAM SOIL
41	31	IRJ1583-AV	8J23167	CAM SOIL
42	4	SEQUENCE-CCV3		
43	8	SEQUENCECCB3		
44	32	8J24081-BLK1	8J24081	CA 200.7 CADW
45	33	8J24091-BS1	8J24081	CA 200.7 CADW
46	34	IRJ1478-01	8J24081	CA 200.7 CADW
47	35	8J24081-MS1	8J24081	CA 200.7 CADW
48	36	8J24081-MSD1	8J24081	CA 200.7 CADW
49	4	SEQUENCE-CCV4		
50	8	SEQUENCE-CCB4		
51	75	IRJ1550-01@20 rerun Cu 4/07	8J23167	CAM SOIL
52	76	IRJ1550-02	8J23167	CAM SOIL
53	75	IRJ1550-01@40	8J23167	CU SOIL
54	77	8J22088-BLK1 Al	8J22088	BP CAM 200.7 SEQ
55	78	8J22088-BS1	8J22088	BP CAM 200.7 SEQ
56	79	IRJ1354-01@5	8J22088	BP CAM 200.7 SEQ
57	80	8J22088-MS1@5	8J22088	BP CAM 200.7 SEQ
58	81	8J22088-MSD1@5	8J22088	BP CAM 200.7 SEQ
59	82	IRJ1354-03@20	8J22088	BP CAM 200.7 SEQ
60	83	IRJ1080-01@20	8J22088	BP CAM 200.7 SEQ
61	4	SEQUENCE-CCV5		
62	8	SEQUENCE-CCB5		
63	84	8J22117-BS1	8J22117	K 200.7
64	85	IRJ2077-01 already reported	8J22117	K 200.7
65	86	8J21085-BLK1	8J21085	BP CAM 200.7 SEQ Seq # 1782806
66	87	8J21085-BS1	8J21085	BP CAM 200.7 SEQ
67	88	IRJ1213-01	8J21085	BP CAM 200.7 SEQ
68	89	8J21085-MS1	8J21085	BP CAM 200.7 SEQ
69	90	8J21085-MSD1	8J21085	BP CAM 200.7 SEQ
70	91	IRJ1207-02@4	8J18048	BP CAM SOIL SEQ
71	92	IRJ1207-05@4	8J18048	BP CAM SOIL SEQ
72	93	IRJ1207-08@5	8J18048	BP CAM SOIL SEQ
73	4	SEQUENCE-CCV6		
74	8	SEQUENCE-CCB6		
75	94	IRJ1207-09@5	8J18048	BP CAM SOIL SEQ
76	95	8J24079-BLK1	8J24079	BP CAM SOIL
77	96	8J24079-BS1	8J24079	BP CAM SOIL
78	97	~~IRJ1670-41~~ Fe, Ti 10x	8J24079	BP CAM SOIL
79	98	~~8J24079-MS1~~	8J24079	BP CAM SOIL
80	99	~~8J24079-MSD1~~	8J24079	BP CAM SOIL
81	100	~~IRJ1670-42~~	8J24079	PB SOIL
82	101	~~IRJ1670-43~~	8J24079	PB SOIL
83	102	~~IRJ1670-44~~	8J24079	PB SOIL
84	103	~~IRJ1670-45~~	8J24079	PB SOIL
85	4	~~SEQUENCE-CCV7~~		
86	4	SEQUENCE-CCV8		
87	8	SEQUENCE-CCB7		
88	104	IRJ1444-01	8J24079	PB SOIL

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
Client: Brown and Caldwell - NV
Instrument ID: ICP4
Control Limt: +/- 10.00%

SDG:
Project: BP Yerington, NV
Calibration: I8J2805
Sequence: IJ82808

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82808-ICV1	Aluminum (dissolved)	2.00	1.98	99	mg/l	EPA 200.7-Diss	10/26/08 11:31
IJ82808-CCV1	Aluminum (dissolved)	1.00	0.997	100	mg/l	EPA 200.7-Diss	10/26/08 13:12
IJ82808-CCV2	Aluminum (dissolved)	1.00	0.998	100	mg/l	EPA 200.7-Diss	10/26/08 16:37
IJ82808-CCV3	Aluminum (dissolved)	1.00	0.992	99	mg/l	EPA 200.7-Diss	10/26/08 17:55
IJ82808-CCV4	Aluminum (dissolved)	1.00	1.01	101	mg/l	EPA 200.7-Diss	10/26/08 19:09
IJ82808-CCV5	Aluminum (dissolved)	1.00	0.968	97	mg/l	EPA 200.7-Diss	10/26/08 20:17
IJ82808-CCV6	Aluminum (dissolved)	1.00	0.958	96	mg/l	EPA 200.7-Diss	10/26/08 21:25
IJ82808-CCV7	Aluminum (dissolved)	1.00	0.944	94	mg/l	EPA 200.7-Diss	10/26/08 22:10

* Values outside of QC limits

Sequence No.: 4
Sample ID: SEQUENCE-ICV1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 10/26/2008 11:29:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-ICV1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5957898.9	100.5	%	0.72				0.72%
Ag 328.068†	81423.9	1.007	mg/L	0.0054	1.007	mg/L	0.0054	0.54%
Al 308.215†	49098.6	1.976	mg/L	0.0176	1.976	mg/L	0.0176	0.89%
As 188.979†	1371.3	1.916	mg/L	0.0229	1.916	mg/L	0.0229	1.19%
B 249.772†	40171.3	2.034	mg/L	0.0176	2.034	mg/L	0.0176	0.86%
Ba 233.527†	122186.9	2.056	mg/L	0.0098	2.056	mg/L	0.0098	0.48%
Be 313.107†	2878762.5	1.978	mg/L	0.0033	1.978	mg/L	0.0033	0.17%
Ca 315.887†	144818.4	2.021	mg/L	0.0188	2.021	mg/L	0.0188	0.93%
Cd 214.440†	198927.1	1.916	mg/L	0.0211	1.916	mg/L	0.0211	1.10%
Co 228.616†	66735.8	1.959	mg/L	0.0227	1.959	mg/L	0.0227	1.16%
Cr 205.560†	26696.3	1.955	mg/L	0.0089	1.955	mg/L	0.0089	0.46%
Cu 324.752†	340308.3	1.977	mg/L	0.0162	1.977	mg/L	0.0162	0.82%
Fe 238.204†	139380.2	2.015	mg/L	0.0217	2.015	mg/L	0.0217	1.08%
K 766.490†	18683.0	20.57	mg/L	0.295	20.57	mg/L	0.295	1.44%
Li 610.362†	249633.9	1.940	mg/L	0.0024	1.940	mg/L	0.0024	0.12%
Mg 279.077†	21123.1	1.993	mg/L	0.0084	1.993	mg/L	0.0084	0.42%
Mn 257.610†	1120792.5	1.958	mg/L	0.0050	1.958	mg/L	0.0050	0.25%
Mo 202.031†	12498.8	1.899	mg/L	0.0124	1.899	mg/L	0.0124	0.65%
Na 589.592†	11238.8	19.77	mg/L	0.334	19.77	mg/L	0.334	1.69%
Ni 231.604†	46322.7	1.969	mg/L	0.0110	1.969	mg/L	0.0110	0.56%
P 214.914†	1846.2	1.915	mg/L	0.0147	1.915	mg/L	0.0147	0.77%
Pb 220.353†	9895.6	1.929	mg/L	0.0113	1.929	mg/L	0.0113	0.59%
Sb 206.836†	3238.2	1.942	mg/L	0.0180	1.942	mg/L	0.0180	0.92%
Se 196.026†	826.7	1.888	mg/L	0.0070	1.888	mg/L	0.0070	0.37%
Si 251.611†	276730.5	10.08	mg/L	0.090	10.08	mg/L	0.090	0.90%
Sn 189.927†	4159.1	1.920	mg/L	0.0105	1.920	mg/L	0.0105	0.55%
Sr 421.552†	199236.1	1.974	mg/L	0.0367	1.974	mg/L	0.0367	1.86%
Ti 334.940†	777237.7	2.039	mg/L	0.0199	2.039	mg/L	0.0199	0.98%
Tl 190.801†	2192.6	1.982	mg/L	0.0169	1.982	mg/L	0.0169	0.85%
V 292.402†	87537.4	2.009	mg/L	0.0056	2.009	mg/L	0.0056	0.28%
Zn 213.857†	118354.2	1.943	mg/L	0.0163	1.943	mg/L	0.0163	0.84%

IV 2.0 mg/L

all w/i 90-110%

Sequence No.: 23
Sample ID: SEQUENCE-CCV5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/26/2008 8:14:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-CCV5

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6334585.7	106.9	%	0.46				0.43%
Ag 328.068†	40271.1	0.4979	mg/L	0.00298	0.4979	mg/L	0.00298	0.60%
Al 308.215†	24114.4	0.9685	mg/L	0.00684	0.9685	mg/L	0.00684	0.71%
As 188.979†	729.0	1.019	mg/L	0.0070	1.019	mg/L	0.0070	0.69%
B 249.772†	19800.0	1.003	mg/L	0.0033	1.003	mg/L	0.0033	0.33%
Ba 233.527†	60520.2	1.018	mg/L	0.0014	1.018	mg/L	0.0014	0.13%
Be 313.107†	1495454.1	1.028	mg/L	0.0029	1.028	mg/L	0.0029	0.28%
Ca 315.887†	716100.6	10.06	mg/L	0.058	10.06	mg/L	0.058	0.57%
Cd 214.440†	104734.4	1.009	mg/L	0.0091	1.009	mg/L	0.0091	0.90%
Co 228.616†	34490.2	1.013	mg/L	0.0086	1.013	mg/L	0.0086	0.85%
Cr 205.560†	13727.4	1.005	mg/L	0.0057	1.005	mg/L	0.0057	0.57%
Cu 324.752†	172241.5	1.001	mg/L	0.0058	1.001	mg/L	0.0058	0.58%
Fe 238.204†	70273.9	1.015	mg/L	0.0030	1.015	mg/L	0.0030	0.29%
K 766.490†	9178.8	10.10	mg/L	0.262	10.10	mg/L	0.262	2.60%
Li 610.362†	129779.0	1.012	mg/L	0.0050	1.012	mg/L	0.0050	0.49%
Mg 279.077†	10906.5	1.029	mg/L	0.0076	1.029	mg/L	0.0076	0.74%
Mn 257.610†	577185.0	1.009	mg/L	0.0058	1.009	mg/L	0.0058	0.57%
Mo 202.031†	6616.2	1.005	mg/L	0.0063	1.005	mg/L	0.0063	0.63%
Na 589.592†	5783.3	10.17	mg/L	0.195	10.17	mg/L	0.195	1.92%
Ni 231.604†	23812.4	1.012	mg/L	0.0051	1.012	mg/L	0.0051	0.51%
P 214.914†	965.7	1.002	mg/L	0.0083	1.002	mg/L	0.0083	0.83%
Pb 220.353†	5199.1	1.014	mg/L	0.0076	1.014	mg/L	0.0076	0.75%
Sb 206.836†	1677.4	1.006	mg/L	0.0022	1.006	mg/L	0.0022	0.22%
Se 196.026†	445.7	1.018	mg/L	0.0093	1.018	mg/L	0.0093	0.91%
Si 251.611†	136201.5	4.959	mg/L	0.0383	4.959	mg/L	0.0383	0.77%
Sn 189.927†	2200.5	1.016	mg/L	0.0036	1.016	mg/L	0.0036	0.35%
Sr 421.552†	102462.3	1.015	mg/L	0.0265	1.015	mg/L	0.0265	2.61%
Ti 334.940†	380634.4	0.9989	mg/L	0.00711	0.9989	mg/L	0.00711	0.71%
Tl 190.801†	1105.8	0.9985	mg/L	0.00427	0.9985	mg/L	0.00427	0.43%
V 292.402†	43965.5	1.009	mg/L	0.0065	1.009	mg/L	0.0065	0.64%
Zn 213.857†	60690.5	0.9958	mg/L	0.00647	0.9958	mg/L	0.00647	0.65%

TV
1.0 mg/L
(10)

all w/i 90-110 %

Sequence No.: 35
Sample ID: SEQUENCE-CCV6
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/26/2008 9:23:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-CCV6

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7335790.5	123.8	%	0.28				0.23%
Ag 328.068†	41645.5	0.5149	mg/L	0.00134	0.5149	mg/L	0.00134	0.26%
Al 308.215†	23891.4	0.9582	mg/L	0.01096	0.9582	mg/L	0.01096	1.14%
As 188.979†	784.6	1.096	mg/L	0.0046	1.096	mg/L	0.0046	0.42%
B 249.772†	21262.3	1.077	mg/L	0.0228	1.077	mg/L	0.0228	2.12%
Ba 233.527†	62793.5	1.057	mg/L	0.0089	1.057	mg/L	0.0089	0.84%
Be 313.107†	1530755.2	1.052	mg/L	0.0024	1.052	mg/L	0.0024	0.23%
Ca 315.887†	759967.8	10.68	mg/L	0.121	10.68	mg/L	0.121	1.13%
Cd 214.440†	114444.9	1.102	mg/L	0.0147	1.102	mg/L	0.0147	1.33%
Co 228.616†	36757.0	1.079	mg/L	0.0112	1.079	mg/L	0.0112	1.04%
Cr 205.560†	14246.3	1.043	mg/L	0.0022	1.043	mg/L	0.0022	0.21%
Cu 324.752†	177757.4	1.033	mg/L	0.0095	1.033	mg/L	0.0095	0.92%
Fe 238.204†	74725.6	1.080	mg/L	0.0126	1.080	mg/L	0.0126	1.16%
K 766.490†	9516.1	10.48	mg/L	0.115	10.48	mg/L	0.115	1.10%
Li 610.362†	122452.5	0.9556	mg/L	0.00995	0.9556	mg/L	0.00995	1.04%
Mg 279.077†	11819.3	1.115	mg/L	0.0067	1.115	mg/L	0.0067	0.60%
Mn 257.610†	606414.2	1.060	mg/L	0.0114	1.060	mg/L	0.0114	1.08%
Mo 202.031†	6894.8	1.047	mg/L	0.0030	1.047	mg/L	0.0030	0.29%
Na 589.592†	6266.3	11.02	mg/L	0.091	11.02	mg/L	0.091	0.82%
Ni 231.604†	25461.0	1.082	mg/L	0.0099	1.082	mg/L	0.0099	0.92%
P 214.914†	1050.3	1.090	mg/L	0.0053	1.090	mg/L	0.0053	0.48%
Pb 220.353†	5519.6	1.076	mg/L	0.0016	1.076	mg/L	0.0016	0.15%
Sb 206.836†	1759.5	1.056	mg/L	0.0096	1.056	mg/L	0.0096	0.91%
Se 196.026†	480.7	1.098	mg/L	0.0101	1.098	mg/L	0.0101	0.92%
Si 251.611†	145300.4	5.293	mg/L	0.0575	5.293	mg/L	0.0575	1.09%
Sn 189.927†	2337.5	1.079	mg/L	0.0030	1.079	mg/L	0.0030	0.28%
Sr 421.552†	104999.6	1.040	mg/L	0.0140	1.040	mg/L	0.0140	1.35%
Ti 334.940†	398069.2	1.045	mg/L	0.0103	1.045	mg/L	0.0103	0.98%
Tl 190.801†	1163.6	1.051	mg/L	0.0054	1.051	mg/L	0.0054	0.52%
V 292.402†	45734.8	1.050	mg/L	0.0085	1.050	mg/L	0.0085	0.81%
Zn 213.857†	64776.5	1.063	mg/L	0.0118	1.063	mg/L	0.0118	1.11%

all w/i 90-110%

CRDL STANDARD

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ICP4
Calibration: I8J2805
Sequence: IJ82808
Injection Date: 10/26/08 11:43

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82808-CRL1	Aluminum (dissolved)	0.100	0.0920	92	mg/l	50 - 150
IJ82808-CRL2	Aluminum (dissolved)	0.100	0.00461	5 *	mg/l	50 - 150
IJ82808-CRL3	Aluminum (dissolved)	0.0200	0.103	516 *	mg/l	50 - 150
IJ82808-CRL4	Aluminum (dissolved)	0.0200	0.0224	112	mg/l	50 - 150
IJ82808-CRL5	Aluminum (dissolved)	0.0200	0.0518	259 *	mg/l	50 - 150
IJ82808-CRL6	Aluminum (dissolved)	0.0200	-0.0362	*	mg/l	50 - 150

* Values outside of QC limits

Al not spiked in CRL2

0.02 mg/L < RL for Al in others

no impact

Sequence No.: 6
Sample ID: SEQUENCE-CRL1
Analyst:
Initial Sample Wt:
Dilution:

50-150 ✓

Autosampler Location: 6
Date Collected: 10/26/2008 11:40:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-CRL1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5884216.7	99.28	%	0.129				0.13%
Ag 328.068†	445.7	0.0055	mg/L	0.00012	0.0055	mg/L	0.00012	2.13%
Al 308.215†	2236.9	0.0920	mg/L	0.00109	0.0920	mg/L	0.00109	1.18%
As 188.979†	7.3	0.0102	mg/L	0.00139	0.0102	mg/L	0.00139	13.67%
B 249.772†	2153.5	0.1101	mg/L	0.00298	0.1101	mg/L	0.00298	2.70%
Ba 233.527†	617.9	0.0104	mg/L	0.00006	0.0104	mg/L	0.00006	0.61%
Be 313.107†	14596.2	0.0100	mg/L	0.00000	0.0100	mg/L	0.00000	0.00%
Ca 315.887†	16210.8	0.2279	mg/L	0.00158	0.2279	mg/L	0.00158	0.69%
Cd 214.440†	1064.7	0.0103	mg/L	0.00004	0.0103	mg/L	0.00004	0.36%
Co 228.616†	365.7	0.0107	mg/L	0.00027	0.0107	mg/L	0.00027	2.54%
Cr 205.560†	143.0	0.0105	mg/L	0.00016	0.0105	mg/L	0.00016	1.57%
Cu 324.752†	2003.5	0.0117	mg/L	0.00031	0.0117	mg/L	0.00031	2.64%
Fe 238.204†	5472.0	0.0790	mg/L	0.00024	0.0790	mg/L	0.00024	0.30%
K 766.490†	858.4	0.9425	mg/L	0.10169	0.9425	mg/L	0.10169	10.79%
Li 610.362†	1354.7	0.0106	mg/L	0.00017	0.0106	mg/L	0.00017	1.60%
Mg 279.077†	452.6	0.0423	mg/L	0.00475	0.0423	mg/L	0.00475	11.23%
Mn 257.610†	6101.0	0.0107	mg/L	0.00010	0.0107	mg/L	0.00010	0.98%
Mo 202.031†	71.0	0.0108	mg/L	0.00100	0.0108	mg/L	0.00100	9.25%
Na 589.592†	503.3	0.8848	mg/L	0.05567	0.8848	mg/L	0.05567	6.29%
Ni 231.604†	280.8	0.0119	mg/L	0.00019	0.0119	mg/L	0.00019	1.58%
P 214.914†	-5.5	-0.0059	mg/L	0.00265	-0.0059	mg/L	0.00265	44.71%
Pb 220.353†	53.9	0.0105	mg/L	0.00104	0.0105	mg/L	0.00104	9.92%
Sb 206.836†	8.2	0.0049	mg/L	0.00342	0.0049	mg/L	0.00342	69.47%
Se 196.026†	2.5	0.0057	mg/L	0.00598	0.0057	mg/L	0.00598	105.08%
Si 251.611†	1644.0	0.0600	mg/L	0.00147	0.0600	mg/L	0.00147	2.44%
Sn 189.927†	26.0	0.0120	mg/L	0.00084	0.0120	mg/L	0.00084	7.01%
Sr 421.552†	1045.6	0.0104	mg/L	0.00004	0.0104	mg/L	0.00004	0.43%
Ti 334.940†	4223.1	0.0111	mg/L	0.00001	0.0111	mg/L	0.00001	0.05%
Tl 190.801†	10.4	0.0093	mg/L	0.00028	0.0093	mg/L	0.00028	2.96%
V 292.402†	448.1	0.0103	mg/L	0.00013	0.0103	mg/L	0.00013	1.24%
Zn 213.857†	676.5	0.0111	mg/L	0.00013	0.0111	mg/L	0.00013	1.17%

207%

spike < RL

"

Ca result >> spike

no impact

Sequence No.: 7
Sample ID: SEQUENCE-CRL2
Analyst:
Initial Sample Wt:
Dilution:

50 - 150 % ✓

Autosampler Location: 9
Date Collected: 10/26/2008 11:46:27 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-CRL2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5886175.8	99.31	%	0.360				0.36%
Ag 328.068†	824.1	0.0102	mg/L	0.00157	0.0102	mg/L	0.00157	15.43%
Al 308.215†	125.1	0.0046	mg/L	0.00378	0.0046	mg/L	0.00378	82.08%
As 188.979†	13.0	0.0182	mg/L	0.00200	0.0182	mg/L	0.00200	10.98%
B 249.772†	506.1	0.0257	mg/L	0.00071	0.0257	mg/L	0.00071	2.77%
Ba 233.527†	1232.7	0.0207	mg/L	0.00017	0.0207	mg/L	0.00017	0.80%
Be 313.107†	29252.1	0.0201	mg/L	0.00014	0.0201	mg/L	0.00014	0.71%
Ca 315.887†	14920.8	0.2097	mg/L	0.00149	0.2097	mg/L	0.00149	0.71%
Cd 214.440†	2108.2	0.0203	mg/L	0.00011	0.0203	mg/L	0.00011	0.52%
Co 228.616†	707.9	0.0208	mg/L	0.00005	0.0208	mg/L	0.00005	0.23%
Cr 205.560†	281.7	0.0206	mg/L	0.00008	0.0206	mg/L	0.00008	0.39%
Cu 324.752†	3668.5	0.0213	mg/L	0.00134	0.0213	mg/L	0.00134	6.27%
Fe 238.204†	1412.5	0.0204	mg/L	0.00001	0.0204	mg/L	0.00001	0.03%
K 766.490†	186.0	0.2048	mg/L	0.00403	0.2048	mg/L	0.00403	1.97%
Li 610.362†	3265.4	0.0255	mg/L	0.00099	0.0255	mg/L	0.00099	3.90%
Mg 279.077†	173.8	0.0165	mg/L	0.00371	0.0165	mg/L	0.00371	22.52%
Mn 257.610†	12051.0	0.0211	mg/L	0.00003	0.0211	mg/L	0.00003	0.15%
Mo 202.031†	136.7	0.0208	mg/L	0.00019	0.0208	mg/L	0.00019	0.91%
Na 589.592†	134.1	0.2360	mg/L	0.01829	0.2360	mg/L	0.01829	7.75%
Ni 231.604†	521.7	0.0222	mg/L	0.00014	0.0222	mg/L	0.00014	0.63%
P 214.914†	11.7	0.0120	mg/L	0.00124	0.0120	mg/L	0.00124	10.32%
Pb 220.353†	98.7	0.0192	mg/L	0.00160	0.0192	mg/L	0.00160	8.34%
Sb 206.836†	29.2	0.0175	mg/L	0.00320	0.0175	mg/L	0.00320	18.25%
Se 196.026†	12.3	0.0281	mg/L	0.00337	0.0281	mg/L	0.00337	11.99%
Si 251.611†	2607.9	0.0947	mg/L	0.00204	0.0947	mg/L	0.00204	2.16%
Sn 189.927†	46.1	0.0213	mg/L	0.00006	0.0213	mg/L	0.00006	0.27%
Sr 421.552†	2114.1	0.0209	mg/L	0.00059	0.0209	mg/L	0.00059	2.80%
Ti 334.940†	8062.0	0.0212	mg/L	0.00003	0.0212	mg/L	0.00003	0.12%
Tl 190.801†	26.4	0.0238	mg/L	0.00054	0.0238	mg/L	0.00054	2.29%
V 292.402†	916.8	0.0210	mg/L	0.00081	0.0210	mg/L	0.00081	3.83%
Zn 213.857†	1239.3	0.0203	mg/L	0.00010	0.0203	mg/L	0.00010	0.49%

BLANKS
EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: ICP4
Project: BP Yerington, NV
Sequence: IJ82808
Calibration: I8J2805

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82808-ICB1	Aluminum (dissolved)	-0.0119	0.050	mg/l		EPA 200.7-Diss	10/26/08 11:3
IJ82808-CCB1	Aluminum (dissolved)	-0.00831	0.050	mg/l		EPA 200.7-Diss	10/26/08 13:1
IJ82808-CCB2	Aluminum (dissolved)	0.000359	0.050	mg/l		EPA 200.7-Diss	10/26/08 16:4
IJ82808-CCB3	Aluminum (dissolved)	-0.00440	0.050	mg/l		EPA 200.7-Diss	10/26/08 18:0
IJ82808-CCB4	Aluminum (dissolved)	0.0000900	0.050	mg/l		EPA 200.7-Diss	10/26/08 19:1
IJ82808-CCB5	Aluminum (dissolved)	-0.0110	0.050	mg/l		EPA 200.7-Diss	10/26/08 20:2
IJ82808-CCB6	Aluminum (dissolved)	-0.0476	0.050	mg/l		EPA 200.7-Diss	10/26/08 21:3
IJ82808-CCB7	Aluminum (dissolved)	-0.0526	0.050	mg/l	*	EPA 200.7-Diss	10/26/08 22:1

no impact

Sequence No.: 5
Sample ID: SEQUENCE-ICB1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/26/2008 11:34:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-ICB1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5788676.2	97.67	%	0.147				0.15%
Ag 328.068†	-3.4	0.0000	mg/L	0.00019	0.0000	mg/L	0.00019	445.28%
Al 308.215†	-287.9	-0.0119	mg/L	0.00647	-0.0119	mg/L	0.00647	54.44%
As 188.979†	-2.4	-0.0034	mg/L	0.00324	-0.0034	mg/L	0.00324	95.07%
B 249.772†	205.4	0.0105	mg/L	0.00150	0.0105	mg/L	0.00150	14.22%
Ba 233.527†	7.5	0.0001	mg/L	0.00015	0.0001	mg/L	0.00015	120.31%
Be 313.107†	-202.2	-0.0001	mg/L	0.00002	-0.0001	mg/L	0.00002	16.33%
Ca 315.887†	-153.5	-0.0022	mg/L	0.00132	-0.0022	mg/L	0.00132	60.93%
Cd 214.440†	6.3	0.0001	mg/L	0.00002	0.0001	mg/L	0.00002	37.40%
Co 228.616†	19.4	0.0006	mg/L	0.00004	0.0006	mg/L	0.00004	6.86%
Cr 205.560†	1.5	0.0001	mg/L	0.00005	0.0001	mg/L	0.00005	50.46%
Cu 324.752†	217.2	0.0013	mg/L	0.00119	0.0013	mg/L	0.00119	94.50%
Fe 238.204†	-29.7	-0.0004	mg/L	0.00004	-0.0004	mg/L	0.00004	10.48%
K 766.490†	6.3	0.0069	mg/L	0.01925	0.0069	mg/L	0.01925	278.48%
Li 610.362†	-390.0	-0.0030	mg/L	0.00013	-0.0030	mg/L	0.00013	4.40%
Mg 279.077†	15.8	0.0015	mg/L	0.00523	0.0015	mg/L	0.00523	353.48%
Mn 257.610†	73.1	0.0001	mg/L	0.00009	0.0001	mg/L	0.00009	73.55%
Mo 202.031†	4.7	0.0007	mg/L	0.00044	0.0007	mg/L	0.00044	62.24%
Na 589.592†	-48.3	-0.0850	mg/L	0.08802	-0.0850	mg/L	0.08802	103.60%
Ni 231.604†	37.2	0.0016	mg/L	0.00045	0.0016	mg/L	0.00045	28.24%
P 214.914†	-9.0	-0.0094	mg/L	0.00302	-0.0094	mg/L	0.00302	32.05%
Pb 220.353†	-7.8	-0.0015	mg/L	0.00006	-0.0015	mg/L	0.00006	3.68%
Sb 206.836†	-2.3	-0.0014	mg/L	0.00116	-0.0014	mg/L	0.00116	83.40%
Se 196.026†	0.1	0.0002	mg/L	0.00350	0.0002	mg/L	0.00350	>999.9%
Si 251.611†	-21.1	-0.0009	mg/L	0.00103	-0.0009	mg/L	0.00103	117.37%
Sn 189.927†	-0.4	-0.0002	mg/L	0.00187	-0.0002	mg/L	0.00187	>999.9%
Sr 421.552†	-0.9	0.0000	mg/L	0.00025	0.0000	mg/L	0.00025	>999.9%
Ti 334.940†	237.1	0.0006	mg/L	0.00051	0.0006	mg/L	0.00051	82.19%
Tl 190.801†	-4.0	-0.0036	mg/L	0.00176	-0.0036	mg/L	0.00176	48.39%
V 292.402†	-21.1	-0.0005	mg/L	0.00031	-0.0005	mg/L	0.00031	65.42%
Zn 213.857†	20.6	0.0003	mg/L	0.00004	0.0003	mg/L	0.00004	10.83%

All < MDL

Sequence No.: 24
Sample ID: SEQUENCE-CCB5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/26/2008 8:20:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-CCB5

