ENVIRONMENTAL STANDARDS

Setting the Standards for Innovative Environmental Solutions

QUALITY ASSURANCE REVIEW

OF THE OU-4B AND OU-5 SOIL SAMPLES

COLLECTED ON JANUARY 7 AND 8, 2020

AT THE ANACONDA COPPER MINE SITE

IN YERINGTON, NEVADA

March 26, 2020

Prepared for:

ATLANTIC RICHFIELD COMPANY
200 Westlake Park Blvd.
Houston, TX 77079

Prepared by:

ENVIRONMENTAL STANDARDS, INC.
1140 Valley Forge Road
P.O. Box 810
Valley Forge, PA 19482-0810

Issued to:

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS, INC.
10940 White Rock Road, Suite 190
Rancho Cordova, CA 95670

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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 OU-4b and OU-5 soil samples that were collected by Wood Environment & Infrastructure Solutions, Inc., on January 7 and 8, 2020, at the Anaconda Copper Mine Site in Yerington, Nevada. These samples were analyzed by Eurofins Calscience, Irvine in California. The samples and analyses 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 quality control (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.

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 method and the Site-Wide Quality Assurance Project Plan Anaconda Copper Mine Site Yerington, Nevada, Update Version 5.1 (September 5, 2018). 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	SDG	Matrix	Date Sample Collected	Parameter(s) Examined
WRSB208_0-0.5	440-258875-1	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_0-0.5MS (Matrix Spike)	440-258875-1MS	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_0-0.5MSD (Matrix Spike Duplicate)	440-258875-1MSD	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_0.5-3	440-258875-2	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_3-6	440-258875-3	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_6-15	440-258875-4	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_15-25	440-258875-5	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208-FD_15-25 (Field Duplicate of WRSB208_15-25)	440-258875-6	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_25-35	440-258875-7	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_35-45	440-258875-8	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_45-55	440-258875-9	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
EB10 (Equipment Blank)	440-258875-10	440-258875-2	Aq	1/7/20	M^1, M^3, M^4, Hg
WRSB208_55-65	440-258875-11	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_65-75	440-258875-12	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208-FD_65-75 (Field Duplicate of WRSB208_65-75)	440-258875-13	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_75-85	440-258875-14	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_85-95	440-258875-15	440-258875-1	Soil	1/7/20	M^1, M^2, Hg
WRSB208_95-105	440-258875-16	440-258875-1	Soil	1/8/20	M^1, M^2, Hg
WRSB208_105-115	440-258875-17	440-258875-1	Soil	1/8/20	M^1, M^2, Hg
FB10 (Field Blank)	440-258875-18	440-258875-2	Aq	1/8/20	M^1, M^3, M^4, Hg
FB10MS (Matrix Spike)	440-258875-18MS	440-258875-2	Aq	1/8/20	M^4

TABLE 1 (Cont.)

Field Sample Identification	Laboratory Sample Identification	SDG	Matrix	Date Sample Collected	Parameter(s) Examined
FB10MSD (Matrix Spike Duplicate)	440-258875-18MSD	440-258875-2	Aq	1/8/20	M[4]
WRSB208_115-125	440-258875-19	440-258875-1	Soil	1/8/20	M[1], M[2], Hg
WRSB208_125-131.5	440-258875-20	440-258875-1	Soil	1/8/20	M[1], M[2], Hg

NOTES:

M[1] - ICP Metals (specifically, aluminum, boron, calcium, iron, lithium, magnesium, phosphorus, potassium, sodium, strontium, tin, and titanium) by SW-846 Method 6010B.

M[2] - ICP/MS Metals (specifically, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc) by SW-846 Method 6020.

M[3] - ICP/MS Metals (specifically, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium, uranium, vanadium, and zinc) by SW-846 Method 6020.

M[4] - ICP/MS Metals (specifically, thorium) by SW-846 Method 6020A.

Hg - Mercury by SW-846 Methods 7470A/7471A.

Aq - Aqueous.

2.0 Findings

Complete support documentation for this inorganic QA review is presented in Section 8.0 of this report.

A. ICP Metals Analysis

Twenty-two samples (including QC samples) were analyzed for inductively coupled plasma (ICP) metals (specifically, aluminum, boron, calcium, iron, lithium, magnesium, phosphorus, potassium, sodium, strontium, tin, and titanium) by SW-846 Method 6010B. The findings offered in this report for this fraction are based on the items on the following table:

Item Reviewed	Acceptable	Acceptable with Qualification	Not Acceptable
Holding Times	√		
Blank Analysis Results	√		
LCS Results	√		
MS/MSD Results		√	
Post-Digestion Spike Results	√		
Serial Dilution Analysis	√		
Detection Limits/Sensitivity	√		
Calibrations	√		
RL Standard Recoveries	√		
ICP Interference Check Samples	√		
Field Duplicate Precision	√		
Analytical Sequence	√		
Sample Preparation	√		
Quantitation of Positive Results		√	
Evaluation of Raw Data	√		

MS/MSD Results: A high recovery (> 125%) was observed for strontium in an associated matrix spike (MS) analysis, indicating a high bias. The reported positive results for strontium in all Sample Delivery Group (SDG) 440-258875-1 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 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

Twenty-four samples (including QC samples) were analyzed for inductively coupled plasma/mass spectrometry (ICP/MS) metals (specifically, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium, thorium, uranium, vanadium, and/or zinc) by SW-846 Methods 6020/6020A. The findings offered in this report for this fraction are based on the items on the following table:

Item Reviewed	Acceptable	Acceptable with Qualification	Not Acceptable
Holding Times	√		
Blank Analysis Results	√		
LCS Results	√		
MS/MSD Results		√	
Post-Digestion Spike Results	√		
Detection Limits/Sensitivity	√		
Calibrations	√		
RL Standard Recoveries	√		
Internal Standard Recoveries	√		
Serial Dilution Analysis	√		
Field Duplicate Precision	√		
Analytical Sequence	√		
Sample Preparation	√		
Quantitation of Positive Results		√	
Evaluation of Raw Data	√		

MS/MSD Results: Low recoveries (< 75%) were observed for antimony and copper in the associated matrix spike/matrix spike duplicate (MS/MSD) analyses, indicating a low bias. The detection limits for antimony and copper in all SDG 440-258875-1 samples may be higher than reported, and the “not-detected” results have been flagged “UJ” on the data tables. In addition, any reported positive results for antimony and copper in all SDG 440-258875-1 samples should be considered estimated and have been flagged “J” on the data tables.

Low (< 75%) and high (> 125%) recoveries were observed for barium in the associated MS/MSD analyses. In addition, a high relative percent difference (RPD > 35%) was observed between the results for barium in the associated MS/MSD analyses. The reported positive results for barium in all SDG 440-258875-1 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

Twenty-two samples (including QC samples) were analyzed for mercury by SW-846 Methods 7470A/7471A. The findings offered in this report for this fraction are based on the items on the following table.

Item Reviewed	Acceptable	Acceptable with Qualification	Not Acceptable
Holding Times	√		
Blank Analysis Results	√		
LCS Results	√		
MS/MSD Results	√		
Detection Limits/Sensitivity	√		
Calibrations	√		
RL Standard Recoveries	√		
Field Duplicate Precision	√		
Analytical Sequence	√		
Sample Preparation	√		
Quantitation of Positive Results		√	
Evaluation of Raw Data	√		

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.

3.0 Qualifier Summary

A. ICP Metals Analysis

Analyte(s)	SDG(s)	Sample(s)	Validation Qualifier(s)	Reason(s) for Qualification
strontium	440-258875-1	All samples	J	4H – High MS recovery

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

B. ICP/MS Metals Analysis

Analyte(s)	SDG(s)	Sample(s)	Validation Qualifier(s)	Reason(s) for Qualification
antimony and copper	440-258875-1	All samples	J/UJ	4L – Low MS/MSD recoveries
barium	440-258875-1	All samples	J	4 – Low and high MS/MSD recoveries 5 – MS/MSD imprecision

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

C. Mercury Analysis

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

4.0 Overall Assessment

Based on this QA review, the results for strontium, antimony, copper, and barium in all soil samples were qualified as estimated due to out-of-criteria MS/MSD recoveries. The results for barium in all soil samples were qualified as estimated due to MS/MSD imprecision. In addition, several metals results were qualified as estimated because the reported results were between the MDL and the RL.

5.0 Inorganic Data Qualifiers and Valid Reason Codes

<u>Inorganic Data Qualifiers</u>

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 QC criteria
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	Dual-column 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,

Bryan J. Eck
Quality Assurance Chemist

Report Reviewed by,

Konstadina Vlahogiani, M.S.
Senior Technical Chemist/
Project Manager

Report Reviewed and Approved by,

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

ENVIRONMENTAL STANDARDS, INC.
1140 Valley Forge Road
P.O. Box 810
Valley Forge, PA 19482-0810

(610) 935-5577

Date: 3/26/20

7.0 ANALYTICAL RESULTS

A. SDG 440-258875-1

					Lab Sample	440-258875-1						440-258875-11					
					Field Sample	WRSB208_0-0.5						WRSB208_55-65					
					Collect Date	1/7/2020 11:15:00 AM						1/7/2020 2:33:00 PM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/KG	7500		8.1	11		Y	9200		8.2	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	14000		7.3	11		Y	16000		7.4	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	7.5		3.0	5.3		Y	8.0		3.0	5.3		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	3300		5.3	11		Y	3300		5.3	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1200		34	66		Y	1500		35	67		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	320		34	66		Y	600		34	67		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	69	J/4H	2.6	5.3		Y	61	J/4H	2.7	5.3		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.3	11		N		U	5.3	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	340		1.1	2.1		Y	380		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	4.4	J/T	2.6	5.3		Y	4.8	J/T	2.7	5.3		Y
	7440-70-2	Calcium	T	INITIAL	MG/KG	7000		14	26		Y	5500		14	27		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	440		2.6	5.3		Y	430		2.7	5.3		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	5.0		0.26	0.53		Y	5.3		0.27	0.53		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	220		0.26	0.53		Y	300		0.27	0.53		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	0.63	J/T	0.53	1.1		Y	1.6		0.53	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	5.4		0.53	1.1		Y	5.7		0.53	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.11	0.53		N		U	0.11	0.53		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.53		N		U	0.27	0.53		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.54	J/T,4L	0.28	1.1		Y	0.34	J/T,4L	0.29	1.1		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	5.4		0.26	0.53		Y	4.7		0.27	0.53		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	86	J/4,5	0.26	0.53		Y	99	J/4,5	0.27	0.53		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.47		0.16	0.32		Y	0.48		0.16	0.32		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.53		N		U	0.27	0.53		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	6.4		0.53	1.1		Y	9.8		0.53	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	5.0		0.22	0.53		Y	4.4		0.22	0.53		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	67	J/4L	0.53	1.1		Y	62	J/4L	0.53	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	32		0.53	1.1		Y	32		0.53	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	22		5.3	11		Y	28		5.3	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.1		0.21	1.1		Y	1.9		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.062		0.012	0.021		Y		U	0.013	0.021		N

					Lab Sample	440-258875-12						440-258875-13					
					Field Sample	WRSB208_65-75						WRSB208-FD_65-75					
					Collect Date	1/7/2020 2:53:00 PM						1/7/2020 3:03:00 PM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/KG	8900		8.2	11		Y	9200		8.1	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	15000		7.3	11		Y	16000		7.3	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	7.7		3.0	5.3		Y	8.3		2.9	5.3		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	3100		5.3	11		Y	3100		5.3	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1500		34	66		Y	1500		34	66		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	590		34	66		Y	600		34	66		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	64	J/4H	2.7	5.3		Y	61	J/4H	2.6	5.3		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.3	11		N		U	5.3	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	380		1.1	2.1		Y	410		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	4.6	J/T	2.7	5.3		Y	4.7	J/T	2.6	5.3		Y
	7440-70-2	Calcium	T	INITIAL	MG/KG	5100		14	27		Y	5600		14	26		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	440		2.7	5.3		Y	420		2.6	5.3		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	5.3		0.27	0.53		Y	5.4		0.26	0.53		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	330		0.27	0.53		Y	300		0.26	0.53		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	1.3		0.53	1.1		Y	1.3		0.53	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	5.3		0.53	1.1		Y	5.1		0.53	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.11	0.53		N		U	0.11	0.53		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.26	0.53		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.32	J/T,4L	0.29	1.1		Y	0.43	J/T,4L	0.28	1.1		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	4.9		0.27	0.53		Y	6.5		0.26	0.53		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	110	J/4,5	0.27	0.53		Y	97	J/4,5	0.26	0.53		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.44		0.16	0.32		Y	0.45		0.16	0.32		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.26	0.53		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	11		0.53	1.1		Y	11		0.53	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.5		0.22	0.53		Y	4.2		0.22	0.53		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	45	J/4L	0.53	1.1		Y	37	J/4L	0.53	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	34		0.53	1.1		Y	34		0.53	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	29		5.3	11		Y	29		5.3	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.9		0.21	1.1		Y	1.6		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG		U	0.013	0.021		N		U	0.012	0.021		N

					Lab Sample	440-258875-14						440-258875-15					
					Field Sample	WRSB208_75-85						WRSB208_85-95					
					Collect Date	1/7/2020 3:17:00 PM						1/7/2020 3:50:00 PM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/KG	8800		8.3	11		Y	8700		8.2	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	15000		7.5	11		Y	14000		7.4	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	8.2		3.0	5.4		Y	7.7		3.0	5.3		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	3000		5.4	11		Y	3100		5.3	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1500		35	68		Y	1500		35	67		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	630		35	68		Y	740		34	67		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	66	J/4H	2.7	5.4		Y	87	J/4H	2.7	5.3		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.4	11		N		U	5.3	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	400		1.1	2.2		Y	320		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	4.5	J/T	2.7	5.4		Y	4.3	J/T	2.7	5.3		Y
	7440-70-2	Calcium	T	INITIAL	MG/KG	4800		15	27		Y	5300		14	27		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	430		2.7	5.4		Y	430		2.7	5.3		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	5.6		0.27	0.54		Y	5.1		0.27	0.53		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	340		0.27	0.54		Y	300		0.27	0.53		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	0.75	J/T	0.54	1.1		Y	0.70	J/T	0.53	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	5.3		0.54	1.1		Y	5.1		0.53	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.11	0.54		N		U	0.11	0.53		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.27	0.54		N		U	0.27	0.53		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.39	J/T,4L	0.29	1.1		Y	0.39	J/T,4L	0.29	1.1		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	4.6		0.27	0.54		Y	6.1		0.27	0.53		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	110	J/4,5	0.27	0.54		Y	170	J/4,5	0.27	0.53		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.51		0.16	0.32		Y	0.49		0.16	0.32		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.27	0.54		N		U	0.27	0.53		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	9.2		0.54	1.1		Y	8.4		0.53	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.5		0.23	0.54		Y	4.3		0.22	0.53		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	33	J/4L	0.54	1.1		Y	37	J/4L	0.53	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	33		0.54	1.1		Y	33		0.53	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	28		5.4	11		Y	29		5.3	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.6		0.22	1.1		Y	1.9		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG		U	0.013	0.021		N		U	0.013	0.022		N

					Lab Sample	440-258875-16						440-258875-17					
					Field Sample	WRSB208_95-105						WRSB208_105-115					
					Collect Date	1/8/2020 12:06:00 PM						1/8/2020 12:23:00 PM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/KG	8400		8.2	11		Y	9100		8.2	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	14000		7.4	11		Y	15000		7.4	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	8.1		3.0	5.3		Y	9.6		3.0	5.3		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	3200		5.3	11		Y	3500		5.3	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1400		35	67		Y	1600		35	67		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	730		34	67		Y	980		34	67		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	58	J/4H	2.7	5.3		Y	87	J/4H	2.7	5.3		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.3	11		N		U	5.3	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	300		1.1	2.1		Y	380		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	4.9	J/T	2.7	5.3		Y	7.7		2.7	5.3		Y
	7440-70-2	Calcium	T	INITIAL	MG/KG	6100		14	27		Y	7300		14	27		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	460		2.7	5.3		Y	560		2.7	5.3		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	4.9		0.27	0.53		Y	5.6		0.27	0.53		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	280		0.27	0.53		Y	360		0.27	0.53		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	0.74	J/T	0.53	1.1		Y	1.1		0.53	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	4.9		0.53	1.1		Y	5.6		0.53	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.11	0.53		N		U	0.11	0.53		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.27	0.53		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.32	J/T,4L	0.29	1.1		Y	0.32	J/T,4L	0.29	1.1		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	5.2		0.27	0.53		Y	6.6		0.27	0.53		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	96	J/4,5	0.27	0.53		Y	120	J/4,5	0.27	0.53		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.45		0.16	0.32		Y	0.40		0.16	0.32		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.27	0.53		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	8.5		0.53	1.1		Y	8.9		0.53	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.2		0.22	0.53		Y	6.0		0.22	0.53		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	44	J/4L	0.53	1.1		Y	78	J/4L	0.53	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	32		0.53	1.1		Y	34		0.53	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	27		5.3	11		Y	25		5.3	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.6		0.21	1.1		Y	1.6		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG		U	0.013	0.021		N		U	0.013	0.021		N

					Lab Sample	440-258875-19						440-258875-2					
					Field Sample	WRSB208_115-125						WRSB208_0.5-3					
					Collect Date	1/8/2020 12:42:00 PM						1/7/2020 11:25:00 AM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/KG	8400		8.2	11		Y	7900		8.1	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	14000		7.4	11		Y	14000		7.3	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	10		3.0	5.3		Y	8.2		2.9	5.3		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	3600		5.3	11		Y	3300		5.3	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1400		35	67		Y	1200		34	66		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	900		34	67		Y	510		34	66		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	64	J/4H	2.7	5.3		Y	60	J/4H	2.6	5.3		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.3	11		N		U	5.3	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	420		1.1	2.1		Y	380		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	9.6		2.7	5.3		Y	4.7	J/T	2.6	5.3		Y
	7440-70-2	Calcium	T	INITIAL	MG/KG	8300		14	27		Y	6200		14	26		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	550		2.7	5.3		Y	470		2.6	5.3		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	4.0		0.27	0.53		Y	4.0		0.26	0.53		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	220		0.27	0.53		Y	230		0.26	0.53		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	1.2		0.53	1.1		Y	0.58	J/T	0.53	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	5.9		0.53	1.1		Y	5.4		0.53	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.11	0.53		N		U	0.11	0.53		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.26	0.53		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.35	J/T,4L	0.29	1.1		Y	0.35	J/T,4L	0.28	1.1		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	6.6		0.27	0.53		Y	5.0		0.26	0.53		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	80	J/4,5	0.27	0.53		Y	75	J/4,5	0.26	0.53		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.30	J/T	0.16	0.32		Y	0.41		0.16	0.32		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.26	0.53		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	9.0		0.53	1.1		Y	7.7		0.53	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.5		0.22	0.53		Y	4.5		0.22	0.53		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	93	J/4L	0.53	1.1		Y	66	J/4L	0.53	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	35		0.53	1.1		Y	34		0.53	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	23		5.3	11		Y	25		5.3	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.4		0.21	1.1		Y	1.2		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.014	J/T	0.013	0.021		Y		U	0.013	0.021		N

					Lab Sample	440-258875-20						440-258875-3					
					Field Sample	WRSB208_125-131.5						WRSB208_3-6					
					Collect Date	1/8/2020 3:57:00 PM						1/7/2020 11:35:00 AM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/KG	7800		7.9	10		Y	7700		8.1	10		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	14000		7.1	10		Y	14000		7.2	10		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	8.7		2.9	5.1		Y	7.5		2.9	5.2		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	3500		5.1	10		Y	3300		5.2	10		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1300		33	64		Y	1200		34	66		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	730		33	64		Y	560		34	66		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	55	J/4H	2.6	5.1		Y	61	J/4H	2.6	5.2		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.1	10		N		U	5.2	10		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	390		1.0	2.1		Y	350		1.0	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	6.9		2.6	5.1		Y	4.8	J/T	2.6	5.2		Y
	7440-70-2	Calcium	T	INITIAL	MG/KG	7000		14	26		Y	6200		14	26		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	520		2.6	5.1		Y	540		2.6	5.2		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	3.6		0.26	0.51		Y	4.0		0.26	0.52		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	200		0.26	0.51		Y	270		0.26	0.52		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	1.2		0.51	1.0		Y	0.64	J/T	0.52	1.0		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	5.7		0.51	1.0		Y	5.6		0.52	1.0		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.10	0.51		N		U	0.10	0.52		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.51		N		U	0.26	0.52		N
	7440-36-0	Antimony	T	INITIAL	MG/KG		UJ/4L	0.28	1.0		N	0.32	J/T,4L	0.28	1.0		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	5.4		0.26	0.51		Y	4.9		0.26	0.52		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	74	J/4,5	0.26	0.51		Y	94	J/4,5	0.26	0.52		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.32		0.15	0.31		Y	0.37		0.16	0.31		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.51		N		U	0.26	0.52		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	9.7		0.51	1.0		Y	7.1		0.52	1.0		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.4		0.22	0.51		Y	4.7		0.22	0.52		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	150	J/4L	0.51	1.0		Y	66	J/4L	0.52	1.0		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	32		0.51	1.0		Y	33		0.52	1.0		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	22		5.1	10		Y	24		5.2	10		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.0		0.21	1.0		Y	1.3		0.21	1.0		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG		U	0.013	0.021		N		U	0.013	0.021		N

					Lab Sample	440-258875-4						440-258875-5					
					Field Sample	WRSB208_6-15						WRSB208_15-25					
					Collect Date	1/7/2020 11:42:00 AM						1/7/2020 11:53:00 AM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/KG	7900		8.1	10		Y	8300		8.0	10		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	13000		7.2	10		Y	16000		7.2	10		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	7.4		2.9	5.2		Y	8.7		2.9	5.2		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	3300		5.2	10		Y	3500		5.2	10		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1200		34	66		Y	1300		34	65		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	540		34	66		Y	530		33	65		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	64	J/4H	2.6	5.2		Y	59	J/4H	2.6	5.2		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.2	10		N		U	5.2	10		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	320		1.0	2.1		Y	380		1.0	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	4.8	J/T	2.6	5.2		Y	5.4		2.6	5.2		Y
	7440-70-2	Calcium	T	INITIAL	MG/KG	6300		14	26		Y	6600		14	26		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	510		2.6	5.2		Y	500		2.6	5.2		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	3.7		0.26	0.52		Y	8.3		0.26	0.52		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	210		0.26	0.52		Y	270		0.26	0.52		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	0.53	J/T	0.52	1.0		Y	1.5		0.52	1.0		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	5.5		0.52	1.0		Y	5.8		0.52	1.0		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.10	0.52		N		U	0.10	0.52		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.26	0.52		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.30	J/T,4L	0.28	1.0		Y	0.43	J/T,4L	0.28	1.0		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	5.1		0.26	0.52		Y	6.3		0.26	0.52		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	81	J/4,5	0.26	0.52		Y	91	J/4,5	0.26	0.52		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.43		0.16	0.31		Y	0.41		0.16	0.31		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.26	0.52		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	7.8		0.52	1.0		Y	8.7		0.52	1.0		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.5		0.22	0.52		Y	4.6		0.22	0.52		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	63	J/4L	0.52	1.0		Y	110	J/4L	0.52	1.0		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	32		0.52	1.0		Y	36		0.52	1.0		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	24		5.2	10		Y	25		5.2	10		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.5		0.21	1.0		Y	1.6		0.21	1.0		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG		U	0.013	0.021		N		U	0.012	0.020		N

					Lab Sample	440-258875-6						440-258875-7					
					Field Sample	WRSB208-FD_15-25						WRSB208_25-35					
					Collect Date	1/7/2020 11:58:00 AM						1/7/2020 12:10:00 PM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/KG	8100		7.9	10		Y	8600		8.1	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	15000		7.0	10		Y	15000		7.3	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	7.9		2.9	5.1		Y	7.8		2.9	5.3		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	3500		5.1	10		Y	3300		5.3	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1300		33	64		Y	1500		34	66		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	520		33	64		Y	570		34	66		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	61	J/4H	2.6	5.1		Y	62	J/4H	2.6	5.3		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.1	10		N		U	5.3	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	330		1.0	2.0		Y	390		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	4.9	J/T	2.6	5.1		Y	5.7		2.6	5.3		Y
	7440-70-2	Calcium	T	INITIAL	MG/KG	6900		14	26		Y	9600		14	26		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	500		2.6	5.1		Y	510		2.6	5.3		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	7.3		0.26	0.51		Y	5.6		0.26	0.53		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	280		0.26	0.51		Y	270		0.26	0.53		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	1.3		0.51	1.0		Y	1.7		0.53	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	5.9		0.51	1.0		Y	5.9		0.53	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.10	0.51		N		U	0.11	0.53		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.51		N		U	0.26	0.53		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.37	J/T,4L	0.28	1.0		Y	0.37	J/T,4L	0.28	1.1		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	5.7		0.26	0.51		Y	6.0		0.26	0.53		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	85	J/4,5	0.26	0.51		Y	94	J/4,5	0.26	0.53		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.42		0.15	0.31		Y	0.35		0.16	0.32		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.51		N		U	0.26	0.53		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	7.9		0.51	1.0		Y	10		0.53	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	5.0		0.21	0.51		Y	4.7		0.22	0.53		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	110	J/4L	0.51	1.0		Y	130	J/4L	0.53	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	34		0.51	1.0		Y	34		0.53	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	23		5.1	10		Y	26		5.3	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.4		0.20	1.0		Y	1.3		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG		U	0.013	0.021		N	0.026		0.013	0.021		Y

					Lab Sample	440-258875-8						440-258875-9					
					Field Sample	WRSB208_35-45						WRSB208_45-55					
					Collect Date	1/7/2020 12:21:00 PM						1/7/2020 2:16:00 PM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/KG	8900		8.0	10		Y	9000		8.2	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	15000		7.2	10		Y	14000		7.4	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	8.0		2.9	5.2		Y	8.0		3.0	5.3		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	3600		5.2	10		Y	3300		5.3	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1400		34	65		Y	1500		35	67		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	630		33	65		Y	610		34	67		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	67	J/4H	2.6	5.2		Y	74	J/4H	2.7	5.3		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.2	10		N		U	5.3	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	370		1.0	2.1		Y	320		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	4.7	J/T	2.6	5.2		Y	4.6	J/T	2.7	5.3		Y
	7440-70-2	Calcium	T	INITIAL	MG/KG	6200		14	26		Y	6700		14	27		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	540		2.6	5.2		Y	420		2.7	5.3		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	6.3		0.26	0.52		Y	5.4		0.27	0.53		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	320		0.26	0.52		Y	300		0.27	0.53		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	1.5		0.52	1.0		Y	1.2		0.53	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	6.1		0.52	1.0		Y	5.3		0.53	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.10	0.52		N		U	0.11	0.53		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.27	0.53		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.39	J/T,4L	0.28	1.0		Y	0.33	J/T,4L	0.29	1.1		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	5.0		0.26	0.52		Y	4.7		0.27	0.53		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	100	J/4,5	0.26	0.52		Y	110	J/4,5	0.27	0.53		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.43		0.16	0.31		Y	0.54		0.16	0.32		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.27	0.53		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	11		0.52	1.0		Y	9.1		0.53	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.5		0.22	0.52		Y	4.5		0.22	0.53		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	68	J/4L	0.52	1.0		Y	49	J/4L	0.53	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	33		0.52	1.0		Y	33		0.53	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	27		5.2	10		Y	28		5.3	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.5		0.21	1.0		Y	1.6		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG		U	0.012	0.020		N		U	0.013	0.021		N

B. SDG 440-258875-2

Yerington
SDG: 440-258875-2

					Lab Sample	440-258875-10						440-258875-18					
					Field Sample	EB10						FB10					
					Collect Date	1/7/2020 2:29:00 PM						1/8/2020 12:28:00 PM					
					Type	N						N					
					Parent												
Method	**CAS Number**	**Chemical Name**	**TD**	**Test Type**	**Units**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**	**Result**	**Qual/ Reason**	**MDL**	**RDL**	**Uncert**	**Detect Flag**
SW-846 6010B	7429-90-5	Aluminum	T	INITIAL	MG/L	0.060	J/T	0.050	0.10		Y		U	0.050	0.10		N
	7439-89-6	Iron	T	INITIAL	MG/L	0.080	J/T	0.050	0.10		Y		U	0.050	0.10		N
	7439-93-2	Lithium	T	INITIAL	UG/L		U	25	500		N		U	25	500		N
	7439-95-4	Magnesium	T	INITIAL	MG/L	0.032		0.010	0.020		Y		U	0.010	0.020		N
	7440-09-7	Potassium	T	INITIAL	MG/L		U	0.25	0.50		N		U	0.25	0.50		N
	7440-23-5	Sodium	T	INITIAL	MG/L		U	0.26	0.50		N		U	0.26	0.50		N
	7440-24-6	Strontium	T	INITIAL	MG/L		U	0.010	0.020		N		U	0.010	0.020		N
	7440-31-5	Tin	T	INITIAL	MG/L		U	0.050	0.10		N		U	0.050	0.10		N
	7440-32-6	Titanium	T	INITIAL	MG/L		U	0.0025	0.0050		N		U	0.0025	0.0050		N
	7440-42-8	Boron	T	INITIAL	UG/L		U	25	50		N		U	25	50		N
	7440-70-2	Calcium	T	INITIAL	MG/L	0.19		0.050	0.10		Y		U	0.050	0.10		N
	7723-14-0	Phosphorus	T	INITIAL	MG/L		U	0.10	0.20		N		U	0.10	0.20		N
SW-846 6020	7439-92-1	Lead	T	INITIAL	UG/L		U	0.50	1.0		N		U	0.50	1.0		N
	7439-96-5	Manganese	T	INITIAL	UG/L	8.8		0.50	1.0		Y		U	0.50	1.0		N
	7439-98-7	Molybdenum	T	INITIAL	UG/L		U	0.50	2.0		N		U	0.50	2.0		N
	7440-02-0	Nickel	T	INITIAL	UG/L	0.59	J/T	0.50	2.0		Y		U	0.50	2.0		N
	7440-22-4	Silver	T	INITIAL	UG/L		U	0.50	1.0		N		U	0.50	1.0		N
	7440-28-0	Thallium	T	INITIAL	UG/L		U	0.20	1.0		N		U	0.20	1.0		N
	7440-36-0	Antimony	T	INITIAL	UG/L		U	0.50	2.0		N		U	0.50	2.0		N
	7440-38-2	Arsenic	T	INITIAL	UG/L		U	0.50	1.0		N		U	0.50	1.0		N
	7440-39-3	Barium	T	INITIAL	UG/L	1.3		0.50	1.0		Y		U	0.50	1.0		N
	7440-41-7	Beryllium	T	INITIAL	UG/L		U	0.25	0.50		N		U	0.25	0.50		N
	7440-43-9	Cadmium	T	INITIAL	UG/L		U	0.25	1.0		N		U	0.25	1.0		N
	7440-47-3	Chromium	T	INITIAL	UG/L	1.8	J/T	0.50	2.0		Y		U	0.50	2.0		N
	7440-48-4	Cobalt	T	INITIAL	UG/L		U	0.50	1.0		N		U	0.50	1.0		N
	7440-50-8	Copper	T	INITIAL	UG/L	2.0		0.50	2.0		Y		U	0.50	2.0		N
	7440-61-1	Uranium	T	INITIAL	UG/L		U	0.50	1.0		N		U	0.50	1.0		N
	7440-62-2	Vanadium	T	INITIAL	UG/L		U	1.0	2.0		N		U	1.0	2.0		N
	7440-66-6	Zinc	T	INITIAL	UG/L	2.8	J/T	2.5	20		Y	12	J/T	2.5	20		Y
	7782-49-2	Selenium	T	INITIAL	UG/L		U	0.50	2.0		N		U	0.50	2.0		N
SW-846 6020A	7440-29-1	Thorium	T	INITIAL	UG/L		U	0.90	2.0		N		U	0.90	2.0		N
SW-846 7470A	7439-97-6	Mercury	T	INITIAL	MG/L		U	0.00010	0.00020		N		U	0.00010	0.00020		N

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8.0 SUPPORTING DOCUMENTATION

A. SDG 440-258875-1

ENVIRONMENTAL STANDARDS

INORGANIC ANALYSIS SUPPORT DOCUMENTATION

ESI project name:	ARCO Yerington	Reviewed by:	BE
Sample Collection Dates:	1/7-8/20	Approved by:	
Job Number:	20115675.GW20	Completion Date:	
Project Manager:	Dina		
Laboratory:	TA St. Louis		

Applicable Sample No's ( ) Refer to Table 1 in the Quality Assurance Review

Deliverable:			Sample No.	Lab Control No.
	CLP (Full)	( )	440-258875-1	
	Level IV (Full)	( )		
	Limited	(x)		
	Other:			

The following table indicates criteria that 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 Letter for Comments Below					Support Documentation Attachments Check (√) if Yes or Footnote Letter for Comments Below				
	6010	6020	Mercury			6010	6020	Mercury			6010	6020	Mercury		
Holding Times	x	x	x								x	x	x		
Blank Analysis Results	x	x	x								x	x	x		
Matrix Spike (Predigestion) Results	x	x	x			x	x				x	x	x		
Duplicate Analysis: (x) Field ( ) Lab	x	x	x								x	x	x		
Quantitation of Results	x	x	x								x	x	x		
Detection Limit/Sensitivity	x	x	x								x	x	x		
Initial Calibrations	x	x	x								x	x	x		
Continuing Calibrations	x	x	x								x	x	x		
Laboratory Control Standard (LCS)	x	x	x								x	x	x		
ICP Linear Range Analysis	x	x									x	x			
ICP Interference Checks	x	x									x	x			
ICP Serial Dilutions	x	x									x	x			
ICP Post-Digestion Spike	x	x									x	x			
GFAA Post Digestion Spikes															
GFAA Duplicate Injections															
ICP Multiple Exposures															
GFAA Standard Additions															
CRDL Standards	x	x	x								x	x	x		
Condition on Receipt	x	x	x								x	x	x		
Percent Solids	x	x	x								x	x	x		
Others: Total vs. Dissolved Metals															

Comments:

ENVIRONMENTAL STANDARDS

BLANK ANALYSIS RESULTS FOR INORGANIC PARAMETERS

	Blank Type									
	Method									
Matrix (Aq., S.)	ICB	CCB	Prep.	Trip	Equip	Field	Blank Sample Number	Contaminant	Concentration (µg/L)	Qualification limit (5×)
							All blanks	none		0
										0
										0
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Aq = Aqueous; S = Solid

Notes:

EVALUATION OF DUPLICATE ANALYSIS PRECISION

Units mg/kg	PRECISION OBJECTIVES[1]		
	Analyte > or = 5 X RL	RPD < or =	40
	Analyte < 5 X RL	Difference < or = RL Times	2

ANALYTE	WRSB208_65-75 Analyte Concentration[2]	Qual	RL	WRSB208-FD_65-75 Analyte Concentration[2]	Qual	RL	Difference	RPD	Notes
Aluminum	8900		11	9200		11	NA	3.3%	IN
Boron	4.6	J	5.3	4.7	J	5.3	0.10	NA	IN
Calcium	5100		27	5600		26	NA	9.3%	IN
Iron	15000		11	16000		11	NA	6.5%	IN
Lithium	7.7		5.3	8.3		5.3	0.60	NA	IN
Magnesium	3100		11	3100		11	NA	0.0%	IN
Phosphorus	440		5.3	420		5.3	NA	4.7%	IN
Potassium	1500		66	1500		66	NA	0.0%	IN
Sodium	590		66	600		66	NA	1.7%	IN
Strontium	64		5.3	61		5.3	NA	5%	IN
Titanium	380		2.1	410		2.10	NA	7.6%	IN
Antimony	0.32	J	1.1	0.43	J	1.1	0.110	NA	IN
Arsenic	4.9		0.53	6.5		0.53	NA	28.1%	IN
Barium	110		0.53	97		0.53	NA	12.6%	IN
Beryllium	0.44		0.32	0.45		0.32	0.010	NA	IN
Chromium	11		1.1	11		1.1	NA	0.0%	IN
Cobalt	4.5		0.53	4.2		0.53	NA	6.9%	IN
Copper	45		1.1	37		1.1	NA	19.5%	IN
Lead	5.3		0.53	5.4		0.53	NA	1.9%	IN
Manganese	330		0.53	300		0.53	NA	10%	IN
Molybdenum	1.3		1.1	1.3		1	0.00	NA	IN
Nickel	5.3		1.1	5.1		1.100	0.20	NA	IN
Selenium	1.9		1.1	1.6		1.1	0.30	NA	IN
Vanadium	34		1.1	34		1.1	NA	0.0%	IN
Zinc	29		11	29		11	0.000	NA	IN

EVALUATION OF DUPLICATE ANALYSIS PRECISION

Units mg/kg	PRECISION OBJECTIVES[1]		
	Analyte > or = 5 X RL	RPD < or =	40
	Analyte < 5 X RL	Difference < or = RL Times	2

ANALYTE	WRSB208_15-25 Analyte Concentration[2]	Qual	RL	WRSB208-FD_15-25 Analyte Concentration[2]	Qual	RL	Difference	RPD	Notes
Aluminum	8300		10	8100		10	NA	2.4%	IN
Boron	5.4		5.2	4.9	J	5.1	0.50	NA	IN
Calcium	6600		26	6900		26	NA	4.4%	IN
Iron	16000		10	15000		10	NA	6.5%	IN
Lithium	8.7		5.2	7.9		5.1	0.80	NA	IN
Magnesium	3500		10	3500		10	NA	0%	IN
Phosphorus	500		5.2	500		5.1	NA	0%	IN
Potassium	1300		65	1300		64	NA	0%	IN
Sodium	530		65	520		64	NA	2%	IN
Strontium	59		5.2	61		5.1	NA	3.3%	IN
Titanium	380		2.1	330		2.00	NA	14.1%	IN
Antimony	0.43	J	1.0	0.37	J	1.0	0.060	NA	IN
Arsenic	6.3		0.52	5.7		0.51	NA	10.0%	IN
Barium	91.0		0.52	85		0.51	NA	7%	IN
Beryllium	0.41		0.31	0.42		0.31	0.01	NA	IN
Chromium	8.7		1.0	7.9		1.00	NA	9.6%	IN
Cobalt	4.6		0.52	5.0		0.51	NA	8.3%	IN
Copper	110		1.0	110		1.0	NA	0%	IN
Lead	8.3		0.52	7.3		0.5	NA	12.8%	IN
Manganese	270		0.52	280		0.51	NA	4%	IN
Molybdenum	1.5		1.0	1.3		1.0	0.20	NA	IN
Nickel	5.8		1.0	5.9		1.0	NA	1.7%	IN
Selenium	1.6		1.0	1.4		1.0	0.200	NA	IN
Vanadium	36		1.0	34		1.0	NA	5.7%	IN
Zinc	25		10	23		10	2.000	NA	IN
								#DIV/0!	#DIV/0!
								#DIV/0!	#DIV/0!
								#DIV/0!	#DIV/0!
								#DIV/0!	#DIV/0!
								#DIV/0!	#DIV/0!