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6190995.6	104.5	%	1.27				1.22%
Ag 328.068†	6.0	0.0001	mg/L	0.00024	0.0001	mg/L	0.00024	323.97%
Al 308.215†	-267.6	-0.0110	mg/L	0.00162	-0.0110	mg/L	0.00162	14.68%
As 188.979†	-2.0	-0.0028	mg/L	0.00250	-0.0028	mg/L	0.00250	89.42%
B 249.772†	338.6	0.0173	mg/L	0.00175	0.0173	mg/L	0.00175	10.11%
Ba 233.527†	6.5	0.0001	mg/L	0.00002	0.0001	mg/L	0.00002	14.26%
Be 313.107†	-209.2	-0.0001	mg/L	0.00006	-0.0001	mg/L	0.00006	38.92%
Ca 315.887†	-91.5	-0.0013	mg/L	0.00125	-0.0013	mg/L	0.00125	97.87%
Cd 214.440†	0.7	0.0000	mg/L	0.00003	0.0000	mg/L	0.00003	454.87%
Co 228.616†	12.3	0.0004	mg/L	0.00024	0.0004	mg/L	0.00024	65.47%
Cr 205.560†	2.7	0.0002	mg/L	0.00029	0.0002	mg/L	0.00029	151.06%
Cu 324.752†	179.9	0.0010	mg/L	0.00020	0.0010	mg/L	0.00020	18.96%
Fe 238.204†	16.1	0.0002	mg/L	0.00012	0.0002	mg/L	0.00012	51.43%
K 766.490†	-10.1	-0.0111	mg/L	0.07452	-0.0111	mg/L	0.07452	672.76%
Li 610.362†	-832.2	-0.0065	mg/L	0.00033	-0.0065	mg/L	0.00033	5.06%
Mg 279.077†	-89.0	-0.0083	mg/L	0.00197	-0.0083	mg/L	0.00197	23.75%
Mn 257.610†	-3.3	0.0000	mg/L	0.00011	0.0000	mg/L	0.00011	>999.9%
Mo 202.031†	8.2	0.0012	mg/L	0.00010	0.0012	mg/L	0.00010	7.74%
Na 589.592†	17.4	0.0305	mg/L	0.09284	0.0305	mg/L	0.09284	304.25%
Ni 231.604†	18.0	0.0008	mg/L	0.00023	0.0008	mg/L	0.00023	30.21%
P 214.914†	-5.0	-0.0053	mg/L	0.00295	-0.0053	mg/L	0.00295	55.37%
Pb 220.353†	-4.2	-0.0008	mg/L	0.00166	-0.0008	mg/L	0.00166	202.23%
Sb 206.836†	-4.8	-0.0029	mg/L	0.00311	-0.0029	mg/L	0.00311	108.36%
Se 196.026†	1.3	0.0029	mg/L	0.00619	0.0029	mg/L	0.00619	213.72%
Si 251.611†	-571.2	-0.0215	mg/L	0.00004	-0.0215	mg/L	0.00004	0.20%
Sn 189.927†	-2.1	-0.0010	mg/L	0.00029	-0.0010	mg/L	0.00029	30.89%
Sr 421.552†	43.0	0.0004	mg/L	0.00022	0.0004	mg/L	0.00022	52.39%
Ti 334.940†	111.9	0.0003	mg/L	0.00011	0.0003	mg/L	0.00011	36.03%
Tl 190.801†	2.0	0.0018	mg/L	0.00299	0.0018	mg/L	0.00299	161.88%
V 292.402†	-46.2	-0.0011	mg/L	0.00038	-0.0011	mg/L	0.00038	35.59%
Zn 213.857†	38.4	0.0006	mg/L	0.00019	0.0006	mg/L	0.00019	30.49%

All < MDL

Sequence No.: 36
Sample ID: SEQUENCE-CCB6
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/26/2008 9:28:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-CCB6

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7402295.9	124.9	%	0.06				0.05%
Ag 328.068†	62.9	0.0008	mg/L	0.00086	0.0008	mg/L	0.00086	111.16%
Al 308.215†	-1154.2	-0.0476	mg/L	0.00699	-0.0476	mg/L	0.00699	14.69%
As 188.979†	1.7	0.0024	mg/L	0.00073	0.0024	mg/L	0.00073	29.79%
B 249.772†	520.6	0.0267	mg/L	0.00311	0.0267	mg/L	0.00311	11.67%
Ba 233.527†	10.3	0.0002	mg/L	0.00007	0.0002	mg/L	0.00007	39.73%
Be 313.107†	54.5	0.0000	mg/L	0.00005	0.0000	mg/L	0.00005	130.52%
Ca 315.887†	179.0	0.0025	mg/L	0.00080	0.0025	mg/L	0.00080	31.56%
Cd 214.440†	-20.2	-0.0002	mg/L	0.00000	-0.0002	mg/L	0.00000	0.59%
Co 228.616†	24.1	0.0007	mg/L	0.00010	0.0007	mg/L	0.00010	13.64%
Cr 205.560†	-2.9	-0.0002	mg/L	0.00029	-0.0002	mg/L	0.00029	135.75%
Cu 324.752†	-154.6	-0.0009	mg/L	0.00008	-0.0009	mg/L	0.00008	8.80%
Fe 238.204†	50.3	0.0007	mg/L	0.00004	0.0007	mg/L	0.00004	5.59%
K 766.490†	-98.0	-0.1075	mg/L	0.01712	-0.1075	mg/L	0.01712	15.92%
Li 610.362†	-376.2	-0.0029	mg/L	0.00037	-0.0029	mg/L	0.00037	12.80%
Mg 279.077†	-56.1	-0.0052	mg/L	0.00480	-0.0052	mg/L	0.00480	91.98%
Mn 257.610†	-51.0	-0.0001	mg/L	0.00006	-0.0001	mg/L	0.00006	72.58%
Mo 202.031†	0.8	0.0001	mg/L	0.00004	0.0001	mg/L	0.00004	37.19%
Na 589.592†	217.8	0.3828	mg/L	0.07102	0.3828	mg/L	0.07102	18.55%
Ni 231.604†	11.1	0.0005	mg/L	0.00020	0.0005	mg/L	0.00020	42.47%
P 214.914†	-1.9	-0.0021	mg/L	0.00483	-0.0021	mg/L	0.00483	235.31%
Pb 220.353†	-3.3	-0.0007	mg/L	0.00057	-0.0007	mg/L	0.00057	86.11%
Sb 206.836†	-6.6	-0.0040	mg/L	0.00059	-0.0040	mg/L	0.00059	14.77%
Se 196.026†	0.9	0.0021	mg/L	0.00132	0.0021	mg/L	0.00132	62.47%
Si 251.611†	-521.9	-0.0196	mg/L	0.00007	-0.0196	mg/L	0.00007	0.35%
Sn 189.927†	-4.9	-0.0023	mg/L	0.00181	-0.0023	mg/L	0.00181	80.07%
Sr 421.552†	-38.6	-0.0004	mg/L	0.00012	-0.0004	mg/L	0.00012	31.90%
Ti 334.940†	138.9	0.0004	mg/L	0.00024	0.0004	mg/L	0.00024	67.14%
Tl 190.801†	3.3	0.0030	mg/L	0.00237	0.0030	mg/L	0.00237	78.23%
V 292.402†	-43.7	-0.0010	mg/L	0.00035	-0.0010	mg/L	0.00035	34.55%
Zn 213.857†	0.5	0.0000	mg/L	0.00000	0.0000	mg/L	0.00000	14.34%

All < MDL

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.7-Diss

Laboratory: TestAmerica Irvine

SDG:

Client: Brown and Caldwell - NV

Project: BP Yerington, NV

Instrument ID: ICP4

Calibration: 18J2805

Sequence: 1J82808

Check Nbr: 1

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Aluminum (dissolved)	NA	500		NA	449	90
Aluminum (dissolved)	500	NA	444	89		NA

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.7-Diss

Laboratory: TestAmerica Irvine

SDG:

Client: Brown and Caldwell - NV

Project: BP Yerington, NV

Instrument ID: ICP4

Calibration: I8J2805

Sequence: IJ82808

Check Nbr: 2

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Aluminum (dissolved)	NA	500		NA	450 –	90 –
Aluminum (dissolved)	500	NA	439 –	88 –		NA

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ICP4
Calibration: I8J2805
Sequence: IJ82808
Check Nbr: 3

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Aluminum (dissolved)	NA	500		NA	443 ✓	89 ✓
Aluminum (dissolved)	500	NA	443 ✓	89 ✓		NA

Analysis Begun

Start Time: 10/26/2008 11:08:59 AM
Logged In Analyst: optima
Spectrometer Model: Optima 4300 DV, S/N 077N1100901

Plasma On Time: 10/26/2008 9:17:17 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima\Sample Information\081026-1.sif
Batch ID:
Results Data Set: 081026-1
Results Library: C:\pe\optima\Results\Results.mdb

10/26/2008 11:10:35 AM Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 0

Sequence No.: 2
Sample ID: SEQUENCE-IFA1
Analyst:
Initial Sample Wt:
Dilution:

ICSA

Autosampler Location: 11
Date Collected: 10/26/2008 11:10:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-IFA1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5553438.1	93.70	%	0.035				0.04%
Ag 328.068†	-3768.3	0.0039	mg/L	0.00078	0.0039	mg/L	0.00078	19.64%
Al 308.215†	10753185.6	443.6	mg/L	3.83	443.6	mg/L	3.83	0.86%
As 188.979†	-40.6	-0.0071	mg/L	0.00519	-0.0071	mg/L	0.00519	72.82%
B 249.772†	3301.6	-0.0172	mg/L	0.00080	-0.0172	mg/L	0.00080	4.65%
Ba 233.527†	282.6	0.0048	mg/L	0.00023	0.0048	mg/L	0.00023	4.92%
Be 313.107†	-866.7	-0.0006	mg/L	0.00005	-0.0006	mg/L	0.00005	8.26%
↑ Ca 315.887†	33909189.6	476.6	mg/L	3.55	476.6	mg/L	3.55	0.74%
Cd 214.440†	122.6	0.0012	mg/L	0.00008	0.0012	mg/L	0.00008	6.47%
Co 228.616†	101.3	0.0030	mg/L	0.00009	0.0030	mg/L	0.00009	3.13%
Cr 205.560†	-60.1	0.0005	mg/L	0.00011	0.0005	mg/L	0.00011	21.56%
Cu 324.752†	-5087.0	0.0003	mg/L	0.00001	0.0003	mg/L	0.00001	2.63%
Fe 238.204†	12814776.2	185.0	mg/L	1.18	185.0	mg/L	1.18	0.64%
K 766.490†	86.0	0.0547	mg/L	0.02192	0.0547	mg/L	0.02192	40.08%
Li 610.362†	<2+ MDL -20059.0	0.0430	mg/L	0.00111	0.0430	mg/L	0.00111	2.58%
Mg 279.077†	5396556.5	502.8	mg/L	3.89	502.8	mg/L	3.89	0.77%
Mn 257.610†	2826.7	0.0003	mg/L	0.00003	0.0003	mg/L	0.00003	12.35%
Mo 202.031†	-16.3	0.0053	mg/L	0.00057	0.0053	mg/L	0.00057	10.62%
Na 589.592†	60.5	0.0759	mg/L	0.04789	0.0759	mg/L	0.04789	63.07%
Ni 231.604†	-16.2	-0.0007	mg/L	0.00007	-0.0007	mg/L	0.00007	10.78%
P 214.914†	-197.2	-0.0026	mg/L	0.00510	-0.0026	mg/L	0.00510	199.07%
Pb 220.353†	-363.1	0.0066	mg/L	0.00007	0.0066	mg/L	0.00007	1.11%
Sb 206.836†	46.5	0.0005	mg/L	0.00049	0.0005	mg/L	0.00049	90.59%
Se 196.026†	-23.2	-0.0152	mg/L	0.00243	-0.0152	mg/L	0.00243	15.91%
Si 251.611†	1136.4	0.0211	mg/L	0.00109	0.0211	mg/L	0.00109	5.16%
Sn 189.927†	No ⊕ -351.3	0.0459	mg/L	0.00596	0.0459	mg/L	0.00596	12.99%
Sr 421.552†	1608.3	0.0000	mg/L	0.00039	0.0000	mg/L	0.00039	>999.9%
Ti 334.940†	-9234.2	-0.0015	mg/L	0.00010	-0.0015	mg/L	0.00010	6.65%
Tl 190.801†	2.4	-0.0009	mg/L	0.00209	-0.0009	mg/L	0.00209	227.79%
V 292.402†	-70.0	-0.0016	mg/L	0.00004	-0.0016	mg/L	0.00004	2.78%
Zn 213.857†	2744.0	-0.0039	mg/L	0.00004	-0.0039	mg/L	0.00004	0.98%

no impact

==========

Analysis Begun

Start Time: 10/26/2008 11:16:15 AM
Logged In Analyst: optima
Spectrometer Model: Optima 4300 DV, S/N 077N1100901
Plasma On Time: 10/26/2008 9:17:17 AM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima\Sample Information\081026-1.sif
Batch ID:
Results Data Set: 081026-1
Results Library: C:\pe\optima\Results\Results.mdb

==========

10/26/2008 11:17:51 AM Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 0

==========

Sequence No.: 2
Sample ID: SEQUENCE-IFB1
Analyst:
Initial Sample Wt:
Dilution:

ICSAB

Autosampler Location: 12
Date Collected: 10/26/2008 11:17:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SEQUENCE-IFB1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5479152.3	92.45	%	1.285				1.39%
Ag 328.068†	18065.2	0.2746	mg/L	0.00052	0.2746	mg/L	0.00052	0.19%
Al 308.215†	10891031.8	449.2	mg/L	6.55	449.2	mg/L	6.55	1.46%
As 188.979†	307.5	0.4796	mg/L	0.00579	0.4796	mg/L	0.00579	1.21%
B 249.772†	13486.6	0.4961	mg/L	0.00940	0.4961	mg/L	0.00940	1.89%
Ba 233.527†	31010.8	0.5218	mg/L	0.00344	0.5218	mg/L	0.00344	0.66%
Be 313.107†	710920.3	0.4885	mg/L	0.00369	0.4885	mg/L	0.00369	0.76%
Ca 315.887†	34391809.6	483.4	mg/L	7.73	483.4	mg/L	7.73	1.60%
Cd 214.440†	49790.6	0.4794	mg/L	0.00233	0.4794	mg/L	0.00233	0.49%
Co 228.616†	15805.3	0.4641	mg/L	0.00313	0.4641	mg/L	0.00313	0.67%
Cr 205.560†	6522.7	0.4826	mg/L	0.00443	0.4826	mg/L	0.00443	0.92%
Cu 324.752†	84471.7	0.5210	mg/L	0.00259	0.5210	mg/L	0.00259	0.50%
Fe 238.204†	13027031.7	188.0	mg/L	3.20	188.0	mg/L	3.20	1.70%
K 766.490†	11463.2	12.56	mg/L	0.336	12.56	mg/L	0.336	2.67%
Li 610.362†	42176.4	0.5293	mg/L	0.00161	0.5293	mg/L	0.00161	0.30%
Mg 279.077†	5269480.2	491.0	mg/L	3.61	491.0	mg/L	3.61	0.74%
Mn 257.610†	285537.3	0.4946	mg/L	0.00301	0.4946	mg/L	0.00301	0.61%
Mo 202.031†	3168.6	0.4893	mg/L	0.00430	0.4893	mg/L	0.00430	0.88%
Na 589.592†	6883.7	12.07	mg/L	0.266	12.07	mg/L	0.266	2.20%
Ni 231.604†	10900.9	0.4634	mg/L	0.00343	0.4634	mg/L	0.00343	0.74%
P 214.914†	259.3	0.4732	mg/L	0.00087	0.4732	mg/L	0.00087	0.18%
Pb 220.353†	2013.6	0.4708	mg/L	0.00407	0.4708	mg/L	0.00407	0.86%
Sb 206.836†	844.6	0.4793	mg/L	0.01299	0.4793	mg/L	0.01299	2.71%
Se 196.026†	186.6	0.4626	mg/L	0.00890	0.4626	mg/L	0.00890	1.92%
Si 251.611†	67813.9	2.449	mg/L	0.0075	2.449	mg/L	0.0075	0.31%
Sn 189.927†	670.4	0.5135	mg/L	0.00407	0.5135	mg/L	0.00407	0.79%
Sr 421.552†	53697.1	0.5159	mg/L	0.00766	0.5159	mg/L	0.00766	1.49%
Ti 334.940†	180655.5	0.4969	mg/L	0.00098	0.4969	mg/L	0.00098	0.20%
Tl 190.801†	492.8	0.4409	mg/L	0.00285	0.4409	mg/L	0.00285	0.65%
V 292.402†	21744.9	0.4991	mg/L	0.00721	0.4991	mg/L	0.00721	1.45%
Zn 213.857†	31321.4	0.4653	mg/L	0.00296	0.4653	mg/L	0.00296	0.64%

80-1207

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.7-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Sequence: IJ82808
Instrument: ICP4
Calibration: I8J2805

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	IJ82808-CAL1	081026-1-001	10/26/08 10:47
Cal Standard	IJ82808-CAL2	081026-1-002	10/26/08 10:52
Cal Standard	IJ82808-CAL3	081026-1-003	10/26/08 10:59
Cal Standard	IJ82808-CAL4	081026-1-004	10/26/08 11:04
Interference Check A	IJ82808-IFA1	081026-1-005	10/26/08 11:13
Interference Check B	IJ82808-IFB1	081026-1-006	10/26/08 11:20
Initial Cal Check	IJ82808-ICV1	081026-1-008	10/26/08 11:31
Initial Cal Blank	IJ82808-ICB1	081026-1-009	10/26/08 11:37
MRL Check	IJ82808-CRL1	081026-1-010	10/26/08 11:43
MRL Check	IJ82808-CRL2	081026-1-011	10/26/08 11:49
Calibration Check	IJ82808-CCV1	081026-1-021	10/26/08 13:12
Calibration Blank	IJ82808-CCB1	081026-1-022	10/26/08 13:17
MRL Check	IJ82808-CRL3	081026-1-023	10/26/08 13:53
MRL Check	IJ82808-CRL4	081026-1-024	10/26/08 13:59
Interference Check A	IJ82808-IFA2	081026-1-025	10/26/08 14:05
Interference Check B	IJ82808-IFB2	081026-1-026	10/26/08 14:11
Calibration Check	IJ82808-CCV2	081026-1-034	10/26/08 16:37
Calibration Blank	IJ82808-CCB2	081026-1-035	10/26/08 16:43
Calibration Check	IJ82808-CCV3	081026-1-046	10/26/08 17:55
Calibration Blank	IJ82808-CCB3	081026-1-047	10/26/08 18:01
Interference Check B	IJ82808-IFB3	081026-1-048	10/26/08 18:11
Calibration Check	IJ82808-CCV4	081026-1-058	10/26/08 19:09
Calibration Blank	IJ82808-CCB4	081026-1-059	10/26/08 19:15
OU4-UEP-10-GW	IRJ1354-01	081026-1-065	10/26/08 19:49
OU4-FEP-13-GW	IRJ1354-03	081026-1-068	10/26/08 20:06
Calibration Check	IJ82808-CCV5	081026-1-070	10/26/08 20:17
Calibration Blank	IJ82808-CCB5	081026-1-071	10/26/08 20:22
Calibration Check	IJ82808-CCV6	081026-1-082	10/26/08 21:25
Calibration Blank	IJ82808-CCB6	081026-1-083	10/26/08 21:31
Calibration Check	IJ82808-CCV7	081026-1-090	10/26/08 22:10
Calibration Blank	IJ82808-CCB7	081026-1-091	10/26/08 22:16

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.7-Diss

Laboratory:	TestAmerica Irvine	SDG:	
Client:	Brown and Caldwell - NV	Project:	BP Yerington, NV
Sequence:	IJ82808	Instrument:	ICP4
		Calibration:	I8J2805

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MRL Check	IJ82808-CRL5	081026-1-092	10/26/08 22:21
MRL Check	IJ82808-CRL6	081026-1-093	10/26/08 22:27
Interference Check A	IJ82808-IFA3	081026-1-094	10/26/08 22:33
Interference Check B	IJ82808-IFB4	081026-1-095	10/26/08 22:38

Sample Information Detail Report
Document Name: 081026-1

File Description
Cal.Std/CCV=081026mecalMECAL -Accu Std. ICP#4

Parameters Common to All Samples

Volume Units	mL
Weight Units	g

Parameters That Vary By Sample

Sample No	A/S Location	Sample ID	Batch ID	Analysis Requested
1	1	Calib blank	081026MECAL	0.00 PPM
2	2	Calib Std 1	081026MECAL	0.005 PPM
3	3	Calib Std 2	081026MECAL	0.1 PPM
4	4	Calib Std 3	081026MECAL	1.0 PPM
5	11	SEQUENCE-IFA1		
6	12	SEQUENCE-IFB1 K, NaT		
7	10	RINSE		
8	7	SEQUENCE-ICV1 Se 200.7		
9	8	SEQUENCE-ICB1		
10	6	SEQUENCE-CRL1		
11	9	SEQUENCE-CRL2		
12	13	8J26027-BLK1	8J26027	BP CAM STLC
13	14	8J26027-BS1	8J26027	BP CAM STLC
14	15	IRJ1585-01	8J26027	BP CAM STLC
15	16	8J26027-MS1	8J26027	BP CAM STLC
16	17	8J26027-MSD1	8J26027	BP CAM STLC
17	18	IRJ1322-02	8J26027	BP ASCRPB STLC
18	19	IRJ1365-01	8J26027	BP PB STLC
19	20	IRJ1585-02	8J26027	BP BA STLC
20	21	IRJ1588-01	8J26027	BP CRCU STLC
21	4	SEQUENCE-CCV1		
22	8	SEQUENCE-CCB1		
23	6	SEQUENCE-BP1-1		
24	9	SEQUENCE-BP2-1		
25	11	SEQUENCE-BPA-1		
26	12	SEQUENCE-BPB-1 K		
27	22	IRJ1758-31@5	8J24124	CR FE 6010B DISS
28	23	8J24124-MS1@5	8J24124	CR FE 6010B DISS
29	24	8J24124-MSD1@5	8J24124	CR FE 6010B DISS
30	25	~~IRJ1758-35@5~~	8J24124	CR FE 6010B DISS
31	26	8J24124-MS3@5	8J24124	CR FE 6010B DISS
32	27	8J24124-MSD3@5	8J24124	CR FE 6010B DISS
33	28	~~IRJ1758-33@5~~	8J24124	CR FE 6010B DISS
34	4	SEQUENCE-CCV2		
35	8	SEQUENCE-CCB2		
36	25	IRJ1758-35@5	8J24124	CR FE 6010B DISS
37	26	8J24124-MS3@5	8J24124	CR FE 6010B DISS
38	27	8J24124-MSD3@5	8J24124	CR FE 6010B DISS
39	28	IRJ1758-33@5	8J24124	CR FE 6010B DISS

Sample Information Detail Report
Document Name: 081026-1

40	29	8J23116-BLK1	8J23116	BASR 200.7
41	30	8J23116-BS1	8J23116	BASR 200.7
42	31	IRJ2330-01	8J23116	BASR 200.7
43	32	8J23116-MS1	8J23116	BASR 200.7
44	33	8J23116-MSD1	8J23116	BASR 200.7
45	34	IRJ1610-01@2 Se	8J23116	CAM 200.7
46	4	SEQUENCE-CCV3		
47	8	SEQUENCE-CCB3		
48	12	SEQUENCE-IFB2 K.		
49	35	8J26031-BLK1	8J26031	CU STLC
50	36	8J26031-BS1	8J26031	CU STLC
51	37	IRJ1402-01	8J26031	CU STLC
52	38	8J26031-MS1	8J26031	CU STLC
53	39	8J26031-MSD1	8J26031	CU STLC
54	40	IRJ1402-02	8J26031	CU STLC
55	41	IRJ1402-03	8J26031	CU STLC
56	42	8J21085-BLK1	8J21085	BP NA 200.7 SEQ
57	43	8J21085-BS1	8J21085	BP NA 200.7 SEQ
58	4	SEQUENCE-CCV4		
59	8	SEQUENCE-CCB4 have been reported		
60	44	IRJ1213-01	8J21085	BP NA 200.7 SEQ
61	45	8J21085-MS1	8J21085	BP NA 200.7 SEQ
62	46	8J21085-MSD1	8J21085	BP NA 200.7 SEQ
63	47	8J22088-BLK1	8J22088	BP CAM 200.7 SEQ Seq # 082808
64	48	8J22088-BS1	8J22088	BP CAM 200.7 SEQ
65	49	IRJ1354-01@5	8J22088	BP CAM 200.7 SEQ
66	50	8J22088-MS1@5	8J22088	BP CAM 200.7 SEQ
67	51	8J22088-MSD1@5	8J22088	BP CAM 200.7 SEQ
68	52	IRJ1354-03@20	8J22088	BP CAM 200.7 SEQ
69	53	IRJ1080-01@20	8J22088	BP CAM 200.7 SEQ
70	4	SEQUENCE-CCV5		
71	8	SEQUENCE-CCB5		
72	54	8J23158-BLK1	8J23158	CAM 200.7DISS K Na Mg
73	55	8J23158-BS1	8J23158	CAM 200.7DISS
74	56	IRJ1354-02 Na↑ Sx.	8J23158	CAM 200.7DISS
75	57	8J23158-MS1	8J23158	CAM 200.7DISS
76	58	8J23158-MSD1	8J23158	CAM 200.7DISS
77	59	IRJ1943-08	8J23158	MN 200.7DISS
78	60	IRJ1943-09	8J23158	MN 200.7DISS
79	61	IRJ1943-10	8J23158	MN 200.7DISS
80	62	IRJ1943-12	8J23158	MN 200.7DISS
81	63	IRJ1943-13	8J23158	MN 200.7DISS
82	4	SEQUENCE-CCV6 Mg		
83	8	SEQUENCE-CCB6		
84	64	8J22043-BLK1	8J22043	BP MG 200.7
85	65	8J22043-BS1	8J22043	BP MG 200.7
86	66	IRJ1358-01	8J22043	BP MG 200.7
87	67	8J22043-MS1	8J22043	BP MG 200.7
88	68	8J22043-MSD1	8J22043	BP MG 200.7
89	69	IRJ1398-03@2	8J22043	BP MG 200.7

90	4	SEQUENCE-CCV7		
91	8	SEQUENCE-CCB7		
92	6	SEQUENCE-BP1-1		
93	9	SEQUENCE-BP2-1		
94	11	SEQUENCE-BPA-1		
95	12	SEQUENCE-BPB-1		
105		NEED TO LOAD		
106	13	8J21107-BLK1	8J21107	CAM 200.7 PT
107	14	8J21107-BS1	8J21107	CAM 200.7 PT
108	15	8J21107-BS2	8J21107	CAM 200.7 PT
109	16	IRJ1355-08	8J21107	CAM 200.7 PT
110	17	IRJ1355-08	8J21107	10X CAM 200.7 PT
111	18	IRJ1355-10	8J21107	SI 200.7 PT
113	27	8J22117-BS1	8J22117	K 200.7
114	28	IRJ2077-01	8J22117	K 200.7
115	64	IRJ1207-02@4	8J18048	BP AL K SOIL SEQ.
116	65	IRJ1207-05@4	8J18048	BP AL K SOIL SEQ.
117	66	IRJ1207-08@4	8J18048	BP AL K SOIL SEQ.
118	67	IRJ1207-09@4	8J18048	BP AL K SOIL SEQ.

Sample No	Aliquot Volume	Diluted To Vol.	Sample Units *	Recalibrate Before
1			mg/L	
2			mg/L	
3			mg/L	
4			mg/L	
5			mg/L	
6			mg/L	
7			mg/L	
8			mg/L	
9			mg/L	
10			mg/L	
11			mg/L	
12			mg/L	
13			mg/L	
14			mg/L	
15			mg/L	
16			mg/L	
17			mg/L	
18			mg/L	
19			mg/L	
20			mg/L	
21			mg/L	
22			mg/L	
23			mg/L	
24			mg/L	
25			mg/L	
26			mg/L	
27			mg/L	
28			mg/L	
29			mg/L	

Mg, K, Na in -02 only

ICP
INITIAL CALIBRATION VERIFICATION SUMMARY

Instrument:	**ICP4**	Labnumber:	SEQUENCE-ICV1
Data File/Seq.#:	081027-1	Filename:	081027-1-008
		Analyzed:	Oct/27/08 9:43:02 AM

	Analyte	Conc (mg/L)		% Rec	%Limits	Q
		True	Found			
1	Aluminum	2	1.989	99	90-110	
2	Antimony	2	2.015	101	90-110	
3	Arsenic	2	2.013	101	90-110	
4	Barium	2	2.098	105	90-110	
5	Beryllium	2	2.039	102	90-110	
6	Boron	2	1.959	98	90-110	
7	Cadmium	2	1.964	98	90-110	
8	Calcium	2	2.048	102	90-110	
9	Chromium	2	2.005	100	90-110	
10	Cobalt	2	2.002	100	90-110	
11	Copper	2	1.993	100	90-110	
12	Iron	2	2.03	101	90-110	
13	Lead	2	2	100	90-110	
14	Lithium	2	2.044	102	90-110	
15	Magnesium	2	2.036	102	90-110	
16	Manganese	2	1.999	100	90-110	
17	Molybdenum	2	1.944	97	90-110	
18	Nickel	2	2.019	101	90-110	
19	Phosphorus	2	1.941	97	90-110	
20	Potassium	20	20.856	104	90-110	
21	Selenium	2	1.986	99	90-110	
22	Silicon	10	10.111	101	90-110	
23	Silver	1	1.007	101	90-110	
24	Sodium	20	20.712	104	90-110	
25	Strontium	2	2.027	101	90-110	
26	Thallium	2	2.056	103	90-110	
27	Tin	2	1.991	100	90-110	
28	Titanium	2	2.037	102	90-110	
29	Vanadium	2	1.976	99	90-110	
30	Zinc	2	1.969	98	90-110	

(*) = Out of range

ICP
CONTINUOUS CALIBRATION VERIFICATION SUMMARY

Instrument:	ICP4	Labnumber:	SEQUENCE-CCV1
Data File/Seq.#:	081027-1	Filename:	081027-1-025
		Analyzed:	Oct/27/08 11:58:25 AM

	Analyte	Conc (mg/L)		% Rec	%Limits	Q
		True	Found			
1	Aluminum	1	0.994	99	90-110	
2	Antimony	1	1.018	102	90-110	
3	Arsenic	1	1.023	102	90-110	
4	Barium	1	1.021	102	90-110	
5	Beryllium	1	1.025	102	90-110	
6	Boron	1	0.995	100	90-110	
7	Cadmium	1	1.013	101	90-110	
8	Calcium	10	10.168	102	90-110	
9	Chromium	1	1.018	102	90-110	
10	Cobalt	1	1.016	102	90-110	
11	Copper	1	1.008	101	90-110	
12	Iron	1	1.015	101	90-110	
13	Lead	1	1.024	102	90-110	
14	Lithium	1	1.016	102	90-110	
15	Magnesium	1	1.044	104	90-110	
16	Manganese	1	1.014	101	90-110	
17	Molybdenum	1	1.011	101	90-110	
18	Nickel	1	1.027	103	90-110	
19	Phosphorus	1	1.003	100	90-110	
20	Potassium	10	10.071	101	90-110	
21	Selenium	1	1.038	104	90-110	
22	Silicon	5	4.902	98	90-110	
23	Silver	0.5	0.497	99	90-110	
24	Sodium	10	9.504	95	90-110	
25	Strontium	1	0.998	100	90-110	
26	Thallium	1	1.015	101	90-110	
27	Tin	1	1.028	103	90-110	
28	Titanium	1	1.002	100	90-110	
29	Vanadium	1	1	100	90-110	
30	Zinc	1	0.999	100	90-110	

(*) = Out of range

ICP
CONTINUOUS CALIBRATION VERIFICATION SUMMARY

Instrument:	**ICP4**	Labnumber:	SEQUENCE-CCV2
Data File/Seq.#:	081027-1	Filename:	081027-1-037
		Analyzed:	Oct/27/08 1:23:15 PM

	Analyte	Conc (mg/L)		% Rec	%Limits	Q
		True	Found			
1	Aluminum	1	0.987	99	90-110	
2	Antimony	1	1.018	102	90-110	
3	Arsenic	1	1.038	104	90-110	
4	Barium	1	1.034	103	90-110	
5	Beryllium	1	1.022	102	90-110	
6	Boron	1	1.037	104	90-110	
7	Cadmium	1	1.056	106	90-110	
8	Calcium	10	10.46	105	90-110	
9	Chromium	1	1.025	102	90-110	
10	Cobalt	1	1.047	105	90-110	
11	Copper	1	1.027	103	90-110	
12	Iron	1	1.048	105	90-110	
13	Lead	1	1.039	104	90-110	
14	Lithium	1	0.995	100	90-110	
15	Magnesium	1	1.076	108	90-110	
16	Manganese	1	1.039	104	90-110	
17	Molybdenum	1	1.02	102	90-110	
18	Nickel	1	1.034	103	90-110	
19	Phosphorus	1	1.024	102	90-110	
20	Potassium	10	10.169	102	90-110	
21	Selenium	1	1.046	105	90-110	
22	Silicon	5	5.058	101	90-110	
23	Silver	0.5	0.504	101	90-110	
24	Sodium	10	9.535	95	90-110	
25	Strontium	1	1	100	90-110	
26	Thallium	1	1.024	102	90-110	
27	Tin	1	1.04	104	90-110	
28	Titanium	1	1.032	103	90-110	
29	Vanadium	1	1.023	102	90-110	
30	Zinc	1	1.028	103	90-110	

(*) = Out of range

ICP
REPORTING LIMIT VERIFICATION SUMMARY (2 x MRL)

Instrument:	**ICP4**	Labnumber:	SEQUENCE-CRL1
Data File/Seq.#:	081027-1	Filename:	081027-1-010
		Analyzed:	Oct/27/08 9:54:09 AM

	Analyte	Conc (mg/L)		% Rec	%Limits	Q
		True	Found			
1	Aluminum	0.1	0.097	97	50-150	
3	Arsenic	0.01	0.0142	142	50-150	
5	Beryllium	0.01	0.0104	104	50-150	
6	Boron	0.1	0.0997	100	50-150	
7	Cadmium	0.01	0.0106	106	50-150	
8	Calcium	0.2	0.1945	97	50-150	
9	Chromium	0.01	0.0115	115	50-150	
12	Iron	0.08	0.0792	99	50-150	
13	Lead	0.01	0.0098	98	50-150	
15	Magnesium	0.04	0.0329	82	50-150	
16	Manganese	0.01	0.0109	109	50-150	
19	Phosphorus	1	0.0015		50-150	
20	Potassium	1	1.1481	115	50-150	
24	Sodium	1	1.0651	107	50-150	
28	Titanium	0.01	0.0105	105	50-150	

(*) = Out of range

ICP

REPORTING LIMIT VERIFICATION SUMMARY (20 ppb)

Instrument:	**ICP4**	Labnumber:	SEQUENCE-CRL2-1
Data File/Seq.#:	081027-1	Filename:	081027-1-014
		Analyzed:	Oct/27/08 10:24:47 AM

	Analyte	Conc (mg/L)		% Rec	%Limits	Q
		True	Found			
2	Antimony	0.02	0.0247	123	50-150	
4	Barium	0.02	0.0213	106	50-150	
10	Cobalt	0.02	0.0214	107	50-150	
11	Copper	0.02	0.0216	108	50-150	
14	Lithium	0.02	0.029	145	50-150	
17	Molybdenum	0.02	0.0202	101	50-150	
18	Nickel	0.02	0.0214	107	50-150	
21	Selenium	0.02	0.0228	114	50-150	
22	Silicon	0.1	0.1009	101	50-150	
23	Silver	0.01	0.0107	107	50-150	
25	Strontium	0.02	0.0203	101	50-150	
26	Thallium	0.02	0.0241	121	50-150	
27	Tin	0.02	0.0212	106	50-150	
29	Vanadium	0.02	0.0217	109	50-150	
30	Zinc	0.02	0.0205	103	50-150	

(*) = Out of range

ICP

REPORTING LIMIT VERIFICATION SUMMARY (2 x MRL)

Instrument:	**ICP4**	Labnumber:	SEQUENCE-BP1-1
Data File/Seq.#:	081027-1	Filename:	081027-1-039
		Analyzed:	Oct/27/08 2:01:33 PM

	Analyte	Conc (mg/L)		% Rec	%Limits	Q
		True	Found			
1	Aluminum	0.1	0.086	86	50-150	
3	Arsenic	0.01	0.0079	79	50-150	
5	Beryllium	0.01	0.0104	104	50-150	
6	Boron	0.1	0.0999	100	50-150	
7	Cadmium	0.01	0.0106	106	50-150	
8	Calcium	0.2	0.1954	98	50-150	
9	Chromium	0.01	0.0109	109	50-150	
12	Iron	0.08	0.0788	99	50-150	
13	Lead	0.01	0.0098	98	50-150	
15	Magnesium	0.04	0.0324	81	50-150	
16	Manganese	0.01	0.0107	107	50-150	
19	Phosphorus	1	0.0059	1	50-150	*
20	Potassium	1	1.0728	107	50-150	
24	Sodium	1	0.9101	91	50-150	
28	Titanium	0.01	0.011	110	50-150	

(*) = Out of range

ICP
REPORTING LIMIT VERIFICATION SUMMARY (20 ppb)

Instrument:	**ICP4**	Labnumber:	SEQUENCE-BP2-1
Data File/Seq.#:	081027-1	Filename:	081027-1-040
		Analyzed:	Oct/27/08 2:07:07 PM

	Analyte	Conc (mg/L)		% Rec	%Limits	Q
		True	Found			
2	Antimony	0.02	0.0212	106	50-150	
4	Barium	0.02	0.0211	105	50-150	
10	Cobalt	0.02	0.0213	106	50-150	
11	Copper	0.02	0.0221	111	50-150	
14	Lithium	0.02	0.03	150	50-150	
17	Molybdenum	0.02	0.0211	105	50-150	
18	Nickel	0.02	0.0214	107	50-150	
21	Selenium	0.02	0.0235	118	50-150	
22	Silicon	0.1	0.1105	111	50-150	
23	Silver	0.01	0.0114	114	50-150	
25	Strontium	0.02	0.0208	104	50-150	
26	Thallium	0.02	0.0209	104	50-150	
27	Tin	0.02	0.0241	121	50-150	
29	Vanadium	0.02	0.0216	108	50-150	
30	Zinc	0.02	0.0206	103	50-150	

(*) = Out of range

ICP
INITIAL CALIBRATION BLANK SUMMARY

Instrument:	**ICP4**	Labnumber:	SEQUENCE-ICB1	
Data File/Seq.#:	081027-1	Filename:	081027-1-009	
		Analyzed:	Oct/27/08	9:48:35 AM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Aluminum	0.05	-0.003	
2	Antimony	0.01	0.001	
3	Arsenic	0.005	0.005	
4	Barium	0.01	0	
5	Beryllium	0.05	0	
6	Boron	0.05	0.008	
7	Cadmium	0.005	0	
8	Calcium	0.1	0.003	
9	Chromium	0.005	0.001	
10	Cobalt	0.01	0	
11	Copper	0.01	0.001	
12	Iron	0.04	0	
13	Lead	0.005	-0.002	
14	Lithium	0.05	0.007	
15	Magnesium	0.5	-0.01	
16	Manganese	0.02	0	
17	Molybdenum	0.02	0.001	
18	Nickel	0.01	0	
19	Phosphorus	0.5	-0.002	
20	Potassium	0.5	0.064	
21	Selenium	0.01	0.004	
22	Silicon	0.05	0.003	
23	Silver	0.01	0.001	
24	Sodium	0.5	-0.049	
25	Strontium	0.02	0	
26	Thallium	0.01	0.003	
27	Tin	0.1	0	
28	Titanium	0.005	0	
29	Vanadium	0.01	0.001	
30	Zinc	0.02	0	

(*) = Out of range

ICP
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	**ICP4**	Labnumber:	SEQUENCE-CCB1	
Data File/Seq.#:	081027-1	Filename:	081027-1-026	
		Analyzed:	Oct/27/08	12:03:59 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Aluminum	0.05	0.007	
2	Antimony	0.01	0.003	
3	Arsenic	0.005	0.004	
4	Barium	0.01	0	
5	Beryllium	0.05	0	
6	Boron	0.05	0.006	
7	Cadmium	0.005	0	
8	Calcium	0.1	0.002	
9	Chromium	0.005	0	
10	Cobalt	0.01	0.001	
11	Copper	0.01	0	
12	Iron	0.04	-0.001	
13	Lead	0.005	-0.001	
14	Lithium	0.05	0.007	
15	Magnesium	0.5	-0.008	
16	Manganese	0.02	0	
17	Molybdenum	0.02	0	
18	Nickel	0.01	0	
19	Phosphorus	0.5	-0.003	
20	Potassium	0.5	0.098	
21	Selenium	0.01	0.005	
22	Silicon	0.05	0.001	
23	Silver	0.01	0.001	
24	Sodium	0.5	0.043	
25	Strontium	0.02	0	
26	Thallium	0.01	0	
27	Tin	0.1	0.001	
28	Titanium	0.005	0	
29	Vanadium	0.01	0.002	
30	Zinc	0.02	0	

(*) = Out of range

ICP
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	**ICP4**	Labnumber:	SEQUENCE-CCB2
Data File/Seq.#:	081027-1	Filename:	081027-1-038
		Analyzed:	Oct/27/08 1:28:49 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Aluminum	0.05	-0.019	
2	Antimony	0.01	0.005	
3	Arsenic	0.005	0.005	
4	Barium	0.01	0	
5	Beryllium	0.05	0	
6	Boron	0.05	0.008	
7	Cadmium	0.005	0	
8	Calcium	0.1	0.002	
9	Chromium	0.005	0	
10	Cobalt	0.01	0	
11	Copper	0.01	0.001	
12	Iron	0.04	0	
13	Lead	0.005	-0.001	
14	Lithium	0.05	0.009	
15	Magnesium	0.5	-0.001	
16	Manganese	0.02	0	
17	Molybdenum	0.02	0.001	
18	Nickel	0.01	0	
19	Phosphorus	0.5	-0.002	
20	Potassium	0.5	0.064	
21	Selenium	0.01	0.005	
22	Silicon	0.05	0	
23	Silver	0.01	0	
24	Sodium	0.5	0.052	
25	Strontium	0.02	0	
26	Thallium	0.01	0.003	
27	Tin	0.1	0.003	
28	Titanium	0.005	0	
29	Vanadium	0.01	0.001	
30	Zinc	0.02	0	

(*) = Out of range

ICP
INTERFERENCE CHECK STANDARD SUMMARY

Instrument: ICP4
Data File/Seq.#: 081027-1

ICSA File name: 081027-1-005
ICSA Analyzed: Oct/27/08 9:18:13 AM
ICSAB File name: 081027-1-012
ICSAB Analyzed: Oct/27/08 10:13:27 AM

	Analyte	True (mg/L)		Found (mg/L)		% Rec	%Limits	Q	Q
		ICSA	ICSAB	ICSA	ICSAB	(ICSAB)	(ICSAB)	(ICSA)	(ICSAB)
1	Aluminum	500	500	458.83	456.398	91	80-120		
2	Antimony	0	0.5	0.007	0.498	100	80-120		
3	Arsenic	0	0.5	-0.008	0.504	101	80-120		
4	Barium	0	0.5	0.005	0.513	103	80-120		
5	Beryllium	0	0.5	-0.001	0.514	103	80-120		
6	Boron	0	0.5	-0.014	0.472	94	80-120		
7	Cadmium	0	0.5	0.001	0.492	98	80-120		
8	Calcium	500	500	484.961	486.034	97	80-120		
9	Chromium	0	0.5	0.002	0.498	100	80-120		
10	Cobalt	0	0.5	0.003	0.489	98	80-120		
11	Copper	0	0.5	0	0.528	106	80-120		
12	Iron	200	200	187.281	187.979	94	80-120		
13	Lead	0	0.5	0.004	0.496	99	80-120		
14	Lithium	0	0.5	0.037	0.605	121	80-120		
15	Magnesium	500	500	508.361	514.319	103	80-120		
16	Manganese	0	0.5	-0.001	0.503	101	80-120		
17	Molybdenum	0	0.5	0.005	0.501	100	80-120		
18	Nickel	0	0.5	-0.001	0.484	97	80-120		
19	Phosphorus	0	0.5	0.028	0.522	104	80-120		
20	Potassium	0	10	0.06	11.907	119	80-120		
21	Selenium	0	0.5	-0.01	0.486	97	80-120		
22	Silicon	0	2.5	0.024	2.453	98	80-120		
23	Silver	0	0.25	0.005	0.268	107	80-120		
24	Sodium	0	10	0.035	11.63	116	80-120		
25	Strontium	0	0.5	0	0.516	103	80-120		
26	Thallium	0	0.5	-0.001	0.485	97	80-120		
27	Tin No (+)	0	0.5	0.049	0.544	109	80-120		
28	Titanium	0	0.5	-0.001	0.5	100	80-120		
29	Vanadium	0	0.5	-0.002	0.49	98	80-120		
30	Zinc	0	0.5	-0.003	0.478	96	80-120		

	ICSA	ICSAB
Acceptance Limits:	+ / - 2xRL	80-120%

(*): out of QC limits

Ca ↑ in -02

~~J for Ti~~

Not reported from this sequence

THN
2/10/09

ICP
INTERFERENCE CHECK STANDARD SUMMARY

Instrument: **ICP4**
Data File/Seq.#: 081027-1

ICSA File name: 081027-1-041
ICSA Analyzed: Oct/27/08 2:12:58 PM
ICSAB File name: 081027-1-042
ICSAB Analyzed: Oct/27/08 2:17:01 PM

	Analyte	True (mg/L)		Found (mg/L)		% Rec	%Limits	Q	Q
		ICSA	ICSAB	ICSA	ICSAB	(ICSAB)	(ICSAB)	(ICSA)	(ICSAB)
1	Aluminum	500	500	456.626	451.435	90	80-120		
2	Antimony	0	0.5	0.004	0.484	97	80-120		
3	Arsenic	0	0.5	-0.002	0.493	99	80-120		
4	Barium	0	0.5	0.005	0.514	103	80-120		
5	Beryllium	0	0.5	-0.001	0.511	102	80-120		
6	Boron	0	0.5	-0.012	0.466	93	80-120		
7	Cadmium	0	0.5	0.001	0.488	98	80-120		
8	Calcium	500	500	487.23	480.935	96	80-120		
9	Chromium	0	0.5	0.002	0.482	96	80-120		
10	Cobalt	0	0.5	0.003	0.474	95	80-120		
11	Copper	0	0.5	0	0.524	105	80-120		
12	Iron	200	200	187.591	185.704	93	80-120		
13	Lead	0	0.5	0.008	0.483	97	80-120		
14	Lithium	0	0.5	0.055	0.591	118	80-120		
15	Magnesium	500	500	515.734	509.825	102	80-120		
16	Manganese	0	0.5	-0.001	0.499	100	80-120		
17	Molybdenum	0	0.5	0.005	0.485	97	80-120		
18	Nickel	0	0.5	-0.001	0.47	94	80-120		
19	Phosphorus	0	0.5	0.022	0.514	103	80-120		
20	Potassium	0	10	<MDL 0.141	11.968	120	80-120		
21	Selenium	0	0.5	-0.007	0.472	94	80-120		
22	Silicon	0	2.5	0.018	2.441	98	80-120		
23	Silver	0	0.25	0.006	0.265	106	80-120		
24	Sodium	0	10	-0.002	11.283	113	80-120		
25	Strontium	0	0.5	-0.001	0.513	103	80-120		
26	Thallium	0	0.5	-0.002	0.46	92	80-120		
27	Tin	0	0.5	0.054	0.533	107	80-120		
28	Titanium	0	0.5	0	0.495	99	80-120		
29	Vanadium	0	0.5	-0.002	0.487	97	80-120		
30	Zinc	0	0.5	-0.005	0.461	92	80-120		

	ICSA	ICSAB
Acceptance Limits:	+ / - 2xRL	80-120%

(*) : out of QC limits

RUN LOG

Intrument: *ICP4*

Calib.file #: 081027-1 Calib. date: 10/27/2008

#	File_Name	Lab_Number	Dilution	Analyzed	Time
1	081027-1-001	Calib Blank 1	1	Oct/27/08	8:54:38 AM
2	081027-1-002	Calib Std 1	1	Oct/27/08	9:00:12 AM
3	081027-1-003	Calib Std 2	1	Oct/27/08	9:05:45 AM
4	081027-1-004	Calib std 3	1	Oct/27/08	9:11:21 AM
5	081027-1-005	ICSA	1	Oct/27/08	9:16:58 AM
6	081027-1-006	ICSAB	1	Oct/27/08	9:30:33 AM
7	081027-1-007	RINSE	1	Oct/27/08	9:36:21 AM
8	081027-1-008	SEQUENCE-ICV1	1	Oct/27/08	9:41:56 AM
9	081027-1-009	SEQUENCE-ICB1	1	Oct/27/08	9:47:33 AM
10	081027-1-010	SEQUENCE-CRL1	1	Oct/27/08	9:53:06 AM
11	081027-1-011	SEQUENCE-CRL2	1	Oct/27/08	9:58:40 AM
12	081027-1-012	ICSAB	1	Oct/27/08	10:12:12 AM
13	081027-1-013	RINSE	1	Oct/27/08	10:18:06 AM
14	081027-1-014	SEQUENCE-CRL2-1	1	Oct/27/08	10:23:45 AM
15	081027-1-015	IRJ1610-01	1	Oct/27/08	10:42:46 AM
16	081027-1-016	8J23158-BLK1	1	Oct/27/08	10:48:35 AM
17	081027-1-017	8J23158-BS1	1	Oct/27/08	10:54:11 AM
18	081027-1-018	IRJ1354-02 5x	1	Oct/27/08	10:59:47 AM
19	081027-1-019	8J23158-MS1	1	Oct/27/08	11:05:25 AM
20	081027-1-020	8J23158-MSD1	1	Oct/27/08	11:11:03 AM
21	081027-1-021	8J22043-BLK1	1	Oct/27/08	11:17:22 AM
22	081027-1-022	8J22043-BS1	1	Oct/27/08	11:22:56 AM
23	081027-1-023	IRJ1358-01	1	Oct/27/08	11:28:32 AM
24	081027-1-024	8J22043-MS1	1	Oct/27/08	11:34:08 AM
25	081027-1-025	SEQUENCE-CCV1	1	Oct/27/08	11:57:21 AM
26	081027-1-026	SEQUENCE-CCB1	1	Oct/27/08	12:02:56 PM
27	081027-1-027	8J22043-MSD1	1	Oct/27/08	12:25:33 PM
28	081027-1-028	IRJ1398-03	1	Oct/27/08	12:31:10 PM
29	081027-1-029	8J24126-BLK1	1	Oct/27/08	12:36:51 PM
30	081027-1-030	8J24126-BS1	1	Oct/27/08	12:42:27 PM
31	081027-1-031	IRJ1996-04	1	Oct/27/08	12:48:03 PM
32	081027-1-032	8J24126-MS1	1	Oct/27/08	12:53:47 PM
33	081027-1-033	8J24126-MSD1	1	Oct/27/08	12:59:26 PM
34	081027-1-034	IRJ1996-05	1	Oct/27/08	1:05:05 PM
35	081027-1-035	IRJ1996-06	1	Oct/27/08	1:10:50 PM
36	081027-1-036	IRJ1703-01	1	Oct/27/08	1:16:29 PM
37	081027-1-037	SEQUENCE-CCV2	1	Oct/27/08	1:22:11 PM
38	081027-1-038	SEQUENCE-CCB2	1	Oct/27/08	1:27:47 PM
39	081027-1-039	SEQUENCE-BP1-1	1	Oct/27/08	2:00:30 PM
40	081027-1-040	SEQUENCE-BP2-1	1	Oct/27/08	2:06:05 PM
41	081027-1-041	ICSA	1	Oct/27/08	2:11:43 PM
42	081027-1-042	ICSAB	1	Oct/27/08	2:15:46 PM
43	081027-1-043	8J24126-BS1	1	Oct/27/08	2:20:31 PM
44	081027-1-044	IRJ1703-01	1	Oct/27/08	2:24:40 PM
45	081027-1-045	8J25062-BLK1	1	Oct/27/08	2:30:16 PM
46	081027-1-046	8J25062-BS1	1	Oct/27/08	2:35:52 PM
47	081027-1-047	IRJ2015-01	1	Oct/27/08	2:41:30 PM
48	081027-1-048	8J25062-MS1	1	Oct/27/08	2:47:06 PM
49	081027-1-049	8J25062-MSD1	1	Oct/27/08	2:52:43 PM
50	081027-1-050	IRJ2110-01	1	Oct/27/08	2:58:20 PM
51	081027-1-051	IRJ2110-02	1	Oct/27/08	3:03:55 PM
52	081027-1-052	SEQUENCE-CCV3	1	Oct/27/08	3:26:32 PM
53	081027-1-053	SEQUENCE-CCB3	1	Oct/27/08	3:32:08 PM
54	081027-1-054	IRJ2112-01	1	Oct/27/08	3:41:17 PM
55	081027-1-055	IRJ2113-01	1	Oct/27/08	3:46:57 PM
56	081027-1-056	IRJ2115-01	1	Oct/27/08	4:01:56 PM
57	081027-1-057	IRJ2116-01	1	Oct/27/08	4:07:36 PM
58	081027-1-058	IRJ1207-12	1	Oct/27/08	4:13:15 PM
59	081027-1-059	SEQUENCE-BP1-2	1	Oct/27/08	4:22:09 PM
60	081027-1-060	SEQUENCE-BP2-2	1	Oct/27/08	4:27:43 PM
61	081027-1-061	ICSA	1	Oct/27/08	4:33:18 PM
62	081027-1-062	ICSAB	1	Oct/27/08	4:39:07 PM
63	081027-1-063	SEQUENCE-CCV4	1	Oct/27/08	4:44:02 PM

Mg, K, Na only

64	081027-1-064	SEQUENCE-CCB4	1	Oct/27/08	4:49:38 PM
65	081027-1-065	IRJ1508-BR	1	Oct/27/08	4:57:26 PM
66	081027-1-066	IRJ1508-BS	1	Oct/27/08	5:03:06 PM
67	081027-1-067	IRJ1508-BT	1	Oct/27/08	5:08:46 PM
68	081027-1-068	8J24134-BLK1	1	Oct/27/08	5:14:26 PM
69	081027-1-069	8J24134-BS1	1	Oct/27/08	5:20:09 PM
70	081027-1-070	IRJ2005-05	1	Oct/27/08	5:25:49 PM
71	081027-1-071	8J24134-MS1	1	Oct/27/08	5:31:30 PM
72	081027-1-072	8J24134-MSD1	1	Oct/27/08	5:36:11 PM
73	081027-1-073	IRJ2005-02	1	Oct/27/08	5:41:51 PM
74	081027-1-074	IRJ2005-03	1	Oct/27/08	5:47:30 PM
75	081027-1-075	SEQUENCE-CCV5	1	Oct/27/08	5:53:11 PM
76	081027-1-076	SEQUENCE-CCB5	1	Oct/27/08	5:58:52 PM
77	081027-1-077	IRJ2005-04	1	Oct/27/08	6:04:29 PM
78	081027-1-078	IRJ2005-05	1	Oct/27/08	6:10:09 PM
79	081027-1-079	IRJ2005-06	1	Oct/27/08	6:15:49 PM
80	081027-1-080	IRJ2005-07	1	Oct/27/08	6:21:29 PM
81	081027-1-081	IRJ2005-08	1	Oct/27/08	6:27:10 PM
82	081027-1-082	IRJ2005-09	1	Oct/27/08	6:32:50 PM
83	081027-1-083	IRJ2005-10	1	Oct/27/08	6:38:31 PM
84	081027-1-084	IRJ2005-11	1	Oct/27/08	6:44:15 PM
85	081027-1-085	IRJ2005-12	1	Oct/27/08	6:49:56 PM
86	081027-1-086	IRJ2005-13	1	Oct/27/08	6:55:34 PM
87	081027-1-087	SEQUENCE-CCV6	1	Oct/27/08	7:01:13 PM
88	081027-1-088	SEQUENCE-CCB6	1	Oct/27/08	7:06:49 PM
89	081027-1-089	IRJ2005-14	1	Oct/27/08	7:12:24 PM
90	081027-1-090	IRJ2005-15	1	Oct/27/08	7:18:02 PM
91	081027-1-091	IRJ2005-16	1	Oct/27/08	7:23:40 PM
92	081027-1-092	IRJ2005-17	1	Oct/27/08	7:29:18 PM
93	081027-1-093	IRJ2005-18	1	Oct/27/08	7:34:58 PM
94	081027-1-094	SEQUENCE-CCV7-	1	Oct/27/08	7:40:40 PM
95	081027-1-095	SEQUENCE-CCB7-	1	Oct/27/08	7:46:16 PM
96	081027-1-096	8J27107-BLK1	1	Oct/27/08	10:32:31 PM
97	081027-1-097	8J27107-BS1	1	Oct/27/08	10:38:07 PM
98	081027-1-098	IRJ1857-01	1	Oct/27/08	10:43:44 PM
99	081027-1-099	8J27107-MS1	1	Oct/27/08	10:49:29 PM
100	081027-1-100	8J27107-MSD1	1	Oct/27/08	10:55:16 PM
101	081027-1-101	IRJ2580-01	1	Oct/27/08	11:01:00 PM
102	081027-1-102	8J24107-MS2	1	Oct/27/08	11:06:37 PM
103	081027-1-103	IRJ2580-02	1	Oct/27/08	11:12:18 PM
104	081027-1-104	IRJ2580-03	1	Oct/27/08	11:17:59 PM
105	081027-1-105	IRJ2580-04	1	Oct/27/08	11:23:44 PM
106	081027-1-106	SEQUENCE-CCV8-	1	Oct/27/08	11:29:22 PM
107	081027-1-107	SEQUENCE-CCB8-	1	Oct/27/08	11:34:58 PM
108	081027-1-108	IRJ2580-05	1	Oct/27/08	11:41:29 PM
109	081027-1-109	IRJ2584-01	1	Oct/27/08	11:47:08 PM
110	081027-1-110	IRJ2584-02	1	Oct/27/08	11:52:47 PM
111	081027-1-111	IRJ2584-03	1	Oct/27/08	11:58:26 PM
112	081027-1-112	IRJ2584-04	1	Oct/28/08	12:04:11 AM
113	081027-1-113	IRJ2584-05	1	Oct/28/08	12:09:50 AM
114	081027-1-114	IRJ2585-01	1	Oct/28/08	12:15:27 AM
115	081027-1-115	IRJ2585-02	1	Oct/28/08	12:21:04 AM
116	081027-1-116	IRJ2585-03	1	Oct/28/08	12:26:43 AM
117	081027-1-117	IRJ2585-04	1	Oct/28/08	12:32:26 AM
118	081027-1-118	SEQUENCE-CCV9	1	Oct/28/08	12:38:01 AM
119	081027-1-119	SEQUENCE-CCB9	1	Oct/28/08	12:43:37 AM
120	081027-1-120	IRJ2585-05	1	Oct/28/08	12:49:13 AM
121	081027-1-121	8J27103-BLK1	1	Oct/28/08	12:54:49 AM
122	081027-1-122	8J27103-BS1	1	Oct/28/08	1:00:25 AM
123	081027-1-123	IRJ2001-04	1	Oct/28/08	1:06:03 AM
124	081027-1-124	8J27103-MS1	1	Oct/28/08	1:11:44 AM
125	081027-1-125	8J27103-MSD1	1	Oct/28/08	1:17:26 AM
126	081027-1-126	IRJ2001-05	1	Oct/28/08	1:23:12 AM
127	081027-1-127	IRJ2001-06	1	Oct/28/08	1:29:01 AM
128	081027-1-128	IRJ2184-01	1	Oct/28/08	1:34:41 AM
129	081027-1-129	IRJ2184-02	1	Oct/28/08	1:40:19 AM
130	081027-1-130	SEQUENCE-CCVA	1	Oct/28/08	1:46:25 AM
131	081027-1-131	SEQUENCE-CCBA	1	Oct/28/08	1:52:04 AM
132	081027-1-132	IRJ2292-01	1	Oct/28/08	1:57:39 AM
133	081027-1-133	IRJ2304-01	1	Oct/28/08	2:03:24 AM

134	081027-1-134	IRJ2304-02	1	Oct/28/08	2:09:08 AM
135	081027-1-135	IRJ2587-01	1	Oct/28/08	2:14:48 AM
136	081027-1-136	IRJ2587-02	1	Oct/28/08	2:20:26 AM
137	081027-1-137	IRJ2587-03	1	Oct/28/08	2:26:06 AM
138	081027-1-138	SEQUENCE-CCVB	1	Oct/28/08	2:31:45 AM
139	081027-1-139	SEQUENCE-CCBB	1	Oct/28/08	2:37:21 AM
140	081027-1-140	SEQUENCE-BP1-2	1	Oct/28/08	2:42:55 AM
141	081027-1-141	SEQUENCE-BP2-2	1	Oct/28/08	2:48:29 AM
142	081027-1-142	ICSA	1	Oct/28/08	2:54:04 AM
143	081027-1-143	ICSAB	1	Oct/28/08	2:59:52 AM

PREPARATION BENCH SHEET

8J22088

TestAmerica Irvine

Printed: 10/22/2008 3:00:56PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICP** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
8J22088-BLK1		QC	10/22/08 09:25	50	50								
8J22088-BS1		QC	10/22/08 09:25	50	50		8090397	250					
8J22088-MS1		QC	10/22/08 09:25	50	50	IRJ1354-01	8090397	250					
8J22088-MSD1		QC	10/22/08 09:25	50	50	IRJ1354-01	8090397	250					
IRJ1080-01	C	Phosphorus-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Tin-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Sodium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Boron-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Calcium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered
IRJ1080-01	C	Iron-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Magnesium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Potassium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Silica-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Strontium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Aluminum-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered
IRJ1080-01	C	Titanium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Lithium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.