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ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Level 4

Rep 232

Laboratory Job ID: 440-258875-1
Client Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

For:
Wood E&I Solutions Inc
10940 White Rock Road Suite 190
Rancho Cordova, California 95670

Attn: Lynda Lombardi

Authorized for release by:
1/24/2020 5:35:59 PM

Christian Bondoc, Project Manager I
(949)260-3218
christian.bondoc@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-258875-1	WRSB208_0-0.5	Solid	01/07/20 11:15	01/10/20 10:00	
440-258875-2	WRSB208_0.5-3	Solid	01/07/20 11:25	01/10/20 10:00	
440-258875-3	WRSB208_3-6	Solid	01/07/20 11:35	01/10/20 10:00	
440-258875-4	WRSB208_6-15	Solid	01/07/20 11:42	01/10/20 10:00	
440-258875-5	WRSB208_15-25	Solid	01/07/20 11:53	01/10/20 10:00	
440-258875-6	WRSB208-FD_15-25	Solid	01/07/20 11:58	01/10/20 10:00	
440-258875-7	WRSB208_25-35	Solid	01/07/20 12:10	01/10/20 10:00	
440-258875-8	WRSB208_35-45	Solid	01/07/20 12:21	01/10/20 10:00	
440-258875-9	WRSB208_45-55	Solid	01/07/20 14:16	01/10/20 10:00	
440-258875-11	WRSB208_55-65	Solid	01/07/20 14:33	01/10/20 10:00	
440-258875-12	WRSB208_65-75	Solid	01/07/20 14:53	01/10/20 10:00	
440-258875-13	WRSB208-FD_65-75	Solid	01/07/20 15:03	01/10/20 10:00	
440-258875-14	WRSB208_75-85	Solid	01/07/20 15:17	01/10/20 10:00	
440-258875-15	WRSB208_85-95	Solid	01/07/20 15:50	01/10/20 10:00	
440-258875-16	WRSB208_95-105	Solid	01/08/20 12:06	01/10/20 10:00	
440-258875-17	WRSB208_105-115	Solid	01/08/20 12:23	01/10/20 10:00	
440-258875-19	WRSB208_115-125	Solid	01/08/20 12:42	01/10/20 10:00	
440-258875-20	WRSB208_125-131.5	Solid	01/08/20 15:57	01/10/20 10:00	

Job ID: 440-258875-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-258875-1

Comments
No additional comments.

Receipt
The samples were received on 1/10/2020 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Aluminum and Iron for preparation batch 440-590204 and analytical batch 440-590318 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: The post digestion spike % recovery for Aluminum and Iron associated with batch 440-590318 was outside of control limits.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Magnesium, Aluminum and Iron for preparation batch 440-590204 and analytical batch 440-590424 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Copper and Antimony for preparation batch 440-590297 and analytical batch 440-590542 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision of Barium for preparation batch 440-590297 and analytical batch 440-590542 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) was within acceptance limits.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision of Strontium for preparation batch 440-590297 and analytical batch 440-590755 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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 BPLAMP Technical Specifications, applicable federal, state, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPLAMP. This Laboratory Report is confidential and is intended for the sole use of Eurofins TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The signature on the cover page extends to the case narrative and all the data and forms in the package. The Chain of Custody is included and is an integral part of this report.

Christian Bondoc
Project Manager I
1/24/2020 5:35:59 PM

Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_0-0.5 — Lab Sample ID: 440-258875-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7500		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Boron	4.4	J	5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	7000		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	14000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	7.5		5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3300		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	440		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	320		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	69	F2 F1	5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	340		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.54	J F1	1.1	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	5.4		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	86	F1 F2	0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.47		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	6.4		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	5.0		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	67	F1	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	5.0		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	220		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	0.63	J	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.4		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.1		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	32		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	22		11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.062		0.021	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_0.5-3 — Lab Sample ID: 440-258875-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7900		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Boron	4.7	J	5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	6200		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	14000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	8.2		5.3	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3300		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	470		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	510		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	60		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	380		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.35	J	1.1	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	5.0		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	75		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.41		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	7.7		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.5		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	66		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	4.0		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	230		0.53	0.26	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_0.5-3 (Continued) — Lab Sample ID: 440-258875-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.58	J	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.4		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.2		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	34		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	25		11	5.3	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_3-6 — Lab Sample ID: 440-258875-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7700		10	8.1	mg/Kg	5	☼	6010B	Total/NA
Boron	4.8	J	5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	6200		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	14000		10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	7.5		5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3300		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	540		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	560		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	61		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	350		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.32	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.9		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	94		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.37		0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	7.1		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.7		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	66		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	4.0		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	270		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	0.64	J	1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	5.6		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	1.3		1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	33		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	24		10	5.2	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_6-15 — Lab Sample ID: 440-258875-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7900		10	8.1	mg/Kg	5	☼	6010B	Total/NA
Boron	4.8	J	5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	6300		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	13000		10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	7.4		5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3300		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	510		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	540		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	64		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	320		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.30	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_6-15 (Continued) — Lab Sample ID: 440-258875-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.1		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	81		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.43		0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	7.8		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.5		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	63		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	3.7		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	210		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	0.53	J	1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	5.5		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	1.5		1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	32		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	24		10	5.2	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_15-25 — Lab Sample ID: 440-258875-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8300		10	8.0	mg/Kg	5	☼	6010B	Total/NA
Boron	5.4		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	6600		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	16000		10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	8.7		5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3500		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	500		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1300		65	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	530		65	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	59		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	380		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.43	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.3		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	91		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.41		0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	8.7		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.6		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	110		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	8.3		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	270		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.5		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	5.8		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	1.6		1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	36		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	25		10	5.2	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208-FD_15-25 — Lab Sample ID: 440-258875-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8100		10	7.9	mg/Kg	5	☼	6010B	Total/NA
Boron	4.9	J	5.1	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	6900		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	15000		10	7.0	mg/Kg	5	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: WRSB208-FD_15-25 (Continued) — Lab Sample ID: 440-258875-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	7.9		5.1	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3500		10	5.1	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	500		5.1	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1300		64	33	mg/Kg	5	☼	6010B	Total/NA
Sodium	520		64	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	61		5.1	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	330		2.0	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.37	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	5.7		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	85		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.42		0.31	0.15	mg/Kg	20	☼	6020	Total/NA
Chromium	7.9		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Cobalt	5.0		0.51	0.21	mg/Kg	20	☼	6020	Total/NA
Copper	110		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Lead	7.3		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	280		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.3		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Nickel	5.9		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Selenium	1.4		1.0	0.20	mg/Kg	20	☼	6020	Total/NA
Vanadium	34		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Zinc	23		10	5.1	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_25-35 — Lab Sample ID: 440-258875-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8600		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Boron	5.7		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	9600		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	15000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	7.8		5.3	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3300		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	510		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1500		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	570		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	62		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	390		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.37	J	1.1	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.0		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	94		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.35		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	10		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.7		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	130		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	5.6		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	270		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.7		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.9		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.3		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	34		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	26		11	5.3	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: WRSB208_25-35 (Continued) — Lab Sample ID: 440-258875-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.026		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_35-45 — Lab Sample ID: 440-258875-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8900		10	8.0	mg/Kg	5	☼	6010B	Total/NA
Boron	4.7	J	5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	6200		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	15000		10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	8.0		5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3600		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	540		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1400		65	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	630		65	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	67		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	370		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.39	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	5.0		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	100		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.43		0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	11		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.5		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	68		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	6.3		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	320		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.5		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	6.1		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	1.5		1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	33		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	27		10	5.2	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_45-55 — Lab Sample ID: 440-258875-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9000		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Boron	4.6	J	5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	6700		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	14000		11	7.4	mg/Kg	5	☼	6010B	Total/NA
Lithium	8.0		5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3300		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	420		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1500		67	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	610		67	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	74		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	320		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.33	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.7		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	110		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.54		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	9.1		1.1	0.53	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: WRSB208_45-55 (Continued) — Lab Sample ID: 440-258875-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	4.5		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	49		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	5.4		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	300		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.2		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.3		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.6		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	33		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	28		11	5.3	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_55-65 — Lab Sample ID: 440-258875-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9200		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Boron	4.8	J	5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	5500		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	16000		11	7.4	mg/Kg	5	☼	6010B	Total/NA
Lithium	8.0		5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3300		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	430		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1500		67	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	600		67	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	61		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	380		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.34	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.7		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	99		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.48		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	9.8		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.4		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	62		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	5.3		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	300		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.6		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.7		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.9		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	32		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	28		11	5.3	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_65-75 — Lab Sample ID: 440-258875-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8900		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Boron	4.6	J	5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	5100		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	15000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	7.7		5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3100		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	440		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1500		66	34	mg/Kg	5	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_65-75 (Continued) — Lab Sample ID: 440-258875-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	590		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	64		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	380		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.32	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.9		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	110		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.44		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	11		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.5		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	45		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	5.3		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	330		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.3		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.3		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.9		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	34		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	29		11	5.3	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208-FD_65-75 — Lab Sample ID: 440-258875-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9200		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Boron	4.7	J	5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	5600		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	16000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	8.3		5.3	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3100		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	420		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1500		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	600		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	61		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	410		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.43	J	1.1	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.5		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	97		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.45		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	11		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.2		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	37		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	5.4		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	300		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.3		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.1		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.6		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	34		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	29		11	5.3	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_75-85 — Lab Sample ID: 440-258875-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8800		11	8.3	mg/Kg	5	☼	6010B	Total/NA
Boron	4.5	J	5.4	2.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	4800		27	15	mg/Kg	5	☼	6010B	Total/NA
Iron	15000		11	7.5	mg/Kg	5	☼	6010B	Total/NA
Lithium	8.2		5.4	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3000		11	5.4	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	430		5.4	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1500		68	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	630		68	35	mg/Kg	5	☼	6010B	Total/NA
Strontium	66		5.4	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	400		2.2	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.39	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.6		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	110		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.51		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	9.2		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.5		0.54	0.23	mg/Kg	20	☼	6020	Total/NA
Copper	33		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Lead	5.6		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	340		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	0.75	J	1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Nickel	5.3		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Selenium	1.6		1.1	0.22	mg/Kg	20	☼	6020	Total/NA
Vanadium	33		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Zinc	28		11	5.4	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_85-95 — Lab Sample ID: 440-258875-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8700		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Boron	4.3	J	5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	5300		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	14000		11	7.4	mg/Kg	5	☼	6010B	Total/NA
Lithium	7.7		5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3100		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	430		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1500		67	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	740		67	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	87		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	320		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.39	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.1		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	170		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.49		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	8.4		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.3		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	37		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	5.1		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	300		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	0.70	J	1.1	0.53	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: WRSB208_85-95 (Continued) — Lab Sample ID: 440-258875-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	5.1		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.9		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	33		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	29		11	5.3	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_95-105 — Lab Sample ID: 440-258875-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8400		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Boron	4.9	J	5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	6100		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	14000		11	7.4	mg/Kg	5	☼	6010B	Total/NA
Lithium	8.1		5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3200		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	460		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1400		67	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	730		67	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	58		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	300		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.32	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	5.2		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	96		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.45		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	8.5		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.2		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	44		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	4.9		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	280		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	0.74	J	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	4.9		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.6		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	32		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	27		11	5.3	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_105-115 — Lab Sample ID: 440-258875-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9100		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Boron	7.7		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	7300		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	15000		11	7.4	mg/Kg	5	☼	6010B	Total/NA
Lithium	9.6		5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3500		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	560		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1600		67	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	980		67	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	87		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	380		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.32	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.6		0.53	0.27	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_105-115 (Continued) — Lab Sample ID: 440-258875-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	120		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.40		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	8.9		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	6.0		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	78		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	5.6		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	360		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.1		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.6		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.6		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	34		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	25		11	5.3	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_115-125 — Lab Sample ID: 440-258875-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8400		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Boron	9.6		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	8300		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	14000		11	7.4	mg/Kg	5	☼	6010B	Total/NA
Lithium	10		5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3600		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	550		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1400		67	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	900		67	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	64		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	420		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.35	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.6		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	80		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.30	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	9.0		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.5		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	93		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	4.0		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	220		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.2		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.9		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	1.4		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	35		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	23		11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.014	J	0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: WRSB208_125-131.5 — Lab Sample ID: 440-258875-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7800		10	7.9	mg/Kg	5	☼	6010B	Total/NA
Boron	6.9		5.1	2.6	mg/Kg	5	☼	6010B	Total/NA
Calcium	7000		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	14000		10	7.1	mg/Kg	5	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_125-131.5 (Continued)

Lab Sample ID: 440-258875-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	8.7		5.1	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3500		10	5.1	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	520		5.1	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1300		64	33	mg/Kg	5	☼	6010B	Total/NA
Sodium	730		64	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	55		5.1	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	390		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Arsenic	5.4		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	74		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.32		0.31	0.15	mg/Kg	20	☼	6020	Total/NA
Chromium	9.7		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.4		0.51	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	150		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Lead	3.6		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	200		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.2		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Nickel	5.7		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Selenium	1.0		1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	32		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Zinc	22		10	5.1	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_0-0.5

Lab Sample ID: 440-258875-1

Date Collected: 01/07/20 11:15
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7500		11	8.1	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Boron	4.4	J	5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Calcium	7000		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Iron	14000		11	7.3	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Lithium	7.5		5.3	3.0	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Magnesium	3300		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Phosphorus	440		5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Potassium	1200		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Sodium	320		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Strontium	69	F2 F1	5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5
Titanium	340		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 15:37	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J F1	1.1	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Arsenic	5.4		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Barium	86	F1 F2	0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Beryllium	0.47		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Chromium	6.4		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Cobalt	5.0		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Copper	67	F1	1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Lead	5.0		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Manganese	220		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Molybdenum	0.63	J	1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Nickel	5.4		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Selenium	1.1		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Thallium	ND		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Vanadium	32		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20
Zinc	22		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 15:41	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.062		0.021	0.012	mg/Kg	☼	01/17/20 08:41	01/20/20 12:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_0.5-3

Lab Sample ID: 440-258875-2

Date Collected: 01/07/20 11:25
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 96.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7900		11	8.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Boron	4.7	J	5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Calcium	6200		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Iron	14000		11	7.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5

Client Sample ID: WRSB208_0.5-3

Lab Sample ID: 440-258875-2

Date Collected: 01/07/20 11:25
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 96.0

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	8.2		5.3	2.9	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Magnesium	3300		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Phosphorus	470		5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Potassium	1200		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Sodium	510		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Strontium	60		5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5
Titanium	380		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:14	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J	1.1	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Arsenic	5.0		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Barium	75		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Beryllium	0.41		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Chromium	7.7		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Cobalt	4.5		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Copper	66		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Lead	4.0		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Manganese	230		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Molybdenum	0.58	J	1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Nickel	5.4		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Selenium	1.2		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Thallium	ND		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Vanadium	34		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20
Zinc	25		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:04	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 12:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_3-6

Lab Sample ID: 440-258875-3

Date Collected: 01/07/20 11:35
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7700		10	8.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Boron	4.8	J	5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Calcium	6200		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Iron	14000		10	7.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Lithium	7.5		5.2	2.9	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Magnesium	3300		10	5.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Phosphorus	540		5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Potassium	1200		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5

Client Sample ID: WRSB208_3-6

Lab Sample ID: 440-258875-3

Date Collected: 01/07/20 11:35
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.8

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	560		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Strontium	61		5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Tin	ND		10	5.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5
Titanium	350		2.1	1.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:17	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J	1.0	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Arsenic	4.9		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Barium	94		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Beryllium	0.37		0.31	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Chromium	7.1		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Cobalt	4.7		0.52	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Copper	66		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Lead	4.0		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Manganese	270		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Molybdenum	0.64	J	1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Nickel	5.6		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Selenium	1.3		1.0	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Silver	ND		0.52	0.10	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Thallium	ND		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Vanadium	33		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20
Zinc	24		10	5.2	mg/Kg	☼	01/13/20 16:29	01/14/20 16:06	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 12:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_6-15

Lab Sample ID: 440-258875-4

Date Collected: 01/07/20 11:42
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7900		10	8.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Boron	4.8	J	5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Calcium	6300		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Iron	13000		10	7.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Lithium	7.4		5.2	2.9	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Magnesium	3300		10	5.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Phosphorus	510		5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Potassium	1200		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Sodium	540		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Strontium	64		5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Tin	ND		10	5.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5
Titanium	320		2.1	1.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:19	5

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_6-15

Lab Sample ID: 440-258875-4

Date Collected: 01/07/20 11:42
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.0	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Arsenic	5.1		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Barium	81		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Beryllium	0.43		0.31	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Chromium	7.8		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Cobalt	4.5		0.52	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Copper	63		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Lead	3.7		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Manganese	210		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Molybdenum	0.53	J	1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Nickel	5.5		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Selenium	1.5		1.0	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Silver	ND		0.52	0.10	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Thallium	ND		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Vanadium	32		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20
Zinc	24		10	5.2	mg/Kg	☼	01/13/20 16:29	01/14/20 16:08	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 12:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_15-25

Lab Sample ID: 440-258875-5

Date Collected: 01/07/20 11:53
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8300		10	8.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Boron	5.4		5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Calcium	6600		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Iron	16000		10	7.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Lithium	8.7		5.2	2.9	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Magnesium	3500		10	5.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Phosphorus	500		5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Potassium	1300		65	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Sodium	530		65	33	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Strontium	59		5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Tin	ND		10	5.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5
Titanium	380		2.1	1.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:21	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43	J	1.0	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Arsenic	6.3		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Barium	91		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Beryllium	0.41		0.31	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20

Client Sample ID: WRSB208_15-25

Lab Sample ID: 440-258875-5

Date Collected: 01/07/20 11:53
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.8

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Chromium	**8.7**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Cobalt	**4.6**		0.52	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Copper	**110**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Lead	**8.3**		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Manganese	**270**		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Molybdenum	**1.5**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Nickel	**5.8**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Selenium	**1.6**		1.0	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Silver	ND		0.52	0.10	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Thallium	ND		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Vanadium	**36**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20
Zinc	**25**		10	5.2	mg/Kg	☼	01/13/20 16:29	01/14/20 16:10	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.012	mg/Kg	☼	01/17/20 08:41	01/20/20 12:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	**yes**				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208-FD_15-25

Lab Sample ID: 440-258875-6

Date Collected: 01/07/20 11:58
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 96.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8100**		10	7.9	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Boron	**4.9**	J	5.1	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Calcium	**6900**		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Iron	**15000**		10	7.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Lithium	**7.9**		5.1	2.9	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Magnesium	**3500**		10	5.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Phosphorus	**500**		5.1	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Potassium	**1300**		64	33	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Sodium	**520**		64	33	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Strontium	**61**		5.1	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Tin	ND		10	5.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5
Titanium	**330**		2.0	1.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:23	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.37**	J	1.0	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Arsenic	**5.7**		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Barium	**85**		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Beryllium	**0.42**		0.31	0.15	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Cadmium	ND		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Chromium	**7.9**		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Cobalt	**5.0**		0.51	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Copper	**110**		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20

Client Sample ID: WRSB208-FD_15-25

Lab Sample ID: 440-258875-6

Date Collected: 01/07/20 11:58
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 96.0

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.3		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Manganese	280		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Molybdenum	1.3		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Nickel	5.9		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Selenium	1.4		1.0	0.20	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Silver	ND		0.51	0.10	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Thallium	ND		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Vanadium	34		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20
Zinc	23		10	5.1	mg/Kg	☼	01/13/20 16:29	01/14/20 16:12	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_25-35

Lab Sample ID: 440-258875-7

Date Collected: 01/07/20 12:10
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 96.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8600		11	8.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Boron	5.7		5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Calcium	9600		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Iron	15000		11	7.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Lithium	7.8		5.3	2.9	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Magnesium	3300		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Phosphorus	510		5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Potassium	1500		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Sodium	570		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Strontium	62		5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5
Titanium	390		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:25	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	1.1	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Arsenic	6.0		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Barium	94		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Beryllium	0.35		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Chromium	10		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Cobalt	4.7		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Copper	130		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Lead	5.6		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Manganese	270		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Molybdenum	1.7		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Nickel	5.9		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20

Client Sample ID: WRSB208_25-35

Lab Sample ID: 440-258875-7

Date Collected: 01/07/20 12:10
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 96.4

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**1.3**		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Thallium	ND		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Vanadium	**34**		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20
Zinc	**26**		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:14	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.026**		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	**yes**				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_35-45

Lab Sample ID: 440-258875-8

Date Collected: 01/07/20 12:21
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 97.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8900**		10	8.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Boron	**4.7**	J	5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Calcium	**6200**		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Iron	**15000**		10	7.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Lithium	**8.0**		5.2	2.9	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Magnesium	**3600**		10	5.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Phosphorus	**540**		5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Potassium	**1400**		65	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Sodium	**630**		65	33	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Strontium	**67**		5.2	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Tin	ND		10	5.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5
Titanium	**370**		2.1	1.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:28	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.39**	J	1.0	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Arsenic	**5.0**		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Barium	**100**		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Beryllium	**0.43**		0.31	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Chromium	**11**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Cobalt	**4.5**		0.52	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Copper	**68**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Lead	**6.3**		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Manganese	**320**		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Molybdenum	**1.5**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Nickel	**6.1**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Selenium	**1.5**		1.0	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Silver	ND		0.52	0.10	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Thallium	ND		0.52	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20
Vanadium	**33**		1.0	0.52	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20

Client Sample ID: WRSB208_35-45

Lab Sample ID: 440-258875-8

Date Collected: 01/07/20 12:21
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 97.7

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	27		10	5.2	mg/Kg	☼	01/13/20 16:29	01/14/20 16:16	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.012	mg/Kg	☼	01/17/20 08:41	01/20/20 13:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_45-55

Lab Sample ID: 440-258875-9

Date Collected: 01/07/20 14:16
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9000		11	8.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Boron	4.6	J	5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Calcium	6700		27	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Iron	14000		11	7.4	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Lithium	8.0		5.3	3.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Magnesium	3300		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Phosphorus	420		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Potassium	1500		67	35	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Sodium	610		67	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Strontium	74		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5
Titanium	320		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:47	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.33	J	1.1	0.29	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Arsenic	4.7		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Barium	110		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Beryllium	0.54		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Cadmium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Chromium	9.1		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Cobalt	4.5		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Copper	49		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Lead	5.4		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Manganese	300		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Molybdenum	1.2		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Nickel	5.3		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Selenium	1.6		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Thallium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Vanadium	33		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20
Zinc	28		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:18	20

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_45-55

Lab Sample ID: 440-258875-9

Date Collected: 01/07/20 14:16
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_55-65

Lab Sample ID: 440-258875-11

Date Collected: 01/07/20 14:33
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9200		11	8.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Boron	4.8	J	5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Calcium	5500		27	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Iron	16000		11	7.4	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Lithium	8.0		5.3	3.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Magnesium	3300		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Phosphorus	430		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Potassium	1500		67	35	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Sodium	600		67	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Strontium	61		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5
Titanium	380		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:49	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.34	J	1.1	0.29	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Arsenic	4.7		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Barium	99		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Beryllium	0.48		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Cadmium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Chromium	9.8		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Cobalt	4.4		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Copper	62		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Lead	5.3		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Manganese	300		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Molybdenum	1.6		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Nickel	5.7		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Selenium	1.9		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Thallium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Vanadium	32		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20
Zinc	28		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:21	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:15	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_55-65

Lab Sample ID: 440-258875-11

Date Collected: 01/07/20 14:33
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_65-75

Lab Sample ID: 440-258875-12

Date Collected: 01/07/20 14:53
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8900		11	8.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Boron	4.6	J	5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Calcium	5100		27	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Iron	15000		11	7.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Lithium	7.7		5.3	3.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Magnesium	3100		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Phosphorus	440		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Potassium	1500		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Sodium	590		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Strontium	64		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5
Titanium	380		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:52	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J	1.1	0.29	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Arsenic	4.9		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Barium	110		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Beryllium	0.44		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Cadmium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Chromium	11		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Cobalt	4.5		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Copper	45		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Lead	5.3		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Manganese	330		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Molybdenum	1.3		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Nickel	5.3		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Selenium	1.9		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Thallium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Vanadium	34		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20
Zinc	29		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:23	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208-FD_65-75

Lab Sample ID: 440-258875-13

Date Collected: 01/07/20 15:03
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9200		11	8.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Boron	4.7	J	5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Calcium	5600		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Iron	16000		11	7.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Lithium	8.3		5.3	2.9	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Magnesium	3100		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Phosphorus	420		5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Potassium	1500		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Sodium	600		66	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Strontium	61		5.3	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5
Titanium	410		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:54	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.43	J	1.1	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Arsenic	6.5		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Barium	97		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Beryllium	0.45		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Chromium	11		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Cobalt	4.2		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Copper	37		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Lead	5.4		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Manganese	300		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Molybdenum	1.3		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Nickel	5.1		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Selenium	1.6		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Thallium	ND		0.53	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Vanadium	34		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20
Zinc	29		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:42	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.012	mg/Kg	☼	01/17/20 08:41	01/20/20 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_75-85

Lab Sample ID: 440-258875-14

Date Collected: 01/07/20 15:17
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 94.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8800		11	8.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Boron	4.5	J	5.4	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Calcium	4800		27	15	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Iron	15000		11	7.5	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5

Client Sample ID: WRSB208_75-85

Lab Sample ID: 440-258875-14

Date Collected: 01/07/20 15:17
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 94.2

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	8.2		5.4	3.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Magnesium	3000		11	5.4	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Phosphorus	430		5.4	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Potassium	1500		68	35	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Sodium	630		68	35	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Strontium	66		5.4	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Tin	ND		11	5.4	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5
Titanium	400		2.2	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:56	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.1	0.29	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Arsenic	4.6		0.54	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Barium	110		0.54	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Beryllium	0.51		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Cadmium	ND		0.54	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Chromium	9.2		1.1	0.54	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Cobalt	4.5		0.54	0.23	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Copper	33		1.1	0.54	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Lead	5.6		0.54	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Manganese	340		0.54	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Molybdenum	0.75	J	1.1	0.54	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Nickel	5.3		1.1	0.54	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Selenium	1.6		1.1	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Silver	ND		0.54	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Thallium	ND		0.54	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Vanadium	33		1.1	0.54	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20
Zinc	28		11	5.4	mg/Kg	☼	01/13/20 16:29	01/14/20 16:45	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_85-95

Lab Sample ID: 440-258875-15

Date Collected: 01/07/20 15:50
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 94.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8700		11	8.2	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Boron	4.3	J	5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Calcium	5300		27	14	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Iron	14000		11	7.4	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Lithium	7.7		5.3	3.0	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Magnesium	3100		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Phosphorus	430		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Potassium	1500		67	35	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5

Client Sample ID: WRSB208_85-95

Lab Sample ID: 440-258875-15

Date Collected: 01/07/20 15:50
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 94.3

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	740		67	34	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Strontium	87		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5
Titanium	320		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 16:58	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.39	J	1.1	0.29	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Arsenic	6.1		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Barium	170		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Beryllium	0.49		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Cadmium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Chromium	8.4		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Cobalt	4.3		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Copper	37		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Lead	5.1		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Manganese	300		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Molybdenum	0.70	J	1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Nickel	5.1		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Selenium	1.9		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Thallium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Vanadium	33		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20
Zinc	29		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:47	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.022	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_95-105

Lab Sample ID: 440-258875-16

Date Collected: 01/08/20 12:06
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 94.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8400		11	8.2	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Boron	4.9	J	5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Calcium	6100		27	14	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Iron	14000		11	7.4	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Lithium	8.1		5.3	3.0	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Magnesium	3200		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Phosphorus	460		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Potassium	1400		67	35	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Sodium	730		67	34	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Strontium	58		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5
Titanium	300		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 17:00	5

Client Sample ID: WRSB208_95-105

Lab Sample ID: 440-258875-16

Date Collected: 01/08/20 12:06
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 94.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J	1.1	0.29	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Arsenic	5.2		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Barium	96		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Beryllium	0.45		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Cadmium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Chromium	8.5		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Cobalt	4.2		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Copper	44		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Lead	4.9		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Manganese	280		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Molybdenum	0.74	J	1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Nickel	4.9		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Selenium	1.6		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Thallium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Vanadium	32		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20
Zinc	27		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:49	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_105-115

Lab Sample ID: 440-258875-17

Date Collected: 01/08/20 12:23
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 94.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9100		11	8.2	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Boron	7.7		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Calcium	7300		27	14	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Iron	15000		11	7.4	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Lithium	9.6		5.3	3.0	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Magnesium	3500		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Phosphorus	560		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Potassium	1600		67	35	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Sodium	980		67	34	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Strontium	87		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5
Titanium	380		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 17:03	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J	1.1	0.29	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Arsenic	6.6		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Barium	120		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Beryllium	0.40		0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20

Client Sample ID: WRSB208_105-115

Lab Sample ID: 440-258875-17

Date Collected: 01/08/20 12:23
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 94.8

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Chromium	**8.9**		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Cobalt	**6.0**		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Copper	**78**		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Lead	**5.6**		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Manganese	**360**		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Molybdenum	**1.1**		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Nickel	**5.6**		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Selenium	**1.6**		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Thallium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Vanadium	**34**		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20
Zinc	**25**		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:51	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	**yes**				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_115-125

Lab Sample ID: 440-258875-19

Date Collected: 01/08/20 12:42
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8400**		11	8.2	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Boron	**9.6**		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Calcium	**8300**		27	14	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Iron	**14000**		11	7.4	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Lithium	**10**		5.3	3.0	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Magnesium	**3600**		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Phosphorus	**550**		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Potassium	**1400**		67	35	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Sodium	**900**		67	34	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Strontium	**64**		5.3	2.7	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Tin	ND		11	5.3	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5
Titanium	**420**		2.1	1.1	mg/Kg	☼	01/13/20 16:29	01/15/20 17:05	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.35**	J	1.1	0.29	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Arsenic	**6.6**		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Barium	**80**		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Beryllium	**0.30**	J	0.32	0.16	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Cadmium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Chromium	**9.0**		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Cobalt	**4.5**		0.53	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Copper	**93**		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20

Client Sample ID: WRSB208_115-125

Lab Sample ID: 440-258875-19

Date Collected: 01/08/20 12:42
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.5

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.0		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Manganese	220		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Molybdenum	1.2		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Nickel	5.9		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Selenium	1.4		1.1	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Silver	ND		0.53	0.11	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Thallium	ND		0.53	0.27	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Vanadium	35		1.1	0.53	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20
Zinc	23		11	5.3	mg/Kg	☼	01/13/20 16:29	01/14/20 16:53	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			01/13/20 13:58	1

Client Sample ID: WRSB208_125-131.5

Lab Sample ID: 440-258875-20

Date Collected: 01/08/20 15:57
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 96.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7800		10	7.9	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Boron	6.9		5.1	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Calcium	7000		26	14	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Iron	14000		10	7.1	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Lithium	8.7		5.1	2.9	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Magnesium	3500		10	5.1	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Phosphorus	520		5.1	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Potassium	1300		64	33	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Sodium	730		64	33	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Strontium	55		5.1	2.6	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Tin	ND		10	5.1	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5
Titanium	390		2.1	1.0	mg/Kg	☼	01/13/20 16:29	01/15/20 17:07	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.28	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Arsenic	5.4		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Barium	74		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Beryllium	0.32		0.31	0.15	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Cadmium	ND		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Chromium	9.7		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Cobalt	4.4		0.51	0.22	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Copper	150		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Lead	3.6		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Manganese	200		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Molybdenum	1.2		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Nickel	5.7		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_125-131.5

Lab Sample ID: 440-258875-20

Date Collected: 01/08/20 15:57
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 96.4

Method: 6020 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**1.0**		1.0	0.21	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Silver	ND		0.51	0.10	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Thallium	ND		0.51	0.26	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Vanadium	**32**		1.0	0.51	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20
Zinc	**22**		10	5.1	mg/Kg	☼	01/13/20 16:29	01/14/20 16:55	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	01/17/20 08:41	01/20/20 13:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	**yes**				NONE			01/13/20 13:58	1

QC Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-590297/1-A ^5
Matrix: Solid
Analysis Batch: 590755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	7.7	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Boron	ND		5.0	2.5	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Calcium	ND		25	14	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Iron	ND		10	6.9	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Lithium	ND		5.0	2.8	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Magnesium	ND		10	5.0	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Phosphorus	ND		5.0	2.5	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Potassium	ND		63	33	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Sodium	ND		63	32	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Strontium	ND		5.0	2.5	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Tin	ND		10	5.0	mg/Kg		01/13/20 16:29	01/15/20 15:30	5
Titanium	ND		2.0	1.0	mg/Kg		01/13/20 16:29	01/15/20 15:30	5

Lab Sample ID: LCS 440-590297/2-A ^5
Matrix: Solid
Analysis Batch: 590755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	50.3	46.3		mg/Kg		92	80 - 120
Boron	50.3	45.1		mg/Kg		90	80 - 120
Calcium	251	238		mg/Kg		95	80 - 120
Iron	50.3	52.2		mg/Kg		104	80 - 120
Lithium	50.3	46.6		mg/Kg		93	80 - 120
Magnesium	251	235		mg/Kg		94	80 - 120
Phosphorus	50.3	46.1		mg/Kg		92	80 - 120
Potassium	503	460		mg/Kg		92	80 - 120
Sodium	503	461		mg/Kg		92	80 - 120
Strontium	50.3	46.6		mg/Kg		93	80 - 120
Tin	50.3	47.5		mg/Kg		95	80 - 120
Titanium	50.3	47.4		mg/Kg		94	80 - 120

Lab Sample ID: 440-258875-1 MS
Matrix: Solid
Analysis Batch: 590755

Client Sample ID: WRSB208_0-0.5
Prep Type: Total/NA
Prep Batch: 590297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7500		53.3	9430	4	mg/Kg	☼	3645	75 - 125
Boron	4.4	J	53.3	48.3		mg/Kg	☼	83	75 - 125
Calcium	7000		266	8260	4	mg/Kg	☼	467	75 - 125
Iron	14000		53.3	12800	4	mg/Kg	☼	-2300	75 - 125
Lithium	7.5		53.3	54.0		mg/Kg	☼	87	75 - 125
Magnesium	3300		266	3440	4	mg/Kg	☼	58	75 - 125
Phosphorus	440		53.3	475	4	mg/Kg	☼	57	75 - 125
Potassium	1200		533	1760		mg/Kg	☼	114	75 - 125
Sodium	320		533	966		mg/Kg	☼	121	75 - 125
Strontium	69	F2 F1	53.3	144	F1	mg/Kg	☼	141	75 - 125 J
Tin	ND		53.3	46.5		mg/Kg	☼	87	75 - 125
Titanium	340		53.3	441	4	mg/Kg	☼	191	75 - 125

QC Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-258875-1 MSD
Matrix: Solid
Analysis Batch: 590755

Client Sample ID: WRSB208_0-0.5
Prep Type: Total/NA
Prep Batch: 590297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	7500		52.7	9560	4	mg/Kg	☼	3928	75 - 125	1	20
Boron	4.4	J	52.7	49.5		mg/Kg	☼	86	75 - 125	3	20
Calcium	7000		264	7600	4	mg/Kg	☼	221	75 - 125	8	20
Iron	14000		52.7	14000	4	mg/Kg	☼	50	75 - 125	9	20
Lithium	7.5		52.7	55.4		mg/Kg	☼	91	75 - 125	3	20
Magnesium	3300		264	3940	4	mg/Kg	☼	251	75 - 125	14	20
Phosphorus	440		52.7	524	4	mg/Kg	☼	151	75 - 125	10	20
Potassium	1200		527	1760		mg/Kg	☼	115	75 - 125	0	20
Sodium	320		527	825		mg/Kg	☼	95	75 - 125	16	20
Strontium	69	F2 F1	52.7	109	F2	mg/Kg	☼	76	75 - 125	ok 28	20
Tin	ND		52.7	46.1		mg/Kg	☼	88	75 - 125	1	20
Titanium	340		52.7	501	4	mg/Kg	☼	307	75 - 125	13	20

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Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 440-590297/1-A ^20
Matrix: Solid
Analysis Batch: 590542

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.27	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Arsenic	ND		0.50	0.25	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Barium	ND		0.50	0.25	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Beryllium	ND		0.30	0.15	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Cadmium	ND		0.50	0.25	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Chromium	ND		1.0	0.50	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Cobalt	ND		0.50	0.21	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Copper	ND		1.0	0.50	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Lead	ND		0.50	0.25	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Manganese	ND		0.50	0.25	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Molybdenum	ND		1.0	0.50	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Nickel	ND		1.0	0.50	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Selenium	ND		1.0	0.20	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Silver	ND		0.50	0.10	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Thallium	ND		0.50	0.25	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Vanadium	ND		1.0	0.50	mg/Kg		01/13/20 16:29	01/14/20 15:37	20
Zinc	ND		10	5.0	mg/Kg		01/13/20 16:29	01/14/20 15:37	20

Lab Sample ID: LCS 440-590297/2-A ^20
Matrix: Solid
Analysis Batch: 590542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.3	46.9		mg/Kg		93	80 - 120
Arsenic	50.3	45.9		mg/Kg		91	80 - 120
Barium	50.3	46.8		mg/Kg		93	80 - 120
Beryllium	50.3	45.6		mg/Kg		91	80 - 120
Cadmium	50.3	45.6		mg/Kg		91	80 - 120
Chromium	50.3	45.7		mg/Kg		91	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 440-590297/2-A ^20
Matrix: Solid
Analysis Batch: 590542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	50.3	45.8		mg/Kg		91	80 - 120
Copper	50.3	46.3		mg/Kg		92	80 - 120
Lead	50.3	45.6		mg/Kg		91	80 - 120
Manganese	50.3	45.3		mg/Kg		90	80 - 120
Molybdenum	50.3	45.4		mg/Kg		90	80 - 120
Nickel	50.3	46.0		mg/Kg		92	80 - 120
Selenium	50.3	45.7		mg/Kg		91	80 - 120
Silver	25.1	24.1		mg/Kg		96	80 - 120
Thallium	50.3	45.6		mg/Kg		91	80 - 120
Vanadium	50.3	45.3		mg/Kg		90	80 - 120
Zinc	50.3	45.2		mg/Kg		90	80 - 120

Lab Sample ID: 440-258875-1 MS
Matrix: Solid
Analysis Batch: 590542

Client Sample ID: WRSB208_0-0.5
Prep Type: Total/NA
Prep Batch: 590297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
Antimony	0.54	J F1	53.3	33.7	F1	mg/Kg	☼	62	75 - 125	J/UJ
Arsenic	5.4		53.3	50.0		mg/Kg	☼	84	75 - 125	
Barium	86	F1 F2	53.3	176	F1	mg/Kg	☼	169	75 - 125	J
Beryllium	0.47		53.3	44.9		mg/Kg	☼	83	75 - 125	
Cadmium	ND		53.3	45.6		mg/Kg	☼	86	75 - 125	
Chromium	6.4		53.3	50.6		mg/Kg	☼	83	75 - 125	
Cobalt	5.0		53.3	48.4		mg/Kg	☼	81	75 - 125	
Copper	67	F1	53.3	105	F1	mg/Kg	☼	72	75 - 125	J/UJ
Lead	5.0		53.3	49.1		mg/Kg	☼	83	75 - 125	
Manganese	220		53.3	294	4	mg/Kg	☼	146	75 - 125	
Molybdenum	0.63	J	53.3	45.2		mg/Kg	☼	84	75 - 125	
Nickel	5.4		53.3	48.9		mg/Kg	☼	82	75 - 125	
Selenium	1.1		53.3	45.0		mg/Kg	☼	83	75 - 125	
Silver	ND		26.6	23.9		mg/Kg	☼	90	75 - 125	
Thallium	ND		53.3	45.0		mg/Kg	☼	84	75 - 125	
Vanadium	32		53.3	73.6		mg/Kg	☼	79	75 - 125	
Zinc	22		53.3	66.7		mg/Kg	☼	83	75 - 125	

Lab Sample ID: 440-258875-1 MSD
Matrix: Solid
Analysis Batch: 590542

Client Sample ID: WRSB208_0-0.5
Prep Type: Total/NA
Prep Batch: 590297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Antimony	0.54	J F1	52.7	34.0	F1	mg/Kg	☼	63	75 - 125	1	20	J/UJ
Arsenic	5.4		52.7	50.3		mg/Kg	☼	85	75 - 125	1	20	
Barium	86	F1 F2	52.7	121	F1 F2	mg/Kg	☼	66	75 - 125	37	20	J+
Beryllium	0.47		52.7	44.4		mg/Kg	☼	83	75 - 125	1	20	
Cadmium	ND		52.7	46.3		mg/Kg	☼	88	75 - 125	2	20	
Chromium	6.4		52.7	51.4		mg/Kg	☼	85	75 - 125	2	20	
Cobalt	5.0		52.7	48.3		mg/Kg	☼	82	75 - 125	0	20	
Copper	67	F1	52.7	109		mg/Kg	☼	81	75 - 125	4	20	
Lead	5.0		52.7	49.1		mg/Kg	☼	84	75 - 125	0	20	