Spiking Witnessed By N/A Date

Preparation Reviewed By 10/22/08 Date

Extracts Received By 10/22/08 Date

PREPARATION BENCH SHEET

8J22088

TestAmerica Irvine

Printed: 10/22/2008 3:00:56PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICP** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike I	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
IRJ1354-01	C	Magnesium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Calcium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-01	C	Boron-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Aluminum-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-01	C	Titanium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Tin-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Iron-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Strontium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Lithium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Sodium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Phosphorus-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Potassium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Silica-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Tin-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Lithium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Sodium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

221

PREPARATION BENCH SHEET

8J22088

TestAmerica Irvine

Printed: 10/22/2008 3:00:56PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICP** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
IRJ1354-03	C	Magnesium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Phosphorus-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Strontium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Titanium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Calcium-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-03	C	Iron-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Boron-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Potassium-200.7,Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Silica-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Aluminum-200.7, Diss	10/22/08 09:25	50	50								BP Sequence. J flag. Field Filtered

Reagents used in Batch

Reagent	Description	Solvent

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BENCH SHEET

8J23158

TestAmerica Irvine

Printed: 1/15/2009 6:36:08AM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICP** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
8J23158-BLK1		QC	10/23/08 19:14	50	50								
8J23158-BS1		QC	10/23/08 19:14	50	50		8090397	250					
8J23158-MS1		QC	10/23/08 19:14	50	50	IRJ1354-02	8090397	250					
8J23158-MSD1		QC	10/23/08 19:14	50	50	IRJ1354-02	8090397	250					
IRJ1354-02	C	Potassium-200.7,Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Aluminum-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Boron-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Calcium-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Iron-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Lithium-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Magnesium-200.7,Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Phosphorus-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Silica-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Sodium-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Strontium-200.7,Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Tin-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered
IRJ1354-02	C	Titanium-200.7, Diss	10/23/08 19:14	50	50								BP Sequence. J flag. Field Filtered

n/a — Spiking Witnessed By — Date

JT/LL/VRS — Preparation Reviewed By — 1/15/09 — Date

JT/LL/VRS — Extracts Received By — 1/15/09 — Date

PREPARATION BENCH SHEET

8J23158

TestAmerica Irvine

Printed: 1/15/2009 6:36:08AM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICP** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials			Extraction Comments
IRJ1354-02	C	Manganese-200.7,Diss	10/23/08 19:14	50	50										Added for BatchQC in: 8J23158
IRJ1943-08	O	Manganese-200.7,Diss	10/23/08 19:14	50	50										J flag
IRJ1943-09	O	Manganese-200.7,Diss	10/23/08 19:14	50	50										J flag
IRJ1943-10	O	Manganese-200.7,Diss	10/23/08 19:14	50	50										J flag
IRJ1943-12	O	Manganese-200.7,Diss	10/23/08 19:14	50	50										J flag
IRJ1943-13	O	Manganese-200.7,Diss	10/23/08 19:14	50	50										J flag

Reagents used in Batch

Reagent	Description	Solvent

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

MDL STUDY
METALS BY ICP - EPA 6010B / 200.7

Analyt Method: EPA 6010B / 200.7 — Instruments: **ICP4**
Prep Method: EPA 3005A / 200.2 — Standard Conc: **Na,K**: 10x - **Si**: 5x - **Ag**: 0.5x
Matrix: **Water** (50ml-->50ml) — **Ca,Mg**: 1x
Units: **mg/L**

Reviewed: T. Vu (Jun/18/07)

#	Analyte	Spike(mg/l)		MDL Runs - (mg/L)								Calc Data (mg/L)			final	*current* LIMS (mg/L)			Validation Criteria				Comm't
		recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	StdDev	MDL	MDL	MDL	RL_1	RL_2	MDL<RL	Ch'g	Ratio (1-10)	%Rec	Grubbs Test
1	Aluminum	0.05	0.05	0.049	0.058	0.052	0.057	0.031	0.034	0.030	0.031	0.043	0.013	0.038	0.038	0.040	0.050	0.050	OK	-6%	1.3	85%	
2	Antimony	0.01	0.01	0.010	0.009	0.010	0.012	0.013	0.016	0.009	0.015	0.012	0.003	0.008	0.008	0.007	0.010	0.010	OK	13%	1.3	119%	
3	Arsenic	0.01	0.01	0.008	0.007	0.013	0.009	0.010	0.010	0.010	0.014	0.010	0.002	0.007	0.007	0.0065	0.010	0.010	OK	6%	1.4	102%	
4	Barium	0.01	0.01	0.011	0.010	0.011	0.011	0.011	0.011	0.010	0.010	0.010	0.000	0.000	0.000	0.006	0.010	0.010	OK	-93%	25	105%	
5	Beryllium	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.000	0.000	0.000	0.0009	0.004	0.004	OK	-67%	17	98%	
6	Boron	0.05	0.05	0.078	0.080	0.079	0.079	0.064	0.071	0.071	0.070	0.074	0.006	0.017	0.017	0.017	0.050	0.050	OK	no ch'g	3	148%	
7	Cadmium	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.000	0.000	0.000	0.002	0.005	0.005	OK	-80%	13	101%	
8	Calcium	0.1	0.05	0.026	0.035	0.028	0.036	0.052	0.060	0.052	0.056	0.043	0.013	0.040	0.040	0.050	0.10	0.10	OK	-20%	1.2	87%	
9	Chromium	0.005	0.005	0.006	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.000	0.001	0.001	0.002	0.005	0.005	OK	-50%	5	103%	
10	Cobalt	0.01	0.01	0.011	0.011	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.000	0.001	0.001	0.002	0.010	0.010	OK	-50%	10	105%	
11	Copper	0.01	0.01	0.012	0.011	0.012	0.011	0.012	0.012	0.011	0.011	0.012	0.001	0.002	0.002	0.003	0.010	0.010	OK	-47%	6	116%	
12	Iron	0.04	0.02	0.020	0.020	0.020	0.020	0.021	0.021	0.020	0.023	0.021	0.001	0.003	0.003	0.015	0.04	0.02	OK	-80%	7	104%	2.33
13	Lead	0.005	0.005	0.005	0.005	0.003	0.006	0.003	0.004	0.004	0.005	0.004	0.001	0.003	0.003	0.003	0.005	0.005	OK	no ch'g	2	86%	
14	Lithium	0.05	0.05	0.069	0.068	0.068	0.070	0.050	0.047	0.050	0.048	0.059	0.011	0.032	0.032	0.030	0.050	0.050	OK	8%	2	118%	
15	Magnesium	0.02	0.02	0.018	0.019	0.024	0.012	0.022	0.016	0.017	0.015	0.018	0.004	0.011	0.011	0.008	0.020	0.020	OK	41%	2	90%	
16	Manganese	0.02	0.02	0.023	0.021	0.021	0.021	0.021	0.022	0.021	0.022	0.021	0.001	0.002	0.002	0.007	0.020	0.020	OK	-74%	11	107%	
17	Molybdenum	0.02	0.02	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.021	0.000	0.001	0.001	0.002	0.020	0.020	OK	-45%	18	104%	
18	Nickel	0.01	0.01	0.011	0.011	0.011	0.011	0.011	0.011	0.010	0.011	0.011	0.000	0.001	0.001	0.002	0.010	0.010	OK	-50%	10	109%	
19	Phosphorus	0.5	0.05	0.045	0.047	0.052	0.055	0.046	0.043	0.053	0.056	0.050	0.005	0.015	0.015	0.02	0.50	0.50	OK	-26%	3	99%	
20	Potassium	0.5	0.5	0.672	0.763	0.681	0.655	0.482	0.532	0.447	0.439	0.584	0.124	0.371	0.37	0.15	0.50	0.50	OK	147%	1.3	117%	
21	Selenium	0.01	0.01	0.015	0.014	0.016	0.011	0.010	0.013	0.018	0.014	0.014	0.002	0.008	0.008	0.008	0.010	0.010	OK	-6%	1.3	139%	
22	Silicon	0.05	0.05	0.061	0.062	0.063	0.063	0.065	0.061	0.062	0.060	0.062	0.002	0.005	0.005	0.013	0.050	0.050	OK	-65%	11	124%	
23	Silver	0.01	0.01	0.010	0.009	0.010	0.007	0.009	0.008	0.009	0.009	0.009	0.001	0.002	0.002	0.006	0.010	0.007	OK	-60%	4	89%	
24	Sodium	0.5	0.5	0.554	0.561	0.527	0.522	0.441	0.474	0.457	0.480	0.502	0.045	0.135	0.14	0.19	0.50	0.50	OK	-29%	4	100%	
25	Strontium	0.02	0.01	0.011	0.010	0.010	0.011	0.011	0.011	0.011	0.011	0.011	0.000	0.001	0.001	0.005	0.020	0.020	OK	-80%	10	108%	
26	Thallium	0.01	0.01	0.009	0.008	0.011	0.009	0.008	0.013	0.009	0.013	0.010	0.002	0.005	0.005	0.007	0.010	0.010	OK	-23%	2	100%	
27	Tin	0.1	0.05	0.055	0.057	0.057	0.056	0.049	0.049	0.050	0.049	0.053	0.004	0.012	0.012	0.01	0.10	0.10	OK	19%	4	105%	
28	Titanium	0.005	0.005	0.005	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.000	0.001	0.001	0.002	0.005	0.005	OK	-45%	5	105%	
29	Vanadium	0.01	0.01	0.012	0.012	0.011	0.012	0.012	0.012	0.010	0.012	0.011	0.001	0.002	0.002	0.003	0.010	0.010	OK	-40%	6	115%	2.21
30	Zinc	0.02	0.02	0.020	0.020	0.019	0.019	0.024	0.020	0.020	0.022	0.020	0.002	0.005	0.005	0.004	0.020	0.020	OK	33%	4	102%	
31	Zirconium	0.2														0.012	0.20	0.20					

MDL STUDY
METALS BY ICP - EPA 6010B / 200.7

Analyt. Method: EPA 6010B / 200.7 — Instruments: **WinLabICP5**
Prep Method: EPA 3005A / 200.2 — Standard Conc: **Na,K**: 10x - **Si**: 5x - **Ag**: 0.5x
Matrix: **Water** (50ml-->50ml)
Units: **mg/L**

Reviewed: T.Vu (Jan/10&23/08)

#	Analyte	Spike(mg/l)		MDL Runs - (mg/L)								Calc Data (mg/L)			final	*current* **LIMS** (mg/L)			Validation Criteria				Comm't
		recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	StdDev	MDL	**MDL**	**MDL**	**RL_1**	**RL_2**	MDL<RL	Ch'g	Ratio (1-10)	%Rec	Grubbs Test
1	Aluminum	0.05	0.05	0.0477	0.0522	0.0519	0.0519	0.049	0.0513	0.0488	**0.06**	1:14	0.00	0.010	0.010	0.040	0.050	0.050	OK	-75%	5	103%	2.13
2	Antimony	0.01	0.01	0.012	0.010	0.007	0.008	0.007	0.005	0.007	0.005	0.008	0.002	0.007	0.007	0.007	0.010	0.010	OK	no ch'g	1.4	76%	
3	Arsenic	0.01	0.01	0.009	0.010	0.008	0.010	0.010	0.008	0.009	0.007	0.009	0.001	0.003	0.003	0.0065	0.010	0.010	OK	-52%	3	89%	
4	Barium	0.01	0.005	0.0051	0.0051	0.0051	0.0051	0.005	0.0049	0.005	0.005	0.01	0.0001	0.000	0.000	0.006	0.010	0.010	OK	-95%	17	100%	
5	Beryllium	0.004	0.005	0.0048	0.0049	0.0049	0.0048	0.0047	0.0046	0.0046	0.005	0.00	0.0002	0.001	0.001	0.0009	0.004	0.004	OK	-44%	10	95%	
6	Boron	0.05	0.005	0.0177	0.0161	0.0166	0.0155	0.0152	0.0169	0.0167	0.017	0.02	0.0008	0.002	0.002	0.017	0.050	0.050	OK	-86%	2	329%	
7	Cadmium	0.005	0.005	0.0052	0.0052	0.0053	0.0053	0.005	0.005	0.005	0.005	0.01	0.0001	0.000	0.000	0.002	0.005	0.005	OK	-80%	13	102%	
8	Calcium	0.1	0.1	0.1214	0.117	0.1186	0.1178	0.1325	0.1292	0.1131	0.14	0.12	0.01	0.030	0.03	0.050	0.10	0.10	OK	-40%	3	124%	
9	Chromium	0.005	0.005	0.0059	0.0059	0.0059	0.0059	0.0053	0.0048	0.0052	0.005	0.01	0.0004	0.001	0.001	0.002	0.005	0.005	OK	-35%	4	110%	
10	Cobalt	0.01	0.01	0.011	0.010	0.010	0.011	0.010	0.010	0.010	0.010	0.010	0.000	0.001	0.001	0.002	0.010	0.010	OK	-70%	17	103%	
11	Copper	0.01	0.01	0.011	0.010	0.011	0.009	0.012	0.011	0.011	0.011	0.011	0.001	0.003	0.003	0.003	0.010	0.010	OK	-17%	4	107%	
12	Iron	0.04	0.005	0.0066	0.005	0.006	0.0088	0.007	0.0069	0.0085	0.007	0.01	0.0012	0.004	0.004	0.015	0.04	0.02	OK	-75%	1	139%	
13	Lead	0.005	0.005	0.004	0.005	0.004	0.005	0.003	0.005	0.005	0.005	0.00	0.0008	0.003	0.003	0.003	0.005	0.005	OK	-17%	2	92%	
14	Lithium	0.05	0.05	0.0661	0.0641	0.0677	0.0631	0.0501	0.0509	0.049	0.05	0.06	0.0084	0.025	0.03	0.030	0.050	0.050	OK	-16%	2	115%	
15	Magnesium	0.02	0.02	0.0213	0.0243	0.0241	0.0272	0.0207	0.018	0.0133	0.0201	0.02	0.0043	0.013	0.013	0.012	0.020	0.020	OK	7%	2	106%	
16	Manganese	0.02	0.005	0.0055	0.0055	0.0055	0.0056	0.0054	0.005	0.0052	0.005	0.01	0.0003	0.001	0.001	0.007	0.020	0.020	OK	-89%	6	107%	
17	Molybdenum	0.02	0.005	0.0053	0.0054	0.0053	0.0064	0.004	0.0044	0.0039	0.004	0.00	0.0009	0.003	0.003	0.002	0.020	0.020	OK	35%	2	97%	
18	Nickel	0.01	0.005	0.0051	0.0053	0.005	0.0052	0.0049	0.0053	0.0049	0.005	0.01	0.0002	0.001	0.001	0.002	0.010	0.010	OK	-65%	7	101%	
19	Phosphorus	0.5	0.1	0.0889	0.093	0.0951	0.0845	0.089	0.0898	0.0869	0.09	0.09	0.0033	0.010	0.01	0.02	0.50	0.50	OK	-51%	10	90%	
20	Potassium	0.5	0.2	0.1801	0.2287	0.1879	0.1629	0.0952	0.1129	0.0864	0.04	0.14	0.0632	0.189	0.189	0.37	0.50	0.50	OK	-49%	1	68%	
21	Selenium	0.01	0.01	0.011	0.009	0.011	0.011	0.019	0.014	0.015	0.012	0.013	0.003	0.009	0.009	0.008	0.010	0.010	OK	10%	1.1	127%	
22	Silicon	0.05	0.05	0.046	0.047	0.047	0.046	0.048	0.049	0.044	0.045	0.05	0.00	0.005	0.005	0.013	0.050	0.050	OK	-60%	10	93%	
23	Silver	0.01	0.0025	0.0021	0.0018	0.001	0.0018	0.0017	0.0027	0.0022	0.00	0.00	0.0005	0.002	0.002	0.006	0.010	0.007	OK	-75%	2	78%	
24	Sodium	0.5	0.5	0.6693	0.598	0.6291	0.5962	0.6126	0.5704	0.5705	0.552	0.60	0.0376	0.113	0.11	0.19	0.50	0.50	OK	-41%	4	120%	
25	Strontium	0.02	0.005	0.0047	0.0047	0.0049	0.0047	0.0052	0.0051	0.0052	0.005	0.00	0.0002	0.001	0.001	0.005	0.020	0.020	OK	-86%	7	99%	
26	Thallium	0.01	0.01	0.009	0.007	0.010	0.010	0.009	0.006	0.007	0.007	0.008	0.002	0.005	0.005	0.007	0.010	0.010	OK	-33%	2	81%	
27	Tin	0.1	0.1	0.1004	0.0986	0.0945	0.0936	0.0901	0.0968	0.0892	0.0901	0.09	0.0042	0.013	0.013	0.012	0.10	0.10	OK	5%	8	94%	
28	Titanium	0.005	0.005	0.0054	0.0056	0.0054	0.0054	0.0051	0.0049	0.0053	0.005	0.01	0.0002	0.001	0.001	0.002	0.005	0.005	OK	-65%	7	105%	
29	Vanadium	0.01	0.01	0.010	0.010	0.010	0.010	0.009	0.008	0.008	0.008	0.009	0.001	0.003	0.003	0.003	0.010	0.010	OK	no ch'g	3	90%	
30	Zinc	0.02	0.01	0.011	0.011	0.011	0.011	0.010	0.011	0.010	0.010	0.011	0.001	0.002	0.002	0.006	0.020	0.020	OK	-72%	6	109%	
31	Zirconium	0.2	0.005													0.012	0.20	0.20					

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2303
Control Limt: +/- 10.00%
Sequence: IJ82310

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82310-ICV1	Antimony (dissolved)	25.0	25.8	103	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Arsenic (dissolved)	25.0	25.1	100	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Barium (dissolved)	25.0	25.6	102	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Beryllium (dissolved)	25.0	24.9	100	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Cadmium (dissolved)	25.0	26.5	106	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Chromium (dissolved)	25.0	26.7	107	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Cobalt (dissolved)	25.0	24.1	96	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Copper (dissolved)	25.0	25.6	102	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Lead (dissolved)	25.0	25.7	103	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Manganese (dissolved)	25.0	23.9	95	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Molybdenum (dissolved)	25.0	25.9	104	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Nickel (dissolved)	25.0	25.9	103	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Selenium (dissolved)	25.0	25.6	102	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Silver (dissolved)	25.0	26.6	106	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Thallium (dissolved)	25.0	25.8	103	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Uranium (dissolved)	25.0	24.3	97	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Vanadium (dissolved)	25.0	23.0	92	ug/l	EPA 200.8-Diss	10/23/08 10:32
	Zinc (dissolved)	25.0	25.0	100	ug/l	EPA 200.8-Diss	10/23/08 10:32
IJ82310-CCV1	Antimony (dissolved)	50.0	45.9	92	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Arsenic (dissolved)	50.0	49.0	98	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Barium (dissolved)	50.0	46.2	92	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Beryllium (dissolved)	50.0	48.0	96	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Cadmium (dissolved)	50.0	47.0	94	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Chromium (dissolved)	50.0	52.1	104	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Cobalt (dissolved)	50.0	47.5	95	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Copper (dissolved)	50.0	51.0	102	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Lead (dissolved)	50.0	49.6	99	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Manganese (dissolved)	50.0	47.3	95	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Molybdenum (dissolved)	50.0	48.2	96	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Nickel (dissolved)	50.0	51.1	102	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Selenium (dissolved)	50.0	48.3	97	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Silver (dissolved)	50.0	50.0	100	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Thallium (dissolved)	50.0	48.0	96	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Uranium (dissolved)	50.0	49.9	100	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Vanadium (dissolved)	50.0	45.8	92	ug/l	EPA 200.8-Diss	10/23/08 12:11
	Zinc (dissolved)	50.0	48.4	97	ug/l	EPA 200.8-Diss	10/23/08 12:11
IJ82310-CCV2	Antimony (dissolved)	50.0	51.6	103	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Arsenic (dissolved)	50.0	48.7	97	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Barium (dissolved)	50.0	51.3	103	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Beryllium (dissolved)	50.0	48.7	97	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Cadmium (dissolved)	50.0	52.2	104	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Chromium (dissolved)	50.0	51.2	102	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Cobalt (dissolved)	50.0	46.5	93	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Copper (dissolved)	50.0	50.3	101	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Lead (dissolved)	50.0	48.7	97	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Manganese (dissolved)	50.0	45.8	92	ug/l	EPA 200.8-Diss	10/23/08 12:57

INITIAL AND CONTINUING CALIBRATION CHECK

~~EPA 200.8-Diss~~

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2303
Control Limt: +/- 10.00%
Sequence: IJ82310

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82310-CCV2	Molybdenum (dissolved)	50.0	51.4	103	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Nickel (dissolved)	50.0	49.5	99	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Selenium (dissolved)	50.0	49.6	99	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Silver (dissolved)	50.0	53.7	107	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Thallium (dissolved)	50.0	47.1	94	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Uranium (dissolved)	50.0	47.5	95	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Vanadium (dissolved)	50.0	44.0	88 *	ug/l	EPA 200.8-Diss	10/23/08 12:57
	Zinc (dissolved)	50.0	49.1	98	ug/l	EPA 200.8-Diss	10/23/08 12:57

* Values outside of QC limits

√ not reported for assoc. samples

CRDL STANDARD

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2303
Sequence: IJ82310
Injection Date: 10/23/08 10:43

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82310-CRL1	Antimony (dissolved)	0.200	0.271	136	ug/l	50 - 150
	Arsenic (dissolved)	0.200	0.344	172 *	ug/l	50 - 150
0.2 mg/L	Barium (dissolved)	0.200	0.162	81	ug/l	50 - 150
is < RL	Beryllium (dissolved)	0.200	0.245	122	ug/l	50 - 150
for All,	Cadmium (dissolved)	0.200	0.212	106	ug/l	50 - 150
	Chromium (dissolved)	0.200	-0.00116	*	ug/l	50 - 150
not evaluated	Cobalt (dissolved)	0.200	0.214	107	ug/l	50 - 150
	Copper (dissolved)	0.200	0.226	113	ug/l	50 - 150
	Lead (dissolved)	0.200	0.232	116	ug/l	50 - 150
	Manganese (dissolved)	0.200	0.231	115	ug/l	50 - 150
	Molybdenum (dissolved)	0.200	0.0344	17 *	ug/l	50 - 150
	Nickel (dissolved)	0.200	0.226	113	ug/l	50 - 150
	Selenium (dissolved)	0.200	0.123	61	ug/l	50 - 150
	Silver (dissolved)	0.200	0.219	109	ug/l	50 - 150
	Thallium (dissolved)	0.200	0.219	109	ug/l	50 - 150
	Uranium (dissolved)	0.200	0.233	117	ug/l	50 - 150
	Vanadium (dissolved)	0.200	0.173	86	ug/l	50 - 150
	Zinc (dissolved)	0.200	-0.564	*	ug/l	50 - 150
IJ82310-CRL2	Antimony (dissolved)	2.00	1.94	97	ug/l	50 - 150
	Arsenic (dissolved)	2.00	2.08 –	104 –	ug/l	50 - 150
	Barium (dissolved)	2.00	1.79	90	ug/l	50 - 150
	Beryllium (dissolved)	2.00	2.08	104	ug/l	50 - 150
	Cadmium (dissolved)	2.00	1.92	96	ug/l	50 - 150
	Chromium (dissolved)	2.00	1.82	91	ug/l	50 - 150
	Cobalt (dissolved)	2.00	1.89 –	94 –	ug/l	50 - 150
	Copper (dissolved)	2.00	1.98	99	ug/l	50 - 150
	Lead (dissolved)	2.00	2.08	104	ug/l	50 - 150
	Manganese (dissolved)	2.00	1.91	95	ug/l	50 - 150

CRDL STANDARD

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2303
Sequence: IJ82310
Injection Date: 10/23/08 10:48

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82310-CRL2	Molybdenum (dissolved)	2.00	1.70	85	ug/l	50 - 150
	Nickel (dissolved)	2.00	1.97	98	ug/l	50 - 150
	Selenium (dissolved)	2.00	1.85	93	ug/l	50 - 150
	Silver (dissolved)	2.00	2.03	102	ug/l	50 - 150
	Thallium (dissolved)	2.00	1.97	99	ug/l	50 - 150
	Uranium (dissolved)	2.00	2.05	102	ug/l	50 - 150
	Vanadium (dissolved)	2.00	1.63	81	ug/l	50 - 150
	Zinc (dissolved)	2.00	1.15	58	ug/l	50 - 150
IJ82310-CRL3	Antimony (dissolved)	2.00	2.14	107	ug/l	50 - 150
	Arsenic (dissolved)	2.00	1.85	92	ug/l	50 - 150
	Barium (dissolved)	2.00	1.94	97	ug/l	50 - 150
	Beryllium (dissolved)	2.00	1.89	95	ug/l	50 - 150
	Cadmium (dissolved)	2.00	2.03	101	ug/l	50 - 150
	Chromium (dissolved)	2.00	2.09	104	ug/l	50 - 150
	Cobalt (dissolved)	2.00	1.85	92	ug/l	50 - 150
	Copper (dissolved)	2.00	1.98	99	ug/l	50 - 150
	Lead (dissolved)	2.00	2.01	101	ug/l	50 - 150
	Manganese (dissolved)	2.00	1.84	92	ug/l	50 - 150
	Molybdenum (dissolved)	2.00	1.78	89	ug/l	50 - 150
	Nickel (dissolved)	2.00	1.89	94	ug/l	50 - 150
	Selenium (dissolved)	2.00	1.94	97	ug/l	50 - 150
	Silver (dissolved)	2.00	2.11	105	ug/l	50 - 150
	Thallium (dissolved)	2.00	1.95	97	ug/l	50 - 150
	Uranium (dissolved)	2.00	1.94	97	ug/l	50 - 150
	Vanadium (dissolved)	2.00	1.44	72	ug/l	50 - 150
	Zinc (dissolved)	2.00	1.17	59	ug/l	50 - 150

* Values outside of QC limits

BLANKS

EPA 200.8-Diss

Laboratory: TestAmerica Irvine SDG:

Client: Brown and Caldwell - NV

Instrument ID: Elan2 Project: BP Yerington, NV

Sequence: IJ82310 Calibration: I8J2303

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82310-ICB1	Antimony (dissolved)	0.0541	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Arsenic (dissolved)	0.170	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Barium (dissolved)	0.00221	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Beryllium (dissolved)	0.00494	0.50	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Cadmium (dissolved)	0.00108	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Chromium (dissolved)	-0.182	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Cobalt (dissolved)	0.00227	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Copper (dissolved)	0.00110	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Lead (dissolved)	0.00302	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Manganese (dissolved)	0.00132	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Molybdenum (dissolved)	-0.0472	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Nickel (dissolved)	0.00332	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Selenium (dissolved)	-0.0257	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Silver (dissolved)	0.00137	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Thallium (dissolved)	0.139	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Uranium (dissolved)	0.0528	1.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Vanadium (dissolved)	-0.120	2.0	ug/l		EPA 200.8-Diss	10/23/08 10:3
	Zinc (dissolved)	0.0679	20	ug/l		EPA 200.8-Diss	10/23/08 10:3
8J22087-BLK1	Antimony (dissolved)	0.0637	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Arsenic (dissolved)	0.326	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Barium (dissolved)	-0.0169	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Beryllium (dissolved)	0.00228	0.50	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Cadmium (dissolved)	-0.0112	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Chromium (dissolved)	0.0746	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Cobalt (dissolved)	0.00332	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Copper (dissolved)	0.0975	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Lead (dissolved)	0.0181	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Manganese (dissolved)	0.0487	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Molybdenum (dissolved)	0.0432	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Nickel (dissolved)	0.0354	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Selenium (dissolved)	-0.0660	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Silver (dissolved)	0.00261	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Thallium (dissolved)	0.127	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Uranium (dissolved)	0.0979	1.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Vanadium (dissolved)	-0.291	2.0	ug/l		EPA 200.8-Diss	10/23/08 11:3
	Zinc (dissolved)	-0.314	20	ug/l		EPA 200.8-Diss	10/23/08 11:3
IJ82310-CCB1	Antimony (dissolved)	0.284	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Arsenic (dissolved)	0.198	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Barium (dissolved)	-0.0656	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Beryllium (dissolved)	-0.00255	0.50	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Cadmium (dissolved)	-0.0136	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Chromium (dissolved)	-0.376	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Cobalt (dissolved)	-0.00426	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Copper (dissolved)	0.191	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1
	Lead (dissolved)	-0.00784	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1

BLANKS

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: Elan2
Project: BP Yerington, NV
Sequence: IJ82310
Calibration: I8J2303