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-258875-1 MSD — **Client Sample ID: WRSB208_0-0.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 590542 — **Prep Batch: 590297**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	220		52.7	258	4	mg/Kg	☼	78	75 - 125	13	20
Molybdenum	0.63	J	52.7	45.2		mg/Kg	☼	85	75 - 125	0	20
Nickel	5.4		52.7	49.3		mg/Kg	☼	83	75 - 125	1	20
Selenium	1.1		52.7	45.8		mg/Kg	☼	85	75 - 125	2	20
Silver	ND		26.4	24.2		mg/Kg	☼	92	75 - 125	1	20
Thallium	ND		52.7	45.0		mg/Kg	☼	85	75 - 125	0	20
Vanadium	32		52.7	75.9		mg/Kg	☼	84	75 - 125	3	20
Zinc	22		52.7	68.3		mg/Kg	☼	87	75 - 125	2	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 440-590447/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 591651 — **Prep Batch: 590447**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.012	mg/Kg		01/17/20 08:41	01/20/20 12:39	1

Lab Sample ID: LCS 440-590447/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 591651 — **Prep Batch: 590447**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.400	0.373		mg/Kg		93	80 - 120

Lab Sample ID: 440-258875-1 MS — **Client Sample ID: WRSB208_0-0.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 591651 — **Prep Batch: 590447**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.062		0.420	0.399		mg/Kg	☼	80	75 - 125

Lab Sample ID: 440-258875-1 MSD — **Client Sample ID: WRSB208_0-0.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 591651 — **Prep Batch: 590447**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.062		0.420	0.409		mg/Kg	☼	83	75 - 125	3	20

Method: Homogenization - Homogenization

Lab Sample ID: 440-258875-1 DU — **Client Sample ID: WRSB208_0-0.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 590265

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sample Homogenized	yes		yes		NONE			

Metals

Prep Batch: 590297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-1	WRSB208_0-0.5	Total/NA	Solid	3050B	
440-258875-2	WRSB208_0.5-3	Total/NA	Solid	3050B	
440-258875-3	WRSB208_3-6	Total/NA	Solid	3050B	
440-258875-4	WRSB208_6-15	Total/NA	Solid	3050B	
440-258875-5	WRSB208_15-25	Total/NA	Solid	3050B	
440-258875-6	WRSB208-FD_15-25	Total/NA	Solid	3050B	
440-258875-7	WRSB208_25-35	Total/NA	Solid	3050B	
440-258875-8	WRSB208_35-45	Total/NA	Solid	3050B	
440-258875-9	WRSB208_45-55	Total/NA	Solid	3050B	
440-258875-11	WRSB208_55-65	Total/NA	Solid	3050B	
440-258875-12	WRSB208_65-75	Total/NA	Solid	3050B	
440-258875-13	WRSB208-FD_65-75	Total/NA	Solid	3050B	
440-258875-14	WRSB208_75-85	Total/NA	Solid	3050B	
440-258875-15	WRSB208_85-95	Total/NA	Solid	3050B	
440-258875-16	WRSB208_95-105	Total/NA	Solid	3050B	
440-258875-17	WRSB208_105-115	Total/NA	Solid	3050B	
440-258875-19	WRSB208_115-125	Total/NA	Solid	3050B	
440-258875-20	WRSB208_125-131.5	Total/NA	Solid	3050B	
MB 440-590297/1-A ^20	Method Blank	Total/NA	Solid	3050B	
MB 440-590297/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 440-590297/2-A ^20	Lab Control Sample	Total/NA	Solid	3050B	
LCS 440-590297/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
440-258875-1 MS	WRSB208_0-0.5	Total/NA	Solid	3050B	
440-258875-1 MSD	WRSB208_0-0.5	Total/NA	Solid	3050B	

Prep Batch: 590447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-1	WRSB208_0-0.5	Total/NA	Solid	7471A	
440-258875-2	WRSB208_0.5-3	Total/NA	Solid	7471A	
440-258875-3	WRSB208_3-6	Total/NA	Solid	7471A	
440-258875-4	WRSB208_6-15	Total/NA	Solid	7471A	
440-258875-5	WRSB208_15-25	Total/NA	Solid	7471A	
440-258875-6	WRSB208-FD_15-25	Total/NA	Solid	7471A	
440-258875-7	WRSB208_25-35	Total/NA	Solid	7471A	
440-258875-8	WRSB208_35-45	Total/NA	Solid	7471A	
440-258875-9	WRSB208_45-55	Total/NA	Solid	7471A	
440-258875-11	WRSB208_55-65	Total/NA	Solid	7471A	
440-258875-12	WRSB208_65-75	Total/NA	Solid	7471A	
440-258875-13	WRSB208-FD_65-75	Total/NA	Solid	7471A	
440-258875-14	WRSB208_75-85	Total/NA	Solid	7471A	
440-258875-15	WRSB208_85-95	Total/NA	Solid	7471A	
440-258875-16	WRSB208_95-105	Total/NA	Solid	7471A	
440-258875-17	WRSB208_105-115	Total/NA	Solid	7471A	
440-258875-19	WRSB208_115-125	Total/NA	Solid	7471A	
440-258875-20	WRSB208_125-131.5	Total/NA	Solid	7471A	
MB 440-590447/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 440-590447/2-A	Lab Control Sample	Total/NA	Solid	7471A	
440-258875-1 MS	WRSB208_0-0.5	Total/NA	Solid	7471A	
440-258875-1 MSD	WRSB208_0-0.5	Total/NA	Solid	7471A	

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Metals

Analysis Batch: 590542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-1	WRSB208_0-0.5	Total/NA	Solid	6020	590297
440-258875-2	WRSB208_0.5-3	Total/NA	Solid	6020	590297
440-258875-3	WRSB208_3-6	Total/NA	Solid	6020	590297
440-258875-4	WRSB208_6-15	Total/NA	Solid	6020	590297
440-258875-5	WRSB208_15-25	Total/NA	Solid	6020	590297
440-258875-6	WRSB208-FD_15-25	Total/NA	Solid	6020	590297
440-258875-7	WRSB208_25-35	Total/NA	Solid	6020	590297
440-258875-8	WRSB208_35-45	Total/NA	Solid	6020	590297
440-258875-9	WRSB208_45-55	Total/NA	Solid	6020	590297
440-258875-11	WRSB208_55-65	Total/NA	Solid	6020	590297
440-258875-12	WRSB208_65-75	Total/NA	Solid	6020	590297
440-258875-13	WRSB208-FD_65-75	Total/NA	Solid	6020	590297
440-258875-14	WRSB208_75-85	Total/NA	Solid	6020	590297
440-258875-15	WRSB208_85-95	Total/NA	Solid	6020	590297
440-258875-16	WRSB208_95-105	Total/NA	Solid	6020	590297
440-258875-17	WRSB208_105-115	Total/NA	Solid	6020	590297
440-258875-19	WRSB208_115-125	Total/NA	Solid	6020	590297
440-258875-20	WRSB208_125-131.5	Total/NA	Solid	6020	590297
MB 440-590297/1-A ^20	Method Blank	Total/NA	Solid	6020	590297
LCS 440-590297/2-A ^20	Lab Control Sample	Total/NA	Solid	6020	590297
440-258875-1 MS	WRSB208_0-0.5	Total/NA	Solid	6020	590297
440-258875-1 MSD	WRSB208_0-0.5	Total/NA	Solid	6020	590297

Analysis Batch: 590755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-1	WRSB208_0-0.5	Total/NA	Solid	6010B	590297
440-258875-2	WRSB208_0.5-3	Total/NA	Solid	6010B	590297
440-258875-3	WRSB208_3-6	Total/NA	Solid	6010B	590297
440-258875-4	WRSB208_6-15	Total/NA	Solid	6010B	590297
440-258875-5	WRSB208_15-25	Total/NA	Solid	6010B	590297
440-258875-6	WRSB208-FD_15-25	Total/NA	Solid	6010B	590297
440-258875-7	WRSB208_25-35	Total/NA	Solid	6010B	590297
440-258875-8	WRSB208_35-45	Total/NA	Solid	6010B	590297
440-258875-9	WRSB208_45-55	Total/NA	Solid	6010B	590297
440-258875-11	WRSB208_55-65	Total/NA	Solid	6010B	590297
440-258875-12	WRSB208_65-75	Total/NA	Solid	6010B	590297
440-258875-13	WRSB208-FD_65-75	Total/NA	Solid	6010B	590297
440-258875-14	WRSB208_75-85	Total/NA	Solid	6010B	590297
440-258875-15	WRSB208_85-95	Total/NA	Solid	6010B	590297
440-258875-16	WRSB208_95-105	Total/NA	Solid	6010B	590297
440-258875-17	WRSB208_105-115	Total/NA	Solid	6010B	590297
440-258875-19	WRSB208_115-125	Total/NA	Solid	6010B	590297
440-258875-20	WRSB208_125-131.5	Total/NA	Solid	6010B	590297
MB 440-590297/1-A ^5	Method Blank	Total/NA	Solid	6010B	590297
LCS 440-590297/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	590297
440-258875-1 MS	WRSB208_0-0.5	Total/NA	Solid	6010B	590297
440-258875-1 MSD	WRSB208_0-0.5	Total/NA	Solid	6010B	590297

Analysis Batch: 591651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-1	WRSB208_0-0.5	Total/NA	Solid	7471A	590447

Metals (Continued)

Analysis Batch: 591651 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-2	WRSB208_0.5-3	Total/NA	Solid	7471A	590447
440-258875-3	WRSB208_3-6	Total/NA	Solid	7471A	590447
440-258875-4	WRSB208_6-15	Total/NA	Solid	7471A	590447
440-258875-5	WRSB208_15-25	Total/NA	Solid	7471A	590447
440-258875-6	WRSB208-FD_15-25	Total/NA	Solid	7471A	590447
440-258875-7	WRSB208_25-35	Total/NA	Solid	7471A	590447
440-258875-8	WRSB208_35-45	Total/NA	Solid	7471A	590447
440-258875-9	WRSB208_45-55	Total/NA	Solid	7471A	590447
440-258875-11	WRSB208_55-65	Total/NA	Solid	7471A	590447
440-258875-12	WRSB208_65-75	Total/NA	Solid	7471A	590447
440-258875-13	WRSB208-FD_65-75	Total/NA	Solid	7471A	590447
440-258875-14	WRSB208_75-85	Total/NA	Solid	7471A	590447
440-258875-15	WRSB208_85-95	Total/NA	Solid	7471A	590447
440-258875-16	WRSB208_95-105	Total/NA	Solid	7471A	590447
440-258875-17	WRSB208_105-115	Total/NA	Solid	7471A	590447
440-258875-19	WRSB208_115-125	Total/NA	Solid	7471A	590447
440-258875-20	WRSB208_125-131.5	Total/NA	Solid	7471A	590447
MB 440-590447/1-A	Method Blank	Total/NA	Solid	7471A	590447
LCS 440-590447/2-A	Lab Control Sample	Total/NA	Solid	7471A	590447
440-258875-1 MS	WRSB208_0-0.5	Total/NA	Solid	7471A	590447
440-258875-1 MSD	WRSB208_0-0.5	Total/NA	Solid	7471A	590447

General Chemistry

Analysis Batch: 590265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-1	WRSB208_0-0.5	Total/NA	Solid	Homogenization	
440-258875-2	WRSB208_0.5-3	Total/NA	Solid	Homogenization	
440-258875-3	WRSB208_3-6	Total/NA	Solid	Homogenization	
440-258875-4	WRSB208_6-15	Total/NA	Solid	Homogenization	
440-258875-5	WRSB208_15-25	Total/NA	Solid	Homogenization	
440-258875-6	WRSB208-FD_15-25	Total/NA	Solid	Homogenization	
440-258875-7	WRSB208_25-35	Total/NA	Solid	Homogenization	
440-258875-8	WRSB208_35-45	Total/NA	Solid	Homogenization	
440-258875-9	WRSB208_45-55	Total/NA	Solid	Homogenization	
440-258875-11	WRSB208_55-65	Total/NA	Solid	Homogenization	
440-258875-12	WRSB208_65-75	Total/NA	Solid	Homogenization	
440-258875-13	WRSB208-FD_65-75	Total/NA	Solid	Homogenization	
440-258875-14	WRSB208_75-85	Total/NA	Solid	Homogenization	
440-258875-15	WRSB208_85-95	Total/NA	Solid	Homogenization	
440-258875-16	WRSB208_95-105	Total/NA	Solid	Homogenization	
440-258875-17	WRSB208_105-115	Total/NA	Solid	Homogenization	
440-258875-19	WRSB208_115-125	Total/NA	Solid	Homogenization	
440-258875-20	WRSB208_125-131.5	Total/NA	Solid	Homogenization	
440-258875-1 DU	WRSB208_0-0.5	Total/NA	Solid	Homogenization	

Analysis Batch: 590269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-1	WRSB208_0-0.5	Total/NA	Solid	Moisture	
440-258875-2	WRSB208_0.5-3	Total/NA	Solid	Moisture	
440-258875-3	WRSB208_3-6	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 590269 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-4	WRSB208_6-15	Total/NA	Solid	Moisture	
440-258875-5	WRSB208_15-25	Total/NA	Solid	Moisture	
440-258875-6	WRSB208-FD_15-25	Total/NA	Solid	Moisture	
440-258875-7	WRSB208_25-35	Total/NA	Solid	Moisture	
440-258875-8	WRSB208_35-45	Total/NA	Solid	Moisture	
440-258875-9	WRSB208_45-55	Total/NA	Solid	Moisture	
440-258875-11	WRSB208_55-65	Total/NA	Solid	Moisture	
440-258875-12	WRSB208_65-75	Total/NA	Solid	Moisture	
440-258875-13	WRSB208-FD_65-75	Total/NA	Solid	Moisture	
440-258875-14	WRSB208_75-85	Total/NA	Solid	Moisture	
440-258875-15	WRSB208_85-95	Total/NA	Solid	Moisture	
440-258875-16	WRSB208_95-105	Total/NA	Solid	Moisture	
440-258875-17	WRSB208_105-115	Total/NA	Solid	Moisture	
440-258875-19	WRSB208_115-125	Total/NA	Solid	Moisture	
440-258875-20	WRSB208_125-131.5	Total/NA	Solid	Moisture	
440-258875-1 DU	WRSB208_0-0.5	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_0-0.5

Lab Sample ID: 440-258875-1
Date Collected: 01/07/20 11:15
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_0-0.5

Lab Sample ID: 440-258875-1
Date Collected: 01/07/20 11:15
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 15:37	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 15:41	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 12:43	MEM	TAL IRV

Client Sample ID: WRSB208_0.5-3

Lab Sample ID: 440-258875-2
Date Collected: 01/07/20 11:25
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_0.5-3

Lab Sample ID: 440-258875-2
Date Collected: 01/07/20 11:25
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:14	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:04	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 12:51	MEM	TAL IRV

Client Sample ID: WRSB208_3-6

Lab Sample ID: 440-258875-3
Date Collected: 01/07/20 11:35
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_3-6

Lab Sample ID: 440-258875-3
Date Collected: 01/07/20 11:35
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:17	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:06	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 12:54	MEM	TAL IRV

Client Sample ID: WRSB208_6-15

Lab Sample ID: 440-258875-4
Date Collected: 01/07/20 11:42
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_6-15

Lab Sample ID: 440-258875-4
Date Collected: 01/07/20 11:42
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:19	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:08	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 12:57	MEM	TAL IRV

Client Sample ID: WRSB208_15-25

Lab Sample ID: 440-258875-5
Date Collected: 01/07/20 11:53
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_15-25

Lab Sample ID: 440-258875-5
Date Collected: 01/07/20 11:53
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:21	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:10	B1H	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_15-25

Lab Sample ID: 440-258875-5
Date Collected: 01/07/20 11:53
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 12:59	MEM	TAL IRV

Client Sample ID: WRSB208-FD_15-25

Lab Sample ID: 440-258875-6
Date Collected: 01/07/20 11:58
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208-FD_15-25

Lab Sample ID: 440-258875-6
Date Collected: 01/07/20 11:58
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:23	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:12	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:01	MEM	TAL IRV

Client Sample ID: WRSB208_25-35

Lab Sample ID: 440-258875-7
Date Collected: 01/07/20 12:10
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_25-35

Lab Sample ID: 440-258875-7
Date Collected: 01/07/20 12:10
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:25	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:14	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:08	MEM	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_35-45
Lab Sample ID: 440-258875-8
Date Collected: 01/07/20 12:21
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_35-45
Lab Sample ID: 440-258875-8
Date Collected: 01/07/20 12:21
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:28	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:16	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:11	MEM	TAL IRV

Client Sample ID: WRSB208_45-55
Lab Sample ID: 440-258875-9
Date Collected: 01/07/20 14:16
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_45-55
Lab Sample ID: 440-258875-9
Date Collected: 01/07/20 14:16
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:47	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:18	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:13	MEM	TAL IRV

Client Sample ID: WRSB208_55-65
Lab Sample ID: 440-258875-11
Date Collected: 01/07/20 14:33
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_55-65

Lab Sample ID: 440-258875-11
Date Collected: 01/07/20 14:33
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:49	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:21	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:15	MEM	TAL IRV

Client Sample ID: WRSB208_65-75

Lab Sample ID: 440-258875-12
Date Collected: 01/07/20 14:53
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_65-75

Lab Sample ID: 440-258875-12
Date Collected: 01/07/20 14:53
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:52	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:23	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:17	MEM	TAL IRV

Client Sample ID: WRSB208-FD_65-75

Lab Sample ID: 440-258875-13
Date Collected: 01/07/20 15:03
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208-FD_65-75

Lab Sample ID: 440-258875-13
Date Collected: 01/07/20 15:03
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:54	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:42	B1H	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208-FD_65-75

Lab Sample ID: 440-258875-13
Date Collected: 01/07/20 15:03
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:19	MEM	TAL IRV

Client Sample ID: WRSB208_75-85

Lab Sample ID: 440-258875-14
Date Collected: 01/07/20 15:17
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_75-85

Lab Sample ID: 440-258875-14
Date Collected: 01/07/20 15:17
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:56	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:45	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:22	MEM	TAL IRV

Client Sample ID: WRSB208_85-95

Lab Sample ID: 440-258875-15
Date Collected: 01/07/20 15:50
Matrix: Solid
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_85-95

Lab Sample ID: 440-258875-15
Date Collected: 01/07/20 15:50
Matrix: Solid
Date Received: 01/10/20 10:00
Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 16:58	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:47	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:24	MEM	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_95-105
Date Collected: 01/08/20 12:06
Date Received: 01/10/20 10:00

Lab Sample ID: 440-258875-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_95-105
Date Collected: 01/08/20 12:06
Date Received: 01/10/20 10:00

Lab Sample ID: 440-258875-16
Matrix: Solid
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 17:00	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:49	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:26	MEM	TAL IRV

Client Sample ID: WRSB208_105-115
Date Collected: 01/08/20 12:23
Date Received: 01/10/20 10:00

Lab Sample ID: 440-258875-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_105-115
Date Collected: 01/08/20 12:23
Date Received: 01/10/20 10:00

Lab Sample ID: 440-258875-17
Matrix: Solid
Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 17:03	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:51	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:28	MEM	TAL IRV

Client Sample ID: WRSB208_115-125
Date Collected: 01/08/20 12:42
Date Received: 01/10/20 10:00

Lab Sample ID: 440-258875-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Client Sample ID: WRSB208_115-125

Lab Sample ID: 440-258875-19

Date Collected: 01/08/20 12:42
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 17:05	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:53	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:35	MEM	TAL IRV

Client Sample ID: WRSB208_125-131.5

Lab Sample ID: 440-258875-20

Date Collected: 01/08/20 15:57
Date Received: 01/10/20 10:00

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	590265	01/13/20 13:58	HTL	TAL IRV
Total/NA	Analysis	Moisture		1	590269	01/13/20 14:11	HTL	TAL IRV

Client Sample ID: WRSB208_125-131.5

Lab Sample ID: 440-258875-20

Date Collected: 01/08/20 15:57
Date Received: 01/10/20 10:00

Matrix: Solid
Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6010B		5	590755	01/15/20 17:07	TQN	TAL IRV
Total/NA	Prep	3050B			590297	01/13/20 16:29	ST	TAL IRV
Total/NA	Analysis	6020		20	590542	01/14/20 16:55	B1H	TAL IRV
Total/NA	Prep	7471A			590447	01/17/20 08:41	MEM	TAL IRV
Total/NA	Analysis	7471A		1	591651	01/20/20 13:37	MEM	TAL IRV

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Nevada	State Program	CA015312020-6	07-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL IRV
6020	Metals (ICP/MS)	SW846	TAL IRV
7471A	Mercury (CVAA)	SW846	TAL IRV
Homogenization	Homogenization	None	TAL IRV
Moisture	Percent Moisture	EPA	TAL IRV
3050B	Preparation, Metals	SW846	TAL IRV
7471A	Preparation, Mercury	SW846	TAL IRV

Protocol References:

EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Site Node Path: NV_YERINGTON **Req Due Date (mm/dd/yy):** STD TAT **Rush TAT:** Yes ___ No X

BP/ARC Facility Name: Anaconda Copper Mine Site **Lab Work Order Number:**

Lab Name:	TestAmerica, Inc.	BP/ARC Facility Address:	1 Austin Circle	Consultant/Contractor:	Wood - E&I Solutions, Inc.
Lab Address:	17461 Derian Ave, Suite #100 Irvine, CA 92614	City, State, ZIP Code:	Yerington, Nevada 89447	Consultant/Contractor Project No:	SA18170340.005.055B
Lab PM:	Christian Bondoc	Lead Regulatory Agency:	NDEP Abandoned Mine Lands Program	Address:	10940 White Rock Rd, Ste 190 Rancho Cordova, CA 95670
Lab Phone:	949-261-1022	California Global ID No.:		Consultant/Contractor PM:	Kent Parrish
Lab Shipping Accnt:	1103-6633-7 (TAL Acct #)	Enfos Proposal No: D019Q-0047	Work Release No: WR331232	Phone: 916-636-3200	Email: Kent.Parrish@woodplc.com
Lab Bottle Order No:	NA	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email Report/EDD To:	lynda.lombardi@woodplc.com
Other Info:	OU-4b_OU-5_Soil	Stage: Appraise	Activity: Field Work/Remedial Investigation	Invoice To	BP/ARC X Contractor ___
BP/ARC EBM:	Chuck Stilwell				
EBM Phone:	713-998-2443				
EBM Email:	Chuck.Stilwell@bp.com				

Report Type & QC Level: Standard ___ Full Data Package X

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Water / Liquid	Air / Vapor		No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl			Requested Analyses: Metals[1] (SW 6010B/6020)	Mercury (SW7471B/7470A)	Thorium, Uranium (SW6020)						MS/MSD	Comments (Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description)
	WRSB208_0-0.5	1/7/20	11:15	X				1	1						X	X								[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	WRSB208_0.5-3	1/7/20	11:25	X				1	1						X	X								Na, P, Sr, Sn, Ti, by 6010B;
	WRSB208_3-6	1/7/20	11:35	X				1	1						X	X								As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	WRSB208_6-15	1/7/20	11:42	X				1	1						X	X								Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	WRSB208_15-25	1/7/20	11:53	X				1	1						X	X								
	WRSB208-FD_15-25	1/7/20	11:58	X				1	1						X	X								
	WRSB208_25-35	1/7/20	12:10	X				1	1						X	X								Report soil on dry weight basis.
	WRSB208_35-45	1/7/20	12:21	X				1	1						X	X								
	WRSB208_45-55	1/7/20	14:16	X				1	1						X	X								
	EB10	1/7/20	14:29		X			1			1				X	X	X							

1/10/20

440-258875 Chain of Custody

Sampler's Name: Rachael Klier	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date / Time
Sampler's Company: Wood	Wood	1/9/20	1200	EC-IRV	1/10/20 10:00
Shipment Method: Fed Ex Ship Date: 1/9/20					
Shipment Tracking No: 7774 1268 5342					

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place (Yes) No | Temp Blank: Yes (No) | Cooler Temp on Receipt 2.1/2.4 °C | Trip Blank: Yes (No) | MS/MSD Sample Submitted: Yes (No)

IR- 7774 1268 5342

BP/ARC LaMP COC Rev. 7, Jul 29, 2010

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Site Node Path: NV_YERINGTON **Req Due Date (mm/dd/yy):** STD TAT **Rush TAT:** Yes ___ No X

BP/ARC Facility Name: Anaconda Copper Mine Site **Lab Work Order Number:**

Lab Name:	TestAmerica, Inc.	BP/ARC Facility Address:	1 Austin Circle	Consultant/Contractor:	Wood - E&I Solutions, Inc.
Lab Address:	17461 Derian Ave, Suite #100 Irvine, CA 92614	City, State, ZIP Code:	Yerington, Nevada 89447	Consultant/Contractor Project No:	SA18170340.005.055B
Lab PM:	Christian Bondoc	Lead Regulatory Agency:	NDEP Abandoned Mine Lands Program	Address:	10940 White Rock Rd, Ste 190 Rancho Cordova, CA 95670
Lab Phone:	949-261-1022	California Global ID No.:		Consultant/Contractor PM:	Kent Parrish
Lab Shipping Accnt:	1103-6633-7 (TAL Acct #)	Enfos Proposal No: D019Q-0047	Work Release No: WR331232	Phone: 916-636-3200	Email: Kent.Parrish@woodplc.com
Lab Bottle Order No:	NA	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email Report/EDD To:	lynda.lombardi@woodplc.com
Other Info:	OU-4b_OU-5_Soil	Stage: Appraise	Activity: Field Work/Remedial Investigation	Invoice To:	BP/ARC X Contractor ___

BP/ARC EBM: Chuck Stilwell
EBM Phone: 713-998-2443
EBM Email: Chuck.Stilwell@bp.com

Report Type & QC Level: Standard ___ Full Data Package X

Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor		Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl			Metals[1] (SW 6010B/6020)	Mercury (SW7471B/7470A)	Thorium, Uranium (SW6020)							MS/MSD	Comments (Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description)
	WRSB208_55-65	1/7/20	1433	X				1	1						X	X									[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	WRSB208_65-75	1/7/20	1453	X				1	1						X	X									Na, P, Sr, Sn, Ti, by 6010B;
	WRSB208-FD_65-75	1/7/20	1503	X				1	1						X	X									As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	WRSB208_75-85	1/7/20	1517	X				1	1						X	X									Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	WRSB208_85-95	1/7/20	1550	X				1	1						X	X									
	WRSB208_95-105	1/8/20	1206	X				1	1						X	X									
	WRSB208_105-115	1/8/20	1223	X				1	1						X	X									Report soil on dry weight basis.
	FB10	1/8/20	1228		X			1			1				X	X	X								
	WRSB208_115-125	1/8/20	1242	X				1	1						X	X									
	WRSB208_125-131.5	1/8/20	1557	X				1	1						X	X									

Sampler's Name: Rachael Klier	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Wood	[signature] / Wood	1/9/20	1200	[signature] EC-IKV	1/10/20	1000
Shipment Method: Fed Ex Ship Date: 1/9/20						
Shipment Tracking No: 7774 1268 5342						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 2.1/2.4 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP/ARC LaMP COC Rev. 7, Jul 29, 2010

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 440-258875-1

Login Number: 258875
List Number: 1
Creator: Dolidze, Lado

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	1	WRSB208_0-0.5	Solid	440-6040957	440-258875-A-1	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	1	WRSB208_0-0.5	Solid	440-6040957	440-258875-A-1	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	1	WRSB208_0-0.5	Solid	440-6040957	440-258875-A-1	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	2	WRSB208_0.5-3	Solid	440-6040959	440-258875-A-2	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	2	WRSB208_0.5-3	Solid	440-6040959	440-258875-A-2	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	2	WRSB208_0.5-3	Solid	440-6040959	440-258875-A-2	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	3	WRSB208_3-6	Solid	440-6040961	440-258875-A-3	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	3	WRSB208_3-6	Solid	440-6040961	440-258875-A-3	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	3	WRSB208_3-6	Solid	440-6040961	440-258875-A-3	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	4	WRSB208_6-15	Solid	440-6040963	440-258875-A-4	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	4	WRSB208_6-15	Solid	440-6040963	440-258875-A-4	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	4	WRSB208_6-15	Solid	440-6040963	440-258875-A-4	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	5	WRSB208_15-25	Solid	440-6040965	440-258875-A-5	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	5	WRSB208_15-25	Solid	440-6040965	440-258875-A-5	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	5	WRSB208_15-25	Solid	440-6040965	440-258875-A-5	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	6	WRSB208-FD_15-25	Solid	440-6040967	440-258875-A-6	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	6	WRSB208-FD_15-25	Solid	440-6040967	440-258875-A-6	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	6	WRSB208-FD_15-25	Solid	440-6040967	440-258875-A-6	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	7	WRSB208_25-35	Solid	440-6040969	440-258875-A-7	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	7	WRSB208_25-35	Solid	440-6040969	440-258875-A-7	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	7	WRSB208_25-35	Solid	440-6040969	440-258875-A-7	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	8	WRSB208_35-45	Solid	440-6040971	440-258875-A-8	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	8	WRSB208_35-45	Solid	440-6040971	440-258875-A-8	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	8	WRSB208_35-45	Solid	440-6040971	440-258875-A-8	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	9	WRSB208_45-55	Solid	440-6040973	440-258875-A-9	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	9	WRSB208_45-55	Solid	440-6040973	440-258875-A-9	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	9	WRSB208_45-55	Solid	440-6040973	440-258875-A-9	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	ICOCWI3-10	Mercado, Michael E	I	440-151403	01/20/20 16:40
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-151373	01/20/20 12:36
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	ICOCWI3-10	Dolidze, Lado	I	440-151038	01/10/20 13:52
440-258875	11	WRSB208_55-65	Solid	440-6040976	440-258875-A-11	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	11	WRSB208_55-65	Solid	440-6040976	440-258875-A-11	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	11	WRSB208_55-65	Solid	440-6040976	440-258875-A-11	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	12	WRSB208_65-75	Solid	440-6040978	440-258875-A-12	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	12	WRSB208_65-75	Solid	440-6040978	440-258875-A-12	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	12	WRSB208_65-75	Solid	440-6040978	440-258875-A-12	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	13	WRSB208-FD_65-75	Solid	440-6040980	440-258875-A-13	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	13	WRSB208-FD_65-75	Solid	440-6040980	440-258875-A-13	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	13	WRSB208-FD_65-75	Solid	440-6040980	440-258875-A-13	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	14	WRSB208_75-85	Solid	440-6040982	440-258875-A-14	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	14	WRSB208_75-85	Solid	440-6040982	440-258875-A-14	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	14	WRSB208_75-85	Solid	440-6040982	440-258875-A-14	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	15	WRSB208_85-95	Solid	440-6040984	440-258875-A-15	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	15	WRSB208_85-95	Solid	440-6040984	440-258875-A-15	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	15	WRSB208_85-95	Solid	440-6040984	440-258875-A-15	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	16	WRSB208_95-105	Solid	440-6040986	440-258875-A-16	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	16	WRSB208_95-105	Solid	440-6040986	440-258875-A-16	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	16	WRSB208_95-105	Solid	440-6040986	440-258875-A-16	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	17	WRSB208_105-115	Solid	440-6040988	440-258875-A-17	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	17	WRSB208_105-115	Solid	440-6040988	440-258875-A-17	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	17	WRSB208_105-115	Solid	440-6040988	440-258875-A-17	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	ICOCWI3-10	Mercado, Michael E	I	440-151403	01/20/20 16:40
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-151373	01/20/20 12:36
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	ICOCWI3-10	Dolidze, Lado	I	440-151038	01/10/20 13:52
440-258875	19	WRSB208_115-125	Solid	440-6040991	440-258875-A-19	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	19	WRSB208_115-125	Solid	440-6040991	440-258875-A-19	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	19	WRSB208_115-125	Solid	440-6040991	440-258875-A-19	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	20	WRSB208_125-131.5	Solid	440-6040993	440-258875-A-20	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	20	WRSB208_125-131.5	Solid	440-6040993	440-258875-A-20	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	20	WRSB208_125-131.5	Solid	440-6040993	440-258875-A-20	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00292	ME 30% H2O2 00110
MB 440-590297/1		3050B, 6010B		2.00 g	50 mL			5 mL	3 mL
LCS 440-590297/2		3050B, 6010B		1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-1	WRSB208_0-0.5	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-1 MS	WRSB208_0-0.5	3050B, 6010B	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-1 MSD	WRSB208_0-0.5	3050B, 6010B	T	1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-2	WRSB208_0.5-3	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-3	WRSB208_3-6	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-4	WRSB208_6-15	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-5	WRSB208_15-25	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-258875-B-6	WRSB208-FD_15-25	3050B, 6010B	T	2.04 g	50 mL			5 mL	3 mL
440-258875-B-7	WRSB208_25-35	3050B, 6010B	T	1.97 g	50 mL			5 mL	3 mL
440-258875-B-8	WRSB208_35-45	3050B, 6010B	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-9	WRSB208_45-55	3050B, 6010B	T	1.97 g	50 mL			5 mL	3 mL
440-258875-B-11	WRSB208_55-65	3050B, 6010B	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-12	WRSB208_65-75	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-13	WRSB208-FD_65-75	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-258875-B-14	WRSB208_75-85	3050B, 6010B	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-15	WRSB208_85-95	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-16	WRSB208_95-105	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-17	WRSB208_105-115	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-19	WRSB208_115-125	3050B, 6010B	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-20	WRSB208_125-131.5	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00551	ME HNO3 00548				
MB 440-590297/1		3050B, 6010B		5 mL	5 mL				
LCS 440-590297/2		3050B, 6010B		5 mL	5 mL				
440-258875-B-1	WRSB208_0-0.5	3050B, 6010B	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00551	ME HNO3 00548				
440-258875-B-1 MS	WRSB208_0-0.5	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-1 MSD	WRSB208_0-0.5	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-2	WRSB208_0.5-3	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-3	WRSB208_3-6	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-4	WRSB208_6-15	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-5	WRSB208_15-25	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-6	WRSB208-FD_15-25	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-7	WRSB208_25-35	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-8	WRSB208_35-45	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-9	WRSB208_45-55	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-11	WRSB208_55-65	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-12	WRSB208_65-75	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-13	WRSB208-FD_65-75	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-14	WRSB208_75-85	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-15	WRSB208_85-95	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-16	WRSB208_95-105	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-17	WRSB208_105-115	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-19	WRSB208_115-125	3050B, 6010B	T	5 mL	5 mL				
440-258875-B-20	WRSB208_125-131.5	3050B, 6010B	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B= 500 ul
Blank Soil Lot Number	25438819
Temperature - Corrected - End	94 Degrees C
Temperature - Corrected - Start	90 Degrees C
Digestion End Time	01/14/2020 12:55
Digestion Start Time	01/14/2020 09:10
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	6019234
Hydrochloric Acid ID	5999212
Nitric Acid ID	5997059
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc.#B14) CF=-1
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	91 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00292	ME 30% H2O2 00110
MB 440-590297/1		3050B, 6020		2.00 g	50 mL			5 mL	3 mL
LCS 440-590297/2		3050B, 6020		1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-1	WRSB208_0-0.5	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-1 MS	WRSB208_0-0.5	3050B, 6020	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-1 MSD	WRSB208_0-0.5	3050B, 6020	T	1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-2	WRSB208_0.5-3	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-3	WRSB208_3-6	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-4	WRSB208_6-15	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-5	WRSB208_15-25	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-258875-B-6	WRSB208-FD_15-25	3050B, 6020	T	2.04 g	50 mL			5 mL	3 mL
440-258875-B-7	WRSB208_25-35	3050B, 6020	T	1.97 g	50 mL			5 mL	3 mL
440-258875-B-8	WRSB208_35-45	3050B, 6020	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-9	WRSB208_45-55	3050B, 6020	T	1.97 g	50 mL			5 mL	3 mL
440-258875-B-11	WRSB208_55-65	3050B, 6020	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-12	WRSB208_65-75	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-13	WRSB208-FD_65-75	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-258875-B-14	WRSB208_75-85	3050B, 6020	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-15	WRSB208_85-95	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-16	WRSB208_95-105	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-17	WRSB208_105-115	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-19	WRSB208_115-125	3050B, 6020	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-20	WRSB208_125-131.5	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00551	ME HNO3 00548				
MB 440-590297/1		3050B, 6020		5 mL	5 mL				
LCS 440-590297/2		3050B, 6020		5 mL	5 mL				
440-258875-B-1	WRSB208_0-0.5	3050B, 6020	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00551	ME HNO3 00548				
440-258875-B-1 MS	WRSB208_0-0.5	3050B, 6020	T	5 mL	5 mL				
440-258875-B-1 MSD	WRSB208_0-0.5	3050B, 6020	T	5 mL	5 mL				
440-258875-B-2	WRSB208_0.5-3	3050B, 6020	T	5 mL	5 mL				
440-258875-B-3	WRSB208_3-6	3050B, 6020	T	5 mL	5 mL				
440-258875-B-4	WRSB208_6-15	3050B, 6020	T	5 mL	5 mL				
440-258875-B-5	WRSB208_15-25	3050B, 6020	T	5 mL	5 mL				
440-258875-B-6	WRSB208-FD_15-25	3050B, 6020	T	5 mL	5 mL				
440-258875-B-7	WRSB208_25-35	3050B, 6020	T	5 mL	5 mL				
440-258875-B-8	WRSB208_35-45	3050B, 6020	T	5 mL	5 mL				
440-258875-B-9	WRSB208_45-55	3050B, 6020	T	5 mL	5 mL				
440-258875-B-11	WRSB208_55-65	3050B, 6020	T	5 mL	5 mL				
440-258875-B-12	WRSB208_65-75	3050B, 6020	T	5 mL	5 mL				
440-258875-B-13	WRSB208-FD_65-75	3050B, 6020	T	5 mL	5 mL				
440-258875-B-14	WRSB208_75-85	3050B, 6020	T	5 mL	5 mL				
440-258875-B-15	WRSB208_85-95	3050B, 6020	T	5 mL	5 mL				
440-258875-B-16	WRSB208_95-105	3050B, 6020	T	5 mL	5 mL				
440-258875-B-17	WRSB208_105-115	3050B, 6020	T	5 mL	5 mL				
440-258875-B-19	WRSB208_115-125	3050B, 6020	T	5 mL	5 mL				
440-258875-B-20	WRSB208_125-131.5	3050B, 6020	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B= 500 ul
Blank Soil Lot Number	25438819
Temperature - Corrected - End	94 Degrees C
Temperature - Corrected - Start	90 Degrees C
Digestion End Time	01/14/2020 12:55
Digestion Start Time	01/14/2020 09:10
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	6019234
Hydrochloric Acid ID	5999212
Nitric Acid ID	5997059
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc.#B14) CF=-1
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	91 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590447 Batch Start Date: 01/17/20 08:41 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 01/20/20 11:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HG1 00416	ME Aqua Regia 00791	ME HYDROX SOL 00117	ME KMN04 00189
MB 440-590447/1		7471A, 7471A		0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
LCS 440-590447/2		7471A, 7471A		0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-258875-B-1	WRSB208_0-0.5	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-1 MS	WRSB208_0-0.5	7471A, 7471A	T	0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-258875-B-1 MSD	WRSB208_0-0.5	7471A, 7471A	T	0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-258875-B-2	WRSB208_0.5-3	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-3	WRSB208_3-6	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-4	WRSB208_6-15	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-5	WRSB208_15-25	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-6	WRSB208-FD_15-25	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-7	WRSB208_25-35	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-8	WRSB208_35-45	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-9	WRSB208_45-55	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-11	WRSB208_55-65	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-12	WRSB208_65-75	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-13	WRSB208-FD_65-75	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-14	WRSB208_75-85	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-15	WRSB208_85-95	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-16	WRSB208_95-105	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-17	WRSB208_105-115	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-19	WRSB208_115-125	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-20	WRSB208_125-131.5	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590447 Batch Start Date: 01/17/20 08:41 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 01/20/20 11:00