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82310-CCB1	Manganese (dissolved)	-0.0432	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Molybdenum (dissolved)	-0.0410	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Nickel (dissolved)	0.298	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Selenium (dissolved)	0.0582	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Silver (dissolved)	-0.000520	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Thallium (dissolved)	0.0368	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Uranium (dissolved)	0.0886	1.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Vanadium (dissolved)	-0.124	2.0	ug/l		EPA 200.8-Diss	10/23/08 12:1:
	Zinc (dissolved)	-0.870	20	ug/l		EPA 200.8-Diss	10/23/08 12:1.
IJ82310-CCB2	Antimony (dissolved)	0.327	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Arsenic (dissolved)	0.00244	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Barium (dissolved)	-0.0577	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Beryllium (dissolved)	-0.00194	0.50	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Cadmium (dissolved)	-0.0123	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Chromium (dissolved)	0.144	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Cobalt (dissolved)	-0.00304	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Copper (dissolved)	0.0302	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Lead (dissolved)	-0.00471	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Manganese (dissolved)	-0.0434	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Molybdenum (dissolved)	-0.0430	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Nickel (dissolved)	0.240	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Selenium (dissolved)	-0.00102	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Silver (dissolved)	0.00105	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Thallium (dissolved)	0.0450	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Uranium (dissolved)	0.0743	1.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Vanadium (dissolved)	-0.439	2.0	ug/l		EPA 200.8-Diss	10/23/08 13:0
	Zinc (dissolved)	-0.976	20	ug/l		EPA 200.8-Diss	10/23/08 13:0

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2303
Sequence: IJ82310
Check Nbr: 1

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Antimony (dissolved)	NA	NA	0.0424	NA		NA
Arsenic (dissolved)	NA	NA	-0.310	NA		NA
Barium (dissolved)	NA	NA	0.454	NA		NA
Beryllium (dissolved)	NA	NA	0.0129	NA		NA
Cadmium (dissolved)	NA	NA	2.67	NA		NA
Chromium (dissolved)	NA	NA	1.70	NA		NA
Cobalt (dissolved)	NA	NA	0.174	NA		NA
Copper (dissolved)	NA	NA	2.18	NA		NA
Lead (dissolved)	NA	NA	0.504	NA		NA
Manganese (dissolved)	NA	NA	1.93	NA		NA
Molybdenum (dissolved)	2000 –	NA	1780 –	89 –		NA
Nickel (dissolved)	NA	NA	0.535	NA		NA
Selenium (dissolved)	NA	NA	0.372	NA		NA
Silver (dissolved)	NA	NA	0.0570	NA		NA
Thallium (dissolved)	NA	NA	0.0301	NA		NA
Uranium (dissolved)	NA	NA	0.0117	NA		NA
Vanadium (dissolved)	NA	NA	0.338	NA		NA
Zinc (dissolved)	NA	NA	4.61	NA		NA

Mo low in all samples, no impact

Method 6020/200.8 - Summary Report

Sample ID: ICSAB2

Sample Date/Time: Thursday, October 23, 2008 11:10:35
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\elan2\working method\050902.mth
Dataset File: C:\elandata\Dataset\Default\ELAN2\0810DASET\081023-1\ICSAB2.021

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Blank Intensity	Conc. Mean	Conc. RSD	Sample Unit
	Be	9	8.333	6.667	0.00085	295.22	ug/L
	Al	27	S	21530.430	S	S	ug/L
	V	51	-21788.521	-13606.706	-0.27657	38.74	ug/L
	Cr	52	361939.139	25234.862	17.87766	0.47	ug/L
	Mn	55	564150.326	2429.564	17.17761	0.43	ug/L
	Co	59	425761.269	212.670	14.62600	0.52	ug/L
	Ni	60	89807.037	165.397	14.80193	1.05	ug/L
	Cu	63	217947.139	379.342	16.71805	0.19	ug/L
	Cu	65	105414.549	234.671	16.80794	0.59	ug/L
	Zn	66	77003.745	5193.329	18.24614	0.58	ug/L
>	Ge	72	248027.093	220829.009			mg/L
	As	75	67057.587	10887.744	14.83621	0.25	ug/L
	Se	82	359.695	177.032	0.34932	35.25	ug/L
	Mo	98	20594592.278	2465.839	1801.38458	0.94	ug/L
	Ag	107	303638.357	69.334	14.67192	1.12	ug/L
	Cd	114	196405.616	178.791	16.71628	0.98	ug/L
	Sb	121	693.024	370.342	0.01914	12.06	ug/L
	Ba	135	2300.875	339.674	0.43922	1.49	ug/L
>	Tb	159	2297920.875	2929537.756			ug/L
	Tl	205	658.022	573.684	0.00675	13.62	ug/L
	Pb	208	20955.194	734.348	0.48797	2.01	ug/L
	U	238	370.008	724.692	-0.00442	6.06	ug/L
	Na	23	S	104633.194	S	S	mg/L
	Mg	24	619049177.760	16124.590	85.59128	1.36	mg/L
	K	39	S	664214.363	S	S	mg/L
	Ca	44	57243764.128	17007.288	102.96117	1.58	mg/L
	Fe	54	130544789.276	53680.956	110781.37613	1.36	ug/L
>	Sc	45	806580.735	885397.805			mg/L
	Ce	140	7171.205	306.340	0.14270	2.41	ug/L
>	In	115	1670108.611	1993264.921			ug/L
	Kr	84	529.112	560.095			mg/L

90 %

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2303
Sequence: IJ82310
Check Nbr: 2

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Antimony (dissolved)	NA	NA		NA	0.0191	NA
Antimony (dissolved)	NA	NA	0.0852	NA		NA
Arsenic (dissolved)	NA	NA	-0.463	NA		NA
Arsenic (dissolved)	NA	20.0		NA	14.8	74
Barium (dissolved)	NA	NA		NA	0.439	NA
Barium (dissolved)	NA	NA	0.461	NA		NA
Beryllium (dissolved)	NA	NA		NA	0.000850	NA
Beryllium (dissolved)	NA	NA	0.0160	NA		NA
Cadmium (dissolved)	NA	NA	2.66	NA		NA
Cadmium (dissolved)	NA	20.0		NA	16.7	84
Chromium (dissolved)	NA	NA	2.98	NA		NA
Chromium (dissolved)	NA	20.0		NA	17.9	89
Cobalt (dissolved)	NA	NA	0.196	NA		NA
Cobalt (dissolved)	NA	20.0		NA	14.6	73
Copper (dissolved)	NA	NA	2.25	NA		NA
Copper (dissolved)	NA	20.0		NA	16.8	84
Lead (dissolved)	NA	NA		NA	0.488	NA
Lead (dissolved)	NA	NA	0.474	NA		NA
Manganese (dissolved)	NA	NA	1.91	NA		NA
Manganese (dissolved)	NA	20.0		NA	17.2	86
Molybdenum (dissolved)	NA	2000		NA	1800 –	90 –
Molybdenum (dissolved)	2000	NA	1810 –	90 –		NA
Nickel (dissolved)	NA	NA	0.743	NA		NA
Nickel (dissolved)	NA	20.0		NA	14.8	74
Selenium (dissolved)	NA	NA		NA	0.349	NA
Selenium (dissolved)	NA	NA	0.374	NA		NA
Silver (dissolved)	NA	NA	0.0618	NA		NA
Silver (dissolved)	NA	20.0		NA	14.7	73
Thallium (dissolved)	NA	NA		NA	0.00675	NA
Thallium (dissolved)	NA	NA	0.0374	NA		NA
Uranium (dissolved)	NA	NA		NA	-0.00442	NA

Mo low in all samples, no impact

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2303
Sequence: IJ82310
Check Nbr: 2

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Uranium (dissolved)	NA	NA	0.0225	NA		NA
Vanadium (dissolved)	NA	NA		NA	-0.277	NA
Vanadium (dissolved)	NA	NA	0.417	NA		NA
Zinc (dissolved)	NA	NA	4.63	NA		NA
Zinc (dissolved)	NA	20.0		NA	18.2	91

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
Client: Brown and Caldwell - NV
Sequence: IJ82310

SDG:
Project: BP Yerington, NV
Instrument: Elan2
Calibration: I8J2303

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	IJ82310-CAL1	081023-1-010	10/23/08 10:12
Cal Standard	IJ82310-CAL2	081023-1-011	10/23/08 10:17
Cal Standard	IJ82310-CAL3	081023-1-012	10/23/08 10:23
Cal Standard	IJ82310-CAL4	081023-1-013	10/23/08 10:27
Initial Cal Check	IJ82310-ICV1	081023-1-014	10/23/08 10:32
Initial Cal Blank	IJ82310-ICB1	081023-1-015	10/23/08 10:37
MRL Check	IJ82310-CRL1	081023-1-016	10/23/08 10:43
MRL Check	IJ82310-CRL2	081023-1-017	10/23/08 10:48
Interference Check A	IJ82310-IFA1	081023-1-018	10/23/08 10:54
Interference Check B	IJ82310-IFB2	081023-1-021	10/23/08 11:10
LCS	8J22087-BS1	081023-1-023	10/23/08 11:30
Blank	8J22087-BLK1	081023-1-024	10/23/08 11:34
Matrix Spike	8J22087-MS1	081023-1-026	10/23/08 11:43
Matrix Spike Dup	8J22087-MSD1	081023-1-027	10/23/08 11:47
OU4-FEP-13-GW 200x	IRJ1354-03	081023-1-031	10/23/08 12:03
OU4-UEP-10-GW 5x	IRJ1354-01	081023-1-032	10/23/08 12:07
Calibration Check	IJ82310-CCV1	081023-1-033	10/23/08 12:11
Calibration Blank	IJ82310-CCB1	081023-1-034	10/23/08 12:15
OU4-FEP-13-GW 40x	IRJ1354-03	081023-1-035	10/23/08 12:22
OU4-UEP-10-GW 10x	IRJ1354-01	081023-1-036	10/23/08 12:26
Calibration Check √↓	IJ82310-CCV2	081023-1-044	10/23/08 12:57
Calibration Blank	IJ82310-CCB2	081023-1-045	10/23/08 13:01
MRL Check	IJ82310-CRL3	081023-1-046	10/23/08 13:05
Interference Check A	IJ82310-IFA2	081023-1-047	10/23/08 13:10
Interference Check B	IJ82310-IFB3	081023-1-048	10/23/08 13:14

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2405
Control Limt: +/- 10.00%
Sequence: IJ82407

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82407-ICV1	Antimony (dissolved)	25.0	24.9	100	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Arsenic (dissolved)	25.0	25.0	100	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Barium (dissolved)	25.0	25.4	102	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Cadmium (dissolved)	25.0	25.7	103	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Chromium (dissolved)	25.0	26.2	105	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Cobalt (dissolved)	25.0	26.0	104	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Copper (dissolved)	25.0	25.7	103	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Lead (dissolved)	25.0	25.3	101	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Manganese (dissolved)	25.0	26.0	104	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Molybdenum (dissolved)	25.0	26.0	104	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Nickel (dissolved)	25.0	25.6	103	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Selenium (dissolved)	25.0	25.3	101	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Silver (dissolved)	25.0	25.8	103	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Thallium (dissolved)	25.0	26.9	108	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Uranium (dissolved)	25.0	26.1	104	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Vanadium (dissolved)	25.0	25.6	102	ug/l	EPA 200.8-Diss	10/24/08 20:11
	Zinc (dissolved)	25.0	25.4	102	ug/l	EPA 200.8-Diss	10/24/08 20:11
IJ82407-CCV1	Antimony (dissolved)	50.0	50.6	101	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Arsenic (dissolved)	50.0	49.6	99	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Barium (dissolved)	50.0	54.9	110	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Cadmium (dissolved)	50.0	51.1	102	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Chromium (dissolved)	50.0	49.2	98	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Cobalt (dissolved)	50.0	48.0	96	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Copper (dissolved)	50.0	49.4	99	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Lead (dissolved)	50.0	48.8	98	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Manganese (dissolved)	50.0	48.0	96	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Molybdenum (dissolved)	50.0	49.5	99	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Nickel (dissolved)	50.0	48.1	96	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Selenium (dissolved)	50.0	46.3	93	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Silver (dissolved)	50.0	52.5	105	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Thallium (dissolved)	50.0	50.3	101	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Uranium (dissolved)	50.0	49.8	100	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Vanadium (dissolved)	50.0	50.1	100	ug/l	EPA 200.8-Diss	10/24/08 21:32
	Zinc (dissolved)	50.0	49.0	98	ug/l	EPA 200.8-Diss	10/24/08 21:32
IJ82407-CCV2	Antimony (dissolved)	50.0	50.2	100	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Arsenic (dissolved)	50.0	49.7	99	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Barium (dissolved)	50.0	52.3	105	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Cadmium (dissolved)	50.0	50.2	100	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Chromium (dissolved)	50.0	50.1	100	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Cobalt (dissolved)	50.0	49.1	98	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Copper (dissolved)	50.0	49.9	100	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Lead (dissolved)	50.0	48.7	97	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Manganese (dissolved)	50.0	49.1	98	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Molybdenum (dissolved)	50.0	49.6	99	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Nickel (dissolved)	50.0	48.9	98	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Selenium (dissolved)	50.0	46.1	92	ug/l	EPA 200.8-Diss	10/24/08 22:18

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2405
Control Limt: +/- 10.00%
Sequence: IJ82407

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82407-CCV2	Silver (dissolved)	50.0	51.8	104	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Thallium (dissolved)	50.0	50.6	101	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Uranium (dissolved)	50.0	48.3	97	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Vanadium (dissolved)	50.0	50.7	101	ug/l	EPA 200.8-Diss	10/24/08 22:18
	Zinc (dissolved)	50.0	48.8	98	ug/l	EPA 200.8-Diss	10/24/08 22:18

* Values outside of QC limits

CRDL STANDARD

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:

Client: Brown and Caldwell - NV
Project: BP Yerington, NV

Instrument ID: Elan2
Calibration: I8J2405

Sequence: IJ82407
Injection Date: 10/24/08 20:35

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82407-CRL1	Antimony (dissolved)	0.200	0.226	113	ug/l	50 - 150
	Arsenic (dissolved)	0.200	0.254	127	ug/l	50 - 150
0.2 < RL	Barium (dissolved)	0.200	0.218	109	ug/l	50 - 150
for all	Cadmium (dissolved)	0.200	0.218	109	ug/l	50 - 150
	Chromium (dissolved)	0.200	0.248	124	ug/l	50 - 150
not evaluated	Cobalt (dissolved)	0.200	0.237	119	ug/l	50 - 150
	Copper (dissolved)	0.200	0.212	106	ug/l	50 - 150
	Lead (dissolved)	0.200	0.227	113	ug/l	50 - 150
	Manganese (dissolved)	0.200	0.222	111	ug/l	50 - 150
	Molybdenum (dissolved)	0.200	0.259	130	ug/l	50 - 150
	Nickel (dissolved)	0.200	0.212	106	ug/l	50 - 150
	Selenium (dissolved)	0.200	0.170	85	ug/l	50 - 150
	Silver (dissolved)	0.200	0.224	112	ug/l	50 - 150
	Thallium (dissolved)	0.200	0.219	109	ug/l	50 - 150
	Uranium (dissolved)	0.200	0.240	120	ug/l	50 - 150
	Vanadium (dissolved)	0.200	0.217	109	ug/l	50 - 150
	Zinc (dissolved)	0.200	-0.0474	*	ug/l	50 - 150
IJ82407-CRL2	Antimony (dissolved)	2.00	2.05	103	ug/l	50 - 150
	Arsenic (dissolved)	2.00	2.06 ✓	103 ✓	ug/l	50 - 150
	Barium (dissolved)	2.00	2.05	102	ug/l	50 - 150
	Cadmium (dissolved)	2.00	2.03	102	ug/l	50 - 150
	Chromium (dissolved)	2.00	2.12	106	ug/l	50 - 150
	Cobalt (dissolved)	2.00	2.16	108	ug/l	50 - 150
	Copper (dissolved)	2.00	2.11	105	ug/l	50 - 150
	Lead (dissolved)	2.00	2.18	109	ug/l	50 - 150
	Manganese (dissolved)	2.00	2.18 ✓	109 ✓	ug/l	50 - 150
	Molybdenum (dissolved)	2.00	2.02	101	ug/l	50 - 150
	Nickel (dissolved)	2.00	2.12	106	ug/l	50 - 150

CRDL STANDARD

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2405
Sequence: IJ82407
Injection Date: 10/24/08 20:39

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82407-CRL2	Selenium (dissolved)	2.00	2.04	102	ug/l	50 - 150
	Silver (dissolved)	2.00	2.11	106	ug/l	50 - 150
	Thallium (dissolved)	2.00	2.10	105	ug/l	50 - 150
	Uranium (dissolved)	2.00	2.23	111	ug/l	50 - 150
	Vanadium (dissolved)	2.00	2.07	104	ug/l	50 - 150
	Zinc (dissolved) RL = 20	2.00	7.21	361 *	ug/l	50 - 150
IJ82407-CRL3	Antimony (dissolved)	2.00	2.21	111	ug/l	50 - 150
	Arsenic (dissolved)	2.00	2.40	120	ug/l	50 - 150
	Barium (dissolved)	2.00	2.16	108	ug/l	50 - 150
	Cadmium (dissolved)	2.00	2.06	103	ug/l	50 - 150
	Chromium (dissolved)	2.00	1.98	99	ug/l	50 - 150
	Cobalt (dissolved)	2.00	2.02	101	ug/l	50 - 150
	Copper (dissolved)	2.00	2.11	106	ug/l	50 - 150
	Lead (dissolved)	2.00	2.01	100	ug/l	50 - 150
	Manganese (dissolved)	2.00	2.04	102	ug/l	50 - 150
	Molybdenum (dissolved)	2.00	1.97	98	ug/l	50 - 150
	Nickel (dissolved)	2.00	2.02	101	ug/l	50 - 150
	Selenium (dissolved)	2.00	1.82	91	ug/l	50 - 150
	Silver (dissolved)	2.00	2.13	106	ug/l	50 - 150
	Thallium (dissolved)	2.00	2.02	101	ug/l	50 - 150
	Uranium (dissolved)	2.00	2.03	102	ug/l	50 - 150
	Vanadium (dissolved)	2.00	2.12	106	ug/l	50 - 150
	Zinc (dissolved)	2.00	1.80	90	ug/l	50 - 150

* Values outside of QC limits

BLANKS

EPA 200.8-Diss

Laboratory: TestAmerica Irvine SDG:

Client: Brown and Caldwell - NV

Instrument ID: Elan2 Project: BP Yerington, NV

Sequence: IJ82407 Calibration: I8J2405

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82407-ICB1	Antimony (dissolved)	0.147	2.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Arsenic (dissolved)	0.104	1.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Barium (dissolved)	0.00683	1.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Cadmium (dissolved)	0.00116	1.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Chromium (dissolved)	-0.0420	2.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Cobalt (dissolved)	0.00222	1.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Copper (dissolved)	-0.00194	2.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Lead (dissolved)	0.00273	1.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Manganese (dissolved)	0.00258	1.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Molybdenum (dissolved)	0.0140	2.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Nickel (dissolved)	0.00213	2.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Selenium (dissolved)	-0.0278	2.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Silver (dissolved)	0.000740	1.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Thallium (dissolved)	0.136	1.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Uranium (dissolved)	0.0605	1.0	ug/l		EPA 200.8-Diss	10/24/08 20:1.
	Vanadium (dissolved)	0.0276	2.0	ug/l		EPA 200.8-Diss	10/24/08 20:1:
	Zinc (dissolved)	-0.000820	20	ug/l		EPA 200.8-Diss	10/24/08 20:1.
IJ82407-CCB1	Antimony (dissolved)	0.402	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Arsenic (dissolved)	0.0963	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Barium (dissolved)	-0.204	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Cadmium (dissolved)	0.00741	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Chromium (dissolved)	-0.0888	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Cobalt (dissolved)	0.00424	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:3.
	Copper (dissolved)	0.0705	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Lead (dissolved)	0.00533	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Manganese (dissolved)	0.265	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Molybdenum (dissolved)	0.0314	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Nickel (dissolved)	0.0959	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Selenium (dissolved)	-0.0873	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Silver (dissolved)	0.0456	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Thallium (dissolved)	0.0239	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Uranium (dissolved)	0.0789	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Vanadium (dissolved)	0.0120	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:3:
	Zinc (dissolved)	0.127	20	ug/l		EPA 200.8-Diss	10/24/08 21:3:
8J23162-BLK1	Antimony (dissolved)	0.103	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Arsenic (dissolved)	0.0495	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Barium (dissolved)	0.198	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Cadmium (dissolved)	0.00299	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Chromium (dissolved)	-0.0327	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Cobalt (dissolved)	0.00836	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Copper (dissolved)	0.178	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Lead (dissolved)	0.0165	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Manganese (dissolved)	0.154	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Molybdenum (dissolved)	-0.0933	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'
	Nickel (dissolved)	0.0359	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:4'

BLANKS

EPA 200.8-Diss

Laboratory: TestAmerica Irvine SDG:

Client: Brown and Caldwell - NV

Instrument ID: Elan2 Project: BP Yerington, NV

Sequence: IJ82407 Calibration: I8J2405

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
8J23162-BLK1	Selenium (dissolved)	-0.147	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:4
	Silver (dissolved)	0.000550	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:4
	Thallium (dissolved)	0.00957	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:4
	Uranium (dissolved)	0.0115	1.0	ug/l		EPA 200.8-Diss	10/24/08 21:4
	Vanadium (dissolved)	-0.118	2.0	ug/l		EPA 200.8-Diss	10/24/08 21:4
	Zinc (dissolved)	4.20	20	ug/l		EPA 200.8-Diss	10/24/08 21:4
IJ82407-CCB2	Antimony (dissolved)	0.411	2.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Arsenic (dissolved)	0.263	1.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Barium (dissolved)	-0.195	1.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Cadmium (dissolved)	0.0111	1.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Chromium (dissolved)	-0.0409	2.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Cobalt (dissolved)	0.00539	1.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Copper (dissolved)	0.140	2.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Lead (dissolved)	0.00668	1.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Manganese (dissolved)	0.265	1.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Molybdenum (dissolved)	0.0915	2.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Nickel (dissolved)	0.135	2.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Selenium (dissolved)	-0.0443	2.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Silver (dissolved)	0.0482	1.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Thallium (dissolved)	0.0594	1.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Uranium (dissolved)	0.106	1.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Vanadium (dissolved)	-0.00200	2.0	ug/l		EPA 200.8-Diss	10/24/08 22:2
	Zinc (dissolved)	0.178	20	ug/l		EPA 200.8-Diss	10/24/08 22:2
8J23162-BLK1	Beryllium (dissolved)	0.0220	0.50	ug/l		EPA 200.8-Diss	10/27/08 21:0

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2405
Sequence: IJ82407
Check Nbr: 1

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Antimony (dissolved)	NA	NA		NA	0.150	NA
Antimony (dissolved)	NA	NA	0.103	NA		NA
Arsenic (dissolved)	NA	NA	-0.141	NA		NA
Arsenic (dissolved)	NA	20.0		NA	18.6	93
Barium (dissolved)	NA	NA		NA	0.438	NA
Barium (dissolved)	NA	NA	0.442	NA		NA
Cadmium (dissolved)	NA	NA	2.68	NA		NA
Cadmium (dissolved)	NA	20.0		NA	20.0	100
Chromium (dissolved)	NA	NA	2.77	NA		NA
Chromium (dissolved)	NA	20.0		NA	21.2	106
Cobalt (dissolved)	NA	NA	0.201	NA		NA
Cobalt (dissolved)	NA	20.0		NA	18.7	94
Copper (dissolved)	NA	NA	2.27	NA		NA
Copper (dissolved)	NA	20.0		NA	19.4	97
Lead (dissolved)	NA	NA		NA	0.527	NA
Lead (dissolved)	NA	NA	0.537	NA		NA
Manganese (dissolved)	NA	NA	2.74	NA		NA
Manganese (dissolved)	NA	20.0		NA	21.7	108
Molybdenum (dissolved)	NA	2000		NA	2120 –	106 –
Molybdenum (dissolved)	2000 –	NA	2130 –	106 –		NA
Nickel (dissolved)	NA	NA	0.0403	NA		NA
Nickel (dissolved)	NA	20.0		NA	17.4	87
Selenium (dissolved)	NA	NA		NA	0.168	NA
Selenium (dissolved)	NA	NA	0.137	NA		NA
Silver (dissolved)	NA	NA	0.0794	NA		NA
Silver (dissolved)	NA	20.0		NA	17.3	86
Thallium (dissolved)	NA	NA		NA	0.0288	NA
Thallium (dissolved)	NA	NA	0.0349	NA		NA
Uranium (dissolved)	NA	NA		NA	0.0162	NA
Uranium (dissolved)	NA	NA	0.0247	NA		NA
Vanadium (dissolved)	NA	NA		NA	0.217	NA

Mo low in sample, no impact

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2405
Sequence: IJ82407
Check Nbr: 1

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Vanadium (dissolved)	NA	NA	0.452	NA		NA
Zinc (dissolved)	NA	NA	6.32	NA		NA
Zinc (dissolved)	NA	20.0		NA	23.5	117

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: Elan2
Calibration: I8J2405
Sequence: IJ82407
Check Nbr: 2

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Antimony (dissolved)	NA	NA		NA	0.100	NA
Antimony (dissolved)	NA	NA	0.141	NA		NA
Arsenic (dissolved)	NA	NA	-0.0728	NA		NA
Arsenic (dissolved)	NA	20.0		NA	19.3	96
Barium (dissolved)	NA	NA		NA	0.403	NA
Barium (dissolved)	NA	NA	0.429	NA		NA
Cadmium (dissolved)	NA	NA	2.53	NA		NA
Cadmium (dissolved)	NA	20.0		NA	19.8	99
Chromium (dissolved)	NA	NA	2.24	NA		NA
Chromium (dissolved)	NA	20.0		NA	21.1	106
Cobalt (dissolved)	NA	NA	0.200	NA		NA
Cobalt (dissolved)	NA	20.0		NA	18.2	91
Copper (dissolved)	NA	NA	2.33	NA		NA
Copper (dissolved)	NA	20.0		NA	19.2	96
Lead (dissolved)	NA	NA		NA	0.513	NA
Lead (dissolved)	NA	NA	0.515	NA		NA
Manganese (dissolved)	NA	NA	2.65	NA		NA
Manganese (dissolved)	NA	20.0		NA	21.4	107
Molybdenum (dissolved)	NA	2000		NA	2090 —	105 —
Molybdenum (dissolved)	2000	NA	2080 —	104 —		NA
Nickel (dissolved)	NA	NA	0.114	NA		NA
Nickel (dissolved)	NA	20.0		NA	16.8	84
Selenium (dissolved)	NA	NA		NA	0.160	NA
Selenium (dissolved)	NA	NA	0.212	NA		NA
Silver (dissolved)	NA	NA	0.103	NA		NA
Silver (dissolved)	NA	20.0		NA	17.4	87
Thallium (dissolved)	NA	NA		NA	0.0323	NA
Thallium (dissolved)	NA	NA	0.0461	NA		NA
Uranium (dissolved)	NA	NA		NA	0.0218	NA
Uranium (dissolved)	NA	NA	0.0345	NA		NA
Vanadium (dissolved)	NA	NA		NA	0.303	NA

Mo low in sample, no impact

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine

SDG:

Client: Brown and Caldwell - NV

Project: BP Yerington, NV

Instrument ID: Elan2

Calibration: I8J2405

Sequence: IJ82407

Check Nbr: 2

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Vanadium (dissolved)	NA	NA	0.360	NA		NA
Zinc (dissolved)	NA	NA	6.15	NA		NA
Zinc (dissolved)	NA	20.0		NA	22.0	110

* Values outside of QC limits

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
Client: Brown and Caldwell - NV
Sequence: IJ82407

SDG:
Project: BP Yerington, NV
Instrument: Elan2
Calibration: I8J2405

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	IJ82407-CAL1	081024-4-013	10/24/08 19:51
Cal Standard	IJ82407-CAL2	081024-4-014	10/24/08 19:56
Cal Standard	IJ82407-CAL3	081024-4-015	10/24/08 20:01
Cal Standard	IJ82407-CAL4	081024-4-016	10/24/08 20:06
Initial Cal Check	IJ82407-ICV1	081024-4-017	10/24/08 20:11
Initial Cal Blank	IJ82407-ICB1	081024-4-018	10/24/08 20:15
Interference Check A	IJ82407-IFA1	081024-4-019	10/24/08 20:21
Interference Check B	IJ82407-IFB1	081024-4-020	10/24/08 20:25
MRL Check	IJ82407-CRL1	081024-4-022	10/24/08 20:35
MRL Check	IJ82407-CRL2	081024-4-023	10/24/08 20:39
Calibration Check	IJ82407-CCV1	081024-4-034	10/24/08 21:32
Calibration Blank	IJ82407-CCB1	081024-4-035	10/24/08 21:35
Blank	8J23162-BLK1	081024-4-038	10/24/08 21:47
LCS	8J23162-BS1	081024-4-039	10/24/08 21:51
OU4-UEP-10-GW-FD 2x	IRJ1354-02	081024-4-040	10/24/08 21:55
OU4-UEP-10-GW-FD	8J23162-MS1	081024-4-041	10/24/08 21:59
OU4-UEP-10-GW-FD	8J23162-MSD1	081024-4-042	10/24/08 22:03
OU4-UEP-10-GW-FD 20x	IRJ1354-02	081024-4-043	10/24/08 22:07
Calibration Check	IJ82407-CCV2	081024-4-046	10/24/08 22:18
Calibration Blank	IJ82407-CCB2	081024-4-047	10/24/08 22:22
MRL Check	IJ82407-CRL3	081024-4-048	10/24/08 22:26
Interference Check A	IJ82407-IFA2	081024-4-049	10/24/08 22:30
Interference Check B	IJ82407-IFB2	081024-4-050	10/24/08 22:34
Blank	8J23162-BLK1	081027-4-024	10/27/08 21:05
LCS	8J23162-BS1	081027-4-025	10/27/08 21:08
OU4-UEP-10-GW-FD	8J23162-MS1	081027-4-027	10/27/08 21:16
OU4-UEP-10-GW-FD	8J23162-MSD1	081027-4-028	10/27/08 21:20

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ELAN
Calibration: I8J2801
Control Limt: +/- 10.00%
Sequence: IJ82804