Batch Notes	
Balance ID	57
Batch Comment	MB Loc: B12, Weighed by AM, Filtered by ES
Blank Matrix ID	25438819
Temperature - Corrected - End	92 Degrees C
Temperature - Corrected - Start	92 Degrees C
Digestion End Time	01/17/2020 10:32
Digestion Start Time	01/17/2020 10:02
Digestion Unit ID	8
Hydrochloric Acid ID	Lot: 0000243992
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	6040574 @1/20/20 @10:30
Potassium Permanganate ID	6040428
Pipette/Syringe/Dispenser ID	800
Analyst ID - Spike Analyst	MM
Thermometer ID	P-120 CF -1 Loc: C1
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	93 Degrees C
Temperature - Uncorrected - Start	93 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590269 Batch Start Date: 01/13/20 14:11 Batch Analyst: Le, Ha Thanh T

Batch Method: Moisture Batch End Date: 01/15/20 13:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	AnalysisComment		
440-258875-B-1	WRSB208_0-0.5	Moisture	T	2.0266 g	12.1071 g	11.6337 g	11.6338		
440-258875-B-1 DU	WRSB208_0-0.5	Moisture	T	2.0412 g	12.3245 g	11.8271 g	11.8272		
440-258875-B-2	WRSB208_0.5-3	Moisture	T	2.0871 g	12.3922 g	11.9779 g	11.9778		
440-258875-B-3	WRSB208_3-6	Moisture	T	2.0373 g	12.1699 g	11.7443 g	11.7444		
440-258875-B-4	WRSB208_6-15	Moisture	T	2.0700 g	12.4731 g	12.0438 g	12.0439		
440-258875-B-5	WRSB208_15-25	Moisture	T	2.0626 g	12.5323 g	12.0895 g	12.0896		
440-258875-B-6	WRSB208-FD_15-25	Moisture	T	2.0830 g	12.1491 g	11.7424 g	11.7425		
440-258875-B-7	WRSB208_25-35	Moisture	T	2.0388 g	12.4055 g	12.0332 g	12.0333		
440-258875-B-8	WRSB208_35-45	Moisture	T	2.0184 g	12.4206 g	12.1789 g	12.1789		
440-258875-B-9	WRSB208_45-55	Moisture	T	2.0792 g	12.3450 g	11.8451 g	11.8450		
440-258875-B-11	WRSB208_55-65	Moisture	T	2.0575 g	12.2197 g	11.7711 g	11.7710		
440-258875-B-12	WRSB208_65-75	Moisture	T	2.0442 g	12.4262 g	11.9327 g	11.9328		
440-258875-B-13	WRSB208-FD_65-75	Moisture	T	2.0190 g	12.5456 g	12.0252 g	12.0253		
440-258875-B-14	WRSB208_75-85	Moisture	T	2.0476 g	12.4804 g	11.8755 g	11.8756		
440-258875-B-15	WRSB208_85-95	Moisture	T	2.0900 g	12.4503 g	11.8555 g	11.8556		
440-258875-B-16	WRSB208_95-105	Moisture	T	2.0818 g	12.1467 g	11.5529 g	11.5530		
440-258875-B-17	WRSB208_105-115	Moisture	T	2.0776 g	12.3357 g	11.8001 g	11.8002		
440-258875-B-19	WRSB208_115-125	Moisture	T	2.0461 g	12.5755 g	12.1005 g	12.1006		
440-258875-B-20	WRSB208_125-131.5	Moisture	T	2.0639 g	12.6245 g	12.2441 g	12.2440		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590269 Batch Start Date: 01/13/20 14:11 Batch Analyst: Le, Ha Thanh T

Batch Method: Moisture Batch End Date: 01/15/20 13:31

Batch Notes	
Balance ID	65
Batch Comment	put the samples back in the oven another 30 mins@ temp 105 c
Date and Time Samples in Desiccator	01/14/2020 08:36
Date and Time Samples out of Desiccator	01/14/2020 09:20
Date samples were placed in the oven	01/13/2020
Oven Temp In	105 Degrees C
Time samples were place in the oven	18:45
Date samples were removed from oven	01/14/2020
Oven Temp Out	105 Degrees C
Time Samples were removed from oven	08:35
Oven ID	6
Thermometer ID	p139, cf 0
Temperature - Start - Uncorrected	105 Degrees C
Temperature - End - Uncorrected	105 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

COVER PAGE
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-1

SDG No.:

Project: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID	Lab Sample ID
WRSB208_0-0.5	440-258875-1
WRSB208_0.5-3	440-258875-2
WRSB208_3-6	440-258875-3
WRSB208_6-15	440-258875-4
WRSB208_15-25	440-258875-5
WRSB208-FD_15-25	440-258875-6
WRSB208_25-35	440-258875-7
WRSB208_35-45	440-258875-8
WRSB208_45-55	440-258875-9
WRSB208_55-65	440-258875-11
WRSB208_65-75	440-258875-12
WRSB208-FD_65-75	440-258875-13
WRSB208_75-85	440-258875-14
WRSB208_85-95	440-258875-15
WRSB208_95-105	440-258875-16
WRSB208_105-115	440-258875-17
WRSB208_115-125	440-258875-19
WRSB208_125-131.5	440-258875-20

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_0-0.5

Lab Sample ID: 440-258875-1

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:15

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 95.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7500	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	4.4	5.3	2.6	mg/Kg	J		5	6010B
7440-70-2	Calcium	7000	26	14	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	7.5	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3300	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	440	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1200	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	320	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	69	5.3	2.6	mg/Kg		F2 F1	5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	340	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.54	1.1	0.28	mg/Kg	J	F1	20	6020
7440-38-2	Arsenic	5.4	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	86	0.53	0.26	mg/Kg		F1 F2	20	6020
7440-41-7	Beryllium	0.47	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	6.4	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	5.0	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	67	1.1	0.53	mg/Kg		F1	20	6020
7439-92-1	Lead	5.0	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	220	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	0.63	1.1	0.53	mg/Kg	J		20	6020
7440-02-0	Nickel	5.4	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.1	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	32	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	22	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.062	0.021	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_0.5-3

Lab Sample ID: 440-258875-2

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:25

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 96.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7900	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	4.7	5.3	2.6	mg/Kg	J		5	6010B
7440-70-2	Calcium	6200	26	14	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	8.2	5.3	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	3300	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	470	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1200	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	510	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	60	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	380	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.35	1.1	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	5.0	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	75	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.41	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	7.7	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.5	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	66	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	4.0	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	230	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	0.58	1.1	0.53	mg/Kg	J		20	6020
7440-02-0	Nickel	5.4	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.2	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	34	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	25	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_3-6

Lab Sample ID: 440-258875-3

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:35

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 95.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7700	10	8.1	mg/Kg			5	6010B
7440-42-8	Boron	4.8	5.2	2.6	mg/Kg	J		5	6010B
7440-70-2	Calcium	6200	26	14	mg/Kg			5	6010B
7439-89-6	Iron	14000	10	7.2	mg/Kg			5	6010B
7439-93-2	Lithium	7.5	5.2	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	3300	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	540	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1200	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	560	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	61	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	350	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.32	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.9	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	94	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.37	0.31	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	7.1	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	4.7	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	66	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	4.0	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	270	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	0.64	1.0	0.52	mg/Kg	J		20	6020
7440-02-0	Nickel	5.6	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	1.3	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.52	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	33	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	24	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_6-15

Lab Sample ID: 440-258875-4

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:42

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 95.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7900	10	8.1	mg/Kg			5	6010B
7440-42-8	Boron	4.8	5.2	2.6	mg/Kg	J		5	6010B
7440-70-2	Calcium	6300	26	14	mg/Kg			5	6010B
7439-89-6	Iron	13000	10	7.2	mg/Kg			5	6010B
7439-93-2	Lithium	7.4	5.2	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	3300	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	510	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1200	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	540	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	64	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	320	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.30	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	5.1	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	81	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.43	0.31	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	7.8	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	4.5	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	63	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	3.7	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	210	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	0.53	1.0	0.52	mg/Kg	J		20	6020
7440-02-0	Nickel	5.5	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	1.5	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.52	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	32	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	24	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_15-25

Lab Sample ID: 440-258875-5

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:53

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 95.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8300	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	5.4	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	6600	26	14	mg/Kg			5	6010B
7439-89-6	Iron	16000	10	7.2	mg/Kg			5	6010B
7439-93-2	Lithium	8.7	5.2	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	3500	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	500	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1300	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	530	65	33	mg/Kg			5	6010B
7440-24-6	Strontium	59	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	380	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.43	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.3	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	91	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.41	0.31	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	8.7	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	4.6	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	110	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	8.3	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	270	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.5	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	5.8	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	1.6	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.52	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	36	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	25	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.020	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208-FD_15-25

Lab Sample ID: 440-258875-6

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:58

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 96.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8100	10	7.9	mg/Kg			5	6010B
7440-42-8	Boron	4.9	5.1	2.6	mg/Kg	J		5	6010B
7440-70-2	Calcium	6900	26	14	mg/Kg			5	6010B
7439-89-6	Iron	15000	10	7.0	mg/Kg			5	6010B
7439-93-2	Lithium	7.9	5.1	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	3500	10	5.1	mg/Kg			5	6010B
7723-14-0	Phosphorus	500	5.1	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1300	64	33	mg/Kg			5	6010B
7440-23-5	Sodium	520	64	33	mg/Kg			5	6010B
7440-24-6	Strontium	61	5.1	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.1	mg/Kg			5	6010B
7440-32-6	Titanium	330	2.0	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.37	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	5.7	0.51	0.26	mg/Kg			20	6020
7440-39-3	Barium	85	0.51	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.42	0.31	0.15	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.51	0.26	mg/Kg			20	6020
7440-47-3	Chromium	7.9	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	5.0	0.51	0.21	mg/Kg			20	6020
7440-50-8	Copper	110	1.0	0.51	mg/Kg			20	6020
7439-92-1	Lead	7.3	0.51	0.26	mg/Kg			20	6020
7439-96-5	Manganese	280	0.51	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.3	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel	5.9	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	1.4	1.0	0.20	mg/Kg			20	6020
7440-22-4	Silver	ND	0.51	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.51	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	34	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	23	10	5.1	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_25-35

Lab Sample ID: 440-258875-7

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 12:10

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 96.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8600	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	5.7	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	9600	26	14	mg/Kg			5	6010B
7439-89-6	Iron	15000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	7.8	5.3	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	3300	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	510	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1500	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	570	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	62	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	390	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.37	1.1	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.0	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	94	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.35	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	10	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.7	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	130	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	5.6	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	270	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.7	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	5.9	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.3	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	34	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	26	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.026	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_35-45

Lab Sample ID: 440-258875-8

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 12:21

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 97.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8900	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	4.7	5.2	2.6	mg/Kg	J		5	6010B
7440-70-2	Calcium	6200	26	14	mg/Kg			5	6010B
7439-89-6	Iron	15000	10	7.2	mg/Kg			5	6010B
7439-93-2	Lithium	8.0	5.2	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	3600	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	540	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1400	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	630	65	33	mg/Kg			5	6010B
7440-24-6	Strontium	67	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	370	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.39	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	5.0	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	100	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.43	0.31	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	11	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	4.5	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	68	1.0	0.52	mg/Kg			20	6020
7439-92-1	Lead	6.3	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	320	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.5	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	6.1	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	1.5	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.52	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	33	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	27	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.020	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_45-55

Lab Sample ID: 440-258875-9

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 14:16

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 95.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	9000	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	4.6	5.3	2.7	mg/Kg	J		5	6010B
7440-70-2	Calcium	6700	27	14	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.4	mg/Kg			5	6010B
7439-93-2	Lithium	8.0	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3300	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	420	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1500	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	610	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	74	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	320	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.33	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.7	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	110	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.54	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.27	mg/Kg			20	6020
7440-47-3	Chromium	9.1	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.5	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	49	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	5.4	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	300	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	1.2	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	5.3	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.6	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	33	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	28	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_55-65

Lab Sample ID: 440-258875-11

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 14:33

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 95.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	9200	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	4.8	5.3	2.7	mg/Kg	J		5	6010B
7440-70-2	Calcium	5500	27	14	mg/Kg			5	6010B
7439-89-6	Iron	16000	11	7.4	mg/Kg			5	6010B
7439-93-2	Lithium	8.0	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3300	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	430	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1500	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	600	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	61	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	380	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.34	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.7	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	99	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.48	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.27	mg/Kg			20	6020
7440-47-3	Chromium	9.8	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.4	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	62	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	5.3	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	300	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	1.6	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	5.7	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.9	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	32	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	28	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_65-75

Lab Sample ID: 440-258875-12

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 14:53

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 95.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8900	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	4.6	5.3	2.7	mg/Kg	J		5	6010B
7440-70-2	Calcium	5100	27	14	mg/Kg			5	6010B
7439-89-6	Iron	15000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	7.7	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3100	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	440	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1500	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	590	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	64	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	380	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.32	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.9	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	110	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.44	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.27	mg/Kg			20	6020
7440-47-3	Chromium	11	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.5	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	45	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	5.3	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	330	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	1.3	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	5.3	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.9	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	34	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	29	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208-FD_65-75

Lab Sample ID: 440-258875-13

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 15:03

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 95.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	9200	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	4.7	5.3	2.6	mg/Kg	J		5	6010B
7440-70-2	Calcium	5600	26	14	mg/Kg			5	6010B
7439-89-6	Iron	16000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	8.3	5.3	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	3100	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	420	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1500	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	600	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	61	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	410	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.43	1.1	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.5	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	97	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.45	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	11	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.2	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	37	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	5.4	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	300	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.3	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	5.1	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.6	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	34	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	29	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_75-85

Lab Sample ID: 440-258875-14

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 15:17

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 94.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8800	11	8.3	mg/Kg			5	6010B
7440-42-8	Boron	4.5	5.4	2.7	mg/Kg	J		5	6010B
7440-70-2	Calcium	4800	27	15	mg/Kg			5	6010B
7439-89-6	Iron	15000	11	7.5	mg/Kg			5	6010B
7439-93-2	Lithium	8.2	5.4	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3000	11	5.4	mg/Kg			5	6010B
7723-14-0	Phosphorus	430	5.4	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1500	68	35	mg/Kg			5	6010B
7440-23-5	Sodium	630	68	35	mg/Kg			5	6010B
7440-24-6	Strontium	66	5.4	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.4	mg/Kg			5	6010B
7440-32-6	Titanium	400	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.39	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.6	0.54	0.27	mg/Kg			20	6020
7440-39-3	Barium	110	0.54	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.51	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.54	0.27	mg/Kg			20	6020
7440-47-3	Chromium	9.2	1.1	0.54	mg/Kg			20	6020
7440-48-4	Cobalt	4.5	0.54	0.23	mg/Kg			20	6020
7440-50-8	Copper	33	1.1	0.54	mg/Kg			20	6020
7439-92-1	Lead	5.6	0.54	0.27	mg/Kg			20	6020
7439-96-5	Manganese	340	0.54	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	0.75	1.1	0.54	mg/Kg	J		20	6020
7440-02-0	Nickel	5.3	1.1	0.54	mg/Kg			20	6020
7782-49-2	Selenium	1.6	1.1	0.22	mg/Kg			20	6020
7440-22-4	Silver	ND	0.54	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.54	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	33	1.1	0.54	mg/Kg			20	6020
7440-66-6	Zinc	28	11	5.4	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_85-95

Lab Sample ID: 440-258875-15

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 15:50

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 94.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8700	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	4.3	5.3	2.7	mg/Kg	J		5	6010B
7440-70-2	Calcium	5300	27	14	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.4	mg/Kg			5	6010B
7439-93-2	Lithium	7.7	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3100	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	430	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1500	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	740	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	87	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	320	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.39	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.1	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	170	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.49	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.27	mg/Kg			20	6020
7440-47-3	Chromium	8.4	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.3	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	37	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	5.1	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	300	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	0.70	1.1	0.53	mg/Kg	J		20	6020
7440-02-0	Nickel	5.1	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.9	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	33	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	29	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.022	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_95-105

Lab Sample ID: 440-258875-16

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/08/2020 12:06

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 94.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8400	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	4.9	5.3	2.7	mg/Kg	J		5	6010B
7440-70-2	Calcium	6100	27	14	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.4	mg/Kg			5	6010B
7439-93-2	Lithium	8.1	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3200	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	460	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1400	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	730	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	58	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	300	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.32	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	5.2	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	96	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.45	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.27	mg/Kg			20	6020
7440-47-3	Chromium	8.5	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.2	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	44	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	4.9	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	280	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	0.74	1.1	0.53	mg/Kg	J		20	6020
7440-02-0	Nickel	4.9	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.6	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	32	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	27	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_105-115

Lab Sample ID: 440-258875-17

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/08/2020 12:23

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 94.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	9100	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	7.7	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	7300	27	14	mg/Kg			5	6010B
7439-89-6	Iron	15000	11	7.4	mg/Kg			5	6010B
7439-93-2	Lithium	9.6	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3500	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	560	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1600	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	980	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	87	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	380	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.32	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.6	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	120	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.40	0.32	0.16	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.53	0.27	mg/Kg			20	6020
7440-47-3	Chromium	8.9	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	6.0	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	78	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	5.6	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	360	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	1.1	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	5.6	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.6	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	34	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	25	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_115-125

Lab Sample ID: 440-258875-19

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/08/2020 12:42

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 95.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8400	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	9.6	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	8300	27	14	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.4	mg/Kg			5	6010B
7439-93-2	Lithium	10	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3600	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	550	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1400	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	900	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	64	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	420	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.35	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.6	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	80	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.30	0.32	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.53	0.27	mg/Kg			20	6020
7440-47-3	Chromium	9.0	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.5	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	93	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	4.0	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	220	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	1.2	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	5.9	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	1.4	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.53	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	35	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	23	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.014	0.021	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WRSB208_125-131.5

Lab Sample ID: 440-258875-20

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/08/2020 15:57

Reporting Basis: DRY

Date Received: 01/10/2020 10:00

% Solids: 96.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7800	10	7.9	mg/Kg			5	6010B
7440-42-8	Boron	6.9	5.1	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	7000	26	14	mg/Kg			5	6010B
7439-89-6	Iron	14000	10	7.1	mg/Kg			5	6010B
7439-93-2	Lithium	8.7	5.1	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	3500	10	5.1	mg/Kg			5	6010B
7723-14-0	Phosphorus	520	5.1	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1300	64	33	mg/Kg			5	6010B
7440-23-5	Sodium	730	64	33	mg/Kg			5	6010B
7440-24-6	Strontium	55	5.1	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.1	mg/Kg			5	6010B
7440-32-6	Titanium	390	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	ND	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	5.4	0.51	0.26	mg/Kg			20	6020
7440-39-3	Barium	74	0.51	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.32	0.31	0.15	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.51	0.26	mg/Kg			20	6020
7440-47-3	Chromium	9.7	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	4.4	0.51	0.22	mg/Kg			20	6020
7440-50-8	Copper	150	1.0	0.51	mg/Kg			20	6020
7439-92-1	Lead	3.6	0.51	0.26	mg/Kg			20	6020
7439-96-5	Manganese	200	0.51	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.2	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel	5.7	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	1.0	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	ND	0.51	0.10	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.51	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	32	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	22	10	5.1	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

ICV Source: ME ICP ICV2_02382 | Concentration Units: mg/L

CCV Source: ME ICP STD3_03095

	ICV 440-590755/6 01/15/2020 12:15				CCV 440-590755/58 01/15/2020 15:11				CCV 440-590755/69 01/15/2020 16:00			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.985		1.00	98	1.03		1.00	103	1.00		1.00	100
Boron	0.997		1.00	100	1.01		1.00	101	1.01		1.00	101
Calcium	5.01		5.00	100	5.01		5.00	100	5.03		5.00	101
Iron	1.01		1.00	101	1.06		1.00	106	1.02		1.00	102
Lithium	0.995		1.00	99	1.00		1.00	100	1.00		1.00	100
Magnesium	5.01		5.00	100	5.07		5.00	101	5.09		5.00	102
Phosphorus	2.06		2.00	103	1.02		1.00	102	1.01		1.00	101
Potassium	5.03		5.00	101	10.0		10.0	100	10.0		10.0	100
Strontium	0.991		1.00	99	1.00		1.00	100	1.01		1.00	101
Tin	1.96		2.00	98	1.01		1.00	101	1.00		1.00	100
Titanium	0.992		1.00	99	1.03		1.00	103	1.01		1.00	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

ICV Source: ME ICP ICV2_02382 Concentration Units: mg/L

CCV Source: ME ICP STD3_03095

	CCV 440-590755/81 01/15/2020 16:34				CCV 440-590755/93 01/15/2020 17:19							
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	1.01		1.00	101	0.999		1.00	100				
Boron	1.01		1.00	101	0.996		1.00	100				
Calcium	5.02		5.00	100	4.96		5.00	99				
Iron	1.03		1.00	103	1.02		1.00	102				
Lithium	1.00		1.00	100	0.995		1.00	99				
Magnesium	5.08		5.00	102	5.05		5.00	101				
Phosphorus	1.01		1.00	101	0.997		1.00	100				
Potassium	9.99		10.0	100	9.93		10.0	99				
Strontium	1.00		1.00	100	0.991		1.00	99				
Tin	1.01		1.00	101	0.985		1.00	98				
Titanium	1.02		1.00	102	1.01		1.00	101				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

ICV Source: ICV SODIUM_00099 | Concentration Units: mg/L

CCV Source: ME ICP STD3_03095

	ICV 440-590755/8 01/15/2020 12:19				CCV 440-590755/58 01/15/2020 15:11				CCV 440-590755/69 01/15/2020 16:00			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	4.94		5.00	99	9.96		10.0	100	10.0		10.0	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

ICV Source: ICV SODIUM_00099 | Concentration Units: mg/L

CCV Source: ME ICP STD3_03095

	CCV 440-590755/81 01/15/2020 16:34				CCV 440-590755/93 01/15/2020 17:19							
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	9.93		10.0	99	9.87		10.0	99				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

ICV Source: MEICPMS ICV_00323 | Concentration Units: ug/L

CCV Source: MEICPMS CCV_00321

	ICV 440-590542/6 01/14/2020 14:58				CCV 440-590542/14 01/14/2020 15:33				CCV 440-590542/23 01/14/2020 16:00			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	25.2		25.0	101	50.6		50.0	101	51.3		50.0	103
Arsenic	25.0		25.0	100	50.3		50.0	101	50.6		50.0	101
Barium	25.1		25.0	101	49.7		50.0	99	50.3		50.0	101
Beryllium	24.3		25.0	97	50.1		50.0	100	50.9		50.0	102
Cadmium	25.1		25.0	100	50.4		50.0	101	50.7		50.0	101
Chromium	24.9		25.0	100	50.6		50.0	101	50.3		50.0	101
Cobalt	25.1		25.0	100	50.5		50.0	101	50.5		50.0	101
Copper	24.7		25.0	99	50.3		50.0	101	50.2		50.0	100
Lead	24.4		25.0	98	48.6		50.0	97	49.1		50.0	98
Manganese	25.1		25.0	100	50.7		50.0	101	50.2		50.0	100
Molybdenum	25.1		25.0	101	50.2		50.0	100	50.9		50.0	102
Nickel	25.1		25.0	100	50.5		50.0	101	50.6		50.0	101
Selenium	24.7		25.0	99	51.6		50.0	103	51.4		50.0	103
Silver	25.4		25.0	102	50.7		50.0	101	51.1		50.0	102
Thallium	23.4		25.0	94	46.6		50.0	93	47.0		50.0	94
Vanadium	24.9		25.0	100	50.4		50.0	101	50.2		50.0	100
Zinc	24.8		25.0	99	50.0		50.0	100	50.5		50.0	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

ICV Source: MEICPMS ICV_00323 | Concentration Units: ug/L

CCV Source: MEICPMS CCV_00321

	CCV 440-590542/35 01/14/2020 16:38				CCV 440-590542/44 01/14/2020 17:02							
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	50.5		50.0	101	51.5		50.0	103				
Arsenic	50.5		50.0	101	50.4		50.0	101				
Barium	49.5		50.0	99	50.1		50.0	100				
Beryllium	50.0		50.0	100	49.9		50.0	100				
Cadmium	50.4		50.0	101	50.9		50.0	102				
Chromium	51.1		50.0	102	51.2		50.0	102				
Cobalt	50.8		50.0	102	51.2		50.0	102				
Copper	50.5		50.0	101	51.2		50.0	102				
Lead	48.6		50.0	97	49.7		50.0	99				
Manganese	50.7		50.0	101	51.0		50.0	102				
Molybdenum	50.6		50.0	101	51.0		50.0	102				
Nickel	50.6		50.0	101	51.3		50.0	103				
Selenium	50.4		50.0	101	51.2		50.0	102				
Silver	50.9		50.0	102	51.6		50.0	103				
Thallium	46.7		50.0	93	47.3		50.0	95				
Vanadium	50.9		50.0	102	51.1		50.0	102				
Zinc	50.4		50.0	101	50.8		50.0	102				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

ICV Source: ME 1 PPM HG1_00419 | Concentration Units: mg/Kg

CCV Source: ME 1 PPM HG1_00418

	ICV 440-591352/1-A 01/20/2020 12:26				CCV 440-591352/3-A 01/20/2020 12:34				CCV 440-591352/3-A 01/20/2020 13:03			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.380		0.400	95	0.393		0.400	98	0.382		0.400	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

ICV Source: ME 1 PPM HG1_00419 | Concentration Units: mg/Kg

CCV Source: ME 1 PPM HG1_00418

	CCV 440-591352/3-A 01/20/2020 13:30				CCV 440-591352/3-A 01/20/2020 13:50							
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.385		0.400	96	0.392		0.400	98				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Method: 6010B | Instrument ID: ICP8

Lab Sample ID: CRI 440-590755/16 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01153

		CRQL Check Standard			
Analyte	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.200		100	50-150
Boron	0.100	0.0994		99	50-150
Calcium	0.200	0.212		106	50-150
Iron	0.200	0.215		107	50-150
Lithium	0.100	0.0995	J	100	50-150
Magnesium	0.0400	0.0475		119	50-150
Phosphorus	0.400	0.423		106	50-150
Potassium	1.00	0.997		100	50-150
Sodium	1.00	0.994		99	50-150
Strontium	0.0400	0.0408		102	50-150
Tin	0.200	0.199		99	50-150
Titanium	0.0100	0.0102		102	50-150

Lab Sample ID: CRI 440-590755/95 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01153

		CRQL Check Standard			
Analyte	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.196		98	50-150
Boron	0.100	0.100		100	50-150
Calcium	0.200	0.205		103	50-150
Iron	0.200	0.206		103	50-150
Lithium	0.100	0.103	J	103	50-150
Magnesium	0.0400	0.0430		108	50-150
Phosphorus	0.400	0.420		105	50-150
Potassium	1.00	1.03		103	50-150
Sodium	1.00	0.925		93	50-150
Strontium	0.0400	0.0409		102	50-150
Tin	0.200	0.194		97	50-150
Titanium	0.0100	0.0112		112	50-150

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS6

Lab Sample ID: CRI 440-590542/10 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00326

	CRQL Check Standard				
Analyte	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.00	1.02	J	102	50-150
Arsenic	1.00	0.995	J	100	50-150
Barium	1.00	0.965	J	97	50-150
Beryllium	0.500	0.508		102	50-150
Cadmium	1.00	1.01		101	50-150
Chromium	1.00	1.01	J	101	50-150
Cobalt	1.00	0.971	J	97	50-150
Copper	1.00	1.05	J	105	50-150
Lead	1.00	0.917	J	92	50-150
Manganese	1.00	0.972	J	97	50-150
Molybdenum	1.00	0.958	J	96	50-150
Nickel	1.00	1.01	J	101	50-150
Selenium	1.00	0.997	J	100	50-150
Silver	1.00	1.03		103	50-150
Thallium	1.00	0.889	J	89	50-150
Vanadium	1.00	ND		99	50-150
Zinc	10.0	9.77	J	98	50-150

Lab Sample ID: CRI 440-590542/11 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00324

	CRQL Check Standard				
Analyte	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.03		102	50-150
Arsenic	2.00	1.99		100	50-150
Barium	2.00	1.98		99	50-150
Beryllium	1.00	0.890		89	50-150
Cadmium	2.00	1.94		97	50-150
Chromium	2.00	1.95	J	97	50-150
Cobalt	2.00	1.88		94	50-150
Copper	2.00	2.00		100	50-150
Lead	2.00	1.84		92	50-150
Manganese	2.00	1.97		98	50-150
Molybdenum	2.00	1.92	J	96	50-150
Nickel	2.00	2.01		101	50-150
Selenium	2.00	1.99	J	100	50-150

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS6

Lab Sample ID: CRI 440-590542/11 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00324

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	2.00	2.01		101	50-150
Thallium	2.00	1.76		88	50-150
Vanadium	2.00	1.93	J	96	50-150
Zinc	20.0	19.2	J	96	50-150

Lab Sample ID: CRI 440-590542/46 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00324

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.08		104	50-150
Arsenic	2.00	1.95		97	50-150
Barium	2.00	2.02		101	50-150
Beryllium	1.00	1.06		106	50-150
Cadmium	2.00	1.99		100	50-150
Chromium	2.00	1.99	J	100	50-150
Cobalt	2.00	1.95		98	50-150
Copper	2.00	2.04		102	50-150
Lead	2.00	1.87		94	50-150
Manganese	2.00	2.00		100	50-150
Molybdenum	2.00	1.97	J	99	50-150
Nickel	2.00	2.02		101	50-150
Selenium	2.00	2.15		107	50-150
Silver	2.00	2.06		103	50-150
Thallium	2.00	1.77		89	50-150
Vanadium	2.00	1.97	J	98	50-150
Zinc	20.0	19.0	J	95	50-150

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Method: 7471A | Instrument ID: CV-HG4

Lab Sample ID: CRA 440-591352/5-A | Concentration Units: mg/Kg

CRQL Check Standard Source: ME 1 PPM HG1_00418

	CRQL Check Standard				
Analyte	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.0200	0.0222		111	70-130

Lab Sample ID: CRA 440-591352/5-A | Concentration Units: mg/Kg

CRQL Check Standard Source: ME 1 PPM HG1_00418

	CRQL Check Standard				
Analyte	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.0200	0.0235		117	70-130

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Concentration Units: mg/L

		ICB 440-590755/10 01/15/2020 12:24		CCB 440-590755/59 01/15/2020 15:16		CCB 440-590755/70 01/15/2020 16:06		CCB 440-590755/82 01/15/2020 16:38	
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Aluminum	0.10	ND		ND		ND		ND	
Boron	0.050	ND		ND		ND		ND	
Calcium	0.10	ND		ND		ND		ND	
Iron	0.10	ND		ND		ND		ND	
Lithium	0.50	ND		ND		ND		ND	
Magnesium	0.020	ND		ND		ND		ND	
Phosphorus	0.20	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Sodium	0.50	ND		ND		ND		ND	
Strontium	0.020	ND		ND		ND		ND	
Tin	0.10	ND		ND		ND		ND	
Titanium	0.0050	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Concentration Units: mg/L

		CCB 440-590755/94 01/15/2020 17:23							
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Aluminum	0.10	ND							
Boron	0.050	ND							
Calcium	0.10	ND							
Iron	0.10	ND							
Lithium	0.50	ND							
Magnesium	0.020	ND							
Phosphorus	0.20	ND							
Potassium	0.50	ND							
Sodium	0.50	ND							
Strontium	0.020	ND							
Tin	0.10	ND							
Titanium	0.0050	ND							

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Concentration Units: ug/L

		ICB 440-590542/8 01/14/2020 15:02		CCB 440-590542/15 01/14/2020 15:35		CCB 440-590542/24 01/14/2020 16:02		CCB 440-590542/36 01/14/2020 16:40	
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND		ND		ND		ND	
Arsenic	1.0	ND		ND		ND		ND	
Barium	1.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	1.0	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	1.0	ND		ND		ND		ND	
Copper	2.0	ND		ND		ND		ND	
Lead	1.0	ND		ND		ND		ND	
Manganese	1.0	ND		ND		ND		ND	
Molybdenum	2.0	ND		ND		ND		ND	
Nickel	2.0	ND		ND		ND		ND	
Selenium	2.0	ND		ND		ND		ND	
Silver	1.0	ND		ND		ND		ND	
Thallium	1.0	ND		ND		ND		ND	
Vanadium	2.0	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Concentration Units: ug/L

CCB 440-590542/45
01/14/2020 17:04

Analyte	RL	Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND							
Arsenic	1.0	ND							
Barium	1.0	ND							
Beryllium	0.50	ND							
Cadmium	1.0	ND							
Chromium	2.0	ND							
Cobalt	1.0	ND							
Copper	2.0	ND							
Lead	1.0	ND							
Manganese	1.0	ND							
Molybdenum	2.0	ND							
Nickel	2.0	ND							
Selenium	2.0	ND							
Silver	1.0	ND							
Thallium	1.0	ND							
Vanadium	2.0	ND							
Zinc	20	ND							

✓

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Concentration Units: mg/Kg

		ICB 440-591352/2-A 01/20/2020 12:29		CCB 440-591352/4-A 01/20/2020 12:36		CCB 440-591352/4-A 01/20/2020 13:05		CCB 440-591352/4-A 01/20/2020 13:33	
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Mercury	0.020	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Concentration Units: mg/Kg

		CCB 440-591352/4-A 01/20/2020 13:52							
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Mercury	0.020	ND							

✓

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG No.:

Concentration Units: mg/Kg

Lab Sample ID: MB 440-590297/1-A ^5

Instrument Code: ICP8

Batch No.: 590755

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010B
7440-42-8	Boron	ND			6010B
7440-70-2	Calcium	ND			6010B
7439-89-6	Iron	ND			6010B
7439-93-2	Lithium	ND			6010B
7439-95-4	Magnesium	ND			6010B
7723-14-0	Phosphorus	ND			6010B
7440-09-7	Potassium	ND			6010B
7440-23-5	Sodium	ND			6010B
7440-24-6	Strontium	ND			6010B
7440-31-5	Tin	ND			6010B
7440-32-6	Titanium	ND			6010B

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Concentration Units: mg/Kg | Lab Sample ID: MB 440-590297/1-A ^20

Instrument Code: ICPMS6 | Batch No.: 590542

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			6020
7440-38-2	Arsenic	ND			6020
7440-39-3	Barium	ND			6020
7440-41-7	Beryllium	ND			6020
7440-43-9	Cadmium	ND			6020
7440-47-3	Chromium	ND			6020
7440-48-4	Cobalt	ND			6020
7440-50-8	Copper	ND			6020
7439-92-1	Lead	ND			6020
7439-96-5	Manganese	ND			6020
7439-98-7	Molybdenum	ND			6020
7440-02-0	Nickel	ND			6020
7782-49-2	Selenium	ND			6020
7440-22-4	Silver	ND			6020
7440-28-0	Thallium	ND			6020
7440-62-2	Vanadium	ND			6020
7440-66-6	Zinc	ND			6020

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG No.:

Concentration Units: mg/Kg

Lab Sample ID: MB 440-590447/1-A

Instrument Code: CV-HG4

Batch No.: 591651

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7471A

✓

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Lab Sample ID: ICSA 440-590755/11 | Instrument ID: ICP8

Lab File ID: 200115-3b.csv | ICS Source: ME ICP IFA_02380

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	615	103
Boron		-0.0024	
Calcium	600	608	101
Iron	600	597	100
Lithium		-0.0105	
Magnesium	600	576	96
Phosphorus		-0.0466	
Potassium		-0.597	
Sodium		-0.624	
Strontium		0.0034	
Tin		-0.0282	
Titanium		-0.0001	
Antimony		*-0.0122*	
Arsenic		*0.0089*	
Barium		*0.0040*	
Beryllium		*0.0005*	
Cadmium		*0.0003*	
Chromium		*-0.0036*	
Cobalt		*0.0002*	
Copper		*-0.0027*	
Lead		*0.0066*	
Manganese		*0.0280*	
Molybdenum		*-0.0013*	
Nickel		*0.0018*	
Selenium		*-0.0025*	
Silicon		*-0.0572*	
Silver		*-0.0001*	
Thallium		*-0.0084*	
Tungsten		*-0.0074*	
Vanadium		*0.0003*	
Zinc		*-0.0063*	
Zirconium		*0.165*	

all samples < ½ ICSA concentration
∴ No eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Lab Sample ID: ICSAB 440-590755/12 | Instrument ID: ICP8

Lab File ID: 200115-3b.csv | ICS Source: ME ICP IFB_02401

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	601	613	102
Boron	0.500	0.526	105
Calcium	603	607	101
Iron	601	592	99
Lithium	0.500	0.541	108
Magnesium	603	582	97
Phosphorus	0.500	0.475	95
Potassium	5.00	5.10	102
Sodium	5.00	4.85	97
Strontium	0.500	0.517	103
Tin	0.500	0.458	92
Titanium	0.500	0.535	107
Antimony	*0.500*	*0.521*	*104*
Arsenic	*0.500*	*0.507*	*101*
Barium	*0.500*	*0.477*	*95*
Beryllium	*0.500*	*0.528*	*106*
Cadmium	*0.500*	*0.464*	*93*
Chromium	*0.500*	*0.496*	*99*
Cobalt	*0.500*	*0.458*	*92*
Copper	*0.500*	*0.546*	*109*
Lead	*0.500*	*0.468*	*94*
Manganese	*0.500*	*0.522*	*104*
Molybdenum	*0.500*	*0.507*	*101*
Nickel	*0.500*	*0.457*	*91*
Selenium	*0.500*	*0.475*	*95*
Silicon	*2.50*	*2.60*	*104*
Silver	*0.250*	*0.276*	*110*
Thallium	*0.500*	*0.463*	*93*
Tungsten	*0.500*	*0.441*	*88*
Vanadium	*0.500*	*0.518*	*104*
Zinc	*0.500*	*0.441*	*88*
Zirconium	*0.500*	*0.418*	*84*

No eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Lab Sample ID: ICSA 440-590755/96 | Instrument ID: ICP8

Lab File ID: 200115-3b.csv | ICS Source: ME ICP IFA_02380

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	613	102
Boron		-0.0048	
Calcium	600	611	102
Iron	600	591	99
Lithium		-0.0081	
Magnesium	600	578	96
Phosphorus		-0.0256	
Potassium		-0.504	
Sodium		-0.707	
Strontium		0.0030	
Tin		-0.0291	
Titanium		0.0000	
Antimony		*-0.0115*	
Arsenic		*0.0000*	
Barium		*0.0042*	
Beryllium		*0.0007*	
Cadmium		*0.0004*	
Chromium		*-0.0002*	
Cobalt		*-0.0004*	
Copper		*-0.0019*	
Lead		*0.0047*	
Manganese		*0.0272*	
Molybdenum		*0.0010*	
Nickel		*0.0030*	
Selenium		*0.0013*	
Silicon		*-0.0588*	
Silver		*0.0005*	
Thallium		*-0.0063*	
Tungsten		*0.0030*	
Vanadium		*0.0001*	
Zinc		*0.0062*	
Zirconium		*0.167*	

No eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Lab Sample ID: ICSAB 440-590755/97 | Instrument ID: ICP8

Lab File ID: 200115-3b.csv | ICS Source: ME ICP IFB_02401

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	601	610	102
Boron	0.500	0.529	106
Calcium	603	613	102
Iron	601	591	98
Lithium	0.500	0.538	108
Magnesium	603	588	98
Phosphorus	0.500	0.474	95
Potassium	5.00	4.91	98
Sodium	5.00	4.74	95
Strontium	0.500	0.511	102
Tin	0.500	0.458	92
Titanium	0.500	0.533	107
Antimony	*0.500*	*0.552*	*110*
Arsenic	*0.500*	*0.512*	*102*
Barium	*0.500*	*0.479*	*96*
Beryllium	*0.500*	*0.524*	*105*
Cadmium	*0.500*	*0.461*	*92*
Chromium	*0.500*	*0.493*	*99*
Cobalt	*0.500*	*0.452*	*90*
Copper	*0.500*	*0.547*	*109*
Lead	*0.500*	*0.464*	*93*
Manganese	*0.500*	*0.512*	*102*
Molybdenum	*0.500*	*0.502*	*100*
Nickel	*0.500*	*0.451*	*90*
Selenium	*0.500*	*0.468*	*94*
Silicon	*2.50*	*2.58*	*103*
Silver	*0.250*	*0.275*	*110*
Thallium	*0.500*	*0.443*	*89*
Tungsten	*0.500*	*0.434*	*87*
Vanadium	*0.500*	*0.515*	*103*
Zinc	*0.500*	*0.438*	*88*
Zirconium	*0.500*	*0.431*	*86*

No eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Lab Sample ID: ICSA 440-590542/12 | Instrument ID: ICPMS6

Lab File ID: 014ICSA.d | ICS Source: MEICPMS ICSA_00349

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.209	
Arsenic		0.0660	
Barium		0.152	
Beryllium		0.0110	
Cadmium		0.168	
Chromium		0.276	
Cobalt		0.277	
Copper		0.331	
Lead		0.0430	
Manganese		0.416	
Molybdenum	2000	2037	102
Nickel		0.284	
Selenium		0.234	
Silver		0.0210	
Thallium		0.0070	
Vanadium		0.0240	
Zinc		0.341	
Aluminum	*100000*	*95724*	*96*
Cerium		*0.0120*	
Cesium		*0.0180*	
Iron	*100000*	*90379*	*90*
Strontium		*0.822*	
Thorium		*0.103*	
Tin		*0.306*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0070*	

ICP-MS — no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Lab Sample ID: ICSAB 440-590542/13 | Instrument ID: ICPMS6

Lab File ID: 015ICSB.d | ICS Source: MEICPMS ICSAB_00276

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	20.0	19.9	99
Arsenic	20.0	19.2	96
Barium	20.0	19.0	95
Beryllium	20.0	17.5	87
Cadmium	20.0	18.3	92
Chromium	20.0	18.4	92
Cobalt	20.0	18.0	90
Copper	20.0	17.3	86
Lead	20.0	17.0	85
Manganese	20.0	18.8	94
Molybdenum	2020	2080	103
Nickel	20.0	17.6	88
Selenium	20.0	19.4	97
Silver	20.0	17.9	90
Thallium	20.0	16.3	81
Vanadium	20.0	18.6	93
Zinc	20.0	17.8	89
Aluminum	*100000*	*96301*	*96*
Cerium	*20.0*	*17.4*	*87*
Cesium	*20.0*	*19.1*	*96*
Iron	*100000*	*89464*	*89*
Rubidium	*20.0*	*21.8*	*109*
Strontium	*20.0*	*21.1*	*105*
Tin	*20.0*	*19.2*	*96*
Total Heavy Metals	*120*	*106*	*89*
Uranium	*20.0*	*17.1*	*85*

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Lab Sample ID: ICSA 440-590542/47 | Instrument ID: ICPMS6

Lab File ID: 055ICSA.d | ICS Source: MEICPMS ICSA_00349

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.198	
Arsenic		0.0720	
Barium		0.185	
Beryllium		0.0000	
Cadmium		0.164	
Chromium		0.278	
Cobalt		0.288	
Copper		0.321	
Lead		0.0420	
Manganese		0.434	
Molybdenum	2000	2068	103
Nickel		0.295	
Selenium		0.335	
Silver		0.0240	
Thallium		0.0120	
Vanadium		0.0270	
Zinc		0.326	
Aluminum	*100000*	*95274*	*95*
Cerium		*0.0190*	
Cesium		*0.0250*	
Iron	*100000*	*90892*	*91*
Strontium		*0.840*	
Thorium		*0.0640*	
Tin		*0.344*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0130*	

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Lab Sample ID: ICSAB 440-590542/48 | Instrument ID: ICPMS6

Lab File ID: 056ICSB.d | ICS Source: MEICPMS ICSAB_00276

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	20.0	20.1	101
Arsenic	20.0	19.2	96
Barium	20.0	19.3	97
Beryllium	20.0	17.3	87
Cadmium	20.0	18.4	92
Chromium	20.0	18.6	93
Cobalt	20.0	18.1	91
Copper	20.0	17.4	87
Lead	20.0	17.3	86
Manganese	20.0	18.8	94
Molybdenum	2020	2105	104
Nickel	20.0	17.5	88
Selenium	20.0	19.5	97
Silver	20.0	18.3	91
Thallium	20.0	16.6	83
Vanadium	20.0	19.0	95
Zinc	20.0	18.1	91
Aluminum	*100000*	*96526*	*97*
Cerium	*20.0*	*17.7*	*89*
Cesium	*20.0*	*19.2*	*96*
Iron	*100000*	*90157*	*90*
Rubidium	*20.0*	*22.0*	*110*
Strontium	*20.0*	*21.4*	*107*
Tin	*20.0*	*19.5*	*97*
Total Heavy Metals	*120*	*107*	*89*
Uranium	*20.0*	*17.3*	*87*

no eval

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: WRSB208_0-0.5 MS

Lab ID: 440-258875-1 MS

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 95.3

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	9430	7500	53.3	3645	75-125	4	6010B
Boron	48.3	4.4 J	53.3	83	75-125		6010B
Calcium	8260	7000	266	467	75-125	4	6010B
Iron	12800	14000	53.3	-2300	75-125	4	6010B
Lithium	54.0	7.5	53.3	87	75-125		6010B
Magnesium	3440	3300	266	58	75-125	4	6010B
Phosphorus	475	440	53.3	57	75-125	4	6010B
Potassium	1760	1200	533	114	75-125		6010B
Sodium	966	320	533	121	75-125		6010B
Strontium	144	69	53.3	J 141	75-125	F1	6010B
Tin	46.5	ND	53.3	87	75-125		6010B
Titanium	441	340	53.3	191	75-125	4	6010B
Antimony	33.7	0.54 J	53.3	J/UJ 62	75-125	F1	6020
Arsenic	50.0	5.4	53.3	84	75-125		6020
Barium	176	86	53.3	J 169	75-125	F1	6020
Beryllium	44.9	0.47	53.3	83	75-125		6020
Cadmium	45.6	ND	53.3	86	75-125		6020
Chromium	50.6	6.4	53.3	83	75-125		6020
Cobalt	48.4	5.0	53.3	81	75-125		6020
Copper	105	67	53.3	J/UJ 72	75-125	F1	6020
Lead	49.1	5.0	53.3	83	75-125		6020
Manganese	294	220	53.3	146	75-125	4	6020
Molybdenum	45.2	0.63 J	53.3	84	75-125		6020
Nickel	48.9	5.4	53.3	82	75-125		6020
Selenium	45.0	1.1	53.3	83	75-125		6020
Silver	23.9	ND	26.6	90	75-125		6020
Thallium	45.0	ND	53.3	84	75-125		6020
Vanadium	73.6	32	53.3	79	75-125		6020
Zinc	66.7	22	53.3	83	75-125		6020
Mercury	0.399	0.062	0.420	80	75-125		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: WRSB208_0-0.5 MSD

Lab ID: 440-258875-1 MSD

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 95.3

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	9560	52.7	3928	75-125	1	20	4	6010B
Boron	49.5	52.7	86	75-125	3	20		6010B
Calcium	7600	264	221	75-125	8	20	4	6010B
Iron	14000	52.7	50	75-125	9	20	4	6010B
Lithium	55.4	52.7	91	75-125	3	20		6010B
Magnesium	3940	264	251	75-125	14	20	4	6010B
Phosphorus	524	52.7	151	75-125	10	20	4	6010B
Potassium	1760	527	115	75-125	0	20		6010B
Sodium	825	527	95	75-125	16	20		6010B
Strontium	109	52.7	76	75-125	ok 28	20	F2	6010B
Tin	46.1	52.7	88	75-125	1	20		6010B
Titanium	501	52.7	307	75-125	13	20	4	6010B
Antimony	34.0	52.7	J/NJ 63	75-125	1	20	F1	6020
Arsenic	50.3	52.7	85	75-125	1	20		6020
Barium	121	52.7	J/NJ 66	75-125	J 37	20	F1 F2	6020
Beryllium	44.4	52.7	83	75-125	1	20		6020
Cadmium	46.3	52.7	88	75-125	2	20		6020
Chromium	51.4	52.7	85	75-125	2	20		6020
Cobalt	48.3	52.7	82	75-125	0	20		6020
Copper	109	52.7	81	75-125	4	20		6020
Lead	49.1	52.7	84	75-125	0	20		6020
Manganese	258	52.7	78	75-125	13	20	4	6020
Molybdenum	45.2	52.7	85	75-125	0	20		6020
Nickel	49.3	52.7	83	75-125	1	20		6020
Selenium	45.8	52.7	85	75-125	2	20		6020
Silver	24.2	26.4	92	75-125	1	20		6020
Thallium	45.0	52.7	85	75-125	0	20		6020
Vanadium	75.9	52.7	84	75-125	3	20		6020
Zinc	68.3	52.7	87	75-125	2	20		6020
Mercury	0.409	0.420	83	75-125	3	20		7471A

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SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: WRSB208_0-0.5 PDS | Lab ID: 440-258875-1 PDS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	7630		7500		52.7	NC	80-120		6010B
Boron	56.1		4.4	J	52.7	98	80-120		6010B
Calcium	7320		7000		264	NC	80-120		6010B
Iron	14100		14000		52.7	NC	80-120		6010B
Lithium	59.8		7.5		52.7	99	80-120		6010B
Magnesium	3540		3300		264	NC	80-120		6010B
Phosphorus	501		440		52.7	106	80-120		6010B
Potassium	1690		1200		527	102	80-120		6010B
Sodium	846		320		527	99	80-120		6010B
Strontium	121		69		52.7	99	80-120		6010B
Tin	52.0		ND		52.7	99	80-120		6010B
Titanium	396		340		52.7	109	80-120		6010B
Antimony	53.2		0.54	J	52.7	100	75-125		6020
Arsenic	55.2		5.4		52.7	94	75-125		6020
Barium	138		86		52.7	99	75-125		6020
Beryllium	49.6		0.47		52.7	93	75-125		6020
Cadmium	50.9		ND		52.7	96	75-125		6020
Chromium	55.4		6.4		52.7	93	75-125		6020
Cobalt	54.0		5.0		52.7	93	75-125		6020
Copper	115		67		52.7	91	75-125		6020
Lead	55.3		5.0		52.7	95	75-125		6020
Manganese	270		220		52.7	101	75-125		6020
Molybdenum	52.7		0.63	J	52.7	99	75-125		6020
Nickel	54.1		5.4		52.7	92	75-125		6020
Selenium	50.2		1.1		52.7	93	75-125		6020
Silver	52.1		ND		52.7	99	75-125		6020
Thallium	50.3		ND		52.7	95	75-125		6020
Vanadium	80.6		32		52.7	93	75-125		6020
Zinc	70.3		22		52.7	91	75-125		6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 440-590297/2-A ^5

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

Sample Matrix: Solid

LCS Source: ICP STD A_00003

Solid(mg/Kg)

Analyte	True	Found	C	%R	Limits		Q	Method
Aluminum	50.3	46.3		92	80	120		6010B
Boron	50.3	45.1		90	80	120		6010B
Calcium	251	238		95	80	120		6010B
Iron	50.3	52.2		104	80	120		6010B
Lithium	50.3	46.6		93	80	120		6010B
Magnesium	251	235		94	80	120		6010B
Phosphorus	50.3	46.1		92	80	120		6010B
Potassium	503	460		92	80	120		6010B
Sodium	503	461		92	80	120		6010B
Strontium	50.3	46.6		93	80	120		6010B
Tin	50.3	47.5		95	80	120		6010B
Titanium	50.3	47.4		94	80	120		6010B

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 440-590297/2-A ^20

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

Sample Matrix: Solid

LCS Source: ICP STD B_00003

Solid(mg/Kg)

Analyte	True	Found	C	%R	Limits		Q	Method
Antimony	50.3	46.9		93	80	120		6020
Arsenic	50.3	45.9		91	80	120		6020
Barium	50.3	46.8		93	80	120		6020
Beryllium	50.3	45.6		91	80	120		6020
Cadmium	50.3	45.6		91	80	120		6020
Chromium	50.3	45.7		91	80	120		6020
Cobalt	50.3	45.8		91	80	120		6020
Copper	50.3	46.3		92	80	120		6020
Lead	50.3	45.6		91	80	120		6020
Manganese	50.3	45.3		90	80	120		6020
Molybdenum	50.3	45.4		90	80	120		6020
Nickel	50.3	46.0		92	80	120		6020
Selenium	50.3	45.7		91	80	120		6020
Silver	25.1	24.1		96	80	120		6020
Thallium	50.3	45.6		91	80	120		6020
Vanadium	50.3	45.3		90	80	120		6020
Zinc	50.3	45.2		90	80	120		6020

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 440-590447/2-A

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

Sample Matrix: Solid

LCS Source: ME 1 PPM HG1_00416

Solid(mg/Kg)

Analyte	True	Found	C	%R	Limits		Q	Method
Mercury	0.400	0.373		93	80	120		7471A

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 440-258875-1

SDG No:

Lab Name: Eurofins Irvine

Job No: 440-258875-1

Matrix: Solid

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	7500		7280		2.9		6010B
Boron	4.4	J	ND		NC		6010B
Calcium	7000		6930		1.2		6010B
Iron	14000		14000		0.09		6010B
Lithium	7.5		ND		NC		6010B
Magnesium	3300		3320		1.2		6010B
Phosphorus	440		440		0.98		6010B
Potassium	1200		1110		NC		6010B
Sodium	320		271	J	NC		6010B
Strontium	69		68.3		NC		6010B
Tin	ND		ND		NC		6010B
Titanium	340		330		2.4		6010B

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 440-258875-1

SDG No:

Lab Name: Eurofins Irvine | Job No: 440-258875-1

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.54	J	ND		NC		6020
Arsenic	5.4		5.37		NC		6020
Barium	86		85.5		0.76		6020
Beryllium	0.47		ND		NC		6020
Cadmium	ND		ND		NC		6020
Chromium	6.4		6.63		NC		6020
Cobalt	5.0		5.05		NC		6020
Copper	67		68.3		2.1		6020
Lead	5.0		4.97		NC		6020
Manganese	220		219		0.99		6020
Molybdenum	0.63	J	ND		NC		6020
Nickel	5.4		5.59		NC		6020
Selenium	1.1		ND		NC		6020
Silver	ND		ND		NC		6020
Thallium	ND		ND		NC		6020
Vanadium	32		32.0		0.73		6020
Zinc	22		ND		NC		6020

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine

Job Number: 440-258875-1

SDG Number:

Matrix: Solid

Instrument ID: ICP8

Method: 6010B

MDL Date: 08/11/2017 12:45

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Aluminum	308.215	10	7.7
Boron	249.773	5	2.5
Calcium	315.887	25	13.5
Iron	238.204	10	6.9
Lithium	610.362	5	2.8
Magnesium	279.079	10	5
Phosphorus	214.914	5	2.5
Potassium		62.5	32.5
Sodium	589.592	62.5	32
Strontium	421.552	5	2.5
Tin	189.933	10	5
Titanium	334.941	2	1

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine | Job Number: 440-258875-1

SDG Number:

Matrix: Solid | Instrument ID: ICP8

Method: 6010B | XMDL Date: 06/15/2017 17:46

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Aluminum	308.215	0.1	0.05
Boron	249.773	0.05	0.025
Calcium	315.887	0.1	0.05
Iron	238.204	0.1	0.05
Lithium	610.362	0.5	0.025
Magnesium	279.079	0.02	0.01
Phosphorus	214.914	0.2	0.1
Potassium	766.49	0.5	0.25
Sodium	589.592	0.5	0.26
Strontium	421.552	0.02	0.01
Tin	189.933	0.1	0.05
Titanium	334.941	0.005	0.0025

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine | Job Number: 440-258875-1

SDG Number:

Matrix: Solid | Instrument ID: ICPMS6

Method: 6020 | MDL Date: 08/07/2015 16:43

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	121	1	0.27
Arsenic	75	0.5	0.25
Barium	135	0.5	0.25
Beryllium	9	0.3	0.15
Cadmium	114	0.5	0.25
Chromium	52	1	0.5
Cobalt	59	0.5	0.21
Copper		1	0.5
Lead	208	0.5	0.25
Manganese	55	0.5	0.25
Molybdenum	98	1	0.5
Nickel	60	1	0.5
Selenium		1	0.2
Silver	107	0.5	0.1
Thallium	205	0.5	0.25
Vanadium	51	1	0.5
Zinc	66	10	5

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine | Job Number: 440-258875-1

SDG Number:

Matrix: Solid | Instrument ID: ICPMS6

Method: 6020 | XMDL Date: 05/13/2019 10:08

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121	2	0.5
Arsenic	75	1	0.5
Barium	135	1	0.5
Beryllium	9	0.5	0.25
Cadmium	114	1	0.25
Chromium	52	2	0.5
Cobalt	59	1	0.5
Copper		2	0.5
Lead	208	1	0.5
Manganese	55	1	0.5
Molybdenum	98	2	0.5
Nickel	60	2	0.5
Selenium		2	0.5
Silver	107	1	0.5
Thallium	205	1	0.2
Vanadium	51	2	1
Zinc	66	20	2.5

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine

Job Number: 440-258875-1

SDG Number:

Matrix: Solid

Instrument ID: CV-HG4

Method: 7471A

MDL Date: 07/05/2011 10:19

Prep Method: 7471A

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury		0.02	0.012

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine

Job Number: 440-258875-1

SDG Number:

Matrix: Solid

Instrument ID: CV-HG4

Method: 7471A

XMDL Date: 01/01/2016 16:44

Analyte	Wavelength/ Mass	XRL (mg/Kg)	XMDL (mg/Kg)
Mercury		0.02	0.012

FORM IX - IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/15/2020

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Aluminum	396.152		0.000013	-0.000018	0.000025	0.000008	-0.000036	0.000046	0	0.02689	-0.000079	-0.000019	-0.000203	0.000009	0.001073
Antimony	206.834	0.000009	0.000003	0.000006	0.010395	-0.000001	0.000022	0.00005	-0.000075	-0.01878	-0.000037	0.000237	0.000208	0.00005	-0.000369
Arsenic	188.980	0.000011	-0.000005	-0.000018	-0.012816	0.00004	-0.00009	0.000008	-0.000015	0.000025	0.000095	-0.000094	-0.000062	-0.000062	0.000903
Barium	233.527	0	0	-0.000006	-0.000002	0.000001	0.000078	0.000001	0	-0.000191	-0.000007	-0.000001	0.000003	-0.000164	0.000137
Beryllium	234.861	0	0	0.000004	0	0	0.000098	0	-0.000003	-0.000013	-0.000018	0.000001	0.000003	0.000001	0.000004
Boron	249.678	0	0.000001	0.00088	0.000452	-0.00002	-0.00011	0	-0.00007	-0.000017	-0.000005	-0.000014	-0.00003	-0.000018	-0.010398
Cadmium	214.439	-0.000001	0	0.000002	-0.000009	-0.000003	0.00006	0	0.000001	-0.000006	0.000004	0.000001	0.000005	0.000002	-0.000056
Calcium	422.673	-0.000006		0.000876	0.000377	-0.000272	-0.000064	0.000039	-0.000053	-0.000524	-0.000396	-0.000114	-0.000132	0.000387	-0.000193
Chromium	205.560	0.000001	0.000003	-0.000007		0.000042	0.000004	0	0.000025	-0.000681	-0.000317	0.000014	0.000028	-0.000018	0.000386
Cobalt	228.615	0	0.000001		0.000085	0.000016	0.000008	0.000002	-0.000003	0.000019	0.000157	0.000002	0.001777	-0.000007	0.000113
Copper	324.754	0.000001	-0.000019	0.000014	0.000019		0.00001	0.000002	0.000013	0.000217	0.000018	0.000014	0.000206	-0.000092	0.00002
Iron	238.204	-0.000007	0.000002	-0.000338	-0.000187	-0.00013		0.000024	0.000002	-0.000162	-0.000109	-0.000119	-0.000132	-0.000188	-0.000132
Lead	220.353	-0.000039	0.000003	-0.000498	0	-0.00009	-0.000204	-0.0005	0.00009	-0.000819	-0.000019	0.000021	-0.000428	-0.000038	-0.000096
Lithium	670.783	0.000054	0.000021	-0.000148	-0.00023	-0.001097	-0.0001	0.000057	-0.000518	-0.000367	-0.000358	-0.001101	0.000381	-0.001377	-0.000136
Magnesium	279.078	-0.00001	0.000007	-0.000382	-0.000435	-0.0001	-0.000217		0.000627	-0.000188	-0.000014	-0.000068	-0.000188	0.000112	-0.00038
Manganese	259.372	0	0.000001	0.00001	-0.000007	-0.000001	0.0012	0.001474		0.004715	0.000013	0.000005	0.000019	0.00001	0.000005
Molybdenum	204.598	0.000025	0	0.000039	0.000067	0.000001	0.000004	0	0.000022		0.000085	-0.000008	0.00005	-0.000031	0.000033
Nickel	231.604	0.000001	-0.000003	-0.000756	0.000004	-0.000028	-0.000011	-0.000002	-0.000049	-0.000042		0.00006	0.000011	-0.000001	-0.000013
Phosphorus	213.618	0.000001	-0.000013	0.000141	0.000127	-0.03762	0.00005	0.000004	-0.000139	-0.020778	0.000094	-0.000098	0.000151	0.00024	-0.000573
Potassium	744.491	0.000095	0.000087	0.002408	0.001429	-0.000339	0.000196	0.000277	-0.000372	-0.001987	0.001312	0.001861	0.001852	0.001103	0.001579
Selenium	196.026	-0.000006	-0.000007	-0.00066	-0.000051	-0.000370	-0.00037	-0.00032	0.000565	-0.000003	-0.000241	0	-0.000066	-0.000483	0.009364
Silicon	251.611	0.000013	0.00002	0.000136	0.000095	0.000162	-0.000038	0.000048	0.000255	0.010982	0.000192	0.000679	0.004127	0.000213	0.053502
Silver	328.068	0	-0.000003	-0.000013	-0.000026	-0.000003	-0.000041	-0.000002	0.000075	0.000029	0.000003	-0.000009	-0.000107	0.000009	0.000009
Sodium	589.592	0.00003	0.000041	0.000558	0.000239	0.000428	0	0.000018	0.000127	0.002128	0.000479	0.000076	0.000228	-0.00004	0.006467
Strontium	421.552	0	0.00003	0.000002	0.000003	-0.000001	0.000001	0	0	0.000001	0.000002	0.000002	0.000001	0	0.000017
Thallium	190.794	-0.000001	-0.000005	0.003078	0.000156	-0.000039	0.000078	0	0.001388	0.000096	-0.000005	-0.000043	-0.010982	-0.02142	0.000265
Tin	189.925	0.000001	0	0.000083	0.000021	0.000021	0	0.000003	0.000047	0.000038	0.000039		-0.000119	0.000028	0.000028
Titanium	336.122	0	-0.000008	-0.000017	-0.000029	0.000002	0	0	0.000005	-0.00012	-0.000039	0.000005		-0.000364	0.000399
Tungsten	207.912	-0.000006	-0.000009	-0.000082	-0.000001	-0.000042	-0.00005	-0.000001	-0.000021	0.000144	-0.000024	-0.000005	-0.000009	-0.000019	
Vanadium	292.401	0.000004	0.000038	0.000001	0.000214	0.000012	-0.000004	0.000002	0.000014	-0.008504	0.000003	0.000009	0.000907		0.000183

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/15/2020

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Yttrium	371.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc	202.548	0.000003	0.000003	0.000013	-0.001604	0.0078	0	-0.00003	0.000044	0.00007	-0.000062	0.000012	0.000048	0.000036	0.000339
Zirconium	343.823	0	0.000002	-0.000097	0.000005	0.000002	-0.00025	-0.0003	-0.000025	-0.000012	-0.000009	0.000007	-0.000025	0.000005	0.000085

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/15/2020

Analyte	Wave Length	Zn	Zr
Aluminum	396.152	-0.00005	0.008541
Antimony	206.834	0.000096	-0.000086
Arsenic	188.980	-0.000075	0.000125
Barium	233.527	0.000001	-0.000001
Beryllium	234.861	0.000001	0.000006
Boron	249.678	0.00002	0.000445
Cadmium	214.439	0.000005	0.000001
Calcium	422.673	-0.000066	-0.000488
Chromium	205.560	0.000037	0.000101
Cobalt	228.615	-0.000013	-0.000003
Copper	324.754	0.000016	0.00004
Iron	238.204	0.00011	0.000622
Lead	220.353	-0.000028	-0.000005
Lithium	670.783	-0.00073	-0.000634
Magnesium	279.078	-0.000119	-0.000067
Manganese	259.372	0.000005	0.000048
Molybdenum	204.598	0.000052	0.000002
Nickel	231.604	0.000023	0.000028
Phosphorus	213.618	-0.00009	0.000028
Potassium	744.491	-0.001412	0.000491
Selenium	196.026	-0.000101	-0.000166
Silicon	251.611	0.001039	0.006759
Silver	328.068	0.000001	0.003947
Sodium	589.592	-0.000112	0.000318
Strontium	421.552	0	-0.00002
Thallium	190.794	-0.000027	0.000028
Tin	189.925	0.000048	0.000557
Titanium	336.122	0.000006	0.000122
Tungsten	207.912	0.008281	0.000004
Vanadium	292.401	0.000024	-0.000008

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/15/2020

Analyte	Wave Length	Zn	Zr
Yttrium	371.029	0	0
Zinc	202.548		0.000117
Zirconium	343.823	0.000003	

X-IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-258875-1

SDG No.:

Instrument ID: ICP8 Date: 06/15/2017 18:16

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum		600	6010B
Boron		30	6010B
Calcium		600	6010B
Iron		600	6010B
Lithium		30	6010B
Magnesium		600	6010B
Phosphorus		30	6010B
Potassium		1000	6010B
Sodium		1000	6010B
Strontium		30	6010B
Tin		30	6010B
Titanium		30	6010B

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-258875-1

SDG No.:

Instrument ID: ICPMS6 Date: 07/03/2018 18:32

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		5000	6020
Arsenic		5000	6020
Barium		5000	6020
Beryllium		1000	6020
Cadmium		5000	6020
Chromium		5000	6020
Cobalt		5000	6020
Copper		5000	6020
Lead		5000	6020
Manganese		4000	6020
Molybdenum		2000	6020
Nickel		5000	6020
Selenium		5000	6020
Silver		100	6020
Thallium		5000	6020
Vanadium		5000	6020
Zinc		5000	6020

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-258875-1

SDG No.:

Instrument ID: CV-HG4 Date: 01/01/2019 13:06

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Mercury		10	7471A

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-590297/1-A ^5	01/13/2020 16:29	590297	2.00		50
LCS 440-590297/2-A ^5	01/13/2020 16:29	590297	1.99		50
440-258875-1	01/13/2020 16:29	590297	1.99		50
440-258875-1 MS	01/13/2020 16:29	590297	1.97		50
440-258875-1 MSD	01/13/2020 16:29	590297	1.99		50
440-258875-2	01/13/2020 16:29	590297	1.98		50
440-258875-3	01/13/2020 16:29	590297	1.99		50
440-258875-4	01/13/2020 16:29	590297	1.99		50
440-258875-5	01/13/2020 16:29	590297	2.01		50
440-258875-6	01/13/2020 16:29	590297	2.04		50
440-258875-7	01/13/2020 16:29	590297	1.97		50
440-258875-8	01/13/2020 16:29	590297	1.96		50
440-258875-9	01/13/2020 16:29	590297	1.97		50
440-258875-11	01/13/2020 16:29	590297	1.96		50
440-258875-12	01/13/2020 16:29	590297	1.98		50
440-258875-13	01/13/2020 16:29	590297	2.00		50
440-258875-14	01/13/2020 16:29	590297	1.96		50
440-258875-15	01/13/2020 16:29	590297	1.99		50
440-258875-16	01/13/2020 16:29	590297	1.99		50
440-258875-17	01/13/2020 16:29	590297	1.98		50
440-258875-19	01/13/2020 16:29	590297	1.96		50
440-258875-20	01/13/2020 16:29	590297	2.02		50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-590297/1-A ^20	01/13/2020 16:29	590297	2.00		50
LCS 440-590297/2-A ^20	01/13/2020 16:29	590297	1.99		50
440-258875-1	01/13/2020 16:29	590297	1.99		50
440-258875-1 MS	01/13/2020 16:29	590297	1.97		50
440-258875-1 MSD	01/13/2020 16:29	590297	1.99		50
440-258875-2	01/13/2020 16:29	590297	1.98		50
440-258875-3	01/13/2020 16:29	590297	1.99		50
440-258875-4	01/13/2020 16:29	590297	1.99		50
440-258875-5	01/13/2020 16:29	590297	2.01		50
440-258875-6	01/13/2020 16:29	590297	2.04		50
440-258875-7	01/13/2020 16:29	590297	1.97		50
440-258875-8	01/13/2020 16:29	590297	1.96		50
440-258875-9	01/13/2020 16:29	590297	1.97		50
440-258875-11	01/13/2020 16:29	590297	1.96		50
440-258875-12	01/13/2020 16:29	590297	1.98		50
440-258875-13	01/13/2020 16:29	590297	2.00		50
440-258875-14	01/13/2020 16:29	590297	1.96		50
440-258875-15	01/13/2020 16:29	590297	1.99		50
440-258875-16	01/13/2020 16:29	590297	1.99		50
440-258875-17	01/13/2020 16:29	590297	1.98		50
440-258875-19	01/13/2020 16:29	590297	1.96		50
440-258875-20	01/13/2020 16:29	590297	2.02		50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-590447/1-A	01/17/2020 08:41	590447	0.50		50
LCS 440-590447/2-A	01/17/2020 08:41	590447	0.50		50
440-258875-1	01/17/2020 08:41	590447	0.51		50
440-258875-1 MS	01/17/2020 08:41	590447	0.50		50
440-258875-1 MSD	01/17/2020 08:41	590447	0.50		50
440-258875-2	01/17/2020 08:41	590447	0.50		50
440-258875-3	01/17/2020 08:41	590447	0.49		50
440-258875-4	01/17/2020 08:41	590447	0.49		50
440-258875-5	01/17/2020 08:41	590447	0.51		50
440-258875-6	01/17/2020 08:41	590447	0.49		50
440-258875-7	01/17/2020 08:41	590447	0.49		50
440-258875-8	01/17/2020 08:41	590447	0.51		50
440-258875-9	01/17/2020 08:41	590447	0.49		50
440-258875-11	01/17/2020 08:41	590447	0.49		50
440-258875-12	01/17/2020 08:41	590447	0.50		50
440-258875-13	01/17/2020 08:41	590447	0.51		50
440-258875-14	01/17/2020 08:41	590447	0.50		50
440-258875-15	01/17/2020 08:41	590447	0.49		50
440-258875-16	01/17/2020 08:41	590447	0.50		50
440-258875-17	01/17/2020 08:41	590447	0.50		50
440-258875-19	01/17/2020 08:41	590447	0.49		50
440-258875-20	01/17/2020 08:41	590447	0.49		50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: ICP8 | Analysis Method: 6010B

Start Date: 01/15/2020 11:50 | End Date: 01/15/2020 17:29

Lab Sample Id	D/F	Type	Time	Analytes											
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
ICIS 440-590755/1		1	11:50	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-590755/2 IC			11:53	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-590755/3 IC			11:58	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-590755/4 IC			12:00	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:10												
ICV 440-590755/6		1	12:15	X	X	X	X	X	X	X		X	X	X	X
ZZZZZZ			12:17												
ICV 440-590755/8		1	12:19								X				
ZZZZZZ			12:21												
ICB 440-590755/10		1	12:24	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-590755/11		1	12:32	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-590755/12		1	12:35	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:37												
ZZZZZZ			12:39												
ZZZZZZ			12:41												
CRI 440-590755/16		1	12:43	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590755/17			12:57												
ZZZZZZ			12:59												
CCB 440-590755/19			13:03												
ZZZZZZ			13:05												
ZZZZZZ			13:07												
ZZZZZZ			13:09												
ZZZZZZ			13:11												
ZZZZZZ			13:14												
ZZZZZZ			13:16												
ZZZZZZ			13:18												
ZZZZZZ			13:20												
ZZZZZZ			13:22												
ZZZZZZ			13:25												
CCV 440-590755/30			13:31												
CCB 440-590755/31			13:36												
ZZZZZZ			13:38												
ZZZZZZ			13:40												
ZZZZZZ			13:43												
ZZZZZZ			13:45												
ZZZZZZ			13:47												
ZZZZZZ			13:49												
ZZZZZZ			13:51												
ZZZZZZ			13:54												
ZZZZZZ			13:56												
CCV 440-590755/41			14:03												
CCB 440-590755/42			14:07												

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: ICP8 | Analysis Method: 6010B

Start Date: 01/15/2020 11:50 | End Date: 01/15/2020 17:29

Lab Sample Id	D/F	Type	Time	Analytes											
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
ZZZZZZ			14:11												
ZZZZZZ			14:13												
CCV 440-590755/45			14:38												
ZZZZZZ			14:40												
CCB 440-590755/47			14:44												
ZZZZZZ			14:46												
ZZZZZZ			14:48												
ZZZZZZ			14:50												
ZZZZZZ			14:53												
ZZZZZZ			14:55												
ZZZZZZ			14:57												
ZZZZZZ			14:59												
ZZZZZZ			15:01												
ZZZZZZ			15:04												
ZZZZZZ			15:06												
CCV 440-590755/58	1		15:11	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590755/59	1		15:16	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			15:19												
ZZZZZZ			15:21												
ZZZZZZ			15:23												
ZZZZZZ			15:25												
ZZZZZZ			15:27												
MB 440-590297/1-A ^5	5	T	15:30	X	X	X	X	X	X	X	X	X	X	X	X
LCS 440-590297/2-A ^5	5	T	15:33	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1 SD	25	T	15:35	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1	5	T	15:37	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590755/69	1		16:00	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590755/70	1		16:06	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1 MS	5	T	16:08	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1 MSD	5	T	16:10	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1 PDS	5	T	16:12	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-2	5	T	16:14	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-3	5	T	16:17	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-4	5	T	16:19	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-5	5	T	16:21	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-6	5	T	16:23	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-7	5	T	16:25	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-8	5	T	16:28	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590755/81	1		16:34	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590755/82	1		16:38	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-9	5	T	16:47	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-11	5	T	16:49	X	X	X	X	X	X	X	X	X	X	X	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 01/15/2020 11:50 End Date: 01/15/2020 17:29

Lab Sample Id	D/F	Type	Time	Analytes											
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
440-258875-12	5	T	16:52	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-13	5	T	16:54	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-14	5	T	16:56	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-15	5	T	16:58	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-16	5	T	17:00	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-17	5	T	17:03	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-19	5	T	17:05	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-20	5	T	17:07	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590755/93	1		17:19	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590755/94	1		17:23	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-590755/95	1		17:25	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-590755/96	1		17:27	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-590755/97	1		17:29	X	X	X	X	X	X	X	X	X	X	X	X

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: ICPMS6 | Analysis Method: 6020

Start Date: 01/14/2020 14:48 | End Date: 01/14/2020 17:11

Lab Sample Id	D/F	Type	Time	Analytes																
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn
STD0 440-590542/1 IC	1		14:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-590542/2 IC	1		14:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-590542/3 IC	1		14:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-590542/4 IC	1		14:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD4 440-590542/5 IC	1		14:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-590542/6	1		14:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			15:00																	
ICB 440-590542/8	1		15:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			15:04																	
CRI 440-590542/10	1		15:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-590542/11	1		15:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-590542/12	1		15:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-590542/13	1		15:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590542/14	1		15:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590542/15	1		15:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 440-590297/1-A ^20	20	T	15:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 440-590297/2-A ^20	20	T	15:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1	20	T	15:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1 MS	20	T	15:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1 MSD	20	T	15:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1 PDS	20	T	15:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-1 SD	100	T	15:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590542/23	1		16:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590542/24	1		16:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-2	20	T	16:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-3	20	T	16:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-4	20	T	16:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-5	20	T	16:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-6	20	T	16:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-7	20	T	16:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-8	20	T	16:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-9	20	T	16:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-11	20	T	16:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-12	20	T	16:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590542/35	1		16:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590542/36	1		16:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-13	20	T	16:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-14	20	T	16:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-15	20	T	16:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-16	20	T	16:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-17	20	T	16:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-19	20	T	16:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: ICPMS6 | Analysis Method: 6020

Start Date: 01/14/2020 14:48 | End Date: 01/14/2020 17:11

Lab Sample Id	D/F	Type	Time	Analytes																
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn
440-258875-20	20	T	16:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590542/44	1		17:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590542/45	1		17:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-590542/46	1		17:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-590542/47	1		17:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-590542/48	1		17:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: CV-HG4 | Analysis Method: 7471A

Start Date: 01/20/2020 12:12 | End Date: 01/20/2020 17:44

Lab Sample Id	D/F	Type	Time	Hg	Analytes
IC 440-591352/6-A			12:12	X	
IC 440-591352/7-A			12:14	X	
IC 440-591352/8-A			12:16	X	
IC 440-591352/9-A			12:19	X	
IC 440-591352/10-A			12:21	X	
IC 440-591352/11-A			12:23	X	
ICV 440-591352/1-A	1		12:26	X	
ICB 440-591352/2-A	1		12:29	X	
CRA 440-591352/5-A	1		12:32	X	
CCV 440-591352/3-A	1		12:34	X	
CCB 440-591352/4-A	1		12:36	X	
MB 440-590447/1-A	1	T	12:39	X	
LCS 440-590447/2-A	1	T	12:41	X	
440-258875-1	1	T	12:43	X	
440-258875-1 MS	1	T	12:46	X	
440-258875-1 MSD	1	T	12:48	X	
440-258875-2	1	T	12:51	X	
440-258875-3	1	T	12:54	X	
440-258875-4	1	T	12:57	X	
440-258875-5	1	T	12:59	X	
440-258875-6	1	T	13:01	X	
CCV 440-591352/3-A	1		13:03	X	
CCB 440-591352/4-A	1		13:05	X	
440-258875-7	1	T	13:08	X	
440-258875-8	1	T	13:11	X	
440-258875-9	1	T	13:13	X	
440-258875-11	1	T	13:15	X	
440-258875-12	1	T	13:17	X	
440-258875-13	1	T	13:19	X	
440-258875-14	1	T	13:22	X	
440-258875-15	1	T	13:24	X	
440-258875-16	1	T	13:26	X	
440-258875-17	1	T	13:28	X	
CCV 440-591352/3-A	1		13:30	X	
CCB 440-591352/4-A	1		13:33	X	
440-258875-19	1	T	13:35	X	
440-258875-20	1	T	13:37	X	
ZZZZZZ			13:40		
ZZZZZZ			13:42		
ZZZZZZ			13:45		
CRA 440-591352/5-A	1		13:47	X	
CCV 440-591352/3-A	1		13:50	X	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: CV-HG4 | Analysis Method: 7471A

Start Date: 01/20/2020 12:12 | End Date: 01/20/2020 17:44

Lab Sample Id	D/F	Type	Time	Hg	Analytes
CCB 440-591352/4-A	1		13:52	X	
CCV 440-591352/3-A			13:59		
CCB 440-591352/4-A			14:01		
ZZZZZZ			14:04		
ZZZZZZ			14:06		
ZZZZZZ			14:08		
ZZZZZZ			14:11		
ZZZZZZ			14:13		
ZZZZZZ			14:17		
ZZZZZZ			14:20		
ZZZZZZ			14:22		
ZZZZZZ			14:25		
ZZZZZZ			14:28		
CCV 440-591352/3-A			14:30		
CCB 440-591352/4-A			14:33		
ZZZZZZ			14:35		
ZZZZZZ			14:38		
ZZZZZZ			14:40		
ZZZZZZ			14:43		
ZZZZZZ			14:46		
ZZZZZZ			14:48		
ZZZZZZ			14:51		
ZZZZZZ			14:53		
ZZZZZZ			14:56		
ZZZZZZ			14:58		
CCV 440-591352/3-A			15:00		
CCB 440-591352/4-A			15:02		
ZZZZZZ			15:05		
ZZZZZZ			15:08		
ZZZZZZ			15:10		
ZZZZZZ			15:13		
ZZZZZZ			15:15		
CRA 440-591352/5-A			15:17		
CCV 440-591352/3-A			15:19		
CCB 440-591352/4-A			15:22		
CCV 440-591352/3-A			15:36		
CCB 440-591352/4-A			15:38		
ZZZZZZ			15:41		
ZZZZZZ			15:43		
ZZZZZZ			15:45		
ZZZZZZ			15:48		
ZZZZZZ			15:51		