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ82804-ICV1	Beryllium (dissolved)	25.0	24.8	99	ug/l	EPA 200.8-Diss	10/27/08 19:12
IJ82804-CCV1	Beryllium (dissolved)	50.0	49.8	100	ug/l	EPA 200.8-Diss	10/27/08 20:57
IJ82804-CCV2	Beryllium (dissolved)	50.0	54.4	109	ug/l	EPA 200.8-Diss	10/27/08 21:43
IJ82804-CCV3	Beryllium (dissolved)	50.0	44.9	90	ug/l	EPA 200.8-Diss	10/27/08 22:51
IJ82804-CCV4	Beryllium (dissolved)	50.0	45.8	92	ug/l	EPA 200.8-Diss	10/27/08 23:38

* Values outside of QC limits

CRDL STANDARD

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:

Client: Brown and Caldwell - NV
Project: BP Yerington, NV

Instrument ID: ELAN
Calibration: I8J2801

Sequence: IJ82804
Injection Date: 10/27/08 20:02

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ82804-CRL1	Beryllium (dissolved)	0.200	0.225	112	ug/l	50 - 150
IJ82804-CRL2	Beryllium (dissolved)	2.00	2.00	100	ug/l	50 - 150
IJ82804-CRL3	Beryllium (dissolved)	2.00	2.14	107	ug/l	50 - 150
IJ82804-CRL4	Beryllium (dissolved)	2.00	1.88	94	ug/l	50 - 150

* Values outside of QC limits

BLANKS

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: ELAN
Project: BP Yerington, NV
Sequence: IJ82804
Calibration: I8J2801

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ82804-ICB1	Beryllium (dissolved)	0.0120	0.50	ug/l		EPA 200.8-Diss	10/27/08 19:1
IJ82804-CCB1	Beryllium (dissolved)	0.00500	0.50	ug/l		EPA 200.8-Diss	10/27/08 21:0
IJ82804-CCB2	Beryllium (dissolved)	0.0180	0.50	ug/l		EPA 200.8-Diss	10/27/08 21:4
IJ82804-CCB3	Beryllium (dissolved)	0.0100	0.50	ug/l		EPA 200.8-Diss	10/27/08 22:5
IJ82804-CCB4	Beryllium (dissolved)	0.00200	0.50	ug/l		EPA 200.8-Diss	10/27/08 23:4

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ELAN
Calibration: I8J2801
Sequence: IJ82804
Check Nbr: 1

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Beryllium (dissolved)	NA	NA		NA	0.0180	NA
Beryllium (dissolved)	NA	NA	0.0100	NA		NA

Form 4

ICP/MS INTERFERENCE CHECK SAMPLE

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: ELAN
Calibration: I8J2801
Sequence: IJ82804
Check Nbr: 2

	True		Found			
Analyte	**Sol A**	**Sol B**	**Sol A**	**%R**	**Sol B**	**%R**
Beryllium (dissolved)	NA	NA		NA	0.0200	NA
Beryllium (dissolved)	NA	NA	0.00700	NA		NA

Form 5

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 200.8-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Sequence: IJ82804
Instrument: ELAN
Calibration: I8J2801

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	IJ82804-CAL1	081027-4-001	10/27/08 18:48
Cal Standard	IJ82804-CAL2	081027-4-002	10/27/08 18:53
Cal Standard	IJ82804-CAL3	081027-4-003	10/27/08 18:59
Cal Standard	IJ82804-CAL4	081027-4-004	10/27/08 19:05
Initial Cal Check	IJ82804-ICV1	081027-4-005	10/27/08 19:12
Initial Cal Blank	IJ82804-ICB1	081027-4-006	10/27/08 19:16
Interference Check A	IJ82804-IFA1	081027-4-007	10/27/08 19:48
Interference Check B	IJ82804-IFB1	081027-4-008	10/27/08 19:54
MRL Check	IJ82804-CRL1	081027-4-010	10/27/08 20:02
MRL Check	IJ82804-CRL2	081027-4-011	10/27/08 20:06
Calibration Check	IJ82804-CCV1	081027-4-022	10/27/08 20:57
Calibration Blank	IJ82804-CCB1	081027-4-023	10/27/08 21:01
OU4-UEP-10-GW-FD	IRJ1354-02	081027-4-026	10/27/08 21:12
Calibration Check	IJ82804-CCV2	081027-4-034	10/27/08 21:43
Calibration Blank	IJ82804-CCB2	081027-4-035	10/27/08 21:47
MRL Check	IJ82804-CRL3	081027-4-036	10/27/08 21:57
Interference Check A	IJ82804-IFA2	081027-4-037	10/27/08 22:01
Interference Check B	IJ82804-IFB2	081027-4-038	10/27/08 22:06
Calibration Check	IJ82804-CCV3	081027-4-049	10/27/08 22:51
Calibration Blank	IJ82804-CCB3	081027-4-050	10/27/08 22:55
Calibration Check	IJ82804-CCV4	081027-4-061	10/27/08 23:38
Calibration Blank	IJ82804-CCB4	081027-4-062	10/27/08 23:42
MRL Check	IJ82804-CRL4	081027-4-063	10/27/08 23:46
Interference Check A	IJ82804-IFA3	081027-4-064	10/27/08 23:50
Interference Check B	IJ82804-IFB3	081027-4-065	10/27/08 23:55

PREPARATION BENCH SHEET

8J22087

TestAmerica Irvine

Printed: 10/22/2008 3:14:13PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICPMS** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
8J22087-BLK1		QC	10/22/08 09:21	50	50								
8J22087-BS1		QC	10/22/08 09:21	50	50		8090815	400					
8J22087-MS1		QC	10/22/08 09:21	50	50	IRJ1080-01	8090815	400					
8J22087-MSD1		QC	10/22/08 09:21	50	50	IRJ1080-01	8090815	400					
IRJ1080-01	C	Manganese-200.8,Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Zinc-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Vanadium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Uranium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Thallium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Silver-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Selenium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Molybdenum-200.8,Dis	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Beryllium-200.8,Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Antimony-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Nickel-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Barium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Lead-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.

N/A — Spiking Witnessed By — Date

AN — Preparation Reviewed By — 10/22/08 — Date

AN — Extracts Received By — 10/22/08 — Date

PREPARATION BENCH SHEET

8J22087

TestAmerica Irvine

Printed: 10/22/2008 3:14:13PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICPMS** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
IRJ1080-01	C	Cadmium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Chromium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Cobalt-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Copper-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1080-01	C	Arsenic-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Cobalt-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Antimony-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Arsenic-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Barium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Beryllium-200.8,Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Cadmium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Copper-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Vanadium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Chromium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Zinc-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Uranium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.

Spiking Witnessed By Date Preparation Reviewed By Date Extracts Received By Date

PREPARATION BENCH SHEET

8J22087

TestAmerica Irvine

Printed: 10/22/2008 3:14:13PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICPMS** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
IRJ1354-01	C	Thallium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Silver-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Selenium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Nickel-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Molybdenum-200.8,Dis	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Manganese-200.8,Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Lead-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Barium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Manganese-200.8,Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Uranium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Thallium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Silver-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Selenium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Nickel-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Molybdenum-200.8,Dis	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Vanadium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.

Spiking Witnessed By Date Preparation Reviewed By Date Extracts Received By Date

PREPARATION BENCH SHEET

8J22087

TestAmerica Irvine

Printed: 10/22/2008 3:14:13PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICPMS** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
IRJ1354-03	C	Lead-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Copper-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Cobalt-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Chromium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Beryllium-200.8,Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Zinc-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Arsenic-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Antimony-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Cadmium-200.8, Diss	10/22/08 09:21	50	50								BP Sequence. J flag. Field Filtered.

Reagents used in Batch

Reagent	Description	Solvent

Spiking Witnessed By Date Preparation Reviewed By Date Extracts Received By Date

PREPARATION BENCH SHEET

8J23162

TestAmerica Irvine

Printed: 10/24/2008 3:04:11PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICPMS** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
8J23162-BLK1		QC	10/23/08 20:33	50	50								
8J23162-BS1		QC	10/23/08 20:33	50	50		8090815	400					
8J23162-MS1		QC	10/23/08 20:33	50	50	IRJ1354-02	8090815	400					
8J23162-MSD1		QC	10/23/08 20:33	50	50	IRJ1354-02	8090815	400					
IRJ1354-02	C	Copper-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Antimony-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Arsenic-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Barium-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Beryllium-200.8,Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Cadmium-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Cobalt-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Zinc-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Lead-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Manganese-200.8,Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Molybdenum-200.8,Dis	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Nickel-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Selenium-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.

N/A — Spiking Witnessed By — Date

AN — Preparation Reviewed By — 10/24/08 — Date

AN — Extracts Received By — 10/24/08 — Date

PREPARATION BENCH SHEET

8J23162

TestAmerica Irvine

Printed: 10/24/2008 3:04:11PM

Matrix: Water **Prepared using: Metals - EPA 200.2 ICPMS** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
IRJ1354-02	C	Silver-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Thallium-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Uranium-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Vanadium-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Chromium-200.8, Diss	10/23/08 20:33	50	50								BP Sequence. J flag. Field Filtered.

Reagents used in Batch

Reagent	Description	Solvent

Spiking Witnessed By Date Preparation Reviewed By Date Extracts Received By Date

SEMI-ANNUAL MDL STUDY

Metals by ICPMS - EPA 6020/200.8

Analyt. Method: EPA 6020 / 200.8 — Instruments: **Elan**
Prep Method: EPA 3005A / 200.2
Matrix: **Water** (50ml-->50ml) — Cu [63]: alternative line
Units: **ug/L** — **Fe:** 10 x nominal conc

Reviewed: T.Vu (Apr/10/08)

#	Analyte	Spike(mg/l)		MDL Runs - (ug/L)								Calc Data (ug/L)			final	LIMS Data (ug/L)			Validation Criteria				Grubbs	Symbol
		recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	StdDev	MDL	MDL	MDL	RL_1	RL_2	MDL<RL	Ch'g	Ratio 1-10	%Rec	Comm't	
1	Aluminum	<=10	10	12.38	12.27	11.63	11.59	11.47	11.44	14.68	11.99	12.18	1.07	3.21	3.2	6.0	10		OK	-46%	3	122%	2.33	Al [27]
2	Antimony	<=1	1	1.091	1.095	1.094	1.086	1.074	1.113	1.087	1.088	1.09	0.01	0.03	0.0	0.2	2	1	OK	-84%	30	109%		Sb [121]
3	Arsenic	<=1	1	1.027	1.072	1.046	1.121	0.698	0.706	0.94	0.666	0.91	0.19	0.57	0.6	0.70	1		OK	-19%	2	91%		As [75]
4	Barium	<=1	1	1.116	1.108	1.064	1.104	1.082	1.055	1.074	1.101	1.09	0.02	0.07	0.1	0.4	1		OK	-83%	15	109%		Ba [135]
5	Beryllium	<=0.2	0.2	0.221	0.221	0.216	0.235	0.218	0.26	0.268	0.211	0.23	0.02	0.06	0.06	0.075	0.5	0.2	OK	-14%	3	116%		Be [9]
6	Cadmium	<=0.2	0.2	0.201	0.207	0.208	0.203	0.201	0.215	0.203	0.203	0.21	0.00	0.01	0.01	0.11	1	0.2	OK	-87%	14	103%	2.09	Cd [114]
7	Cerium	<=1	1	1.114	1.129	1.109	1.109	1.089	1.084	1.084	1.085	1.10	0.02	0.05	0.1	0.35	1		OK	-85%	19	110%		Ce [140]
8	Chromium	<=1	1	1.3	1.257	1.259	1.218	1.27	1.281	1.284	1.306	1.27	0.03	0.08	0.1	0.70	2	1	OK	-88%	12	127%		Cr [52]
9	Cobalt	<=1	1	1.124	1.109	1.115	1.098	1.099	1.112	1.108	1.122	1.11	0.01	0.03	0.0	0.15	1		OK	-81%	35	111%		Co [59]
10	Copper	<=1	1	1.144	1.16	1.131	1.132	1.131	1.074	1.248	1.079	1.14	0.05	0.16	0.2	0.75	2	1	OK	-78%	6	114%	2.05	Cu [65]
11	Copper[63]	<=1	1	1.144	1.145	1.142	1.168	1.097	1.125	1.249	1.118	1.15	0.05	0.14	0.1	0.30	2	1	OK	-54%	7	115%	2.19	Cu [63]
12	Lead	<=1	1	1.168	1.145	1.15	1.14	1.119	1.143	1.133	1.109	1.14	0.02	0.05	0.1	0.3	1		OK	-82%	18	114%		Pb [208]
13	Manganese	<=1	1	1.136	1.083	1.05	1.088	1.106	1.126	1.143	1.114	1.11	0.03	0.09	0.1	0.75	1		OK	-88%	11	111%		Mn [55]
14	Molybdenum	<=1	1	1.122	1.261	1.252	1.117	1.074	1.061	1.08	1.06	1.13	0.08	0.25	0.2	0.2	2	1	OK	24%	4	113%		Mo [98]
15	Nickel	<=1	1	1.179	1.187	1.156	1.171	1.047	1.107	1.064	1.093	1.13	0.05	0.16	0.2	0.90	2	1	OK	-82%	6	113%		Ni [60]
16	Selenium	<=1	1	0.927	1.007	0.973	0.92	0.93	0.959	0.97	0.927	0.95	0.03	0.09	0.1	0.3	2	1	OK	-69%	11	95%		Se [82]
17	Silver	<=1	1	1.152	1.143	1.123	1.12	1.11	1.112	1.122	1.102	1.12	0.02	0.05	0.1	0.3	1		OK	-83%	20	112%		Ag [107]
18	Thallium	<=1	1	1.192	1.205	1.189	1.18	1.132	1.148	1.157	1.138	1.17	0.03	0.08	0.1	0.2	1		OK	-59%	12	117%		Tl [205]
19	Uranium	<=1	1	1.179	1.142	1.14	1.156	1.145	1.173	1.172	1.15	1.16	0.02	0.05	0.0	0.5	1		OK	-91%	22	116%		U [238]
20	Vanadium	<=1	1	1.17	1.102	1.087	0.997	1.079	1.011	1.219	1.055	1.09	0.08	0.23	0.2	0.7	2	1	OK	-68%	4	109%		V [51]
21	Zinc	<=5	2	2.843	2.725	2.725	2.66	2.398	3.615	2.8	2.802	2.82	0.35	1.05	1.0	2.5	10	5	OK	-58%	2	141%	2.27	Zn [66]
22	Tungsten	<=2														0.5	2							W [184]
	For 0.1 ppb MDL:																							
17	Silver	<=1	0.2	0.227	0.228	0.231	0.215	0.222	0.225	0.231	0.225	0.23	0.01	0.02	0.02	0.2	1		OK	-92%	13	113%		Ag [107]

SEMI-ANNUAL MDL STUDY

Metals by ICPMS - EPA 6020/200.8

Analytical Method: EPA 6020 / 200.8 — Instruments: **Elan2**
Prep Method: EPA 3005A / 200.2
Matrix: **Water** (50ml-->50ml) — Cu [63]: alternative line
Units: **ug/L** — Fe: 10 x nominal conc

#	Analyte	Spike(mg/l)		MDL Runs - (ug/L)								Calc Data (ug/L)			final	LIMS Data (ug/L)			Validation Criteria				Grubbs	Symbol
		recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	StdDev	MDL	MDL	MDL	RL_1	RL_2	MDL<RL	Ch'g	Ratio 1-10	%Rec	Comm't	
1	Aluminum	<=10	10	10.83	10.73	10.41	10.14	12.33	12.09	15.96	12.54	11.88	1.89	5.66	5.7	6.0	10		OK	-6%	2	119%	2.16	Al [27]
2	Antimony	<=1	1	1.133	1.114	1.131	1.121	1.226	1.223	1.235	1.222	1.18	0.05	0.16	0.2	0.2	2	1	OK	-18%	6	118%		Sb [121]
3	Arsenic	<=1	1	1.427	1.359	1.504	1.296	1.125	1.104	1.065	0.959	1.23	0.19	0.58	0.6	0.70	1		OK	-17%	2	123%		As [75]
4	Barium	<=1	1	1.076	1.085	1.040	1.050	1.174	1.159	1.176	1.205	1.12	0.06	0.19	0.2	0.4	1		OK	-52%	5	112%		Ba [135]
5	Beryllium	<=0.2	0.2	0.219	0.221	0.214	0.209	0.284	0.259	0.256	0.253	0.24	0.03	0.08	0.1	0.2	0.5	0.2	OK	-59%	2	120%		Be [9]
6	Cadmium	<=0.2	0.2	0.212	0.208	0.203	0.209	0.264	0.267	0.247	0.246	0.23	0.03	0.08	0.1	0.11	1	0.2	OK	-27%	2	116%		Cd [114]
7	Cerium	<=1	1	1.031	1.036	1.027	1.031	1.010	1.007	0.991	1.011	1.02	0.02	0.05	0.0	0.35	1		OK	-87%	21	102%		Ce [140]
8	Chromium	<=1	1	1.831	1.849	1.844	1.842	2.223	2.152	2.095	2.269	2.01	0.19	0.57	0.6	0.70	2	1	OK	-19%	2	201%		Cr [52]
9	Cobalt	<=1	1	1.124	1.126	1.117	1.114	1.120	1.130	1.111	1.119	1.12	0.01	0.02	0.0	0.15	1		OK	-87%	52	112%		Co [59]
10	Copper	<=1	1	1.126	1.117	contam.	1.155	1.128	1.144	1.26	1.139	1.15	0.05	0.15	0.2	0.75	2	1	OK	-80%	7	115%	2.19	Cu [65]
11	Copper[63]	<=1	1	1.149	1.149	contam.	1.169	1.152	1.149	1.25	1.156	1.17	0.04	0.12	0.1	0.30	2	1	OK	-60%	8	117%	2.23	Cu [63]
12	Lead	<=1	1	1.177	1.171	1.167	1.162	1.123	1.127	1.129	1.138	1.15	0.02	0.07	0.1	0.3	1		OK	-78%	15	115%		Pb [208]
13	Manganese	<=1	1	1.140	1.067	1.061	1.42	1.066	1.076	1.082	1.100	1.13	0.12	0.36	0.4	0.75	1		OK	-52%	3	113%	2.42	Mn [55]
14	Molybdenum	<=1	1	1.083	1.071	1.059	1.041	1.175	1.180	1.190	1.207	1.13	0.07	0.20	0.2	0.2	2	1	OK	no ch'g	5	113%		Mo [98]
15	Nickel	<=1	1	1.134	1.112	1.32	1.071	1.089	1.107	1.112	1.122	1.13	0.08	0.23	0.2	0.90	2	1	OK	-74%	4	113%	2.4	Ni [60]
16	Selenium	<=1	1	1.022	0.899	0.958	0.882	1.005	1.091	0.974	1.012	0.98	0.07	0.20	0.2	0.3	2	1	OK	-32%	5	98%		Se [82]
17	Silver	<=1	1	1.170	1.133	1.140	1.117	1.217	1.225	1.237	1.218	1.18	0.05	0.14	0.14	0.3	1		OK	-52%	7	118%		Ag [107]
18	Thallium	<=1	1	1.169	1.200	1.190	1.187	1.104	1.109	1.107	1.106	1.15	0.04	0.13	0.1	0.2	1		OK	-35%	8	115%		Tl [205]
19	Uranium	<=1	1	1.170	1.159	1.158	1.155	1.089	1.119	1.100	1.114	1.13	0.03	0.09	0.1	0.5	1		OK	-81%	11	113%		U [238]
20	Vanadium	<=1	2	1.606	1.672	1.415	1.413	1.847	1.701	2.032	1.439	1.64	0.22	0.67	0.7	0.7	2	1	OK	no ch'g	3	82%		V [51]
21	Zinc	<=5	2	2.929	2.838	2.905	2.776	2.917	4.14	3.284	3.321	3.14	0.45	1.36	1.4	2.5	10	5	OK	-46%	1	157%	2.22	Zn [66]
22	Tungsten	<=2														0.5	2							W [184]
	For 0.1ppb MDL																							
17	Silver	<=1	0.2	0.229	0.225	0.230	0.222	0.245	0.243	0.248	0.242	0.24	0.01	0.03	0.03	0.2	1		OK	-85%	7	118%		Ag [107]
9	Cobalt	<=1	0.2	0.218	0.217	0.216	0.221	0.270	0.273	0.250	0.250	0.24	0.02	0.07	0.07	0.15	1		OK	-52%	3	120%		Co [59]
7	Cerium	<=1	0.2	0.201	0.202	0.203	0.203	0.183	0.186	0.181	0.183	0.19	0.01	0.03	0.03	0.35	1		OK	-91%	7	96%		Ce [140]
12	Lead	<=1	0.2	0.243	0.236	0.229	0.237	0.259	0.262	0.254	0.255	0.25	0.01	0.04	0.04	0.10	1		OK	-63%	5	123%		Pb [208]

1ppb	*filename:*	080312-2	080312-2	080312-2	080312-2	080313-1	080313-1	080313-1	080313-1-021		
	labnumber:	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PP	MDL-1PPB-8		
	date:	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/13/0E	Mar/13/0E	Mar/13/0E	Mar/13/08		
	time:	14:41	14:45	14:49	14:53	10:37	10:40	10:44	10:48		
0.2ppb	*filename:*	080312-2	080312-2	080312-2	080312-2	080313-1	080313-1	080313-1	080313-1-017		
	labnumber:	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0.2F	MDL-0 2PPB-8		
	date:	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/13/0E	Mar/13/0E	Mar/13/0E	Mar/13/08		
	time:	14:26	14:30	14:34	14:37	10:21	10:25	10:29	10:33		
2ppb	*filename:*	080312-2	080312-2	080312-2	080312-2	080313-1	080313-1	080313-1	080313-1-027		
	labnumber:	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PP	MDL-2PPB-8		
	date:	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/12/0E	Mar/13/0E	Mar/13/0E	Mar/13/0E	Mar/13/08		
	time:	15:06	15:10	15:13	15:17	11:00	11:04	11:08	11:11		
10ppb	*filename:*	080312-2	080312-2	080312-2	080312-2	080313-1	080313-1	080313-1	080313-1-031		

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 245.1-Diss

Laboratory: TestAmerica Irvine
Client: Brown and Caldwell - NV
Instrument ID: CV-Hg2
Control Limt: +/- 10.00%

SDG:
Project: BP Yerington, NV
Calibration: I8J1603
Sequence: IJ81604

Lab Sample ID	Analyte	True	Found	%R	Units	Method	Analyzed
IJ81604-ICV1	Mercury (dissolved)	8.00	8.10	101	ug/l	EPA 245.1-Diss	10/16/08 12:05
IJ81604-CCV1	Mercury (dissolved)	4.00	3.95	99	ug/l	EPA 245.1-Diss	10/16/08 12:29
IJ81604-CCV2	Mercury (dissolved)	4.00	3.95	99	ug/l	EPA 245.1-Diss	10/16/08 12:41

* Values outside of QC limits

CRDL STANDARD

EPA 245.1-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Project: BP Yerington, NV
Instrument ID: CV-Hg2
Calibration: I8J1603
Sequence: IJ81604
Injection Date: 10/16/08 12:09

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
IJ81604-CRL1	Mercury (dissolved)	0.200	0.163	82	ug/l	50 - 150
IJ81604-CRL2	Mercury (dissolved)	0.200	0.152	76	ug/l	50 - 150

* Values outside of QC limits

BLANKS
EPA 245.1-Diss

Laboratory: TestAmerica Irvine
SDG:
Client: Brown and Caldwell - NV
Instrument ID: CV-Hg2
Project: BP Yerington, NV
Sequence: IJ81604
Calibration: I8J1603

Lab Sample ID	Analyte	Found	MRL	Units	C	Method	Analyzed
IJ81604-ICB1	Mercury (dissolved)	0.0199	0.20	ug/l		EPA 245.1-Diss	10/16/08 12:0
8J15121-BLK1	Mercury (dissolved)	-0.0000356	0.00020	mg/l		EPA 245.1-Diss	10/16/08 12:1
IJ81604-CCB1	Mercury (dissolved)	0.0117	0.20	ug/l		EPA 245.1-Diss	10/16/08 12:3
IJ81604-CCB2	Mercury (dissolved)	0.00838	0.20	ug/l		EPA 245.1-Diss	10/16/08 12:4

Sample Information Detail Report
Document Name: 081016-1

File Description
FIMS-Hg2

Parameters Common to All Samples

Volume Units	mL
Weight Units	g

Parameters That Vary By Sample

Sample No	A/S Location	Sample ID	Batch ID
1	1	Calibration Blank	
2	2	Standard 1	
3	3	Standard 2	
4	4	Standard 3	
5	5	Standard 4	
6	6	Standard 5	
7	9	ICV	
8	8	ICB	
9	2	.2PPB	
10	29	8J15121-BLK1	8J15121
11	30	8J15121-BS1	8J15121
12	31	IRJ0886-01	8J15121
13	32	8J15121-MS1	8J15121
14	33	8J15121-MSD1	8J15121
15	34	IRJ0886-02	8J15121
16	35	IRJ1213-01	8J15121
17	36	IRJ1354-01	8J15121
18	7	CCV	
19	8	CCB	
20	37	IRJ1354-02	8J15121
21	38	IRJ1354-03	8J15121
22	7	CCV	
23	8	CCB	
24	2	BP CHK	
25	20	IRJ0974-03	8J15120
26	21	IRJ0974-04	8J15120
27	22	IRJ0978-01	8J15120
28	23	IRJ0980-01	8J15120
29	24	IRJ0993-03	8J15120
30	25	IRJ1000-01	8J15120
31	26	IRJ1001-01	8J15120
32	7	CCV	
33	8	~~CCB~~	
34	27	~~IRJ1005-01~~	~~8J15120~~
35	28	~~IRJ1293-06~~	~~8J15120~~ DB 10/17/08
36	7	CCV	
37	8	CCB	
38	2	BP CHK	
39	39	8J16089-BLK1	8J16089
40	40	8J16089-BS1	8J16089
41	41	IRJ1389-01	8J16089
42	42	8J16089-MS1	8J16089
43	43	8J16089-MSD1	8J16089
44	44	IRJ0620-01	8J16089
45	45	IRJ1389-02	8J16089
46	46	IRJ1389-03	8J16089
47	47	IRJ1389-04	8J16089
48	48	IRJ1389-05	8J16089
49	7	CCV	
50	8	CCB	
51	49	IRJ1389-06	8J16089
52	50	IRJ1389-07	8J16089
53	51	IRJ1393-04	8J16089
54	52	IRJ1393-05	8J16089
55	53	8J16098-BLK1	8J16098
56	54	8J16098-B1	8J16098
57	55	IRJ0737-01	8J16098

58	56	8J16098-MS1	8J16098
59	57	8J16098-MSD1	8J16098
60	58	IRJ0737-02	8J16098
61	7	CCV	
62	8	CCB	
63	59	IRJ0737-03	8J16098
64	60	IRJ0737-04	8J16098
65	7	CCV	
66	8	CCB	
67	2	BP CHK	

Sample No	Analysis	Sample Units *
1	0ppb	ug/L
2	0.2ppb	ug/L
3	1.0ppb	ug/L
4	5.0ppb	ug/L
5	10.0ppb	ug/L
6	15.0ppb	ug/L
7	8.0ppb	ug/L
8	0ppb	ug/L
9		ug/L
10		ug/L
11		ug/L
12		ug/L
13		ug/L
14		ug/L
15		ug/L
16		ug/L
17		ug/L
18		ug/L
19		ug/L
20		ug/L
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39		ug/L
40		ug/L
41		ug/L
42		ug/L
43		ug/L
44		ug/L
45		ug/L
46		ug/L
47		ug/L
48		ug/L
49		ug/L
50		ug/L
51		ug/L
52		ug/L
53		ug/L
54		ug/L
55		ug/L
56		ug/L

PREPARATION BENCH SHEET

8J15121

TestAmerica Irvine

Printed: 10/15/2008 4:16:54PM

Matrix: Water **Prepared using: Metals - EPA 245.1** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Surrogate	Initials		Extraction Comments
8J15121-BLK1		QC	10/15/08 16:15	20	20							
8J15121-BS1		QC	10/15/08 16:15	20	20		8100266	160				
8J15121-MS1		QC	10/15/08 16:15	20	20	IRJ0886-01	8100266	160				
8J15121-MSD1		QC	10/15/08 16:15	20	20	IRJ0886-01	8100266	160				
IRJ0886-01	C	Mercury - 245.1, Diss	10/15/08 16:15	20	20							BP Sequence. J flag. Field Filtered.
IRJ0886-02	C	Mercury - 245.1, Diss	10/15/08 16:15	20	20							BP Sequence. J flag. Field Filtered.
IRJ1213-01	C	Mercury - 245.1, Diss	10/15/08 16:15	20	20							BP Sequence. J flag. Field Filtered.
IRJ1354-01	C	Mercury - 245.1, Diss	10/15/08 16:15	20	20							BP Sequence. J flag. Field Filtered.
IRJ1354-02	C	Mercury - 245.1, Diss	10/15/08 16:15	20	20							BP Sequence. J flag. Field Filtered.
IRJ1354-03	C	Mercury - 245.1, Diss	10/15/08 16:15	20	20							BP Sequence. J flag. Field Filtered.