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: CV-HG4 | Analysis Method: 7471A

Start Date: 01/20/2020 12:12 | End Date: 01/20/2020 17:44

Lab Sample Id	D/F	Type	Time	Hg	Analytes
ZZZZZZ			15:54		
ZZZZZZ			15:57		
ZZZZZZ			16:00		
ZZZZZZ			16:03		
ZZZZZZ			16:05		
CCV 440-591352/3-A			16:07		
CCB 440-591352/4-A			16:10		
ZZZZZZ			16:13		
ZZZZZZ			16:15		
ZZZZZZ			16:17		
ZZZZZZ			16:20		
ZZZZZZ			16:22		
ZZZZZZ			16:25		
ZZZZZZ			16:27		
ZZZZZZ			16:29		
ZZZZZZ			16:32		
ZZZZZZ			16:34		
CCV 440-591352/3-A			16:37		
CCB 440-591352/4-A			16:40		
ZZZZZZ			16:43		
ZZZZZZ			16:45		
ZZZZZZ			16:48		
ZZZZZZ			16:50		
CRA 440-591352/5-A			16:53		
CCV 440-591352/3-A			16:55		
CCB 440-591352/4-A			16:58		
CCV 440-591352/3-A			17:01		
CCB 440-591352/4-A			17:03		
ZZZZZZ			17:06		
ZZZZZZ			17:08		
ZZZZZZ			17:11		
ZZZZZZ			17:13		
ZZZZZZ			17:15		
ZZZZZZ			17:19		
ZZZZZZ			17:22		
ZZZZZZ			17:24		
ZZZZZZ			17:26		
ZZZZZZ			17:29		
CCV 440-591352/3-A			17:32		
CCB 440-591352/4-A			17:35		
ZZZZZZ			17:38		
CRA 440-591352/5-A			17:40		

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: CV-HG4 | Analysis Method: 7471A

Start Date: 01/20/2020 12:12 | End Date: 01/20/2020 17:44

Lab Sample Id	D/F	Type	Time	Analytes Hg
CCV 440-591352/3-A			17:42	
CCB 440-591352/4-A			17:44	

Prep Types:
T = Total/NA

FORM XIII-IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

ICP Instrument ID: ICP8 Start Date: 01/15/2020 End Date: 01/15/2020

Internal Standards %RI For:

Lab Sample ID	Time	Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICIS 440-590755/1	11:50										
ICV 440-590755/6	12:15	100									
ICV 440-590755/8	12:19	100									
ICB 440-590755/10	12:24	100									
ICSA 440-590755/11	12:32	84									
ICSAB 440-590755/12	12:35	84									
CRI 440-590755/16	12:43	100									
CCV 440-590755/58	15:11	97									
CCB 440-590755/59	15:16	97									
MB 440-590297/1-A ^5	15:30	97									
LCS 440-590297/2-A ^5	15:33	97									
440-258875-1 SD	15:35	96									
440-258875-1	15:37	94									
CCV 440-590755/69	16:00	97									
CCB 440-590755/70	16:06	97									
440-258875-1 MS	16:08	94									
440-258875-1 MSD	16:10	93									
440-258875-1 PDS	16:12	94									
440-258875-2	16:14	94									
440-258875-3	16:17	95									
440-258875-4	16:19	94									
440-258875-5	16:21	94									
440-258875-6	16:23	94									
440-258875-7	16:25	94									
440-258875-8	16:28	94									
CCV 440-590755/81	16:34	96									
CCB 440-590755/82	16:38	97									
440-258875-9	16:47	95									
440-258875-11	16:49	95									
440-258875-12	16:52	95									
440-258875-13	16:54	95									
440-258875-14	16:56	95									
440-258875-15	16:58	95									
440-258875-16	17:00	95									
440-258875-17	17:03	95									
440-258875-19	17:05	94									
440-258875-20	17:07	95									
CCV 440-590755/93	17:19	97									
CCB 440-590755/94	17:23	98									

FORM XV - IN

15-IN

ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

ICP Instrument ID: ICP8 Start Date: 01/15/2020 End Date: 01/15/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
CRI 440-590755/95	17:25	98									
ICSA 440-590755/96	17:27	83									
ICSAB 440-590755/97	17:29	83									

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FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

ICP-MS Instrument ID: ICPMS6 Start Date: 01/14/2020 End Date: 01/14/2020

Lab Sample ID	Time	Internal Standards %RI For: Element Sc-45	Q	Element Ge	Q	Element In-115	Q	Element Tb-159	Q	Element	Q
STD0 440-590542/1 IC	14:48	100		100		100		100			
STD1 440-590542/2 IC	14:50	100		100		100		100			
STD2 440-590542/3 IC	14:52	99		100		100		100			
STD3 440-590542/4 IC	14:54	101		101		102		102			
STD4 440-590542/5 IC	14:56	99		100		100		102			
ICV 440-590542/6	14:58	100		101		100		101			
ICB 440-590542/8	15:02	98		98		99		101			
CRI 440-590542/10	15:07	98		98		99		101			
CRI 440-590542/11	15:09	98		98		100		101			
ICSA 440-590542/12	15:11	102		99		96		100			
ICSAB 440-590542/13	15:14	112		106		100		101			
CCV 440-590542/14	15:33	101		102		101		102			
CCB 440-590542/15	15:35	99		100		99		101			
MB 440-590297/1-A ^20	15:37	98		98		97		98			
LCS 440-590297/2-A ^20	15:39	99		99		98		99			
440-258875-1	15:41	102		101		97		100			
440-258875-1 MS	15:43	103		100		98		99			
440-258875-1 MSD	15:45	104		100		97		100			
440-258875-1 PDS	15:47	102		100		96		99			
440-258875-1 SD	15:53	103		101		100		101			
CCV 440-590542/23	16:00	101		101		99		100			
CCB 440-590542/24	16:02	98		99		98		99			
440-258875-2	16:04	102		99		96		98			
440-258875-3	16:06	102		99		96		98			
440-258875-4	16:08	100		98		95		97			
440-258875-5	16:10	101		98		95		98			
440-258875-6	16:12	100		98		95		98			
440-258875-7	16:14	100		98		95		98			
440-258875-8	16:16	102		100		97		99			
440-258875-9	16:18	103		100		97		98			
440-258875-11	16:21	104		101		97		99			
440-258875-12	16:23	104		101		97		99			
CCV 440-590542/35	16:38	103		104		102		101			
CCB 440-590542/36	16:40	101		101		100		99			
440-258875-13	16:42	105		102		98		99			
440-258875-14	16:45	103		102		97		99			
440-258875-15	16:47	104		101		98		100			

FORM XV - IN

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

ICP-MS Instrument ID: ICPMS6 Start Date: 01/14/2020 End Date: 01/14/2020

Internal Standards %RI For:

Lab Sample ID	Time	Element Sc-45	Q	Element Ge	Q	Element In-115	Q	Element Tb-159	Q	Element	Q
440-258875-16	16:49	103		100		98		100			
440-258875-17	16:51	103		101		98		100			
440-258875-19	16:53	102		100		97		100			
440-258875-20	16:55	103		101		98		100			
CCV 440-590542/44	17:02	100		101		99		99			
CCB 440-590542/45	17:04	99		100		99		99			
CRI 440-590542/46	17:06	100		100		100		100			
ICSA 440-590542/47	17:08	102		99		95		99			
ICSAB 440-590542/48	17:11	111		106		99		99			

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FORM XV - IN

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00292	ME 30% H2O2 00110
MB 440-590297/1		3050B, 6010B		2.00 g	50 mL			5 mL	3 mL
LCS 440-590297/2		3050B, 6010B		1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-1	WRSB208_0-0.5	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-1 MS	WRSB208_0-0.5	3050B, 6010B	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-1 MSD	WRSB208_0-0.5	3050B, 6010B	T	1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-2	WRSB208_0.5-3	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-3	WRSB208_3-6	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-4	WRSB208_6-15	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-5	WRSB208_15-25	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-258875-B-6	WRSB208-FD_15-25	3050B, 6010B	T	2.04 g	50 mL			5 mL	3 mL
440-258875-B-7	WRSB208_25-35	3050B, 6010B	T	1.97 g	50 mL			5 mL	3 mL
440-258875-B-8	WRSB208_35-45	3050B, 6010B	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-9	WRSB208_45-55	3050B, 6010B	T	1.97 g	50 mL			5 mL	3 mL
440-258875-B-11	WRSB208_55-65	3050B, 6010B	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-12	WRSB208_65-75	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-13	WRSB208-FD_65-75	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-258875-B-14	WRSB208_75-85	3050B, 6010B	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-15	WRSB208_85-95	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-16	WRSB208_95-105	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-17	WRSB208_105-115	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-19	WRSB208_115-125	3050B, 6010B	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-20	WRSB208_125-131.5	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00551	ME HNO3 00548
MB 440-590297/1		3050B, 6010B		5 mL	5 mL
LCS 440-590297/2		3050B, 6010B		5 mL	5 mL
440-258875-B-1	WRSB208_0-0.5	3050B, 6010B	T	5 mL	5 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00551	ME HNO3 00548
440-258875-B-1 MS	WRSB208_0-0.5	3050B, 6010B	T	5 mL	5 mL
440-258875-B-1 MSD	WRSB208_0-0.5	3050B, 6010B	T	5 mL	5 mL
440-258875-B-2	WRSB208_0.5-3	3050B, 6010B	T	5 mL	5 mL
440-258875-B-3	WRSB208_3-6	3050B, 6010B	T	5 mL	5 mL
440-258875-B-4	WRSB208_6-15	3050B, 6010B	T	5 mL	5 mL
440-258875-B-5	WRSB208_15-25	3050B, 6010B	T	5 mL	5 mL
440-258875-B-6	WRSB208-FD_15-25	3050B, 6010B	T	5 mL	5 mL
440-258875-B-7	WRSB208_25-35	3050B, 6010B	T	5 mL	5 mL
440-258875-B-8	WRSB208_35-45	3050B, 6010B	T	5 mL	5 mL
440-258875-B-9	WRSB208_45-55	3050B, 6010B	T	5 mL	5 mL
440-258875-B-11	WRSB208_55-65	3050B, 6010B	T	5 mL	5 mL
440-258875-B-12	WRSB208_65-75	3050B, 6010B	T	5 mL	5 mL
440-258875-B-13	WRSB208-FD_65-75	3050B, 6010B	T	5 mL	5 mL
440-258875-B-14	WRSB208_75-85	3050B, 6010B	T	5 mL	5 mL
440-258875-B-15	WRSB208_85-95	3050B, 6010B	T	5 mL	5 mL
440-258875-B-16	WRSB208_95-105	3050B, 6010B	T	5 mL	5 mL
440-258875-B-17	WRSB208_105-115	3050B, 6010B	T	5 mL	5 mL
440-258875-B-19	WRSB208_115-125	3050B, 6010B	T	5 mL	5 mL
440-258875-B-20	WRSB208_125-131.5	3050B, 6010B	T	5 mL	5 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

	Batch Notes
Balance ID	57
Batch Comment	Spike A&B= 500 ul
Blank Soil Lot Number	25438819
Temperature - Corrected - End	94 Degrees C
Temperature - Corrected - Start	90 Degrees C
Digestion End Time	01/14/2020 12:55
Digestion Start Time	01/14/2020 09:10
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	6019234
Hydrochloric Acid ID	5999212
Nitric Acid ID	5997059
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc.#B14) CF=-1
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	91 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00292	ME 30% H2O2 00110
MB 440-590297/1		3050B, 6020		2.00 g	50 mL			5 mL	3 mL
LCS 440-590297/2		3050B, 6020		1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-1	WRSB208_0-0.5	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-1 MS	WRSB208_0-0.5	3050B, 6020	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-1 MSD	WRSB208_0-0.5	3050B, 6020	T	1.99 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-258875-B-2	WRSB208_0.5-3	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-3	WRSB208_3-6	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-4	WRSB208_6-15	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-5	WRSB208_15-25	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-258875-B-6	WRSB208-FD_15-25	3050B, 6020	T	2.04 g	50 mL			5 mL	3 mL
440-258875-B-7	WRSB208_25-35	3050B, 6020	T	1.97 g	50 mL			5 mL	3 mL
440-258875-B-8	WRSB208_35-45	3050B, 6020	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-9	WRSB208_45-55	3050B, 6020	T	1.97 g	50 mL			5 mL	3 mL
440-258875-B-11	WRSB208_55-65	3050B, 6020	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-12	WRSB208_65-75	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-13	WRSB208-FD_65-75	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-258875-B-14	WRSB208_75-85	3050B, 6020	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-15	WRSB208_85-95	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-16	WRSB208_95-105	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-258875-B-17	WRSB208_105-115	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-258875-B-19	WRSB208_115-125	3050B, 6020	T	1.96 g	50 mL			5 mL	3 mL
440-258875-B-20	WRSB208_125-131.5	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00551	ME HNO3 00548
MB 440-590297/1		3050B, 6020		5 mL	5 mL
LCS 440-590297/2		3050B, 6020		5 mL	5 mL
440-258875-B-1	WRSB208_0-0.5	3050B, 6020	T	5 mL	5 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00551	ME HNO3 00548
440-258875-B-1 MS	WRSB208_0-0.5	3050B, 6020	T	5 mL	5 mL
440-258875-B-1 MSD	WRSB208_0-0.5	3050B, 6020	T	5 mL	5 mL
440-258875-B-2	WRSB208_0.5-3	3050B, 6020	T	5 mL	5 mL
440-258875-B-3	WRSB208_3-6	3050B, 6020	T	5 mL	5 mL
440-258875-B-4	WRSB208_6-15	3050B, 6020	T	5 mL	5 mL
440-258875-B-5	WRSB208_15-25	3050B, 6020	T	5 mL	5 mL
440-258875-B-6	WRSB208-FD_15-25	3050B, 6020	T	5 mL	5 mL
440-258875-B-7	WRSB208_25-35	3050B, 6020	T	5 mL	5 mL
440-258875-B-8	WRSB208_35-45	3050B, 6020	T	5 mL	5 mL
440-258875-B-9	WRSB208_45-55	3050B, 6020	T	5 mL	5 mL
440-258875-B-11	WRSB208_55-65	3050B, 6020	T	5 mL	5 mL
440-258875-B-12	WRSB208_65-75	3050B, 6020	T	5 mL	5 mL
440-258875-B-13	WRSB208-FD_65-75	3050B, 6020	T	5 mL	5 mL
440-258875-B-14	WRSB208_75-85	3050B, 6020	T	5 mL	5 mL
440-258875-B-15	WRSB208_85-95	3050B, 6020	T	5 mL	5 mL
440-258875-B-16	WRSB208_95-105	3050B, 6020	T	5 mL	5 mL
440-258875-B-17	WRSB208_105-115	3050B, 6020	T	5 mL	5 mL
440-258875-B-19	WRSB208_115-125	3050B, 6020	T	5 mL	5 mL
440-258875-B-20	WRSB208_125-131.5	3050B, 6020	T	5 mL	5 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590297 Batch Start Date: 01/13/20 16:29 Batch Analyst: Tan, Sarah

Batch Method: 3050B Batch End Date: 01/14/20 14:00

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B= 500 ul
Blank Soil Lot Number	25438819
Temperature - Corrected - End	94 Degrees C
Temperature - Corrected - Start	90 Degrees C
Digestion End Time	01/14/2020 12:55
Digestion Start Time	01/14/2020 09:10
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	6019234
Hydrochloric Acid ID	5999212
Nitric Acid ID	5997059
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc.#B14) CF=-1
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	91 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590447 Batch Start Date: 01/17/20 08:41 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 01/20/20 11:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HG1 00416	ME Aqua Regia 00791	ME HYDROX SOL 00117	ME KMN04 00189
MB 440-590447/1		7471A, 7471A		0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
LCS 440-590447/2		7471A, 7471A		0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-258875-B-1	WRSB208_0-0.5	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-1 MS	WRSB208_0-0.5	7471A, 7471A	T	0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-258875-B-1 MSD	WRSB208_0-0.5	7471A, 7471A	T	0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-258875-B-2	WRSB208_0.5-3	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-3	WRSB208_3-6	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-4	WRSB208_6-15	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-5	WRSB208_15-25	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-6	WRSB208-FD_15-25	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-7	WRSB208_25-35	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-8	WRSB208_35-45	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-9	WRSB208_45-55	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-11	WRSB208_55-65	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-12	WRSB208_65-75	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-13	WRSB208-FD_65-75	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-14	WRSB208_75-85	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-15	WRSB208_85-95	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-16	WRSB208_95-105	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-17	WRSB208_105-115	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-19	WRSB208_115-125	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-258875-B-20	WRSB208_125-131.5	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590447 Batch Start Date: 01/17/20 08:41 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 01/20/20 11:00

Batch Notes	
Balance ID	57
Batch Comment	MB Loc: B12, Weighed by AM, Filtered by ES
Blank Matrix ID	25438819
Temperature - Corrected - End	92 Degrees C
Temperature - Corrected - Start	92 Degrees C
Digestion End Time	01/17/2020 10:32
Digestion Start Time	01/17/2020 10:02
Digestion Unit ID	8
Hydrochloric Acid ID	Lot: 0000243992
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	6040574 @1/20/20 @10:30
Potassium Permanganate ID	6040428
Pipette/Syringe/Dispenser ID	800
Analyst ID - Spike Analyst	MM
Thermometer ID	P-120 CF -1 Loc: C1
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	93 Degrees C
Temperature - Uncorrected - Start	93 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 591352 Batch Start Date: 01/20/20 09:41 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 01/20/20 11:24

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HG1 00418	ME 1 PPM HG1 00419	ME Aqua Regia 00792	ME HYDROX SOL 00117
ICV 440-591352/1		7471A, 7471A		0.50 g	50 mL		200 uL	4.2 mL	5 mL
ICB 440-591352/2		7471A, 7471A		0.50 g	50 mL			4.2 mL	5 mL
CCV 440-591352/3		7471A, 7471A		0.50 g	50 mL	200 uL		4.2 mL	5 mL
CCB 440-591352/4		7471A, 7471A		0.50 g	50 mL			4.2 mL	5 mL
CRA 440-591352/5		7471A, 7471A		0.50 g	50 mL	10 uL		4.2 mL	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME KMN04 00189
ICV 440-591352/1		7471A, 7471A		12.4 mL
ICB 440-591352/2		7471A, 7471A		12.4 mL
CCV 440-591352/3		7471A, 7471A		12.4 mL
CCB 440-591352/4		7471A, 7471A		12.4 mL
CRA 440-591352/5		7471A, 7471A		12.4 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 591352 Batch Start Date: 01/20/20 09:41 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 01/20/20 11:24

Batch Notes	
Balance ID	57
Batch Comment	ICB Loc: A6
Blank Matrix ID	25438819
Temperature - Corrected - End	95 Degrees C
Temperature - Corrected - Start	95 Degrees C
Digestion End Time	01/20/2020 10:40
Digestion Start Time	01/20/2020 10:10
Digestion Unit ID	12
Hydrochloric Acid ID	Lot: 0000243992
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	6040574 @ 01/20/2020 11:14
Potassium Permanganate ID	6040428
Pipette/Syringe/Dispenser ID	800
Analyst ID - Spike Analyst	MM
Thermometer ID	P-128 CF +1 Loc: C2
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	94 Degrees C
Temperature - Uncorrected - Start	94 Degrees C

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Current Signal

[He]

Mass	Range	Count	Avg. Count	RSD [%]
59	20000	13119	13283.5	1.50
89	20000	10485	10460.9	2.20
205	50000	30770	30809.5	1.19
70/140	2	1.009 %	0.925 %	6.40
156/140	1	0.281 %	0.229 %	12.04
51	20	3	4.4	52.83
56	2000	423	452.3	31.80
75	20	1	0.4	166.21
78	20	10	6.6	40.50
Integration Time [sec]		0.10		

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	°C
Smpl Depth	8.0	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.80	L/min	Makeup/Dilution Gas	0.25	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	1.3	V	Cell Entrance	-40	V
Extract 2	-250.0	V	Cell Exit	-70	V
Omega Bias	-110	V	Deflect	5.4	V
Omega Lens	9.8	V	Plate Bias	-60	V

Cell Parameters

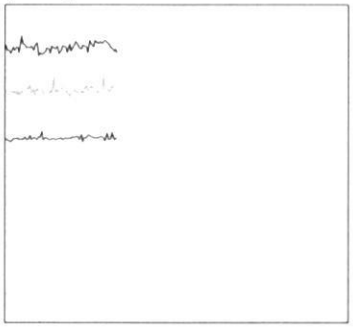
Use Gas	Yes		OctP RF	200	V
He Flow	4.5	mL/min	Energy Discrimination	5.0	V
OctP Bias	-18.0	V			

Meters

IF/BK Press	1.68E+2	Pa	Carrier Gas(BP)	2.92E+2	kPa	Reflected Power	12	W
Analyzer Press	1.21E-4	Pa	Ar Gas Tank Press	6.49E+2	kPa			

Current Signal

[No Gas]



Mass	Range	Count	Avg. Count	RSD [%]
7	20000	17011	17362.3	1.55
65	50	32	32.2	20.24
89	200000	116411	116338.7	1.10
205	100000	73395	73241.7	1.61
156/140	1	0.450 %	0.473 %	5.00
70/140	1	0.720 %	0.726 %	4.15
9	20	1	2.4	74.08
10	100	52	49.3	17.13
220	20	1	1.5	83.62

Integration Time [sec] 0.10

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	°C
Smpl Depth	8.0	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.80	L/min	Makeup/Dilution Gas	0.25	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	1.3	V	Cell Entrance	-40	V
Extract 2	-250.0	V	Cell Exit	-60	V
Omega Bias	-110	V	Deflect	17.2	V
Omega Lens	9.8	V	Plate Bias	-50	V

Cell Parameters

Use Gas	No		OctP RF	200	V
He Flow	0.0	mL/min	Energy Discrimination	5.0	V
OctP Bias	-8.0	V			

Meters

IF/BK Press	1.66E+2	Pa	Carrier Gas(BP)	2.91E+2	kPa	Reflected Power	12	W
Analyzer Press	6.53E-5	Pa	Ar Gas Tank Press	6.49E+2	kPa			

US EPA Tune Check Sample Report

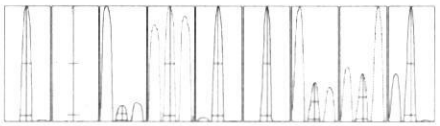
Batch Folder D:\Agilent\ICPMH\1\DATA\6_6020_template_170802_rev1C_3.b
Report Comment
Instrument Name G8403A JP16211410

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	3231	0.71	5.00	
24	18780	0.19	5.00	
25	2574	0.87	5.00	
26	3070	0.66	5.00	
59	38399	0.29	5.00	
115	64623	0.25	5.00	
206	13275	0.22	5.00	
207	11624	0.71	5.00	
208	28316	0.51	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	3260	3208	3245	3208	3236
24	18815	18743	18753	18766	18823
25	2588	2571	2563	2604	2546
26	3096	3076	3040	3074	3066
59	38367	38300	38381	38593	38352
115	64879	64599	64661	64507	64469
206	13291	13297	13275	13225	13287
207	11737	11677	11556	11542	11607
208	28482	28457	28170	28203	28267

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	5456	8.95	8.9 - 9.1		0.778	0.900	
24	30879	23.90	23.9 - 24.1		0.784	0.900	
25	4212	24.95	24.9 - 25.1		0.770	0.900	
26	5008	25.95	25.9 - 26.1		0.811	0.900	
59	67116	58.95	58.9 - 59.1		0.775	0.900	
115	122983	115.05	114.9 - 115.1		0.723	0.900	
206	25356	206.00	205.9 - 206.1		0.775	0.900	
207	22332	207.00	206.9 - 207.1		0.750	0.900	
208	53637	208.00	207.9 - 208.1		0.804	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 212.5 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1500	W	Carrier Gas	0.80	L/min	S/C Temp	2	°C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.25	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	1.3	V	Omega Lens	9.8	V	Deflect	17.2	V
Extract 2	-250.0	V	Cell Entrance	-40	V	Plate Bias	-50	V
Omega Bias	-110	V	Cell Exit	-60	V			

Cell Parameters

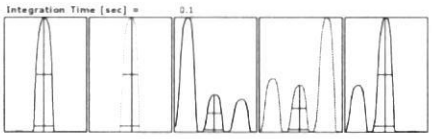
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination	5.0	V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	7488	0.73	5.00
115	7593	0.17	5.00
206	5052	0.94	5.00
207	4462	1.22	5.00
208	10824	0.74	5.00

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	7575	7509	7458	7456	7443
115	7609	7599	7594	7575	7588
206	5101	5080	5076	5008	4994
207	4495	4541	4419	4444	4414
208	10892	10906	10838	10764	10719

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	13247	59.000	58.9 - 59.1		0.737	0.900	
115	14454	115.050	114.9 - 115.1		0.688	0.900	
206	10034	206.000	205.9 - 206.1		0.724	0.900	
207	8818	207.000	206.9 - 207.1		0.730	0.900	
208	21456	208.000	207.9 - 208.1		0.744	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 123.4 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1500	W	Carrier Gas	0.80	L/min	S/C Temp	2	°C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.25	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	1.3	V	Omega Lens	9.8	V	Deflect	5.4	V
Extract 2	-250.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-110	V	Cell Exit	-70	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination	5.0	V
He Flow	4.5	mL/min	OctP RF	200	V			

P/A Factor Tuning Report

========== Current Sample ==========

Sample Name: RINSE
Data File: 001SMPL.d
Acquired: 2020-01-14 09:27:13

========= Detector Parameters and P/A Factors =========

Discriminator: 4.8 mV
AnalogHV: 2244 V
PulseHV: 1279 V

Acquired: 2020-01-14 08:23:13

Mass[u]	Element	P/A Factor
9	Be	0.105452
24	Mg	0.115881
27	Al	0.121694
45	Sc	0.128427
51	V	0.132281
52	Cr	0.136736
55	Mn	0.139108
59	Co	0.148131
60	Ni	0.149435
65	Cu	0.155600
66	Zn	0.155439
72	Ge	0.149640
75	As	0.150802
95	Mo	0.145861
96	Mo	0.148874
98	Mo	0.148660
100	Ru	0.151184
101	Ru	0.153140
102	Ru	0.153528
104	Ru	0.156187
115	In	0.163790
118	Sn	0.164111
121	Sb	0.162417
138	Ba	0.163631
193	Ir	0.178065
205	Tl	0.183135
208	Pb	0.181591
209	Bi	0.182727
232	Th	0.180057
238	U	0.179407

Created: 2020-01-14 09:30:15

1-20-20-soil

Method: SOIL Operator: Admin Date of Analysis: 20 Jan 2020 10:56:09

Seq ID	Type	Sample ID	Extended ID	Date	Conc	Units	Stnd Conc	µ Abs Method	Chapter
20954	S	IC 440-591352/6-A - 1		20 Jan 2020 12:12:26	-	ppb	0.0000	1472SOIL	1-20-20-soil
20955	S	IC 440-591352/6-A - 2		20 Jan 2020 12:12:26	-	ppb	0.0000	1537SOIL	1-20-20-soil
20956	S	IC 440-591352/7-A - 1		20 Jan 2020 12:14:37	-	ppb	0.2000	3140SOIL	1-20-20-soil
20957	S	IC 440-591352/7-A - 2		20 Jan 2020 12:14:37	-	ppb	0.2000	3244SOIL	1-20-20-soil
20958	S	IC 440-591352/8-A - 1		20 Jan 2020 12:16:49	-	ppb	0.5000	5534SOIL	1-20-20-soil
20959	S	IC 440-591352/8-A - 2		20 Jan 2020 12:16:49	-	ppb	0.5000	5758SOIL	1-20-20-soil
20960	S	IC 440-591352/9-A - 1		20 Jan 2020 12:19:03	-	ppb	1.0000	9615SOIL	1-20-20-soil
20961	S	IC 440-591352/9-A - 2		20 Jan 2020 12:19:03	-	ppb	1.0000	10005SOIL	1-20-20-soil
20962	S	IC 440-591352/10-A - 1		20 Jan 2020 12:21:16	-	ppb	5.0000	46926SOIL	1-20-20-soil
20963	S	IC 440-591352/10-A - 2		20 Jan 2020 12:21:16	-	ppb	5.0000	49016SOIL	1-20-20-soil
20964	S	IC 440-591352/11-A - 1		20 Jan 2020 12:23:40	-	ppb	10.0000	95199SOIL	1-20-20-soil
20965	S	IC 440-591352/11-A - 2		20 Jan 2020 12:23:40	-	ppb	10.0000	99296SOIL	1-20-20-soil
20966	C	ICV 440-591352/1-A - 1		20 Jan 2020 12:26:16	93.1% 3.7240	ppb	-	36585SOIL	1-20-20-soil
20967	C	ICV 440-591352/1-A - 2		20 Jan 2020 12:26:16	97.1% 3.8846	ppb	-	38125SOIL	1-20-20-soil
20968	C	ICB 440-591352/2-A - 1		20 Jan 2020 12:29:21	-0.0397	ppb	-	483SOIL	1-20-20-soil
20969	C	ICB 440-591352/2-A - 2		20 Jan 2020 12:29:21	-0.0348	ppb	-	530SOIL	1-20-20-soil
20970	C	CRA 440-591352/5-A - 1		20 Jan 2020 12:32:12	107.2% 0.2143	ppb	-	2920SOIL	1-20-20-soil
20971	C	CRA 440-591352/5-A - 2		20 Jan 2020 12:32:12	114.6% 0.2291	ppb	-	3062SOIL	1-20-20-soil
20972	C	CCV 440-591352/3-A - 1		20 Jan 2020 12:34:25	96.2% 3.8496	ppb	-	37789SOIL	1-20-20-soil
20973	C	CCV 440-591352/3-A - 2		20 Jan 2020 12:34:25	100.1% 4.0059	ppb	-	39289SOIL	1-20-20-soil
20974	C	CCB 440-591352/4-A - 1		20 Jan 2020 12:36:36	-0.0324	ppb	-	553SOIL	1-20-20-soil
20975	C	CCB 440-591352/4-A - 2		20 Jan 2020 12:36:36	-0.0314	ppb	-	563SOIL	1-20-20-soil
20976	U	MB 440-590447/1-A - 1		20 Jan 2020 12:39:22	-0.0919	ppb	-	-17SOIL	1-20-20-soil
20977	U	MB 440-590447/1-A - 2		20 Jan 2020 12:39:22	-0.0943	ppb	-	-40SOIL	1-20-20-soil
20978	U	LCS 440-590447/2-A - 1		20 Jan 2020 12:41:34	3.6497	ppb	-	35872SOIL	1-20-20-soil
20979	U	LCS 440-590447/2-A - 2		20 Jan 2020 12:41:34	3.8151	ppb	-	37459SOIL	1-20-20-soil
20980	U	440-258875-B-1-D - 1		20 Jan 2020 12:43:42	0.5900	ppb	-	6523SOIL	1-20-20-soil
20981	U	440-258875-B-1-D - 2		20 Jan 2020 12:43:42	0.6113	ppb	-	6728SOIL	1-20-20-soil
20982	U	440-258875-B-1-E MS - 1		20 Jan 2020 12:46:22	3.7161	ppb	-	36509SOIL	1-20-20-soil
20983	U	440-258875-B-1-E MS - 2		20 Jan 2020 12:46:22	3.8798	ppb	-	38079SOIL	1-20-20-soil
20984	U	440-258875-B-1-F MSD - 1		20 Jan 2020 12:48:55	3.8112	ppb	-	37421SOIL	1-20-20-soil
20985	U	440-258875-B-1-F MSD - 2		20 Jan 2020 12:48:55	3.9785	ppb	-	39026SOIL	1-20-20-soil
20986	U	440-258875-B-2-B - 1		20 Jan 2020 12:51:54	0.1124	ppb	-	1942SOIL	1-20-20-soil
20987	U	440-258875-B-2-B - 2		20 Jan 2020 12:51:54	0.1257	ppb	-	2070SOIL	1-20-20-soil
20988	U	440-258875-B-3-B - 1		20 Jan 2020 12:54:51	0.0326	ppb	-	1177SOIL	1-20-20-soil
20989	U	440-258875-B-3-B - 2		20 Jan 2020 12:54:51	0.0450	ppb	-	1296SOIL	1-20-20-soil
20990	U	440-258875-B-4-B - 1		20 Jan 2020 12:57:07	0.0330	ppb	-	1181SOIL	1-20-20-soil
20991	U	440-258875-B-4-B - 2		20 Jan 2020 12:57:07	0.0436	ppb	-	1282SOIL	1-20-20-soil
20992	U	440-258875-B-5-B - 1		20 Jan 2020 12:59:21	0.0069	ppb	-	930SOIL	1-20-20-soil
20993	U	440-258875-B-5-B - 2		20 Jan 2020 12:59:21	0.0169	ppb	-	1026SOIL	1-20-20-soil
20994	U	440-258875-B-6-B - 1		20 Jan 2020 13:01:36	0.0424	ppb	-	1271SOIL	1-20-20-soil
20995	U	440-258875-B-6-B - 2		20 Jan 2020 13:01:36	0.0502	ppb	-	1346SOIL	1-20-20-soil
20996	C	CCV 440-591352/3-A - 1		20 Jan 2020 13:03:48	93.3% 3.7328	ppb	-	36669SOIL	1-20-20-soil
20997	C	CCV 440-591352/3-A - 2		20 Jan 2020 13:03:48	97.5% 3.9016	ppb	-	38288SOIL	1-20-20-soil
20998	C	CCB 440-591352/4-A - 1		20 Jan 2020 13:05:59	-0.0146	ppb	-	724SOIL	1-20-20-soil
20999	C	CCB 440-591352/4-A - 2		20 Jan 2020 13:05:59	-0.0092	ppb	-	776SOIL	1-20-20-soil
21000	U	440-258875-B-7-B - 1		20 Jan 2020 13:08:48	0.2366	ppb	-	3134SOIL	1-20-20-soil
21001	U	440-258875-B-7-B - 2		20 Jan 2020 13:08:48	0.2558	ppb	-	3318SOIL	1-20-20-soil
21002	U	440-258875-B-8-B - 1		20 Jan 2020 13:11:00	0.0125	ppb	-	984SOIL	1-20-20-soil
21003	U	440-258875-B-8-B - 2		20 Jan 2020 13:11:00	0.0238	ppb	-	1092SOIL	1-20-20-soil
21004	U	440-258875-B-9-B - 1		20 Jan 2020 13:13:13	0.0860	ppb	-	1689SOIL	1-20-20-soil
21005	U	440-258875-B-9-B - 2		20 Jan 2020 13:13:13	0.0981	ppb	-	1805SOIL	1-20-20-soil
21006	U	440-258875-B-11-B - 1		20 Jan 2020 13:15:27	-0.0063	ppb	-	804SOIL	1-20-20-soil
21007	U	440-258875-B-11-B - 2		20 Jan 2020 13:15:27	-0.0074	ppb	-	793SOIL	1-20-20-soil
21008	U	440-258875-B-12-B - 1		20 Jan 2020 13:17:39	0.0232	ppb	-	1087SOIL	1-20-20-soil
21009	U	440-258875-B-12-B - 2		20 Jan 2020 13:17:39	0.0304	ppb	-	1156SOIL	1-20-20-soil
21010	U	440-258875-B-13-B - 1		20 Jan 2020 13:19:51	0.0409	ppb	-	1256SOIL	1-20-20-soil
21011	U	440-258875-B-13-B - 2		20 Jan 2020 13:19:51	0.0485	ppb	-	1329SOIL	1-20-20-soil
21012	U	440-258875-B-14-B - 1		20 Jan 2020 13:22:04	0.0037	ppb	-	900SOIL	1-20-20-soil
21013	U	440-258875-B-14-B - 2		20 Jan 2020 13:22:04	0.0082	ppb	-	943SOIL	1-20-20-soil
21014	U	440-258875-B-15-B - 1		20 Jan 2020 13:24:15	-0.0202	ppb	-	670SOIL	1-20-20-soil
21015	U	440-258875-B-15-B - 2		20 Jan 2020 13:24:15	-0.0141	ppb	-	729SOIL	1-20-20-soil
21016	U	440-258875-B-16-B - 1		20 Jan 2020 13:26:28	0.0028	ppb	-	891SOIL	1-20-20-soil
21017	U	440-258875-B-16-B - 2		20 Jan 2020 13:26:28	0.0102	ppb	-	962SOIL	1-20-20-soil
21018	U	440-258875-B-17-B - 1		20 Jan 2020 13:28:39	0.0026	ppb	-	889SOIL	1-20-20-soil
21019	U	440-258875-B-17-B - 2		20 Jan 2020 13:28:39	0.0072	ppb	-	933SOIL	1-20-20-soil
21020	C	CCV 440-591352/3-A - 1		20 Jan 2020 13:30:52	94.3% 3.7720	ppb	-	37045SOIL	1-20-20-soil
21021	C	CCV 440-591352/3-A - 2		20 Jan 2020 13:30:52	98.3% 3.9332	ppb	-	38591SOIL	1-20-20-soil
21022	C	CCB 440-591352/4-A - 1		20 Jan 2020 13:33:03	-0.0482	ppb	-	402SOIL	1-20-20-soil
21023	C	CCB 440-591352/4-A - 2		20 Jan 2020 13:33:03	-0.0405	ppb	-	476SOIL	1-20-20-soil
21024	U	440-258875-B-19-B - 1		20 Jan 2020 13:35:43	0.1280	ppb	-	2092SOIL	1-20-20-soil
21025	U	440-258875-B-19-B - 2		20 Jan 2020 13:35:43	0.1372	ppb	-	2180SOIL	1-20-20-soil
21026	U	440-258875-B-20-B - 1		20 Jan 2020 13:37:55	-0.0016	ppb	-	849SOIL	1-20-20-soil
21027	U	440-258875-B-20-B - 2		20 Jan 2020 13:37:55	0.0033	ppb	-	896SOIL	1-20-20-soil
21028	U	440-258906-B-1-B - 1		20 Jan 2020 13:40:10	2.3330	ppb	-	23242SOIL	1-20-20-soil
21029	U	440-258906-B-1-B - 2		20 Jan 2020 13:40:10	2.4455	ppb	-	24321SOIL	1-20-20-soil
21030	U	440-258906-B-2-B - 1		20 Jan 2020 13:42:23	1.6659	ppb	-	16843SOIL	1-20-20-soil
21031	U	440-258906-B-2-B - 2		20 Jan 2020 13:42:23	1.7418	ppb	-	17571SOIL	1-20-20-soil
21032	C	CRA 440-591352/5-A - 1		20 Jan 2020 13:45:26	(L)50.1% 0.1003	ppb	-	1826SOIL	1-20-20-soil
21033	C	CRA 440-591352/5-A - 2		20 Jan 2020 13:45:26	(L)56.3% 0.1126	ppb	-	1944SOIL	1-20-20-soil
21034	C	CRA 440-591352/5-A - 1		20 Jan 2020 13:47:59	114.0% 0.2280	ppb	-	3051SOIL	1-20-20-soil
21035	C	CRA 440-591352/5-A - 2		20 Jan 2020 13:47:59	120.7% 0.2413	ppb	-	3179SOIL	1-20-20-soil
21036	C	CCV 440-591352/3-A - 1		20 Jan 2020 13:50:18	95.9% 3.8341	ppb	-	37641SOIL	1-20-20-soil
21037	C	CCV 440-591352/3-A - 2		20 Jan 2020 13:50:18	100.1% 4.0032	ppb	-	39263SOIL	1-20-20-soil
21038	C	CCB 440-591352/4-A - 1		20 Jan 2020 13:52:29	-0.0189	ppb	-	683SOIL	1-20-20-soil
21039	C	CCB 440-591352/4-A - 2		20 Jan 2020 13:52:29	-0.0135	ppb	-	735SOIL	1-20-20-soil
21040	C	CCV 440-591352/3-A - 1		20 Jan 2020 13:59:28	99.0% 3.9590	ppb	-	38839SOIL	1-20-20-soil
21041	C	CCV 440-591352/3-A - 2		20 Jan 2020 13:59:28	103.1% 4.1251	ppb	-	40432SOIL	1-20-20-soil
21042	C	CCB 440-591352/4-A - 1		20 Jan 2020 14:01:36	-0.1885	ppb	-	-944SOIL	1-20-20-soil
21043	C	CCB 440-591352/4-A - 2		20 Jan 2020 14:01:36	-0.1836	ppb	-	-897SOIL	1-20-20-soil
21044	U	MB 440-590448/1-A - 1		20 Jan 2020 14:04:06	-0.0932	ppb	-	-30SOIL	1-20-20-soil
21045	U	MB 440-590448/1-A - 2		20 Jan 2020 14:04:06	-0.0918	ppb	-	-16SOIL	1-20-20-soil
21046	U	LCS 440-590448/2-A - 1		20 Jan 2020 14:06:17	3.9028	ppb	-	38300SOIL	1-20-20-soil
21047	U	LCS 440-590448/2-A - 2		20 Jan 2020 14:06:17	4.0614	ppb	-	39821SOIL	1-20-20-soil
21048	U	440-258906-B-3-B - 1		20 Jan 2020 14:08:27	1.4877	ppb	-	15134SOIL	1-20-20-soil
21049	U	440-258906-B-3-B - 2		20 Jan 2020 14:08:27	1.5488	ppb	-	15720SOIL	1-20-20-soil
21050	U	440-258906-B-3-C MS - 1		20 Jan 2020 14:11:16	5.1333	ppb	-	50103SOIL	1-20-20-soil
21051	U	440-258906-B-3-C MS - 2		20 Jan 2020 14:11:16	5.3720	ppb	-	52392SOIL	1-20-20-soil
21052	U	440-258906-B-3-D MSD - 1		20 Jan 2020 14:13:54	5.1914	ppb	-	50660SOIL	1-20-20-soil
21053	U	440-258906-B-3-D MSD - 2		20 Jan 2020 14:13:54	5.4240	ppb	-	52891SOIL	1-20-20-soil
21054	U	440-258906-B-4-B - 1		20 Jan 2020 14:17:06	0.7605	ppb	-	8159SOIL	1-20-20-soil
21055	U	440-258906-B-4-B - 2		20 Jan 2020 14:17:06	0.8025	ppb	-	8562SOIL	1-20-20-soil
21056	U	440-258906-B-5-B - 1		20 Jan 2020 14:20:04	1.7256	ppb	-	17416SOIL	1-20-20-soil
21057	U	440-258906-B-5-B - 2		20 Jan 2020 14:20:04	1.8060	ppb	-	18187SOIL	1-20-20-soil
21058	U	440-258909-B-1-D - 1		20 Jan 2020 14:22:27	1.2369	ppb	-	12728SOIL	1-20-20-soil
21059	U	440-258909-B-1-D - 2		20 Jan 2020 14:22:27	1.2994	ppb	-	13328SOIL	1-20-20-soil
21060	U	440-258909-B-2-B - 1		20 Jan 2020 14:25:24	0.8378	ppb	-	8900SOIL	1-20-20-soil
21061	U	440-258909-B-2-B - 2		20 Jan 2020 14:25:24	0.8870	ppb	-	9372SOIL	1-20-20-soil
21062	U	440-258909-B-3-B - 1		20 Jan 2020 14:28:09	0.8430	ppb	-	8950SOIL	1-20-20-soil
21063	U	440-258909-B-3-B - 2		20 Jan 2020 14:28:09	0.8833	ppb	-	9337SOIL	1-20-20-soil

1-20-20-soil

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Seq ID	Type	Sample ID	Extended ID	Date	Conc	Units	Stnd Conc	µ Abs	Method	Chapter
21064	C	CCV 440-591352/3-A - 1		20 Jan 2020 14:30:43	94.8%	3.7911	ppb	-	37228	SOIL 1-20-20-soil
21065	C	CCV 440-591352/3-A - 2		20 Jan 2020 14:30:43	99.0%	3.9594	ppb	-	38843	SOIL 1-20-20-soil
21066	C	CCB 440-591352/4-A - 1		20 Jan 2020 14:33:12	-0.1348		ppb	-	-429	SOIL 1-20-20-soil
21067	C	CCB 440-591352/4-A - 2		20 Jan 2020 14:33:12	-0.1322		ppb	-	-404	SOIL 1-20-20-soil
21068	U	440-258909-B-4-B - 1		20 Jan 2020 14:35:58	0.9306		ppb	-	9790	SOIL 1-20-20-soil
21069	U	440-258909-B-4-B - 2		20 Jan 2020 14:35:58	0.9777		ppb	-	10242	SOIL 1-20-20-soil
21070	U	440-258909-B-6-B - 1		20 Jan 2020 14:38:10	2.3102		ppb	-	23024	SOIL 1-20-20-soil
21071	U	440-258909-B-6-B - 2		20 Jan 2020 14:38:10	2.4277		ppb	-	24151	SOIL 1-20-20-soil
21072	U	440-258909-B-7-B - 1		20 Jan 2020 14:40:35	1.7523		ppb	-	17672	SOIL 1-20-20-soil
21073	U	440-258909-B-7-B - 2		20 Jan 2020 14:40:35	1.8571		ppb	-	18677	SOIL 1-20-20-soil
21074	U	440-258909-B-8-B - 1		20 Jan 2020 14:43:18	0.4988		ppb	-	5649	SOIL 1-20-20-soil
21075	U	440-258909-B-8-B - 2		20 Jan 2020 14:43:18	0.5272		ppb	-	5921	SOIL 1-20-20-soil
21076	U	440-258909-B-9-B - 1		20 Jan 2020 14:46:22	0.6296		ppb	-	6903	SOIL 1-20-20-soil
21077	U	440-258909-B-9-B - 2		20 Jan 2020 14:46:22	0.6669		ppb	-	7261	SOIL 1-20-20-soil
21078	U	440-258909-B-10-B - 1		20 Jan 2020 14:48:40	0.6093		ppb	-	6709	SOIL 1-20-20-soil
21079	U	440-258909-B-10-B - 2		20 Jan 2020 14:48:40	0.6449		ppb	-	7050	SOIL 1-20-20-soil
21080	U	440-258909-B-11-B - 1		20 Jan 2020 14:51:03	2.3577		ppb	-	23479	SOIL 1-20-20-soil
21081	U	440-258909-B-11-B - 2		20 Jan 2020 14:51:03	2.4663		ppb	-	24521	SOIL 1-20-20-soil
21082	U	440-258909-B-12-B - 1		20 Jan 2020 14:53:26	0.3909		ppb	-	4614	SOIL 1-20-20-soil
21083	U	440-258909-B-12-B - 2		20 Jan 2020 14:53:26	0.4188		ppb	-	4881	SOIL 1-20-20-soil
21084	U	440-258909-B-13-B - 1		20 Jan 2020 14:56:13	0.6190		ppb	-	6802	SOIL 1-20-20-soil
21085	U	440-258909-B-13-B - 2		20 Jan 2020 14:56:13	0.6555		ppb	-	7152	SOIL 1-20-20-soil
21086	U	440-258909-B-14-B - 1		20 Jan 2020 14:58:34	0.1871		ppb	-	2659	SOIL 1-20-20-soil
21087	U	440-258909-B-14-B - 2		20 Jan 2020 14:58:34	0.2045		ppb	-	2826	SOIL 1-20-20-soil
21088	C	CCV 440-591352/3-A - 1		20 Jan 2020 15:00:46	96.6%	3.8639	ppb	-	37927	SOIL 1-20-20-soil
21089	C	CCV 440-591352/3-A - 2		20 Jan 2020 15:00:46	100.6%	4.0239	ppb	-	39461	SOIL 1-20-20-soil
21090	C	CCB 440-591352/4-A - 1		20 Jan 2020 15:02:59	-0.1091		ppb	-	-182	SOIL 1-20-20-soil
21091	C	CCB 440-591352/4-A - 2		20 Jan 2020 15:02:59	-0.1131		ppb	-	-221	SOIL 1-20-20-soil
21092	U	440-258909-B-15-B - 1		20 Jan 2020 15:05:51	1.3214		ppb	-	13539	SOIL 1-20-20-soil
21093	U	440-258909-B-15-B - 2		20 Jan 2020 15:05:51	1.3886		ppb	-	14184	SOIL 1-20-20-soil
21094	U	440-258909-B-16-B - 1		20 Jan 2020 15:08:01	0.4183		ppb	-	4876	SOIL 1-20-20-soil
21095	U	440-258909-B-16-B - 2		20 Jan 2020 15:08:01	0.4492		ppb	-	5173	SOIL 1-20-20-soil
21096	U	440-258909-B-17-B - 1		20 Jan 2020 15:10:32	0.0878		ppb	-	1706	SOIL 1-20-20-soil
21097	U	440-258909-B-17-B - 2		20 Jan 2020 15:10:32	0.1009		ppb	-	1832	SOIL 1-20-20-soil
21098	U	440-258909-B-18-B - 1		20 Jan 2020 15:13:10	0.4146		ppb	-	4841	SOIL 1-20-20-soil
21099	U	440-258909-B-18-B - 2		20 Jan 2020 15:13:10	0.4447		ppb	-	5130	SOIL 1-20-20-soil
21100	C	CRA 440-591352/5-A - 1		20 Jan 2020 15:15:23	(L)57.8%	0.1156	ppb	-	1973	SOIL 1-20-20-soil
21101	C	CRA 440-591352/5-A - 2		20 Jan 2020 15:15:23	(L)67.6%	0.1352	ppb	-	2161	SOIL 1-20-20-soil
21102	C	CRA 440-591352/5-A - 1		20 Jan 2020 15:17:38	118.5%	0.2371	ppb	-	3138	SOIL 1-20-20-soil
21103	C	CRA 440-591352/5-A - 2		20 Jan 2020 15:17:38	126.9%	0.2537	ppb	-	3298	SOIL 1-20-20-soil
21104	C	CCV 440-591352/3-A - 1		20 Jan 2020 15:19:53	96.7%	3.8673	ppb	-	37959	SOIL 1-20-20-soil
21105	C	CCV 440-591352/3-A - 2		20 Jan 2020 15:19:53	100.8%	4.0303	ppb	-	39523	SOIL 1-20-20-soil
21106	C	CCB 440-591352/4-A - 1		20 Jan 2020 15:22:03	-0.1509		ppb	-	-583	SOIL 1-20-20-soil
21107	C	CCB 440-591352/4-A - 2		20 Jan 2020 15:22:03	-0.1487		ppb	-	-562	SOIL 1-20-20-soil
21108	C	CCV 440-591352/3-A - 1		20 Jan 2020 15:36:17	97.4%	3.8960	ppb	-	38235	SOIL 1-20-20-soil
21109	C	CCV 440-591352/3-A - 2		20 Jan 2020 15:36:17	101.8%	4.0721	ppb	-	39924	SOIL 1-20-20-soil
21110	C	CCB 440-591352/4-A - 1		20 Jan 2020 15:38:25	-0.0901		ppb	-	0	SOIL 1-20-20-soil
21111	C	CCB 440-591352/4-A - 2		20 Jan 2020 15:38:25	-0.0853		ppb	-	46	SOIL 1-20-20-soil
21112	U	MB 440-590453/1-A - 1		20 Jan 2020 15:41:06	-0.0977		ppb	-	-73	SOIL 1-20-20-soil
21113	U	MB 440-590453/1-A - 2		20 Jan 2020 15:41:06	-0.0957		ppb	-	-54	SOIL 1-20-20-soil
21114	U	LCS 440-590453/2-A - 1		20 Jan 2020 15:43:17	3.7256		ppb	-	36600	SOIL 1-20-20-soil
21115	U	LCS 440-590453/2-A - 2		20 Jan 2020 15:43:17	3.8987		ppb	-	38260	SOIL 1-20-20-soil
21116	U	440-258909-B-24-D - 1		20 Jan 2020 15:45:28	1.0855		ppb	-	11276	SOIL 1-20-20-soil
21117	U	440-258909-B-24-D - 2		20 Jan 2020 15:45:28	1.1411		ppb	-	11810	SOIL 1-20-20-soil
21118	U	440-258909-B-24-E MS - 1		20 Jan 2020 15:48:08	5.0050		ppb	-	48872	SOIL 1-20-20-soil
21119	U	440-258909-B-24-E MS - 2		20 Jan 2020 15:48:08	5.2234		ppb	-	50967	SOIL 1-20-20-soil
21120	U	440-258909-B-24-F MSD - 1		20 Jan 2020 15:51:01	10.9273		ppb	-	105679	SOIL 1-20-20-soil
21121	U	440-258909-B-24-F MSD - 2		20 Jan 2020 15:51:01	11.4079		ppb	-	110289	SOIL 1-20-20-soil
21122	U	440-258909-B-19-B - 1		20 Jan 2020 15:54:20	1.2852		ppb	-	13192	SOIL 1-20-20-soil
21123	U	440-258909-B-19-B - 2		20 Jan 2020 15:54:20	1.3460		ppb	-	13775	SOIL 1-20-20-soil
21124	U	440-258909-B-20-B - 1		20 Jan 2020 15:57:57	0.4475		ppb	-	5157	SOIL 1-20-20-soil
21125	U	440-258909-B-20-B - 2		20 Jan 2020 15:57:57	0.4856		ppb	-	5522	SOIL 1-20-20-soil
21126	U	440-258909-B-21-B - 1		20 Jan 2020 16:00:37	0.2592		ppb	-	3350	SOIL 1-20-20-soil
21127	U	440-258909-B-21-B - 2		20 Jan 2020 16:00:37	0.2766		ppb	-	3517	SOIL 1-20-20-soil
21128	U	440-258909-B-22-B - 1		20 Jan 2020 16:03:21	0.2769		ppb	-	3520	SOIL 1-20-20-soil
21129	U	440-258909-B-22-B - 2		20 Jan 2020 16:03:21	0.3013		ppb	-	3754	SOIL 1-20-20-soil
21130	U	440-258909-B-23-B - 1		20 Jan 2020 16:05:34	0.6591		ppb	-	7186	SOIL 1-20-20-soil
21131	U	440-258909-B-23-B - 2		20 Jan 2020 16:05:34	0.7022		ppb	-	7600	SOIL 1-20-20-soil
21132	C	CCV 440-591352/3-A - 1		20 Jan 2020 16:07:50	94.7%	3.7868	ppb	-	37187	SOIL 1-20-20-soil
21133	C	CCV 440-591352/3-A - 2		20 Jan 2020 16:07:50	99.1%	3.9631	ppb	-	38878	SOIL 1-20-20-soil
21134	C	CCB 440-591352/4-A - 1		20 Jan 2020 16:10:14	-0.1074		ppb	-	-166	SOIL 1-20-20-soil
21135	C	CCB 440-591352/4-A - 2		20 Jan 2020 16:10:14	-0.1061		ppb	-	-154	SOIL 1-20-20-soil
21136	U	440-258909-B-25-B - 1		20 Jan 2020 16:13:00	1.0538		ppb	-	10972	SOIL 1-20-20-soil
21137	U	440-258909-B-25-B - 2		20 Jan 2020 16:13:00	1.1077		ppb	-	11489	SOIL 1-20-20-soil
21138	U	440-258909-B-26-B - 1		20 Jan 2020 16:15:14	0.2644		ppb	-	3400	SOIL 1-20-20-soil
21139	U	440-258909-B-26-B - 2		20 Jan 2020 16:15:14	0.2837		ppb	-	3585	SOIL 1-20-20-soil
21140	U	440-258909-B-27-B - 1		20 Jan 2020 16:17:48	1.2301		ppb	-	12663	SOIL 1-20-20-soil
21141	U	440-258909-B-27-B - 2		20 Jan 2020 16:17:48	1.2936		ppb	-	13272	SOIL 1-20-20-soil
21142	U	440-258909-B-29-B - 1		20 Jan 2020 16:20:06	0.6885		ppb	-	7468	SOIL 1-20-20-soil
21143	U	440-258909-B-29-B - 2		20 Jan 2020 16:20:06	0.7274		ppb	-	7841	SOIL 1-20-20-soil
21144	U	440-258909-B-30-B - 1		20 Jan 2020 16:22:36	0.7362		ppb	-	7926	SOIL 1-20-20-soil
21145	U	440-258909-B-30-B - 2		20 Jan 2020 16:22:36	0.7772		ppb	-	8319	SOIL 1-20-20-soil
21146	U	440-258909-B-31-B - 1		20 Jan 2020 16:25:01	0.4904		ppb	-	5568	SOIL 1-20-20-soil
21147	U	440-258909-B-31-B - 2		20 Jan 2020 16:25:01	0.5201		ppb	-	5853	SOIL 1-20-20-soil
21148	U	440-258909-B-32-B - 1		20 Jan 2020 16:27:32	1.1067		ppb	-	11480	SOIL 1-20-20-soil
21149	U	440-258909-B-32-B - 2		20 Jan 2020 16:27:32	1.1660		ppb	-	12048	SOIL 1-20-20-soil
21150	U	440-258909-B-33-B - 1		20 Jan 2020 16:29:54	0.9693		ppb	-	10162	SOIL 1-20-20-soil
21151	U	440-258909-B-33-B - 2		20 Jan 2020 16:29:54	1.0220		ppb	-	10667	SOIL 1-20-20-soil
21152	U	440-258909-B-34-B - 1		20 Jan 2020 16:32:28	5.3817		ppb	-	52485	SOIL 1-20-20-soil
21153	U	440-258909-B-34-B - 2		20 Jan 2020 16:32:28	5.6449		ppb	-	55010	SOIL 1-20-20-soil
21154	U	440-258909-B-35-B - 1		20 Jan 2020 16:34:48	0.9798		ppb	-	10262	SOIL 1-20-20-soil
21155	U	440-258909-B-35-B - 2		20 Jan 2020 16:34:48	1.0343		ppb	-	10785	SOIL 1-20-20-soil
21156	C	CCV 440-591352/3-A - 1		20 Jan 2020 16:37:54	96.6%	3.8655	ppb	-	37942	SOIL 1-20-20-soil
21157	C	CCV 440-591352/3-A - 2		20 Jan 2020 16:37:54	100.8%	4.0312	ppb	-	39531	SOIL 1-20-20-soil
21158	C	CCB 440-591352/4-A - 1		20 Jan 2020 16:40:30	-0.0813		ppb	-	84	SOIL 1-20-20-soil
21159	C	CCB 440-591352/4-A - 2		20 Jan 2020 16:40:30	-0.0778		ppb	-	118	SOIL 1-20-20-soil
21160	U	440-258909-B-37-B - 1		20 Jan 2020 16:43:22	1.2844		ppb	-	13184	SOIL 1-20-20-soil
21161	U	440-258909-B-37-B - 2		20 Jan 2020 16:43:22	1.3464		ppb	-	13779	SOIL 1-20-20-soil
21162	U	440-258909-B-38-B - 1		20 Jan 2020 16:45:34	0.5439		ppb	-	6081	SOIL 1-20-20-soil
21163	U	440-258909-B-38-B - 2		20 Jan 2020 16:45:34	0.5812		ppb	-	6439	SOIL 1-20-20-soil
21164	U	440-258909-B-39-B - 1		20 Jan 2020 16:48:08	1.3208		ppb	-	13533	SOIL 1-20-20-soil
21165	U	440-258909-B-39-B - 2		20 Jan 2020 16:48:08	1.3872		ppb	-	14170	SOIL 1-20-20-soil
21166	U	440-258909-B-40-B - 1		20 Jan 2020 16:50:31	1.3464		ppb	-	13779	SOIL 1-20-20-soil
21167	U	440-258909-B-40-B - 2		20 Jan 2020 16:50:31	1.4156		ppb	-	14443	SOIL 1-20-20-soil
21168	C	CRA 440-591352/5-A - 1		20 Jan 2020 16:53:11	80.0%	0.1599	ppb	-	2398	SOIL 1-20-20-soil
21169	C	CRA 440-591352/5-A - 2		20 Jan 2020 16:53:11	88.3%	0.1766	ppb	-	2558	SOIL 1-20-20-soil
21170	C	CCV 440-591352/3-A - 1		20 Jan 2020 16:55:53	97.6%	3.9044	ppb	-	38315	SOIL 1-20-20-soil
21171	C	CCV 440-591352/3-A - 2		20 Jan 2020 16:55:53	101.5%	4.0582	ppb	-	39790	SOIL 1-20-20-soil
21172	C	CCB 440-591352/4-A - 1		20 Jan 2020 16:58:03	-0.0714		ppb	-	179	SOIL 1-20-20-soil
21173	C	CCB 440-591352/4-A - 2		20 Jan 2020 16:58:03	-0.0692		ppb	-	200	SOIL 1-20-20-soil

1-20-20-soil

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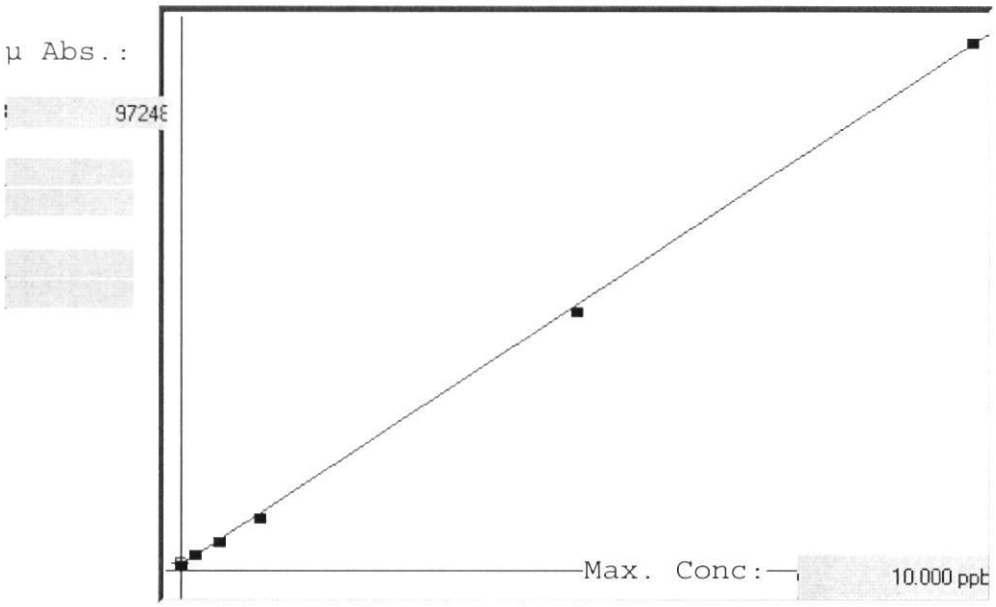
Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs Method	Chapter
21174	C	CCV 440-591352/3-A - 1		20 Jan 2020 17:01:47	96.9% 3.8746	ppb	-	38029SOIL	1-20-20-soil
21175	C	CCV 440-591352/3-A - 2		20 Jan 2020 17:01:47	101.3% 4.0515	ppb	-	39726SOIL	1-20-20-soil
21176	C	CCB 440-591352/4-A - 1		20 Jan 2020 17:03:55	-0.1465	ppb	-	-541SOIL	1-20-20-soil
21177	C	CCB 440-591352/4-A - 2		20 Jan 2020 17:03:55	-0.1509	ppb	-	-583SOIL	1-20-20-soil
21178	U	MB 440-590454/1-A - 1		20 Jan 2020 17:06:40	-0.0926	ppb	-	-24SOIL	1-20-20-soil
21179	U	MB 440-590454/1-A - 2		20 Jan 2020 17:06:40	-0.0915	ppb	-	-14SOIL	1-20-20-soil
21180	U	LCS 440-590454/2-A - 1		20 Jan 2020 17:08:50	3.5971	ppb	-	35367SOIL	1-20-20-soil
21181	U	LCS 440-590454/2-A - 2		20 Jan 2020 17:08:50	3.7608	ppb	-	36938SOIL	1-20-20-soil
21182	U	440-258909-B-43-D - 1		20 Jan 2020 17:11:00	0.6131	ppb	-	6745SOIL	1-20-20-soil
21183	U	440-258909-B-43-D - 2		20 Jan 2020 17:11:00	0.6474	ppb	-	7074SOIL	1-20-20-soil
21184	U	440-258909-B-43-E MS - 1		20 Jan 2020 17:13:36	3.8975	ppb	-	38249SOIL	1-20-20-soil
21185	U	440-258909-B-43-E MS - 2		20 Jan 2020 17:13:36	4.0874	ppb	-	40070SOIL	1-20-20-soil
21186	U	440-258909-B-43-F MSD - 1		20 Jan 2020 17:15:59	4.1213	ppb	-	40396SOIL	1-20-20-soil
21187	U	440-258909-B-43-F MSD - 2		20 Jan 2020 17:15:59	4.3200	ppb	-	42302SOIL	1-20-20-soil
21188	U	440-258909-B-41-B - 1		20 Jan 2020 17:19:05	0.3671	ppb	-	4385SOIL	1-20-20-soil
21189	U	440-258909-B-41-B - 2		20 Jan 2020 17:19:05	0.3920	ppb	-	4624SOIL	1-20-20-soil
21190	U	440-258909-B-42-B - 1		20 Jan 2020 17:22:05	0.4889	ppb	-	5554SOIL	1-20-20-soil
21191	U	440-258909-B-42-B - 2		20 Jan 2020 17:22:05	0.5216	ppb	-	5867SOIL	1-20-20-soil
21192	U	440-258909-B-44-B - 1		20 Jan 2020 17:24:26	2.1440	ppb	-	21429SOIL	1-20-20-soil
21193	U	440-258909-B-44-B - 2		20 Jan 2020 17:24:26	2.2664	ppb	-	22603SOIL	1-20-20-soil
21194	U	440-258909-B-45-B - 1		20 Jan 2020 17:26:56	2.7617	ppb	-	27354SOIL	1-20-20-soil
21195	U	440-258909-B-45-B - 2		20 Jan 2020 17:26:56	2.9039	ppb	-	28718SOIL	1-20-20-soil
21196	U	440-258909-B-46-B - 1		20 Jan 2020 17:29:56	2.4629	ppb	-	24488SOIL	1-20-20-soil
21197	U	440-258909-B-46-B - 2		20 Jan 2020 17:29:56	2.5871	ppb	-	25680SOIL	1-20-20-soil
21198	C	CCV 440-591352/3-A - 1		20 Jan 2020 17:32:46	94.9% 3.7945	ppb	-	37261SOIL	1-20-20-soil
21199	C	CCV 440-591352/3-A - 2		20 Jan 2020 17:32:46	99.4% 3.9751	ppb	-	38993SOIL	1-20-20-soil
21200	C	CCB 440-591352/4-A - 1		20 Jan 2020 17:35:28	-0.1933	ppb	-	-990SOIL	1-20-20-soil
21201	C	CCB 440-591352/4-A - 2		20 Jan 2020 17:35:28	-0.1938	ppb	-	-995SOIL	1-20-20-soil
21202	U	440-258909-B-48-B - 1		20 Jan 2020 17:38:12	0.2042	ppb	-	2823SOIL	1-20-20-soil
21203	U	440-258909-B-48-B - 2		20 Jan 2020 17:38:12	0.2181	ppb	-	2956SOIL	1-20-20-soil
21204	C	CRA 440-591352/5-A - 1		20 Jan 2020 17:40:22	78.0% 0.1561	ppb	-	2361SOIL	1-20-20-soil
21205	C	CRA 440-591352/5-A - 2		20 Jan 2020 17:40:22	84.1% 0.1683	ppb	-	2478SOIL	1-20-20-soil
21206	C	CCV 440-591352/3-A - 1		20 Jan 2020 17:42:37	94.7% 3.7877	ppb	-	37196SOIL	1-20-20-soil
21207	C	CCV 440-591352/3-A - 2		20 Jan 2020 17:42:37	99.1% 3.9659	ppb	-	38905SOIL	1-20-20-soil
21208	C	CCB 440-591352/4-A - 1		20 Jan 2020 17:44:48	-0.1768	ppb	-	-832SOIL	1-20-20-soil
21209	C	CCB 440-591352/4-A - 2		20 Jan 2020 17:44:48	-0.1779	ppb	-	-842SOIL	1-20-20-soil

SOIL



Linear

A= 0.0000e+000

B= 1.0425e-004

C= -9.0088e-002

Rho= 0.9998680

Accept= Accepted

Accepted Date=

01/20/20 12:26

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
IC 440-591352/6-A	0.000	0.067	0.067	1504	32.500	1472	1537			
IC 440-591352/7-A	0.200	0.243	0.043	3192	1.6 %	3140	3244			
IC 440-591352/8-A	0.500	0.499	-0.001	5646	2.0 %	5534	5758			
IC 440-591352/9-A	1.000	0.933	-0.067	9810	2.0 %	9615	10005			
IC 440-591352/10-A	5.000	4.911	-0.089	47971	2.2 %	46926	49016			
IC 440-591352/11-A	10.000	10.048	0.048	97247	2.1 %	95199	99296			

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Irvine

Job Number: 440-258875-1

SDG No.:

Project: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID	Lab Sample ID
WRSB208_0-0.5	440-258875-1
WRSB208_0.5-3	440-258875-2
WRSB208_3-6	440-258875-3
WRSB208_6-15	440-258875-4
WRSB208_15-25	440-258875-5
WRSB208-FD_15-25	440-258875-6
WRSB208_25-35	440-258875-7
WRSB208_35-45	440-258875-8
WRSB208_45-55	440-258875-9
WRSB208_55-65	440-258875-11
WRSB208_65-75	440-258875-12
WRSB208-FD_65-75	440-258875-13
WRSB208_75-85	440-258875-14
WRSB208_85-95	440-258875-15
WRSB208_95-105	440-258875-16
WRSB208_105-115	440-258875-17
WRSB208_115-125	440-258875-19
WRSB208_125-131.5	440-258875-20

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_0-0.5

Lab Sample ID: 440-258875-1

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:15

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_0.5-3

Lab Sample ID: 440-258875-2

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:25

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_3-6

Lab Sample ID: 440-258875-3

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:35

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_6-15

Lab Sample ID: 440-258875-4

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:42

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_15-25

Lab Sample ID: 440-258875-5

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:53

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208-FD_15-25

Lab Sample ID: 440-258875-6

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 11:58

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_25-35

Lab Sample ID: 440-258875-7

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 12:10

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_35-45

Lab Sample ID: 440-258875-8

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 12:21

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_45-55

Lab Sample ID: 440-258875-9

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 14:16

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_55-65

Lab Sample ID: 440-258875-11

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 14:33

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_65-75

Lab Sample ID: 440-258875-12

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 14:53

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208-FD_65-75

Lab Sample ID: 440-258875-13

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 15:03

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_75-85

Lab Sample ID: 440-258875-14

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 15:17

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_85-95

Lab Sample ID: 440-258875-15

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/07/2020 15:50

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_95-105

Lab Sample ID: 440-258875-16

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/08/2020 12:06

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_105-115

Lab Sample ID: 440-258875-17

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/08/2020 12:23

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_115-125

Lab Sample ID: 440-258875-19

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/08/2020 12:42

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WRSB208_125-131.5

Lab Sample ID: 440-258875-20

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/08/2020 15:57

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Sample Homogenized	yes			NONE			1	Homogenization

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 590265 Date: 01/13/2020 13:58								
Homogenization	WRSB208_0-0.5	440-258875-1	Sample Homogenized	yes	NONE			
Homogenization	WRSB208_0-0.5	440-258875-1 DU	Sample Homogenized	yes	NONE			

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

FORM VI-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Irvine | Job Number: 440-258875-1

SDG Number:

Matrix: Solid | Instrument ID: BAL065

Method: Moisture | RL Date: 10/26/2010 18:28

Analyte	Wavelength/ Mass	RL (%)
Percent Moisture		0.1

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Irvine | Job Number: 440-258875-1

SDG Number:

Matrix: Solid | Instrument ID: BAL065

Method: Moisture | XRL Date: 11/16/2010 10:12

Analyte	Wavelength/ Mass	XRL (%)
Percent Moisture		0.1

FORM IX - IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: NOEQUIP | Analysis Method: Homogenization

Start Date: 01/13/2020 13:58 | End Date: 01/13/2020 13:58

Lab Sample Id	D/F	Type	Time	SHD	Analytes
440-258875-1	1	T	13:58	X	
440-258875-2	1	T	13:58	X	
440-258875-3	1	T	13:58	X	
440-258875-4	1	T	13:58	X	
440-258875-5	1	T	13:58	X	
440-258875-6	1	T	13:58	X	
440-258875-7	1	T	13:58	X	
440-258875-8	1	T	13:58	X	
440-258875-9	1	T	13:58	X	
440-258875-11	1	T	13:58	X	
440-258875-12	1	T	13:58	X	
440-258875-13	1	T	13:58	X	
440-258875-14	1	T	13:58	X	
440-258875-15	1	T	13:58	X	
440-258875-16	1	T	13:58	X	
440-258875-17	1	T	13:58	X	
440-258875-19	1	T	13:58	X	
440-258875-20	1	T	13:58	X	
440-258875-1 DU	1	T	13:58	X	
ZZZZZZ			13:58		

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Irvine | Job No.: 440-258875-1

SDG No.:

Instrument ID: BAL065 | Analysis Method: Moisture

Start Date: 01/13/2020 14:11 | End Date: 01/13/2020 15:05

Lab Sample Id	D/F	Type	Time	Analytes	
				Moist	
440-258875-1	1	T	14:11	X	
440-258875-1 DU	1	T	14:11	X	
440-258875-2	1	T	14:11	X	
440-258875-3	1	T	14:11	X	
440-258875-4	1	T	14:11	X	
440-258875-5	1	T	14:11	X	
440-258875-6	1	T	14:11	X	
440-258875-7	1	T	14:11	X	
440-258875-8	1	T	14:11	X	
440-258875-9	1	T	14:11	X	
440-258875-11	1	T	14:11	X	
440-258875-12	1	T	14:11	X	
440-258875-13	1	T	14:11	X	
440-258875-14	1	T	14:11	X	
440-258875-15	1	T	14:11	X	
440-258875-16	1	T	14:11	X	
440-258875-17	1	T	14:11	X	
440-258875-19	1	T	14:11	X	
440-258875-20	1	T	14:11	X	
ZZZZZZ			14:11		
ZZZZZZ			15:05		

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-1

SDG No.:

Batch Number: 590269 Batch Start Date: 01/13/20 14:11 Batch Analyst: Le, Ha Thanh T

Batch Method: Moisture Batch End Date: 01/15/20 13:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	AnalysisComment
440-258875-B-1	WRSB208_0-0.5	Moisture	T	2.0266 g	12.1071 g	11.6337 g	11.6338
440-258875-B-1 DU	WRSB208_0-0.5	Moisture	T	2.0412 g	12.3245 g	11.8271 g	11.8272
440-258875-B-2	WRSB208_0.5-3	Moisture	T	2.0871 g	12.3922 g	11.9779 g	11.9778
440-258875-B-3	WRSB208_3-6	Moisture	T	2.0373 g	12.1699 g	11.7443 g	11.7444
440-258875-B-4	WRSB208_6-15	Moisture	T	2.0700 g	12.4731 g	12.0438 g	12.0439
440-258875-B-5	WRSB208_15-25	Moisture	T	2.0626 g	12.5323 g	12.0895 g	12.0896
440-258875-B-6	WRSB208-FD_15-25	Moisture	T	2.0830 g	12.1491 g	11.7424 g	11.7425
440-258875-B-7	WRSB208_25-35	Moisture	T	2.0388 g	12.4055 g	12.0332 g	12.0333
440-258875-B-8	WRSB208_35-45	Moisture	T	2.0184 g	12.4206 g	12.1789 g	12.1789
440-258875-B-9	WRSB208_45-55	Moisture	T	2.0792 g	12.3450 g	11.8451 g	11.8450
440-258875-B-11	WRSB208_55-65	Moisture	T	2.0575 g	12.2197 g	11.7711 g	11.7710
440-258875-B-12	WRSB208_65-75	Moisture	T	2.0442 g	12.4262 g	11.9327 g	11.9328
440-258875-B-13	WRSB208-FD_65-75	Moisture	T	2.0190 g	12.5456 g	12.0252 g	12.0253
440-258875-B-14	WRSB208_75-85	Moisture	T	2.0476 g	12.4804 g	11.8755 g	11.8756
440-258875-B-15	WRSB208_85-95	Moisture	T	2.0900 g	12.4503 g	11.8555 g	11.8556
440-258875-B-16	WRSB208_95-105	Moisture	T	2.0818 g	12.1467 g	11.5529 g	11.5530
440-258875-B-17	WRSB208_105-115	Moisture	T	2.0776 g	12.3357 g	11.8001 g	11.8002
440-258875-B-19	WRSB208_115-125	Moisture	T	2.0461 g	12.5755 g	12.1005 g	12.1006
440-258875-B-20	WRSB208_125-131.5	Moisture	T	2.0639 g	12.6245 g	12.2441 g	12.2440

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Irvine

Job No.: 440-258875-1

SDG No.:

Batch Number: 590269

Batch Start Date: 01/13/20 14:11

Batch Analyst: Le, Ha Thanh T

Batch Method: Moisture

Batch End Date: 01/15/20 13:31

Batch Notes	
Balance ID	65
Batch Comment	put the samples back in the oven another 30 mins@ temp 105 c
Date and Time Samples in Desiccator	01/14/2020 08:36
Date and Time Samples out of Desiccator	01/14/2020 09:20
Date samples were placed in the oven	01/13/2020
Oven Temp In	105 Degrees C
Time samples were place in the oven	18:45
Date samples were removed from oven	01/14/2020
Oven Temp Out	105 Degrees C
Time Samples were removed from oven	08:35
Oven ID	6
Thermometer ID	p139, cf 0
Temperature - Start - Uncorrected	105 Degrees C
Temperature - End - Uncorrected	105 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Daily Balance Calibration Logbook

Weight Set ID: **D-6** Weight Set Calib Due: 01.09.20

Date	Initials	Balance ID	0.0020g	1.000g	100.0000g	OK?	COMMENTS/ MAINTENANCE
01.15.20	KL	65	0.0019	1.0001	99.9990	ok	
01.15.20	KL	74	0.0020	0.9998	100.0004	ok	

Reviewed: _____

B. SDG 440-258875-2

Konstadina Vlahogiani

From: Bondoc, Christian M. <Christian.Bondoc@testamericainc.com>
Sent: Thursday, February 13, 2020 7:14 PM
To: Konstadina Vlahogiani
Cc: Lombardi, Lynda
Subject: RE: ACMS Yerington OU-4b_OU-5 Soil Sampling - request for 440-258875-2

Hi Dina,

This has been revised and posted to TotalAccess. Please let me know if there are any further issues.

Thank You,

Christian Bondoc

Main: 949-261-1022
Direct: 949-260-3218
Cell: 657-250-0229

E-mail: Christian.bondoc@testamericainc.com

From: Konstadina Vlahogiani [mailto:dvlahogi@envstd.com]
Sent: Tuesday, February 11, 2020 12:42 PM
To: Bondoc, Christian M.
Cc: Lombardi, Lynda
Subject: ACMS Yerington OU-4b_OU-5 Soil Sampling - request for 440-258875-2

-External Email-

Hi Christian,

In job 440-258875-2, there is no Case Narrative included in the Level II or Level IV report. Please check.