Reagents used in Batch

Reagent	Description	Solvent

N/A
king Witnessed By Date

DB 10/15/08
Preparation Reviewed By Date

DB 10/15/08
Extracts Received By Date

MDL STUDY
METALS BY COLD VAPOR ATOMIC ABSORPTION
EPA 7470A / 7471A / 245.1

Matrix	Units	Specific Met	Prep Method	Factor
Water	mg/L	245.1/7471A	20ml --> 20ml	1
All Leachates	mg/L	1311/1312/STLC/DIWET	2 ml --> 20ml	10

Analyte	FIMS1		FIMS2		Water (mg/L)					Leachates (mg/L)			
	MDL calc.	MDL Verif	MDL calc.	MDL Verif	max MDL	%	New MDL	LIMS MDL	MRL	calc. MDL	New MDL	LIMS MDL	MRL
	Jul/18/08	Jul/18/08	Sep/18/08	Sep/18/08			N/A	13-Mar-07			N/A		
Mercury	0.00007	0.00010	0.00003	0.00010	0.00010	no ch'g		0.00010	0.00020			0.0010	0.0020

Reviewed: T. Vu (Sept/04/08)

Matrix	Units	Specific Met	Prep Method	
Soil, Oil, Product	mg/Kg	7471A	0.5g --> 50ml	1
Wipe	ug		1w --> 50ml	0.5
CVS-STLC	ug/Kg		2g --> 200ml	1000

Analyte	FIMS1		FIMS2		Soil (mg/Kg)					Wipe (ug)				CVS-STLC (ug/Kg)	
	MDL calc.	MDL Verif	MDL calc.	MDL Verif	max MDL	%	New MDL	LIMS MDL	MRL	calc. MDL	New MDL	LIMS MDL	MRL	calc. MDL	New MDL
	Jul/29/08	Jul/29/08	Sep/18/08	Sep/18/08			N/A	16-Jul-07			N/A				N/A
Mercury	0.010	0.012	0.004	0.012	0.012	no ch'g		0.012	0.020			0.006	0.010		

Reviewed: T. Vu (Sept/19/08)

5/22/2008 5:26:41 PM Method: H:\DATA\IC5\IC5RE22.mth

Draw baselines
Include timed event annotations
Automatically set plot start and end times to data limits

Plot Scale : 130.000
Number of Pages : 1
Plot Title : Chromatogram
X-Axis Label : Time [min]
Y-Axis Label : Response [mV]
Orientation : Landscape
Retention Labels : Top of Plot
Component Labels : Actual Time

User Programs
No user programs will be executed

Global Sample Information
Default Sample Volume : 1.000 uL
Quantitation Units : PPM
Void Time : 0.000 min
Correct amounts during calibration : Yes
Convert unknowns to concentration units : Yes
Reject outliers during calibration : No

An External Standard calibration will be used
Unknown peaks will be quantitated using a response factor of 1.000000e+06
First peak will be relative retention reference

Component Information
FLUORIDE
Component Type : Single Peak Component
Retention Time : 2.698 min
Search Window : 2.00 s, 10.90 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	2327.06	266.31	———	———	1
2	0.2000	36276.90	4621.36	———	———	1
3	0.5000	87288.94	11732.04	———	———	1
4	5.0000	917082.18	113305.74	———	———	1
5	10.0000	1980107.43	228934.96	———	———	1
6	20.0000	4108892.41	448046.38	———	———	1
7	30.0000	6210730.20	646148.55	———	———	1

Calibration Curve : y = (-16794.948139) + (196392.404377)x + (390.986494)x^2 + (0.000000)x^3
R-squared : 0.999829

CHLORIDE
Component Type : Single Peak Component
Retention Time : 3.761 min
Search Window : 4.00 s, 7.60 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit

5/22/2008 5:26:41 PM Method: H:\DATA\IC5\IC5RE22.mth

Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	5625.08	342.91	———	———	1
2	0.2000	24885.16	2770.77	———	———	1
3	0.5000	67228.11	6953.15	———	———	1
4	5.0000	574259.74	60709.39	———	———	1
5	10.0000	1249345.21	126494.19	———	———	1
6	20.0000	2755461.06	277606.74	———	———	1
7	30.0000	4415734.65	446335.67	———	———	1

Calibration Curve : y = (-887.789782) + (114917.235792)x + (1086.571614)x^2 + (0.000000)x^3
R-squared : 0.999910

NITRITE
Component Type : Single Peak Component
Retention Time : 4.504 min
Search Window : 2.00 s, 5.80 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	0.00	0.00	———	———	0
2	0.2000	13621.06	1163.76	———	———	1
3	0.5000	37797.03	3379.51	———	———	1
4	5.0000	363897.69	30682.64	———	———	1
5	10.0000	759313.86	61618.55	———	———	1
6	20.0000	1611421.45	129040.90	———	———	1
7	30.0000	2493865.68	200854.31	———	———	1

Calibration Curve : y = (-2807.460764) + (73598.985362)x + (325.623763)x^2 + (0.000000)x^3
R-squared : 0.999943

BROMIDE
Component Type : Single Peak Component
Retention Time : 5.593 min
Search Window : 3.00 s, 6.10 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression

5/22/2008 5:26:41 PM Method: H:\DATA\IC5\IC5RE22.mth

Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	0.00	0.00	———	———	0
2	0.2000	10329.70	800.52	———	———	1
3	0.5000	23420.79	1884.33	———	———	1
4	5.0000	238045.50	17298.58	———	———	1
5	10.0000	496694.72	34726.02	———	———	1
6	20.0000	1042592.24	73324.56	———	———	1
7	30.0000	1626267.99	117982.80	———	———	1

Calibration Curve : y = (-819.535836) + (47526.616754)x + (224.925608)x^2 + (0.000000)x^3
R-squared : 0.999986

NITRATE
Component Type : Single Peak Component
Retention Time : 6.588 min
Search Window : 5.08 s, 4.90 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	2744.06	206.05	———	———	1
2	0.2000	17766.50	878.21	———	———	1
3	0.5000	32097.03	2151.53	———	———	1
4	5.0000	312008.96	18596.88	———	———	1
5	10.0000	641769.97	37257.03	———	———	1
6	20.0000	1355583.83	78195.86	———	———	1
7	30.0000	2114476.90	125112.97	———	———	1

Calibration Curve : y = (2040.963806) + (61216.589325)x + (308.866561)x^2 + (0.000000)x^3
R-squared : 0.999981

PHOSPHATE
Component Type : Single Peak Component
Retention Time : 8.771 min
Search Window : 5.00 s, 4.30 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1

5/22/2008 5:26:41 PM Method: H:\DATA\IC5\IC5RE22.mth

Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	0.00	0.00	———	———	0
3	0.5000	12624.42	675.66	———	———	1
4	5.0000	155471.55	6690.73	———	———	1
5	10.0000	327566.10	13691.64	———	———	1
6	20.0000	676045.54	28521.38	———	———	1
7	30.0000	1048565.84	45470.24	———	———	1

Calibration Curve : y = (-2306.866363) + (31660.894973)x + (112.487542)x^2 + (0.000000)x^3
R-squared : 0.999975

SULFATE
Component Type : Single Peak Component
Retention Time : 10.372 min
Search Window : 2.00 s, 4.95 %
Reference Component :
Find peak closest to expected RT in window
Calibrating Area versus Amount using a 2nd Order Fit
Curve will ignore the origin
Amounts will not be scaled prior to the regression
Weighting factor for the regression: 1
Component standard purity percentage : 100.0000%

User Values
Label :
Value 1 : 0.000000
Value 2 : 0.000000
Value 3 : 0.000000
Value 4 : 0.000000
Value 5 : 0.000000

Calibration Level

Level Name	Amount	Area	Height	ISTD Amt.	ISTD Resp.	# Replicates
1	0.0001	0.00	0.00	———	———	0
2	0.4000	41692.08	1538.51	———	———	1
3	1.0000	84831.02	3552.55	———	———	1
4	10.0000	813622.11	32087.32	———	———	1
5	20.0000	1707690.76	67009.10	———	———	1
6	40.0000	3714762.71	145796.45	———	———	1
7	60.0000	5897209.24	234943.19	———	———	1

Calibration Curve : y = (-406.262043) + (79966.434916)x + (307.841599)x^2 + (0.000000)x^3
R-squared : 0.999959

Calibration Replicate Lists
Component : FLUORIDE
Level : 1

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
2327.06	266.31	0.0001	———	———	5/22/2008	5:25:04 PM	H:\DATA\IC5\20080522\20080522011A.rst

Level : 2

Area	Height	Vol Adj Amt	ISTD Response	ISTD Amount	Date	Time	File
36276.90	4621.36	0.2000	———	———	5/22/2008	5:25:05 PM	H:\DATA\IC5\20080522\20080522005.rst

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	8J14046-BS1	
Calibration File:	IC5RE22C	Filename:	20081014002-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	11:31:20 AM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	5	4.96	99.2	90-110	
2	Chloride	5	4.84	96.8	90-110	
3	Fluoride	5	4.84	96.8	90-110	
4	Nitrate-NO3	5	4.77	95.4	90-110	
5	Nitrite-NO2	5	4.93	98.6	90-110	
6	Phosphate (PO4)	5	0	0	90-110	*
7	Sulfate	10	10.32	103.2	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081014014-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	2:05:50 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.42	104	90-110	
2	Chloride	10	10.53	105	90-110	
3	Fluoride	10	10.5	105	90-110	
4	Nitrate-NO3	10	10.78	108	90-110	
5	Nitrite-NO2	10	9.83	98	90-110	
6	Phosphate (PO4)	10	3.84	38	90-110	*
7	Sulfate	20	22.13	111	90-110	*

(*) = Out of range

no bracketed samples

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081014017-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	2:44:27 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.3	103	90-110	
2	Chloride	10	10.45	105	90-110	
3	Fluoride	10	10.45	105	90-110	
4	Nitrate-NO3	10	10.72	107	90-110	
5	Nitrite-NO2	10	9.72	97	90-110	
6	Phosphate (PO4)	10	3.84	38	90-110	*
7	Sulfate	20	21.79	109	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081014031-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	6:02:00 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.18	102	90-110	
2	Chloride	10	10.31	103	90-110	
3	Fluoride	10	10.36	104	90-110	
4	Nitrate-NO3	10	10.6	106	90-110	
5	Nitrite-NO2	10	9.67	97	90-110	
6	Phosphate (PO4)	10	3.44	34	90-110	*
7	Sulfate	20	21.81	109	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081014042A-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	8:27:34 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.37	104	90-110	
2	Chloride	10	10.49	105	90-110	
3	Fluoride	10	10.47	105	90-110	
4	Nitrate-NO3	10	10.78	108	90-110	
5	Nitrite-NO2	10	9.83	98	90-110	
6	Phosphate (PO4)	10	2.35	24	90-110	*
7	Sulfate	20	21.98	110	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV
Calibration File:	IC5RE22C	Filename:	20081014054-0
Data Sequence:	20081014	Analyzed:	Oct/14/08 11:03:09 PM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.01	100	90-110	
2	Chloride	10	10.23	102	90-110	
3	Fluoride	10	10.17	102	90-110	
4	Nitrate-NO3	10	10.47	105	90-110	
5	Nitrite-NO2	10	9.56	96	90-110	
6	Phosphate (PO4)	10	2.56	26	90-110	*
7	Sulfate	20	21.62	108	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV
Calibration File:	IC5RE22C	Filename:	20081014066-0
Data Sequence:	20081014	Analyzed:	Oct/15/08 1:37:39 AM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.09	101	90-110	
2	Chloride	10	10.25	103	90-110	
3	Fluoride	10	10.2	102	90-110	
4	Nitrate-NO3	10	10.46	105	90-110	
5	Nitrite-NO2	10	9.61	96	90-110	
6	Phosphate (PO4)	10	3.02	30	90-110	*
7	Sulfate	20	21.58	108	90-110	

(*) = Out of range

IC
CALIBRATION VERIFICATION SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCV	
Calibration File:	IC5RE22C	Filename:	20081014078-0	
Data Sequence:	20081014	Analyzed:	Oct/15/08	4:12:08 AM

	Analyte	Conc (mg/L)		% Rec	% Limits	Q
		True	Found			
1	Bromide	10	10.2	102	90-110	
2	Chloride	10	10.39	104	90-110	
3	Fluoride	10	10.32	103	90-110	
4	Nitrate-NO3	10	10.64	106	90-110	
5	Nitrite-NO2	10	9.7	97	90-110	
6	Phosphate (PO4)	10	2.29	23	90-110	*
7	Sulfate	20	21.76	109	90-110	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	8J14046-BLK1	
Calibration File:	IC5RE22C	Filename:	20081014003-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	11:44:13 AM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0.02	
3	Fluoride	0.5	0	
4	Nitrate-NO3	0.5	0	
5	Nitrite-NO2	0.5	0	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081014015-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	2:18:42 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0	
3	Fluoride	0.5	0	
4	Nitrate-NO3	0.5	0	
5	Nitrite-NO2	0.5	0	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081014018-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	2:57:19 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0.03	
3	Fluoride	0.5	0.11	
4	Nitrate-NO3	0.5	0	
5	Nitrite-NO2	0.5	0.05	
6	Phosphate (PO4)	0.5	0.22	
7	Sulfate	0.5	0.07	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081014030-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	5:49:09 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0.04	
3	Fluoride	0.5	0.1	
4	Nitrate-NO3	0.5	0.1	No ⊖
5	Nitrite-NO2	0.5	0	
6	Phosphate (PO4)	0.5	0.13	
7	Sulfate	0.5	0.04	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB
Calibration File:	IC5RE22C	Filename:	20081014043-0
Data Sequence:	20081014	Analyzed:	Oct/14/08 8:40:27 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0.08	
3	Fluoride	0.5	0.1	
4	Nitrate-NO3	0.5	0.11	No ⊕
5	Nitrite-NO2	0.5	0	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0.16	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081014055-0	
Data Sequence:	20081014	Analyzed:	Oct/14/08	11:16:02 PM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0.07	
3	Fluoride	0.5	0.1	
4	Nitrate-NO3	0.5	0	
5	Nitrite-NO2	0.5	0	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0.11	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081014067-0	
Data Sequence:	20081014	Analyzed:	Oct/15/08	1:50:31 AM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0.07	
2	Chloride	0.5	0.11	
3	Fluoride	0.5	0.11	
4	Nitrate-NO3	0.5	0	
5	Nitrite-NO2	0.5	0.07	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0.13	

(*) = Out of range

IC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument:	ICDNX5A	Labnumber:	CCB	
Calibration File:	IC5RE22C	Filename:	20081014079-0	
Data Sequence:	20081014	Analyzed:	Oct/15/08	4:25:01 AM

	Analyte	Conc (mg/L)		Q
		MRL	Found	
1	Bromide	0.5	0	
2	Chloride	0.5	0.08	
3	Fluoride	0.5	0.11	
4	Nitrate-NO3	0.5	0.01	
5	Nitrite-NO2	0.5	0.06	
6	Phosphate (PO4)	0.5	0	
7	Sulfate	0.5	0.11	

(*) = Out of range

RUN LOG

Intrument: *ICDNX5A*

Calib.file #: IC5RE22C Calib. date: 5/22/2008

#	File_Name	Lab_Number	Dilution	Analyzed	Time
1	20081014001-0	IB	1	Oct/14/08	11:18:28 AM
2	20081014002-0	8J14046-BS1	1	Oct/14/08	11:31:20 AM
3	20081014003-0	8J14046-BLK1	1	Oct/14/08	11:44:13 AM
4	20081014004-0	8J14049-BS1	1	Oct/14/08	11:57:05 AM
5	20081014005-0	8J14049-BLK1	1	Oct/14/08	12:09:58 PM
6	20081014006-0	IRJ1345-01	1	Oct/14/08	12:22:50 PM
7	20081014007-0	8J14049-MS1	1	Oct/14/08	12:35:42 PM
8	20081014008-0	8J14049-MSD1	1	Oct/14/08	12:48:35 PM
9	20081014009-0	IRJ1345-02	1	Oct/14/08	1:01:27 PM
10	20081014010-0	IRJ1345-03	1	Oct/14/08	1:14:20 PM
11	20081014011-0	IRJ1345-04	1	Oct/14/08	1:27:12 PM
12	20081014012-0	IRJ1345-05	1	Oct/14/08	1:40:05 PM
13	20081014013-0	IRJ1345-06	1	Oct/14/08	1:52:57 PM
14	20081014014-0	CCV	1	Oct/14/08	2:05:50 PM
15	20081014015-0	CCB	1	Oct/14/08	2:18:42 PM
16	20081014016-0	IRJ1345-07	1	Oct/14/08	2:31:34 PM
17	20081014017-0	CCV	1	Oct/14/08	2:44:27 PM
18	20081014018-0	CCB	1	Oct/14/08	2:57:19 PM
19	20081014019A-0	IRJ1347-02	1	Oct/14/08	3:27:33 PM
20	20081014019-0	IRJ1347-02	1	Oct/14/08	3:27:33 PM
21	20081014020-0	IRJ1347-04	1	Oct/14/08	3:40:26 PM
22	20081014021-0	IRJ1347-06	1	Oct/14/08	3:53:18 PM
23	20081014022-0	IRJ1347-22	1	Oct/14/08	4:06:11 PM
24	20081014023-0	IRJ1346-03	10	Oct/14/08	4:19:03 PM
25	20081014024-0	IRJ1346-04	10	Oct/14/08	4:31:54 PM
26	20081014025-0	8J14046-MS1	1	Oct/14/08	4:44:46 PM
27	20081014026-0	8J14046-MSD1	1	Oct/14/08	4:57:39 PM
28	20081014027A-0	IRJ1354-01	10	Oct/14/08	5:10:31 PM
29	20081014027-0	IRJ1354-01	10	Oct/14/08	5:10:31 PM
30	20081014028-0	IRJ1354-02	10	Oct/14/08	5:23:24 PM
31	20081014029-0	CCV	1	Oct/14/08	5:36:16 PM
32	20081014030-0	CCB	1	Oct/14/08	5:49:09 PM
33	20081014031-0	CCV	1	Oct/14/08	6:02:00 PM
34	20081014032-0	IRJ1354-03	10	Oct/14/08	6:14:52 PM
35	20081014033-0	IRJ0641-01	20	Oct/14/08	6:27:45 PM
36	20081014034-0	IRJ1297-01	20	Oct/14/08	6:40:37 PM
37	20081014035-0	IRJ1383-01	10000	Oct/14/08	6:53:30 PM
38	20081014036-0	IRJ1383-02	10000	Oct/14/08	7:06:22 PM
39	20081014037-0	IRJ1427-01	1	Oct/14/08	7:19:15 PM
40	20081014038-0	8J14111-BS1	1	Oct/14/08	7:32:07 PM
41	20081014039-0	8J14111-BLK1	1	Oct/14/08	7:44:59 PM
42	20081014040-0	IRJ1428-01	1	Oct/14/08	8:01:50 PM
43	20081014041-0	IRJ1428-02	1	Oct/14/08	8:14:42 PM
44	20081014042A-0	CCV	1	Oct/14/08	8:27:34 PM
45	20081014042-0	CCV	1	Oct/14/08	8:27:34 PM
46	20081014043-0	CCB	1	Oct/14/08	8:40:27 PM
47	20081014044-0	IRJ1428-03	1	Oct/14/08	8:54:26 PM
48	20081014045-0	IRJ1428-03	5	Oct/14/08	9:07:19 PM
49	20081014046-0	IRJ1428-01	5	Oct/14/08	9:20:11 PM
50	20081014047-0	8J14111-MS1	5	Oct/14/08	9:33:04 PM
51	20081014048-0	8J14111-MSD1	5	Oct/14/08	9:45:56 PM
52	20081014049-0	IRJ1428-02	5	Oct/14/08	9:58:47 PM
53	20081014050-0	IRJ1395-01	2	Oct/14/08	10:11:40 PM
54	20081014051-0	IRJ1395-01	50	Oct/14/08	10:24:32 PM
55	20081014052-0	IRJ1395-02	2	Oct/14/08	10:37:24 PM
56	20081014053-0	IRJ1395-02	50	Oct/14/08	10:50:17 PM
57	20081014054-0	CCV	1	Oct/14/08	11:03:09 PM
58	20081014055-0	CCB	1	Oct/14/08	11:16:02 PM
59	20081014056-0	IRJ1397-01	2	Oct/14/08	11:28:54 PM
60	20081014057-0	IRJ1397-01	50	Oct/14/08	11:41:47 PM
61	20081014058-0	IRJ1398-01	2	Oct/14/08	11:54:39 PM
62	20081014059-0	IRJ1398-01	50	Oct/15/08	12:07:32 AM

63	20081014060-0	IRJ1398-02		2	Oct/15/08	12:20:24 AM
64	20081014061-0	IRJ1398-02		50	Oct/15/08	12:33:17 AM
65	20081014062-0	IRJ1398-03		2	Oct/15/08	12:46:09 AM
66	20081014063-0	IRJ1398-03		50	Oct/15/08	12:59:01 AM
67	20081014064-0	IRJ1354-01		500	Oct/15/08	1:11:54 AM
68	20081014065-0	IRJ1354-02		500	Oct/15/08	1:24:46 AM
69	20081014066-0	CCV	S04	1	Oct/15/08	1:37:39 AM
70	20081014067-0	CCB		1	Oct/15/08	1:50:31 AM
71	20081014068-0	IRJ1354-03		500	Oct/15/08	2:03:24 AM
72	20081014069-0	8J14046-MS2		50	Oct/15/08	2:16:16 AM
73	20081014070-0	IRJ1436-01		1	Oct/15/08	2:29:09 AM
74	20081014071-0	IRJ1436-01		20	Oct/15/08	2:42:01 AM
75	20081014072-0	IRJ1436-02		1	Oct/15/08	2:54:54 AM
76	20081014073-0	IRJ1436-02		20	Oct/15/08	3:07:46 AM
77	20081014074-0	IRJ1442-01		1	Oct/15/08	3:20:38 AM
78	20081014075-0	IRJ1442-01		5	Oct/15/08	3:33:31 AM
79	20081014076-0	IRJ1442-02		1	Oct/15/08	3:46:23 AM
80	20081014077-0	IRJ1442-02		5	Oct/15/08	3:59:16 AM
81	20081014078-0	CCV		1	Oct/15/08	4:12:08 AM
82	20081014079-0	CCB		1	Oct/15/08	4:25:01 AM
83	20081014080-0	IRJ1442-03		1	Oct/15/08	4:37:53 AM
84	20081014081-0	IRJ1442-03		5	Oct/15/08	4:50:46 AM
85	20081014082-0	IRJ1442-04		1	Oct/15/08	5:03:38 AM
86	20081014083-0	IRJ1442-04		5	Oct/15/08	5:16:31 AM
87	20081014084-0	IRJ1434-01		1	Oct/15/08	5:29:23 AM
88	20081014085-0	IRJ1434-01		20	Oct/15/08	5:42:15 AM
89	20081014086-0	IRJ1434-02		1	Oct/15/08	5:55:08 AM
90	20081014087-0	IRJ1434-02		20	Oct/15/08	6:08:00 AM
91	20081014088-0	IRJ1435-02		1	Oct/15/08	6:20:53 AM
92	20081014089-0	IRJ1435-02		20	Oct/15/08	6:33:45 AM
93	20081014090-0	CCV		1	Oct/15/08	6:46:38 AM
94	20081014091-0	CCB		1	Oct/15/08	6:59:30 AM
95	20081014092-0	IRJ1435-03		1	Oct/15/08	7:12:23 AM
96	20081014093-0	IRJ1435-03		20	Oct/15/08	7:25:15 AM
97	20081014094-0	IRJ1435-04		1	Oct/15/08	7:38:08 AM
98	20081014095-0	IRJ1435-04		20	Oct/15/08	7:51:00 AM
99	20081014096-0	IRJ1435-05		1	Oct/15/08	8:03:52 AM
100	20081014097-0	IRJ1435-05		20	Oct/15/08	8:16:45 AM
101	20081014098-0	IRJ1435-06		1	Oct/15/08	8:29:37 AM
102	20081014099-0	IRJ1435-06		20	Oct/15/08	8:42:30 AM
103	20081014100-0	IRJ1435-07		1	Oct/15/08	8:55:22 AM
104	20081014101-0	IRJ1435-07		20	Oct/15/08	9:08:15 AM
105	20081014102-0	CCV		1	Oct/15/08	9:21:07 AM
106	20081014103-0	CCB		1	Oct/15/08	9:34:00 AM
107	20081014104-0	IRJ1435-08		1	Oct/15/08	9:46:52 AM
108	20081014105-0	IRJ1435-08		20	Oct/15/08	9:59:45 AM
109	20081014106-0	8J14111-MS2		20	Oct/15/08	10:12:37 AM
110	20081014107-0	CCV		1	Oct/15/08	10:25:29 AM
111	20081014108-0	CCB		1	Oct/15/08	10:38:22 AM

PREPARATION BENCH SHEET

8J14046

TestAmerica Irvine

Printed: 10/15/2008 12:01:55PM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
8J14046-BLK1		QC	10/14/08 11:00	10	10								
8J14046-BS1		QC	10/14/08 11:00	10	10		8100276	50					
8J14046-MS1		QC	10/14/08 16:30	10	10	IRJ1347-02	8100276	50					
8J14046-MS2		QC	10/14/08 21:30	10	10	IRJ1395-01	8100276	500					
8J14046-MSD1		QC	10/14/08 16:30	10	10	IRJ1347-02	8100276	50					
IRJ0641-01	A	Sulfate-300.0	10/14/08 15:15	10	10								Add in 10/14/08 - DJ
IRJ1297-01	A	Sulfate-300.0 CA DW	10/14/08 15:15	10	10								
IRJ1346-03	E	Sulfate-300.0	10/14/08 15:15	10	10								
IRJ1346-04	E	Sulfate-300.0	10/14/08 15:15	10	10								
IRJ1347-02	V	Nitrite-N, 300.0	10/14/08 15:15	10	10								Added for BatchQC in: 8J14046
IRJ1347-02	V	Sulfate-300.0	10/14/08 15:15	10	10								j flags; ICV, CCV, and run logs only!!
IRJ1347-02	V	Nitrate-N, 300.0	10/14/08 15:15	10	10								Added for BatchQC in: 8J14046
IRJ1347-02	V	Chloride - 300.0	10/14/08 15:15	10	10								Added for BatchQC in: 8J14046
IRJ1347-02	V	Fluoride-300.0	10/14/08 15:15	10	10								Added for BatchQC in: 8J14046
IRJ1347-02	V	Sulfate-300.0 CA DW	10/14/08 15:15	10	10								Added for BatchQC in: 8J14046
IRJ1347-02	V	Nitrate-N (0.1ppm)	10/14/08 15:15	10	10								j flags
IRJ1347-04	O	Nitrate-N (0.1ppm)	10/14/08 15:15	10	10								j flags
IRJ1347-04	O	Sulfate-300.0	10/14/08 15:15	10	10								j flags; ICV, CCV, and run logs only!!
IRJ1347-06	O	Sulfate-300.0	10/14/08 15:15	10	10								j flags; ICV, CCV, and run logs only!!
IRJ1347-06	O	Nitrate-N (0.1ppm)	10/14/08 15:15	10	10								j flags

Spiking Witnessed By Date

Preparation Reviewed By Date 10/15/08

Extracts Received By Date

825

PREPARATION BENCH SHEET

8J14046

TestAmerica Irvine

Printed: 10/15/2008 12:01:55PM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials			Extraction Comments
IRJ1347-22	M	Nitrate-N (0.1ppm)	10/14/08 15:15	10	10										j flags
IRJ1347-22	M	Sulfate-300.0	10/14/08 15:15	10	10										j flags; ICV, CCV, and run logs only!!
IRJ1354-01	B	Chloride - 300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-01	B	Fluoride-300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-01	B	Nitrate-N, 300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-01	B	Nitrite-N, 300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-01	B	Sulfate-300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-02	B	Fluoride-300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-02	B	Nitrate-N, 300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-02	B	Nitrite-N, 300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-02	B	Sulfate-300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-02	B	Chloride - 300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-03	B	Chloride - 300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-03	B	Fluoride-300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-03	B	Nitrate-N, 300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-03	B	Nitrite-N, 300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1354-03	B	Sulfate-300.0	10/14/08 15:15	10	10										BP Sequence. J flag.
IRJ1383-01	A	Chloride - 300.0	10/14/08 18:45	10	10										
IRJ1383-02	A	Chloride - 300.0	10/14/08 18:45	10	10										
IRJ1395-01	A	Nitrate-N, 300.0	10/14/08 18:45	10	10										Added for BatchQC in: 8J14046

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

826

BIANNUAL MDL STUDY

INORGANIC ANIONS BY IC - EPA 300.0 / SM 4110B / SW9056

Analyt. Method: EPA 300.0 / SW 9056 / SM 4110b — Instrument: **ICDNX5A**
Prep Method: 10-->10ml — Low Cal.: 0.2 mg/L
Matrix: **Water (10ml-->10ml)** — (o P:0.5, SO4: 0.4)
Units: **mg/L**

Reviewed: T.Vu (Jul/29/08)

#	Analyte	oc Spike(mg/l)		MDL Runs - (mg/L oc)							Calc Data (mg/L-oc)			final	LIMS (mg/L)			Validation Criteria				Comm't
		recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Avrg	StdDev	MDL	MDL	MDL	RL	lowRL	MDL<RL	Ch'g	Ratio (1-10)	%Rec	Grubbs test
	filename:			200805230	200805230	200805230	200805240	200805240	200805250	20080525032-20080527-142450-0												
	labnumber:			0.5	0.5	0.5	0.5	0.5	0.5	0.5												
	date:			May/23/08	May/23/08	May/23/08	May/24/08	May/24/08	May/25/08	May/25/08												
	time:			19:28	19:43	19:57	12:20	12:34	19:56	20:11												
1	Bromide	0.5	0.50	0.463	0.583	0.649	0.599	0.489	0.421	0.566	0.539	0.082	0.26	0.26	0.35	0.50	0.50	OK	-26%	2	108%	
2	Chloride	0.5	0.50	0.516	0.504	0.488	0.524	0.482	0.510	0.522	0.507	0.016	0.05	0.05	0.25	0.50	0.50	OK	-80%	10	101%	
3	Fluoride	0.5	0.25	0.302	0.307	0.326	0.313	0.299	0.308	0.395	0.321	0.033	0.11	0.11	0.15	0.50	0.50	OK	-30%	2	128%	
4	Nitrate-NO3	0.5	0.50	0.596	0.488	0.513	0.434	0.504	0.424	0.452	0.487	0.059	0.19	0.19	0.25	0.50	0.50	OK	-26%	3	97%	
5	Nitrite-NO2	0.5	0.50	0.531	0.567	0.542	0.551	0.508	0.520	0.515	0.533	0.021	0.07	0.07	0.30	0.50	0.50	OK	-78%	8	107%	
6	Orthophosphate - PO4	0.5	0.50	0.724	0.428	0.764	0.585	0.716	0.675	0.467	0.623	0.132	0.42	0.42	0.40	0.50	0.50	OK	no ch'g	1.2	125%	
7	Sulfate	0.5	1.0	1.022	1.0331	1.0806	0.9835	1.0398	1.0614	1.0533	1.039	0.031	0.10	0.10	0.2	0.50	0.50	OK	-51%	10	104%	
	For Reference:																					
3	Fluoride	0.5	0.50	0.483	0.506	0.508	0.508	0.497	0.519	0.508	0.504	0.011	0.04	0.04	0.15	0.50	0.50	OK	-76%	14	101%	

ALKALINITY

(EPA 310.1 & SM 2320B)

Analyst: DC
Date: 10.15.2008
HCL Normality: **0.02**
0.02 HCL ID: ####### 8100355

2° Review: [signature]
Date: 10/16/08

Batches: 8J15048

Lab Sample ID:	Vol / Wt	Matrix	Initial	Vol	Vol	Vol	(P) Alk	(T) Total Alk	HCO3		CO3		OH	
				@ pH	@ pH	@ pH	as mg/l	as mg/l	as mg/l	as mg/l	as mg/l	as mg/l	as mg/l	as mg/l
	ml / g	W / S	pH	**8.3**	**4.5**	**4.2**	CaCO3	CaCO3	CaCO3	HCO3	CaCO3	CO3	CaCO3	OH
LCS (8100356)	25.00	W	9.06	3.30	5.80		132.0	232.0	0.0	0.00	200.0	119.91	32.0	10.87
BLK	100.00	W	5.42	0.00	0.10		0.0	1.0	1.0	1.22	0.0	0.00	0.0	0.00
IRJ1417-01	1.00	W	7.86	0.00	5.60		0.0	5600.0	5600.0	6827.77	0.0	0.00	0.0	0.00
IRJ1417-02	1.00	W	7.93	0.00	6.70		0.0	6700.0	6,700	8168.94	0.0	0.00	0.0	0.00
IRJ1417-03	1.00	W	8.10	0.00	6.50		0.0	6500.0	6500.0	7925.09	0.0	0.00	0.0	0.00
IRJ1347-02	25.00	W	6.27	0.00	7.80		0.0	312.0	312.0	380.40	0.0	0.00	0.0	0.00
IRJ1347-02DUP	25.00	W	6.29	0.00	7.85		0.0	314.0	314.0	382.84	0.0	0.00	0.0	0.00
IRJ1347-04	25.00	W	6.40	0.00	8.10		0.0	324.0	324.0	395.04	0.0	0.00	0.0	0.00
IRJ1347-06	25.00	W	6.32	0.00	4.60		0.0	184.0	184.0	224.34	0.0	0.00	0.0	0.00
IRJ1347-22	100.00	W	6.03	0.00	0.20		0.0	2.0	2.0	2.44	0.0	0.00	0.0	0.00
IRJ1354-01	25.00	W	6.96	0.00	17.50		0.0	700.0	700.0	853.47	0.0	0.00	0.0	0.00
IRJ1354-02	25.00	W	6.93	0.00	17.90		0.0	716.0	716.0	872.98	0.0	0.00	0.0	0.00
IRJ1354-03	25.00	W	3.96	0.00	0.00		0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.00
IRJ1424-01	25.00	W	6.99	0.00	8.00		0.0	320.0	320.0	390.16	0.0	0.00	0.0	0.00
IRJ1433-01	100.00	W	7.71	0.00	3.10		0.0	31.0	31.0	37.80	0.0	0.00	0.0	0.00
IRJ1433-02	25.00	W	7.62	0.00	1.35		0.0	54.0	54.0	65.84	0.0	0.00	0.0	0.00
IRJ1433-03	25.00	W	7.60	0.00	1.40		0.0	56.0	56.0	68.28	0.0	0.00	0.0	0.00
IRJ1433-04	25.00	W	7.46	0.00	2.20		0.0	88.0	88.0	107.29	0.0	0.00	0.0	0.00
IRJ1433-05	25.00	W	7.21	0.00	4.20		0.0	168.0	168.0	204.83	0.0	0.00	0.0	0.00
IRJ1433-06	25.00	W	7.10	0.00	6.20		0.0	248.0	248.0	302.37	0.0	0.00	0.0	0.00
IRJ1433-07	100.00	W	5.71	0.00	1.60		0.0	16.0	16.0	19.51	0.0	0.00	0.0	0.00
IRJ1436-01	25.00	W	7.56	0.00	5.40		0.0	216.0	216.0	263.36	0.0	0.00	0.0	0.00
IRJ1436-02	25.00	W	7.36	0.00	5.50		0.0	220.0	220.0	268.23	0.0	0.00	0.0	0.00

Legend:

P: 8.3 pH endpoint Alkalinity
T: 4.5 pH endpoint Alkalinity

PREPARATION BENCH SHEET

8J15048

TestAmerica Irvine

Printed: 1/22/2009 8:40:32AM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Surrogate	Initials		Extraction Comments
8J15048-BLK1		QC	10/15/08 07:53	25	25							
8J15048-DUP1		QC	10/15/08 07:53	25	25	IRJ1347-02						
8J15048-SRM1		QC	10/15/08 07:53	25	25		8100356	25000				
IRJ1347-02	U	Alkalinity-Total CA DW	10/15/08 07:53	25	25							Added for BatchQC in: 8J15048
IRJ1347-02	U	Alkalinity-All forms (as	10/15/08 07:53	25	25							Added for BatchQC in: 8J15048
IRJ1347-02	U	Alkalinity-All forms (as	10/15/08 07:53	25	25							Added for BatchQC in: 8J15048
IRJ1347-02	U	Alkalinity-All forms CA	10/15/08 07:53	25	25							Added for BatchQC in: 8J15048
IRJ1347-02	U	Alkalinity-SM2320B, T	10/15/08 07:53	25	25							j flags; ICV, CCV, and run logs only!!
IRJ1347-04	O	Alkalinity-SM2320B, T	10/15/08 07:53	25	25							j flags; ICV, CCV, and run logs only!!
IRJ1347-06	O	Alkalinity-SM2320B, T	10/15/08 07:53	25	25							j flags; ICV, CCV, and run logs only!!
IRJ1347-22	M	Alkalinity-SM2320B, T	10/15/08 07:53	25	25							j flags; ICV, CCV, and run logs only!!
IRJ1354-01	B	Alkalinity-All forms (as	10/15/08 07:53	25	25							BP Sequence. J flag
IRJ1354-02	B	Alkalinity-All forms (as	10/15/08 07:53	25	25							BP Sequence. J flag
IRJ1354-03	B	Alkalinity-All forms (as	10/15/08 07:53	25	25							BP Sequence. J flag
IRJ1417-01	A	Alkalinity-SM2320B, T	10/15/08 07:53	25	25							J flag, Log as water
IRJ1417-02	A	Alkalinity-SM2320B, T	10/15/08 07:53	25	25							J flag, Log as water
IRJ1417-03	A	Alkalinity-SM2320B, T	10/15/08 07:53	25	25							J flag, Log as water
IRJ1424-01	A	Alkalinity-Total CA DW	10/15/08 07:53	25	25							J flag
IRJ1433-01	A	Alkalinity-All forms (as	10/15/08 07:53	25	25							

Spiking Witnessed By Date

Preparation Reviewed By Date 1/22/09

Extracts Received By Date

TOTAL DISSOLVED / SUSPENDED SOLIDS
(EPA 160.1/160.2 & SM 2540C,D)

Log Book / Page: TDS/36
Analysis Date: 10/15/2008 8J15037
Analyst: MC
Reviewd by: 10/20/08

Lab ID	Initial Sample (S) (g)	Initial Sample (W) (ml)	Dish or Filter (g)	Dish/Filter & Spl (#1) (g)	Dish/Filter & Spl (#2) (g)	Dryness Check (|1-2|) (Diff:<0.5mg)		Result (W) (mg/L)	Result (S) (mg/Kg)
-BLK		100.0	66.3523	66.3523	66.3522	0.1	OK	-1.0	
LCS(8100110)		50.0	72.9695	73.0216	73.0214	0.2	OK	1038.0	
DUP 1433-01		100.0	73.4008	73.4130	73.4129	0.1	OK	121.0	
IRJ 1433-01		100.0	64.7237	64.7356	64.7356	0.0	OK	119.0	
IRJ 1433-02		100.0	75.7909	75.8126	75.8126	0.0	OK	217.0	
IRJ 1433-03		100.0	79.9757	79.9957	79.9956	0.1	OK	199.0	
IRJ 1433-04		100.0	74.2349	74.2672	74.2670	0.2	OK	321.0	
IRJ 1433-05		100.0	76.7852	76.8469	76.8469	0.0	OK	617.0	
IRJ 1433-06		100.0	76.1028	76.1920	76.1918	0.2	OK	890.0	
IRJ 1433-07		100.0	66.0990	66.1080	66.1078	0.2	OK	88.0	
IRJ 1354-01		10.0	68.4487	68.5380	68.5378	0.2	OK	8910.0	
IRJ 1354-02		10.0	65.2637	65.3590	65.3588	0.2	OK	9510.0	
IRJ 1354-03		10.0	82.0933	82.1861	82.1860	0.1	OK	9270.0	
IRJ 1395-01		50.0	85.9736	86.0945	86.0943	0.2	OK	2414.0	
IRJ 1395-02		50.0	76.1676	76.2874	76.2873	0.1	OK	2394.0	
IRJ 1436-01		100.0	67.0724	67.1182	67.1182	0.0	OK	458.0	
IRJ 1436-02		100.0	70.4106	70.4593	70.4593	0.0	OK	487.0	
IRJ 1443-01		100.0	64.9311	64.9647	64.9647	0.0	OK	336.0	
IRJ 1443-02		100.0	73.1533	73.2068	73.2067	0.1	OK	534.0	
IRJ 1443-03		100.0	67.4903	67.5300	67.5300	0.0	OK	397.0	
IRJ 1443-04		100.0	66.9474	66.9731	66.9728	0.3	OK	254.0	
IRJ 1406-01		50.0	77.6804	77.7622	77.7621	0.1	OK	1634.0	

$$\text{TDS / TSS (mg/L)} = \frac{[\text{(Dish \& Spl) - Dish}] \times 1{,}000{,}000}{\text{Initial Spl (W)}}$$

$$\text{TDS (mg/Kg)} = \frac{[\text{(Dish \& Spl) - Dish}] \times 1{,}000{,}000}{\text{Initial Spl (S)}}$$

TDS_TSS
ver. 02/14/08

10/16/2008

PREPARATION BENCH SHEET

8J15037

TestAmerica Irvine

Printed: 1/19/2009 7:51:26AM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials	Extraction Comments
8J15037-BLK1		QC	10/15/08 07:09	100	100								
8J15037-BS1		QC	10/15/08 07:09	50	50		8100110	50000					
8J15037-DUP1		QC	10/15/08 07:09	100	100	IRJ1433-01							
IRJ1354-01	B	TDS - SM 2540C	10/15/08 07:09	100	100								BP Sequence. J flag.
IRJ1354-02	B	TDS - SM 2540C	10/15/08 07:09	100	100								BP Sequence. J flag.
IRJ1354-03	B	TDS - SM 2540C	10/15/08 07:09	100	100								BP Sequence. J flag.
IRJ1395-01	A	TDS - EPA 160.1	10/15/08 07:09	100	100								BP LAMP. Sequence. LEVEL 4. J flag.
IRJ1395-02	A	TDS - EPA 160.1	10/15/08 07:09	100	100								BP LAMP. Sequence. LEVEL 4. J flag.
IRJ1406-01	A	TDS - EPA 160.1	10/15/08 07:09	100	100								
IRJ1433-01	A	TDS - SM 2540C CA D	10/15/08 07:09	100	100								
IRJ1433-01	A	TDS - EPA 160.1	10/15/08 07:09	100	100								Added for BatchQC in: 8J15037
IRJ1433-01	A	TDS - SM 2540C	10/15/08 07:09	100	100								Added for BatchQC in: 8J15037
IRJ1433-02	A	TDS - SM 2540C CA D	10/15/08 07:09	100	100								
IRJ1433-03	A	TDS - SM 2540C CA D	10/15/08 07:09	100	100								
IRJ1433-04	A	TDS - SM 2540C CA D	10/15/08 07:09	100	100								
IRJ1433-05	A	TDS - SM 2540C CA D	10/15/08 07:09	100	100								
IRJ1433-06	A	TDS - SM 2540C CA D	10/15/08 07:09	100	100								
IRJ1433-07	A	TDS - SM 2540C CA D	10/15/08 07:09	100	100								
IRJ1436-01	K	TDS - SM 2540C CA D	10/15/08 07:09	100	100								j flags;
IRJ1436-02	X	TDS - SM 2540C CA D	10/15/08 07:09	100	100								j flags;

Spiking Witnessed By Date

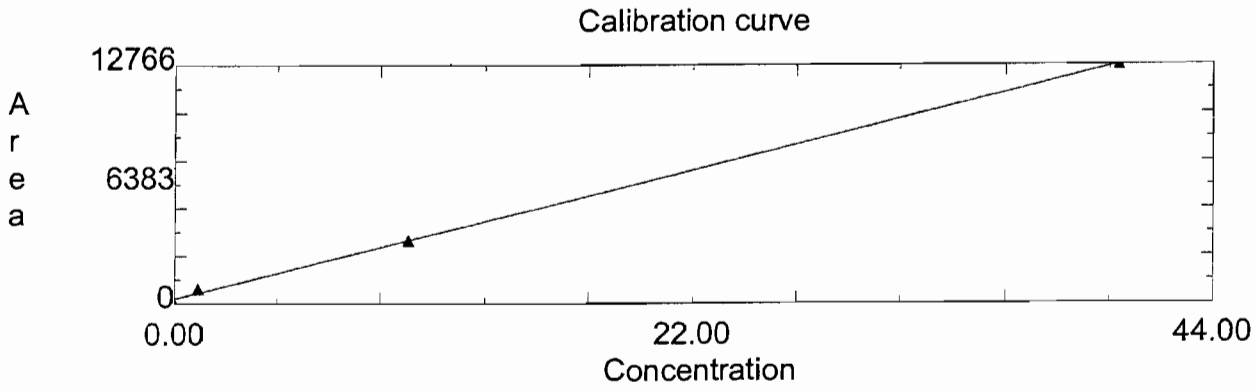
IM 1/19/09

Preparation Reviewed By Date

Extracts Received By Date

860

TOC-Control



Calibration Curves

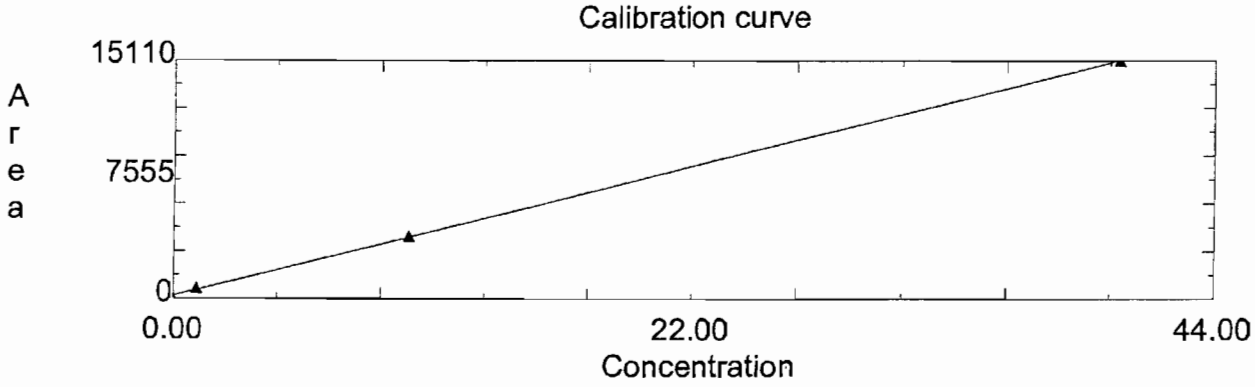
Filename: 20081020.cal
Title: TOC-CAL
Calculation method: Lin. regression without zero shift
Catalyst: Normal sense TC catalyst

Analysis	No. of Washes	Unit	Range	Spargetime	Inj.Vol	Max SD	Max CV
NPOC	4	ppm	1	3	50	200	2.00%

Sample Name	Sample ID	Vial	Conc.	No. of Inj.	Max No. of Inj.	Mean Area	SD	CV
TOC-CAL	STD 1	S	0.000	2	4	0	0	0.00%
TOC-CAL	STD 2	S	1.000	2	4	661	5	.856%
TOC-CAL	STD 3	S	10.00	2	4	4012	5	1.36%
TOC-CAL	STD 4	S	40.00	2	4	15110	2	.197%

Slope: 373.97
Intercept: 177.51
R^2: 0.999639

TOC-Control


Calibration curve
15110
A
r
e
a
7555
0
0.00
22.00
44.00
Concentration

TOC
CALIBRATION VERIFICATION SUMMARY

Instrument: **Shimadzu SSM5000A** CCV Std ID: 8050154
Calibration File: **081020_w.met**

	Sample Name	Analyte	Conc (mg/Kg)		% Rec	% Limits	Q	Analyzed:	Time
			True	Found					
1	CCV1	Total Organic Carbon	10	10.67	107	90-110		10/22/2008	7:58:11 AM

Q (*): denotes "Out of range"

TOC
CONTINUOUS CALIBRATION BLANK SUMMARY

Instrument: **Shimadzu SSM5000A**
Calibration File: **081020_w.met**

	Sample Name	Analyte	Conc (mg/Kg)		Q	Analyzed:	Time
			MRL	Found			
1	CCB1	Total Organic Carbon	1	0.47465		10/22/2008	8:05:06 AM

Q (*): denotes "Out of range"

< MDL

	Sample Name	Sample ID	Analysis	Dilution	Date / Time	Conc.	Mean Area
1	TOC-CAL	STD 1	NPOC	1.000	10/20/08 06:	0.000 ppm	0
2	TOC-CAL	STD 2	NPOC	1.000	10/20/08 06:	1.000 ppm	661
3	TOC-CAL	STD 3	NPOC	1.000	10/20/08 07:	10.00 ppm	4011
4	TOC-CAL	STD 4	NPOC	1.000	10/20/08 07:	40.00 ppm	15110
5	IB	TOC	NPOC	1.000	10/22/08 05:	-0.4747 ppm	0
6	MP (ID 8050	TOC	NPOC	1.000	10/22/08 05:	18.58 ppm	7127
7	8J22010-BS1	TOC	NPOC	1.000	10/22/08 05:	9.259 ppm	3640
8	8J22010-BLK	TOC	NPOC	1.000	10/22/08 05:	-0.4747 ppm	0
9	30 PPM	TOC	NPOC	1.000	10/22/08 06:	30.50 ppm	11584
10	IRJ1354-01	TOC	NPOC	1.000	10/22/08 06:	4.400 ppm	1823
11	8J22010-MS	TOC	NPOC	1.000	10/22/08 06:	8.584 ppm	3387
12	8J22010-MS	TOC	NPOC	1.000	10/22/08 06:	8.646 ppm	3411
13	IRJ1354-02	TOC	NPOC	1.000	10/22/08 07:	2.403 ppm	1076
14	IRJ1354-03	TOC	NPOC	1.000	10/22/08 07:	6.352 ppm	2553
15	IRJ1480-01	TOC	NPOC	1.000	10/22/08 07:	7.241 ppm	2885
16	IRJ1480-02	TOC	NPOC	1.000	10/22/08 07:	4.026 ppm	1683
17	IRJ1480-03	TOC	NPOC	1.000	10/22/08 07:	3.011 ppm	1303
18	IRJ1297-04	TOC	NPOC	1.000	10/22/08 07:	0.9292 ppm	525
19	CCV1	TOC	NPOC	1.000	10/22/08 07:	10.67 ppm	4168
20	CCB1	TOC	NPOC	1.000	10/22/08 08:	-0.4747 ppm	0
21	IRJ1655-01	TOC	NPOC	1.000	10/22/08 08:	10.01 ppm	3921
22	IRJ1655-02	TOC	NPOC	1.000	10/22/08 08:	-0.4747 ppm	0
23	IRJ1930-01	TOC	NPOC	1.000	10/22/08 08:	-0.4747 ppm	0
24	IRJ2038-01	TOC	NPOC	1.000	10/22/08 08:	-0.4747 ppm	0
25	IRJ2038-02	TOC	NPOC	1.000	10/22/08 08:	-0.4747 ppm	0
26	IRJ1665-01	TOC	NPOC	1.000	10/22/08 08:	4.495 ppm	1858
27	IRJ1355-04	TOC	NPOC	1.000	10/22/08 09:	2.467 ppm	1100
28	IRJ1355-04	TOC	NPOC	1.000	10/22/08 09:	2.488 ppm	1108
29	IRJ1551-01	TOC	NPOC	10.00	10/22/08 09:	57.97 ppm	2345
30	IRJ1554-01	TOC	NPOC	1.000	10/22/08 09:	5.956 ppm	2405
31	8J22014-BS1	TOC	NPOC	1.000	10/22/08 10:	9.962 ppm	3903
32	8J22014-BLK	TOC	NPOC	1.000	10/22/08 10:	-0.4747 ppm	0
33	IRJ1551-02	TOC	NPOC	1.000	10/22/08 10:	6.628 ppm	2656
34	8J22014-MS	TOC	NPOC	1.000	10/22/08 10:	11.55 ppm	4496
35	8J22014-MD	TOC	NPOC	1.000	10/22/08 10:	11.74 ppm	4566
36	IRJ1551-03	TOC	NPOC	1.000	10/22/08 10:	3.794 ppm	1596
37	IRJ1701-01	TOC	NPOC	1.000	10/22/08 10:	0.5294 ppm	375
38	IRJ1701-02	TOC	NPOC	1.000	10/22/08 11:	-0.4747 ppm	0
39	IRJ1701-03	TOC	NPOC	1.000	10/22/08 11:	-0.4747 ppm	0
40	IRJ1701-04	TOC	NPOC	1.000	10/22/08 11:	-0.4747 ppm	0
41	IRJ1638-04	TOC	NPOC	1.000	10/22/08 11:	4.694 ppm	1933
42	IRJ1638-05	TOC	NPOC	1.000	10/22/08 12:	-0.1016 ppm	139
43	CCV1	TOC	NPOC	1.000	10/22/08 12:	9.691 ppm	3801
44	CCB1	TOC	NPOC	1.000	10/22/08 12:	-0.4747 ppm	0
45	IRJ2054-01	TOC-9060	NPOC	1.000	10/22/08 12:	5.948 ppm	2402
46	IRJ2054-01	TOC-9060	NPOC	1.000	10/22/08 12:	6.118 ppm	2465
47	IRJ2054-01	TOC-9060	NPOC	1.000	10/22/08 12:	5.958 ppm	2405
48	IRJ2054-01	TOC-9060	NPOC	1.000	10/22/08 13:	5.996 ppm	2420
49	~~IRJ2054-02~~	TOC-9060	NPOC	1.000	10/22/08 13:	564.8 ppm	42254

6.005

PREPARATION BENCH SHEET

8J22010

TestAmerica Irvine

Printed: 10/22/2008 10:47:41AM

Matrix: Water **Prepared using: Wet Chemistry - General Prep** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	Spike 2	ul Spike	ul Surrogate	Initials			Extraction Comments
8J22010-BLK1		QC	10/14/08 07:00	10	10										
8J22010-BS1		QC	10/14/08 07:00	10	10		8050154	100							
8J22010-MS1		QC	10/22/08 05:30	10	10	IRJ1354-01	8050154	50							
8J22010-MSD1		QC	10/22/08 05:30	10	10	IRJ1354-01	8050154	50							
IRJ1297-04	B	TOC - SM5310B (Diss)	10/14/08 07:00	10	10										LAB to filter/preserve
IRJ1354-01	A	TOC - 415.1	10/22/08 05:30	10	10										Added for BatchQC in: 8J22010
IRJ1354-01	A	TOC - SM5310B	10/22/08 05:30	10	10										BP Sequence. J flag.
IRJ1354-01	A	TOC - SM5310B (Diss)	10/22/08 05:30	10	10										Added for BatchQC in: 8J22010
IRJ1354-02	A	TOC - SM5310B	10/22/08 05:30	10	10										BP Sequence. J flag.
IRJ1354-03	A	TOC - SM5310B	10/22/08 05:30	10	10										BP Sequence. J flag.
IRJ1355-04	A	TOC - SM5310B	10/22/08 05:30	10	10										
IRJ1355-04	A	TOC - 415.1	10/22/08 05:30	10	10										
IRJ1480-01	A	TOC - SM5310B	10/22/08 05:30	10	10										BP Sequence. J flag.
IRJ1480-02	A	TOC - SM5310B	10/22/08 05:30	10	10										BP Sequence. J flag.
IRJ1480-03	A	TOC - SM5310B	10/22/08 05:30	10	10										BP Sequence. J flag.
IRJ1551-01	A	TOC - SM5310B	10/22/08 05:30	10	10										J flag
IRJ1554-01	A	TOC - SM5310B	10/22/08 05:30	10	10										J flag
IRJ1655-01	A	TOC - SM5310B	10/22/08 05:30	10	10										BP Sequence. J flag.
IRJ1655-02	A	TOC - SM5310B	10/22/08 05:30	10	10										BP Sequence. J flag.
IRJ1665-01	A	TOC - SM5310B	10/22/08 05:30	10	10										Irvine

Spiking Witnessed By Date

Preparation Reviewed By C 10/24/08 Date

Extracts Received By Date

911

MDL STUDY

TOC - SM 5310B / EPA 415.1 / SW9060
by Catalytic Combustion-Infrared Method
(N/A for low RL and CADW TOC)

Analyt. Method: EPA 415.1 / 9060 & SM 5310B	Instrument: Shimadzu TOC-5000A
Prep Method: N/A	Method Sum: Acidify, purge volatile
Matrix: **Water** (10ml-->10ml). **Wipe** (1-->50ml) **Soil** (0.1g)	TOC, remove TIC)
Units: W (mg/L) - S (mg/Kg)	Cal: 1 / 10 / 40 ppm

Reviewed: T. Vu (Jun/14/07)

Analyte	Spike (mg/L)		MDL Runs (mg/L)								Calc. Data			LIMS (mg/L)		Validation Criteria				Grubbs
(WATER)	recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	Std Dev	**MDL**	MDL	RL	MDL<RL	Ch'g	Ratio (1-10)	%Rec	Comm't
labnumber:			IQE2464-I	IQE2464-I	IQE2464-I	IQE2464-I	IQE2464-I	IQE2464-I	IQE2464-07											
date:			Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07											
time:			16:25	16:25	16:25	17:54	17:54	17:54	17:54											
TOC	1.0	1.0	1.009	0.952	1.159	1.087	1.319	1.250	1.154		1.133	0.129	0.41	0.5	1.0	OK	-19%	2	113%	PASS

Analyte	Spike (mg/Kg)		MDL Runs (mg/Kg)								Calc. Data			LIMS (mg/kg)		Validation Criteria				Grubbs
(SOIL)	recom.	Actual	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Avrg	Std Dev	**MDL**	MDL	RL	MDL<RL	Ch'g	Ratio (1-10)	%Rec	Comm't
labnumber:			IQE2464-I	IQE2464-	IQE2464-	IQE2464-	IQE2464-	IQE2464-	IQE2464-15											
date:			Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07	Jun/07/07											
time:			16:30	16:30	16:30	16:30	16:30	16:30	16:30											
TOC	5000	5000	4552	4730	4751	5162	4713	5096	5003		4858	228	717	2200	5000	OK	-67%	7	97%	PASS

Review: BP 10/15/08

pH
EPA Method 150.1/9040/SM4500-H,B (water)
EPA Method 9045 (soil)

Analyst Initials: PP

Analysis Date: 10/15/08

		Standard ID	Calibration Temperature	Calibration pH
Buffer:	pH 4 -	8080283	22.0	4.00
	pH 7 -	8060084	PP 22.0 / 10/15 21.9	10.04 / 6.99 (PP 10/15)
	pH 10 -	7090236		

	Bottle	Sample Number	Batch Number	Matrix	Temperature #1 (°C)	pH #1	Temperature #2 (°C)	pH #2
9:40	* A	IRJ 1417-01	8J15073	W	21.7	7.84	21.7	7.88
	A	IRJ 1417-01 DUP			21.6	7.87	21.6	7.87
	A	IRJ 1417-02			21.2	7.85	21.2	7.86
	A	IRJ 1417-03			21.3	8.18	21.3	8.18
	—	pH 7		Buffer	21.6	7.03	—	—
9:45	B	IRJ 1354-01	8J15074	W	21.6	7.12	21.6	7.12
	B	IRJ 1354-01 DUP			21.5	7.14	21.5	7.14
	B	IRJ 1354-02			21.4	7.14	21.3	7.14
	B	IRJ 1354-03			21.3	4.03	21.3	4.03
	—	pH 7		Buffer	22.3	7.02	—	—
10:00	A	IRJ 1366-01	8J15080	W	21.7	7.63	21.7	7.63
	A	IRJ 1366-01 DUP			21.6	7.65	21.6	7.65
	A	IRJ 1366-02			20.9	7.42	20.9	7.47
	B	IRJ 1406-02			21.3	8.20	21.3	8.22
	A	IRJ 1424-01			21.5	7.42	21.5	7.42

PREPARATION BENCH SHEET

8J15074

TestAmerica Irvine

Printed: 10/15/2008 12:32:24PM

Matrix: Water **Prepared using: Inorganics Prep - GEN PREP** **(No Surrogate)**

Lab Number	C	Analysis	Prepared	Initial (ml)	Final (ml)	Source ID	Spike 1	ul Spike	ul Surrogate	Initials		Extraction Comments
8J15074-DUP1		QC	10/15/08 09:45	50	50	IRJ1354-01						
IRJ1354-01	B	pH - SM4500-H,B	10/15/08 09:45	50	50							BP Sequence. J flag.
IRJ1354-02	B	pH - SM4500-H,B	10/15/08 09:45	50	50							BP Sequence. J flag.
IRJ1354-03	B	pH - SM4500-H,B	10/15/08 09:45	50	50							BP Sequence. J flag.

Spiking Witnessed By N/A Date

Preparation Reviewed By BP Date 10/15/08

Extracts Received By N/A Date

924
922