Thanks

Dina

Konstadina Vlahogiani
Senior Technical Chemist
Environmental Standards, Inc.
1140 Valley Forge Road • PO Box 810 • Valley Forge, PA 19482
610.935.5577 x 405 • www.envstd.com • kvlahogiani@envstd.com

Emergency Response Quality Assurance Hotline: 855.374.7272

ENVIRONMENTAL STANDARDS

INORGANIC ANALYSIS SUPPORT DOCUMENTATION

ESI project name:	ARCO Yerington	Reviewed by:	BE
Sample Collection Dates:	1/7-8/20	Approved by:	
Job Number:	20115675.GW20	Completion Date:	
Project Manager:	Dina		
Laboratory:	TA St. Louis		

Applicable Sample No's ( ) Refer to Table 1 in the Quality Assurance Review

Deliverable:			Sample No.	Lab Control No.
	CLP (Full)	( )	440-258875-2	
	Level IV (Full)	( )		
	Limited	(x)		
	Other:			

The following table indicates criteria that 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 Letter for Comments Below					Support Documentation Attachments Check (√) if Yes or Footnote Letter for Comments Below				
	6010	6020	Mercury			6010	6020	Mercury			6010	6020	Mercury		
Holding Times	x	x	x								x	x	x		
Blank Analysis Results	x	x	x								x	x	x		
Matrix Spike (Predigestion) Results	x	x	x								x	x	x		
Duplicate Analysis: (x) Field ( ) Lab	x	x	x								x	x	x		
Quantitation of Results	x	x	x								x	x	x		
Detection Limit/Sensitivity	x	x	x								x	x	x		
Initial Calibrations	x	x	x								x	x	x		
Continuing Calibrations	x	x	x								x	x	x		
Laboratory Control Standard (LCS)	x	x	x								x	x	x		
ICP Linear Range Analysis	x	x									x	x			
ICP Interference Checks	x	x									x	x			
ICP Serial Dilutions	x	x									x	x			
ICP Post-Digestion Spike	x	x									x	x			
GFAA Post Digestion Spikes															
GFAA Duplicate Injections															
ICP Multiple Exposures															
GFAA Standard Additions															
CRDL Standards	x	x	x								x	x	x		
Condition on Receipt	x	x	x								x	x	x		
Percent Solids	x	x	x								x	x	x		
Others: Total vs. Dissolved Metals															

Comments:

ENVIRONMENTAL STANDARDS

BLANK ANALYSIS RESULTS FOR INORGANIC PARAMETERS

	Blank Type									
	Method									
Matrix (Aq., S.)	ICB	CCB	Prep.	Trip	Equip	Field	Blank Sample Number	Contaminant	Concentration (µg/L)	Qualification limit (5×)
Aq					X		EB10	aluminum	60	300
								calcium	190	950
								iron	80	400
								magnesium	32	160
								barium	1.3	6.5
								chromium	1.8	9
								copper	2.0	10
								manganese	8.8	44
								nickel	0.59	2.95
								zinc	2.8	14
Aq						X	FB10	zinc	12	60
Aq		X					440-590306/15	antimony	0.752	3.76
Aq		X					440-590306/25	antimony	0.697	3.485
Aq		X					440-590306/33	antimony	0.68	3.4
										0
										0
										0
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										0

Aq = Aqueous; S = Solid

Notes:

** Column K contains a formula

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ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Level 4
Rep 232

Laboratory Job ID: 440-258875-2
Client Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil
Revision: 1

For:
Wood E&I Solutions Inc
10940 White Rock Road Suite 190
Rancho Cordova, California 95670

Attn: Lynda Lombardi

Authorized for release by:
2/13/2020 1:37:54 PM

Christian Bondoc, Project Manager I
(949)260-3218
christian.bondoc@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-258875-10	EB10	Water	01/07/20 14:29	01/10/20 10:00	
440-258875-18	FB10	Water	01/08/20 12:28	01/10/20 10:00	

Job ID: 440-258875-2

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-258875-2

Comments
No additional comments.

Receipt
The samples were received on 1/10/2020 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Aluminum and Iron for preparation batch 440-590204 and analytical batch 440-590318 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6010B: The post digestion spike % recovery for Aluminum and Iron associated with batch 440-590318 was outside of control limits.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Magnesium, Aluminum and Iron for preparation batch 440-590204 and analytical batch 440-590424 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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 BPLAMP Technical Specifications, applicable federal, state, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPLAMP. This Laboratory Report is confidential and is intended for the sole use of Eurofins TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The signature on the cover page extends to the case narrative and all the data and forms in the package. The Chain of Custody is included and is an integral part of this report.

Christian Bondoc
Project Manager I
2/13/2020 1:37:54 PM

Definitions/Glossary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Client Sample ID: EB10 — Lab Sample ID: 440-258875-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.060	J	0.10	0.050	mg/L	1		6010B	Total Recoverable
Calcium	0.19		0.10	0.050	mg/L	1		6010B	Total Recoverable
Iron	0.080	J	0.10	0.050	mg/L	1		6010B	Total Recoverable
Magnesium	0.032		0.020	0.010	mg/L	1		6010B	Total Recoverable
Barium	1.3		1.0	0.50	ug/L	1		6020	Total Recoverable
Chromium	1.8	J	2.0	0.50	ug/L	1		6020	Total Recoverable
Copper	2.0		2.0	0.50	ug/L	1		6020	Total Recoverable
Manganese	8.8		1.0	0.50	ug/L	1		6020	Total Recoverable
Nickel	0.59	J	2.0	0.50	ug/L	1		6020	Total Recoverable
Zinc	2.8	J	20	2.5	ug/L	1		6020	Total Recoverable

Client Sample ID: FB10 — Lab Sample ID: 440-258875-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	12	J	20	2.5	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Client Sample ID: EB10

Lab Sample ID: 440-258875-10

Date Collected: 01/07/20 14:29
Date Received: 01/10/20 10:00

Matrix: Water

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.060**	J	0.10	0.050	mg/L		01/13/20 10:02	01/13/20 19:16	1
Boron	ND		50	25	ug/L		01/13/20 10:02	01/13/20 19:16	1
Calcium	**0.19**		0.10	0.050	mg/L		01/13/20 10:02	01/14/20 10:31	1
Iron	**0.080**	J	0.10	0.050	mg/L		01/13/20 10:02	01/13/20 19:16	1
Lithium	ND		500	25	ug/L		01/13/20 10:02	01/13/20 19:16	1
Magnesium	**0.032**		0.020	0.010	mg/L		01/13/20 10:02	01/13/20 19:16	1
Phosphorus	ND		0.20	0.10	mg/L		01/13/20 10:02	01/13/20 19:16	1
Potassium	ND		0.50	0.25	mg/L		01/13/20 10:02	01/13/20 19:16	1
Sodium	ND		0.50	0.26	mg/L		01/13/20 10:02	01/13/20 19:16	1
Strontium	ND		0.020	0.010	mg/L		01/13/20 10:02	01/13/20 19:16	1
Tin	ND		0.10	0.050	mg/L		01/13/20 10:02	01/13/20 19:16	1
Titanium	ND		0.0050	0.0025	mg/L		01/13/20 10:02	01/13/20 19:16	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	ND		2.0	0.90	ug/L		02/04/20 16:43	02/06/20 13:48	2

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Arsenic	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Barium	**1.3**		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Beryllium	ND		0.50	0.25	ug/L		01/13/20 10:12	01/13/20 17:07	1
Cadmium	ND		1.0	0.25	ug/L		01/13/20 10:12	01/13/20 17:07	1
Chromium	**1.8**	J	2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Cobalt	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Copper	**2.0**		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Lead	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Manganese	**8.8**		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Molybdenum	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Nickel	**0.59**	J	2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Selenium	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Silver	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Thallium	ND		1.0	0.20	ug/L		01/13/20 10:12	01/13/20 17:07	1
Uranium	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:07	1
Vanadium	ND		2.0	1.0	ug/L		01/13/20 10:12	01/13/20 17:07	1
Zinc	**2.8**	J	20	2.5	ug/L		01/13/20 10:12	01/13/20 17:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/20/20 12:36	01/21/20 11:57	1

Client Sample ID: FB10

Lab Sample ID: 440-258875-18

Date Collected: 01/08/20 12:28
Date Received: 01/10/20 10:00

Matrix: Water

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.10	0.050	mg/L		01/13/20 10:02	01/13/20 19:18	1
Boron	ND		50	25	ug/L		01/13/20 10:02	01/13/20 19:18	1
Calcium	ND		0.10	0.050	mg/L		01/13/20 10:02	01/14/20 10:33	1

Client Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Client Sample ID: FB10

Date Collected: 01/08/20 12:28
Date Received: 01/10/20 10:00

Lab Sample ID: 440-258875-18

Matrix: Water

Method: 6010B - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.10	0.050	mg/L		01/13/20 10:02	01/13/20 19:18	1
Lithium	ND		500	25	ug/L		01/13/20 10:02	01/13/20 19:18	1
Magnesium	ND		0.020	0.010	mg/L		01/13/20 10:02	01/13/20 19:18	1
Phosphorus	ND		0.20	0.10	mg/L		01/13/20 10:02	01/13/20 19:18	1
Potassium	ND		0.50	0.25	mg/L		01/13/20 10:02	01/13/20 19:18	1
Sodium	ND		0.50	0.26	mg/L		01/13/20 10:02	01/13/20 19:18	1
Strontium	ND		0.020	0.010	mg/L		01/13/20 10:02	01/13/20 19:18	1
Tin	ND		0.10	0.050	mg/L		01/13/20 10:02	01/13/20 19:18	1
Titanium	ND		0.0050	0.0025	mg/L		01/13/20 10:02	01/13/20 19:18	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	ND		2.0	0.90	ug/L		02/04/20 16:43	02/06/20 13:54	2

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Arsenic	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Barium	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Beryllium	ND		0.50	0.25	ug/L		01/13/20 10:12	01/13/20 17:10	1
Cadmium	ND		1.0	0.25	ug/L		01/13/20 10:12	01/13/20 17:10	1
Chromium	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Cobalt	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Copper	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Lead	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Manganese	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Molybdenum	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Nickel	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Selenium	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Silver	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Thallium	ND		1.0	0.20	ug/L		01/13/20 10:12	01/13/20 17:10	1
Uranium	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 17:10	1
Vanadium	ND		2.0	1.0	ug/L		01/13/20 10:12	01/13/20 17:10	1
Zinc	**12**	**J**	20	2.5	ug/L		01/13/20 10:12	01/13/20 17:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/20/20 12:36	01/21/20 11:59	1

QC Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-590204/1-A
Matrix: Water
Analysis Batch: 590318

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590204

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.10	0.050	mg/L		01/13/20 10:02	01/13/20 18:34	1
Boron	ND		50	25	ug/L		01/13/20 10:02	01/13/20 18:34	1
Iron	ND		0.10	0.050	mg/L		01/13/20 10:02	01/13/20 18:34	1
Lithium	ND		500	25	ug/L		01/13/20 10:02	01/13/20 18:34	1
Magnesium	ND		0.020	0.010	mg/L		01/13/20 10:02	01/13/20 18:34	1
Phosphorus	ND		0.20	0.10	mg/L		01/13/20 10:02	01/13/20 18:34	1
Potassium	ND		0.50	0.25	mg/L		01/13/20 10:02	01/13/20 18:34	1
Sodium	ND		0.50	0.26	mg/L		01/13/20 10:02	01/13/20 18:34	1
Strontium	ND		0.020	0.010	mg/L		01/13/20 10:02	01/13/20 18:34	1
Tin	ND		0.10	0.050	mg/L		01/13/20 10:02	01/13/20 18:34	1
Titanium	ND		0.0050	0.0025	mg/L		01/13/20 10:02	01/13/20 18:34	1

Lab Sample ID: MB 440-590204/1-A
Matrix: Water
Analysis Batch: 590424

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590204

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		0.10	0.050	mg/L		01/13/20 10:02	01/14/20 09:54	1

Lab Sample ID: LCS 440-590204/2-A
Matrix: Water
Analysis Batch: 590318

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.02		mg/L		102	80 - 120
Boron	1000	1000		ug/L		100	80 - 120
Iron	1.00	1.08		mg/L		108	80 - 120
Lithium	1000	1030		ug/L		103	80 - 120
Magnesium	5.00	5.15		mg/L		103	80 - 120
Phosphorus	1.00	0.995		mg/L		100	80 - 120
Potassium	10.0	10.3		mg/L		103	80 - 120
Sodium	10.0	10.2		mg/L		102	80 - 120
Strontium	1.00	1.02		mg/L		102	80 - 120
Tin	1.00	1.03		mg/L		103	80 - 120
Titanium	1.00	1.05		mg/L		105	80 - 120

Lab Sample ID: LCS 440-590204/2-A
Matrix: Water
Analysis Batch: 590424

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	5.00	5.31		mg/L		106	80 - 120

Lab Sample ID: 440-258802-L-15-C MS not in site
Matrix: Water
Analysis Batch: 590318

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 590204

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	3.1	F1	1.00	5.38	F1	mg/L		230	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 440-258802-L-15-C MS
Matrix: Water
Analysis Batch: 590318

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 590204

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	98		1000	1160		ug/L		106	75 - 125
Iron	3.7	F1	1.00	5.33	F1	mg/L		160	75 - 125
Lithium	ND		1000	1060		ug/L		106	75 - 125
Magnesium	14		5.00	20.1		mg/L		122	75 - 125
Phosphorus	0.11	J	1.00	1.18		mg/L		107	75 - 125
Potassium	3.2		10.0	14.2		mg/L		110	75 - 125
Sodium	56		10.0	69.3	4	mg/L		132	75 - 125
Strontium	0.50		1.00	1.58		mg/L		108	75 - 125
Tin	ND		1.00	1.05		mg/L		105	75 - 125
Titanium	0.22		1.00	1.35		mg/L		113	75 - 125

Lab Sample ID: 440-258802-L-15-C MS
Matrix: Water
Analysis Batch: 590424

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 590204

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	60		5.00	69.8	4	mg/L		199	75 - 125

Lab Sample ID: 440-258802-L-15-D MSD
Matrix: Water
Analysis Batch: 590318

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 590204

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	3.1	F1	1.00	5.24	F1	mg/L		216	75 - 125	3	20
Boron	98		1000	1100		ug/L		100	75 - 125	6	20
Iron	3.7	F1	1.00	5.11	F1	mg/L		139	75 - 125	4	20
Lithium	ND		1000	1010		ug/L		101	75 - 125	5	20
Magnesium	14		5.00	18.8		mg/L		94	75 - 125	7	20
Phosphorus	0.11	J	1.00	1.12		mg/L		101	75 - 125	5	20
Potassium	3.2		10.0	13.4		mg/L		102	75 - 125	6	20
Sodium	56		10.0	64.1	4	mg/L		80	75 - 125	8	20
Strontium	0.50		1.00	1.48		mg/L		98	75 - 125	7	20
Tin	ND		1.00	1.00		mg/L		100	75 - 125	5	20
Titanium	0.22		1.00	1.32		mg/L		110	75 - 125	3	20

Lab Sample ID: 440-258802-L-15-D MSD
Matrix: Water
Analysis Batch: 590424

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 590204

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	60		5.00	64.0	4	mg/L		83	75 - 125	9	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 440-590206/1-A
Matrix: Water
Analysis Batch: 590306

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 440-590206/1-A
Matrix: Water
Analysis Batch: 590306

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 590206

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Barium	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Beryllium	ND		0.50	0.25	ug/L		01/13/20 10:12	01/13/20 16:22	1
Cadmium	ND		1.0	0.25	ug/L		01/13/20 10:12	01/13/20 16:22	1
Chromium	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Cobalt	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Copper	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Lead	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Manganese	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Molybdenum	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Nickel	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Selenium	ND		2.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Silver	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Thallium	ND		1.0	0.20	ug/L		01/13/20 10:12	01/13/20 16:22	1
Uranium	ND		1.0	0.50	ug/L		01/13/20 10:12	01/13/20 16:22	1
Vanadium	ND		2.0	1.0	ug/L		01/13/20 10:12	01/13/20 16:22	1
Zinc	ND		20	2.5	ug/L		01/13/20 10:12	01/13/20 16:22	1

Lab Sample ID: LCS 440-590206/2-A
Matrix: Water
Analysis Batch: 590306

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 590206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	80.0	88.4		ug/L		111	80 - 120
Arsenic	80.0	80.3		ug/L		100	80 - 120
Barium	80.0	81.9		ug/L		102	80 - 120
Beryllium	80.0	86.5		ug/L		108	80 - 120
Cadmium	80.0	81.0		ug/L		101	80 - 120
Chromium	80.0	86.8		ug/L		109	80 - 120
Cobalt	80.0	80.7		ug/L		101	80 - 120
Copper	80.0	78.6		ug/L		98	80 - 120
Lead	80.0	81.7		ug/L		102	80 - 120
Manganese	80.0	80.5		ug/L		101	80 - 120
Molybdenum	80.0	81.3		ug/L		102	80 - 120
Nickel	80.0	81.9		ug/L		102	80 - 120
Selenium	80.0	82.4		ug/L		103	80 - 120
Silver	80.0	78.5		ug/L		98	80 - 120
Thallium	80.0	83.7		ug/L		105	80 - 120
Uranium	80.0	84.4		ug/L		105	80 - 120
Vanadium	80.0	80.5		ug/L		101	80 - 120
Zinc	80.0	83.4		ug/L		104	80 - 120

Lab Sample ID: 440-258696-Q-1-B MS
Matrix: Water
Analysis Batch: 590306

not in site

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 590206

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		80.0	87.7		ug/L		110	75 - 125
Arsenic	4.3		80.0	84.7		ug/L		101	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-258696-Q-1-B MS not in site
Matrix: Water
Analysis Batch: 590306

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 590206

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	190		80.0	276		ug/L		106	75 - 125
Beryllium	ND		80.0	85.0		ug/L		106	75 - 125
Cadmium	ND		80.0	79.1		ug/L		99	75 - 125
Chromium	3.5		80.0	81.7		ug/L		98	75 - 125
Cobalt	1.2		80.0	76.3		ug/L		94	75 - 125
Copper	3.1		80.0	75.4		ug/L		90	75 - 125
Lead	1.6		80.0	79.3		ug/L		97	75 - 125
Manganese	310		80.0	415		ug/L		125	75 - 125
Molybdenum	1.4	J	80.0	85.7		ug/L		105	75 - 125
Nickel	11		80.0	82.9		ug/L		90	75 - 125
Selenium	ND		80.0	77.6		ug/L		97	75 - 125
Silver	ND		80.0	76.4		ug/L		96	75 - 125
Thallium	ND		80.0	79.0		ug/L		99	75 - 125
Uranium	0.54	J	80.0	85.9		ug/L		107	75 - 125
Vanadium	5.5		80.0	86.1		ug/L		101	75 - 125
Zinc	22		80.0	97.5		ug/L		94	75 - 125

Lab Sample ID: 440-258696-Q-1-C MSD
Matrix: Water
Analysis Batch: 590306

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 590206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		80.0	88.3		ug/L		110	75 - 125	1	20
Arsenic	4.3		80.0	84.9		ug/L		101	75 - 125	0	20
Barium	190		80.0	279		ug/L		110	75 - 125	1	20
Beryllium	ND		80.0	86.3		ug/L		108	75 - 125	2	20
Cadmium	ND		80.0	79.4		ug/L		99	75 - 125	0	20
Chromium	3.5		80.0	81.1		ug/L		97	75 - 125	1	20
Cobalt	1.2		80.0	76.2		ug/L		94	75 - 125	0	20
Copper	3.1		80.0	75.4		ug/L		90	75 - 125	0	20
Lead	1.6		80.0	79.5		ug/L		97	75 - 125	0	20
Manganese	310		80.0	414		ug/L		123	75 - 125	0	20
Molybdenum	1.4	J	80.0	86.1		ug/L		106	75 - 125	1	20
Nickel	11		80.0	82.6		ug/L		89	75 - 125	0	20
Selenium	ND		80.0	75.0		ug/L		94	75 - 125	4	20
Silver	ND		80.0	76.6		ug/L		96	75 - 125	0	20
Thallium	ND		80.0	79.1		ug/L		99	75 - 125	0	20
Uranium	0.54	J	80.0	85.5		ug/L		106	75 - 125	0	20
Vanadium	5.5		80.0	86.5		ug/L		101	75 - 125	1	20
Zinc	22		80.0	97.4		ug/L		94	75 - 125	0	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 160-459253/1-A
Matrix: Water
Analysis Batch: 459475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 459253

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	ND		2.0	0.90	ug/L		02/04/20 16:43	02/06/20 13:34	2

QC Sample Results

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 160-459253/2-A
Matrix: Water
Analysis Batch: 459475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 459253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	1000	994		ug/L		99	80 - 120

Lab Sample ID: 440-258875-18 MS
Matrix: Water
Analysis Batch: 459475

Client Sample ID: FB10
Prep Type: Total/NA
Prep Batch: 459253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	ND		1000	1000		ug/L		100	75 - 125

Lab Sample ID: 440-258875-18 MSD
Matrix: Water
Analysis Batch: 459475

Client Sample ID: FB10
Prep Type: Total/NA
Prep Batch: 459253

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thorium	ND		1000	983		ug/L		98	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 440-591392/1-A
Matrix: Water
Analysis Batch: 591637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 591392

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		01/20/20 12:36	01/21/20 11:33	1

Lab Sample ID: LCS 440-591392/2-A
Matrix: Water
Analysis Batch: 591637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 591392

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00400	0.00395		mg/L		99	80 - 120

Lab Sample ID: 720-96968-A-2-D MS not in site
Matrix: Water
Analysis Batch: 591637

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 591392

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00400	0.00382		mg/L		95	75 - 125

Lab Sample ID: 720-96968-A-2-E MSD
Matrix: Water
Analysis Batch: 591637

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 591392

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00400	0.00352		mg/L		88	75 - 125	8	20

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Metals

Prep Batch: 459253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-10	EB10	Total/NA	Water	3010A	
440-258875-18	FB10	Total/NA	Water	3010A	
MB 160-459253/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-459253/2-A	Lab Control Sample	Total/NA	Water	3010A	
440-258875-18 MS	FB10	Total/NA	Water	3010A	
440-258875-18 MSD	FB10	Total/NA	Water	3010A	

Analysis Batch: 459475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-10	EB10	Total/NA	Water	6020A	459253
440-258875-18	FB10	Total/NA	Water	6020A	459253
MB 160-459253/1-A	Method Blank	Total/NA	Water	6020A	459253
LCS 160-459253/2-A	Lab Control Sample	Total/NA	Water	6020A	459253
440-258875-18 MS	FB10	Total/NA	Water	6020A	459253
440-258875-18 MSD	FB10	Total/NA	Water	6020A	459253

Prep Batch: 590204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-10	EB10	Total Recoverable	Water	3005A	
440-258875-18	FB10	Total Recoverable	Water	3005A	
MB 440-590204/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-590204/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-258802-L-15-C MS	Matrix Spike	Total Recoverable	Water	3005A	
440-258802-L-15-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 590206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-10	EB10	Total Recoverable	Water	3005A	
440-258875-18	FB10	Total Recoverable	Water	3005A	
MB 440-590206/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-590206/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-258696-Q-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
440-258696-Q-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 590306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-10	EB10	Total Recoverable	Water	6020	590206
440-258875-18	FB10	Total Recoverable	Water	6020	590206
MB 440-590206/1-A	Method Blank	Total Recoverable	Water	6020	590206
LCS 440-590206/2-A	Lab Control Sample	Total Recoverable	Water	6020	590206
440-258696-Q-1-B MS	Matrix Spike	Total Recoverable	Water	6020	590206
440-258696-Q-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	590206

Analysis Batch: 590318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-10	EB10	Total Recoverable	Water	6010B	590204
440-258875-18	FB10	Total Recoverable	Water	6010B	590204
MB 440-590204/1-A	Method Blank	Total Recoverable	Water	6010B	590204
LCS 440-590204/2-A	Lab Control Sample	Total Recoverable	Water	6010B	590204
440-258802-L-15-C MS	Matrix Spike	Total Recoverable	Water	6010B	590204
440-258802-L-15-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	590204

QC Association Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Metals

Analysis Batch: 590424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-10	EB10	Total Recoverable	Water	6010B	590204
440-258875-18	FB10	Total Recoverable	Water	6010B	590204
MB 440-590204/1-A	Method Blank	Total Recoverable	Water	6010B	590204
LCS 440-590204/2-A	Lab Control Sample	Total Recoverable	Water	6010B	590204
440-258802-L-15-C MS	Matrix Spike	Total Recoverable	Water	6010B	590204
440-258802-L-15-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	590204

Prep Batch: 591392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-10	EB10	Total/NA	Water	7470A	
440-258875-18	FB10	Total/NA	Water	7470A	
MB 440-591392/1-A	Method Blank	Total/NA	Water	7470A	
LCS 440-591392/2-A	Lab Control Sample	Total/NA	Water	7470A	
720-96968-A-2-D MS	Matrix Spike	Total/NA	Water	7470A	
720-96968-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 591637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-258875-10	EB10	Total/NA	Water	7470A	591392
440-258875-18	FB10	Total/NA	Water	7470A	591392
MB 440-591392/1-A	Method Blank	Total/NA	Water	7470A	591392
LCS 440-591392/2-A	Lab Control Sample	Total/NA	Water	7470A	591392
720-96968-A-2-D MS	Matrix Spike	Total/NA	Water	7470A	591392
720-96968-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	591392

Lab Chronicle

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Client Sample ID: EB10

Lab Sample ID: 440-258875-10
Matrix: Water

Date Collected: 01/07/20 14:29
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			590204	01/13/20 10:02	EP	TAL IRV
Total Recoverable	Analysis	6010B		1	590318	01/13/20 19:16	P1R	TAL IRV
Total Recoverable	Prep	3005A			590204	01/13/20 10:02	EP	TAL IRV
Total Recoverable	Analysis	6010B		1	590424	01/14/20 10:31	TQN	TAL IRV
Total Recoverable	Prep	3005A			590206	01/13/20 10:12	EP	TAL IRV
Total Recoverable	Analysis	6020		1	590306	01/13/20 17:07	P1R	TAL IRV
Total/NA	Prep	3010A			459253	02/04/20 16:43	LAM	TAL SL
Total/NA	Analysis	6020A		2	459475	02/06/20 13:48	LKP	TAL SL
Total/NA	Prep	7470A			591392	01/20/20 12:36	EMS	TAL IRV
Total/NA	Analysis	7470A		1	591637	01/21/20 11:57	MEM	TAL IRV

Client Sample ID: FB10

Lab Sample ID: 440-258875-18
Matrix: Water

Date Collected: 01/08/20 12:28
Date Received: 01/10/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			590204	01/13/20 10:02	EP	TAL IRV
Total Recoverable	Analysis	6010B		1	590318	01/13/20 19:18	P1R	TAL IRV
Total Recoverable	Prep	3005A			590204	01/13/20 10:02	EP	TAL IRV
Total Recoverable	Analysis	6010B		1	590424	01/14/20 10:33	TQN	TAL IRV
Total Recoverable	Prep	3005A			590206	01/13/20 10:12	EP	TAL IRV
Total Recoverable	Analysis	6020		1	590306	01/13/20 17:10	P1R	TAL IRV
Total/NA	Prep	3010A			459253	02/04/20 16:43	LAM	TAL SL
Total/NA	Analysis	6020A		2	459475	02/06/20 13:54	LKP	TAL SL
Total/NA	Prep	7470A			591392	01/20/20 12:36	EMS	TAL IRV
Total/NA	Analysis	7470A		1	591637	01/21/20 11:59	MEM	TAL IRV

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Nevada	State Program	CA015312020-6	07-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010B	3005A	Water	Lithium
6010B	3005A	Water	Phosphorus

Laboratory: Eurofins TestAmerica, St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Nevada	State Program	MO000542018-1	07-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Wood E&I Solutions Inc
Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil

Job ID: 440-258875-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL IRV
6020	Metals (ICP/MS)	SW846	TAL IRV
6020A	Metals (ICP/MS)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL IRV
3010A	Preparation, Total Metals	SW846	TAL SL
7470A	Preparation, Mercury	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Site Node Path: NV_YERINGTON **Req Due Date (mm/dd/yy):** STD TAT **Rush TAT:** Yes ___ No X

BP/ARC Facility Name: Anaconda Copper Mine Site **Lab Work Order Number:**

Lab Name:	TestAmerica, Inc.	BP/ARC Facility Address:	1 Austin Circle	Consultant/Contractor:	Wood - E&I Solutions, Inc.
Lab Address:	17461 Derian Ave, Suite #100 Irvine, CA 92614	City, State, ZIP Code:	Yerington, Nevada 89447	Consultant/Contractor Project No:	SA18170340.005.055B
Lab PM:	Christian Bondoc	Lead Regulatory Agency:	NDEP Abandoned Mine Lands Program	Address:	10940 White Rock Rd, Ste 190 Rancho Cordova, CA 95670
Lab Phone:	949-261-1022	California Global ID No.:		Consultant/Contractor PM:	Kent Parrish
Lab Shipping Accnt:	1103-6633-7 (TAL Acct #)	Enfos Proposal No: D019Q-0047	Work Release No: WR331232	Phone: 916-636-3200 Email:	Kent.Parrish@woodplc.com
Lab Bottle Order No:	NA	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email Report/EDD To:	lynda.lombardi@woodplc.com
Other Info:	OU-4b_OU-5_Soil	Stage: Appraise	Activity: Field Work/Remedial Investigation	Invoice To	BP/ARC X Contractor ___
BP/ARC EBM:	Chuck Stilwell				
EBM Phone:	713-998-2443				
EBM Email:	Chuck.Stilwell@bp.com				

Report Type & QC Level: Standard ___ Full Data Package X

Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor	Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Metals[1] (SW 6010B/6020)	Mercury (SW7471B/7470A)	Thorium, Uranium (SW6020)	MS/MSD	Comments
	WRSB208_0-0.5	1/7/20	11:15	X			1	1				X	X			[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	WRSB208_0.5-3	1/7/20	11:25	X			1	1				X	X			Na, P, Sr, Sn, Ti, by 6010B;
	WRSB208_3-6	1/7/20	11:35	X			1	1				X	X			As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	WRSB208_6-15	1/7/20	11:42	X			1	1				X	X			Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	WRSB208_15-25	1/7/20	11:53	X			1	1				X	X			
	WRSB208-FD_15-25	1/7/20	11:58	X			1	1				X	X			
	WRSB208_25-35	1/7/20	12:10	X			1	1				X	X			Report soil on dry weight basis.
	WRSB208_35-45	1/7/20	12:21	X			1	1				X	X			
	WRSB208_45-55	1/7/20	14:16	X			1	1				X	X			
	EB10	1/7/20	14:29		X		1			1		X	X	X		

1/10/20 LD

440-258875 Chain of Custody

Sampler's Name:	Rachael Klier	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation / Date / Time
Sampler's Company:	Wood	Wood	1/9/20	1200	EC-IRV 1/10/20 10:00
Shipment Method:	Fed Ex Ship Date: 1/9/20				
Shipment Tracking No:	7774 1268 5342				

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place (Yes) / No | Temp Blank: Yes / (No) | Cooler Temp on Receipt: 2.1/2.4 °C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: Yes / (No)

IR- 7774 1268 5342

BP/ARC LaMP COC Rev. 7, Jul 29, 2010

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Site Node Path: NV_YERINGTON
Req Due Date (mm/dd/yy): STD TAT
Rush TAT: Yes ___ No X
BP/ARC Facility Name: Anaconda Copper Mine Site
Lab Work Order Number:

Lab Name:	TestAmerica, Inc.	BP/ARC Facility Address:	1 Austin Circle	Consultant/Contractor:	Wood - E&I Solutions, Inc.
Lab Address:	17461 Derian Ave, Suite #100 Irvine, CA 92614	City, State, ZIP Code:	Yerington, Nevada 89447	Consultant/Contractor Project No:	SA18170340.005.055B
Lab PM:	Christian Bondoc	Lead Regulatory Agency:	NDEP Abandoned Mine Lands Program	Address:	10940 White Rock Rd, Ste 190 Rancho Cordova, CA 95670
Lab Phone:	949-261-1022	California Global ID No.:		Consultant/Contractor PM:	Kent Parrish
Lab Shipping Acct:	1103-6633-7 (TAL Acct #)	Enfos Proposal No: D019Q-0047	Work Release No: WR331232	Phone: 916-636-3200	Email: Kent.Parrish@woodplc.com
Lab Bottle Order No.	NA	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email Report/EDD To:	lynda.lombardi@woodplc.com
Other Info:	OU-4b_OU-5_Soil	Stage: Appraise	Activity: Field Work/Remedial Investigation	Invoice To:	BP/ARC X Contractor ___
BP/ARC EBM:	Chuck Stilwell				
EBM Phone:	713-998-2443				
EBM Email:	Chuck.Stilwell@bp.com				

Report Type & QC Level: Standard ___ Full Data Package X

Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor		Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl			Metals[1] (SW 6010B/6020)	Mercury (SW7471B/7470A)	Thorium, Uranium (SW6020)							MS/MSD	Comments (Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description)
	WRSB208_55-65	1/7/20	1433	X				1	1						X	X									[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	WRSB208_65-75	1/7/20	1453	X				1	1						X	X									Na, P, Sr, Sn, Ti, by 6010B;
	WRSB208-FD_65-75	1/7/20	1503	X				1	1						X	X									As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	WRSB208_75-85	1/7/20	1517	X				1	1						X	X									Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	WRSB208_85-95	1/7/20	1550	X				1	1						X	X									
	WRSB208_95-105	1/8/20	1206	X				1	1						X	X									
	WRSB208_105-115	1/8/20	1223	X				1	1						X	X									Report soil on dry weight basis.
	FB10	1/8/20	1228		X			1			1				X	X	X								
	WRSB208_115-125	1/8/20	1242	X				1	1						X	X									
	WRSB208_125-131.5	1/8/20	1557	X				1	1						X	X									

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Rachael Klier						
Sampler's Company: Wood	R. Klier / Wood	1/9/20	1200	EC-1KV	1/10/20	1000
Shipment Method: Fed Ex Ship Date: 1/9/20						
Shipment Tracking No: 7774 1268 5342						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 2.1/2.4 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

1K

BP/ARC LaMP COC Rev. 7, Jul 29, 2010

Eurofins Calscience Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone: 949-261-1022 Fax: 949-260-3297

Chain of Custody Record

eurofins Calscience

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bondoc, Christian M	Carrier Tracking No(s):	COC No: 440-151779.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: christian.bondoc@testamericainc.com	State of Origin: Nevada	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Nevada		Job #: 440-258875-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 1/21/2020			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: ACMS - BP Yerington OU-4b_OU-5 Soil	Project #: 44023618			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020A/3010A_2% Thorium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EB10 (440-258875-10)	1/7/20	14:29 Pacific		Water			X	1	
FB10 (440-258875-18)	1/8/20	12:28 Pacific		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Calscience attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by:	Date/Time: 1/28/20 1700	Company: ECIRV	Received by:	Date/Time: 1.27.20 8:50	Company: STASTL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 440-258875-2

Login Number: 258875
List Number: 1
Creator: Dolidze, Lado

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 440-258875-2

Login Number: 258875
List Number: 2
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 01/29/20 01:47 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	1	WRSB208_0-0.5	Solid	440-6040957	440-258875-A-1	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	1	WRSB208_0-0.5	Solid	440-6040957	440-258875-A-1	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	1	WRSB208_0-0.5	Solid	440-6040957	440-258875-A-1	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	1	WRSB208_0-0.5	Solid	440-6040958	440-258875-B-1	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	2	WRSB208_0.5-3	Solid	440-6040959	440-258875-A-2	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	2	WRSB208_0.5-3	Solid	440-6040959	440-258875-A-2	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	2	WRSB208_0.5-3	Solid	440-6040959	440-258875-A-2	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	2	WRSB208_0.5-3	Solid	440-6040960	440-258875-B-2	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	3	WRSB208_3-6	Solid	440-6040961	440-258875-A-3	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	3	WRSB208_3-6	Solid	440-6040961	440-258875-A-3	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	3	WRSB208_3-6	Solid	440-6040961	440-258875-A-3	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	3	WRSB208_3-6	Solid	440-6040962	440-258875-B-3	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	4	WRSB208_6-15	Solid	440-6040963	440-258875-A-4	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	4	WRSB208_6-15	Solid	440-6040963	440-258875-A-4	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	4	WRSB208_6-15	Solid	440-6040963	440-258875-A-4	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	4	WRSB208_6-15	Solid	440-6040964	440-258875-B-4	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	5	WRSB208_15-25	Solid	440-6040965	440-258875-A-5	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	5	WRSB208_15-25	Solid	440-6040965	440-258875-A-5	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	5	WRSB208_15-25	Solid	440-6040965	440-258875-A-5	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	5	WRSB208_15-25	Solid	440-6040966	440-258875-B-5	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	6	WRSB208-FD_15-25	Solid	440-6040967	440-258875-A-6	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	6	WRSB208-FD_15-25	Solid	440-6040967	440-258875-A-6	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	6	WRSB208-FD_15-25	Solid	440-6040967	440-258875-A-6	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	6	WRSB208-FD_15-25	Solid	440-6040968	440-258875-B-6	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	7	WRSB208_25-35	Solid	440-6040969	440-258875-A-7	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	7	WRSB208_25-35	Solid	440-6040969	440-258875-A-7	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	7	WRSB208_25-35	Solid	440-6040969	440-258875-A-7	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	7	WRSB208_25-35	Solid	440-6040970	440-258875-B-7	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	8	WRSB208_35-45	Solid	440-6040971	440-258875-A-8	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	8	WRSB208_35-45	Solid	440-6040971	440-258875-A-8	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	8	WRSB208_35-45	Solid	440-6040971	440-258875-A-8	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	8	WRSB208_35-45	Solid	440-6040972	440-258875-B-8	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	9	WRSB208_45-55	Solid	440-6040973	440-258875-A-9	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	9	WRSB208_45-55	Solid	440-6040973	440-258875-A-9	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	9	WRSB208_45-55	Solid	440-6040973	440-258875-A-9	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	9	WRSB208_45-55	Solid	440-6040974	440-258875-B-9	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	METALS	Mazariegos, Leonel	I	160-191007	02/04/20 16:41
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	Metals Storage Room (Rm	Mazariegos, Leonel	I	160-191017	02/04/20 18:59
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	METALS	Harris, Lorin C	I	160-190717	01/29/20 13:48
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	Shared Samples In-Transi	Dolidze, Lado	O	440-151779	01/28/20 13:47
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	ICOCWI3-10	Mercado, Michael E	I	440-151403	01/20/20 16:40
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-151373	01/20/20 12:36
440-258875	10	EB10	Water	440-6040975	440-258875-A-10	Plastic 250ml - with Nitric Acid	ICOCWI3-10	Dolidze, Lado	I	440-151038	01/10/20 13:52
440-258875	11	WRSB208_55-65	Solid	440-6040976	440-258875-A-11	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	11	WRSB208_55-65	Solid	440-6040976	440-258875-A-11	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	11	WRSB208_55-65	Solid	440-6040976	440-258875-A-11	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	11	WRSB208_55-65	Solid	440-6040977	440-258875-B-11	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	12	WRSB208_65-75	Solid	440-6040978	440-258875-A-12	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	12	WRSB208_65-75	Solid	440-6040978	440-258875-A-12	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	12	WRSB208_65-75	Solid	440-6040978	440-258875-A-12	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	12	WRSB208_65-75	Solid	440-6040979	440-258875-B-12	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	13	WRSB208-FD_65-75	Solid	440-6040980	440-258875-A-13	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	13	WRSB208-FD_65-75	Solid	440-6040980	440-258875-A-13	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	13	WRSB208-FD_65-75	Solid	440-6040980	440-258875-A-13	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	13	WRSB208-FD_65-75	Solid	440-6040981	440-258875-B-13	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	14	WRSB208_75-85	Solid	440-6040982	440-258875-A-14	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	14	WRSB208_75-85	Solid	440-6040982	440-258875-A-14	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	14	WRSB208_75-85	Solid	440-6040982	440-258875-A-14	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	14	WRSB208_75-85	Solid	440-6040983	440-258875-B-14	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	15	WRSB208_85-95	Solid	440-6040984	440-258875-A-15	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	15	WRSB208_85-95	Solid	440-6040984	440-258875-A-15	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	15	WRSB208_85-95	Solid	440-6040984	440-258875-A-15	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	15	WRSB208_85-95	Solid	440-6040985	440-258875-B-15	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	16	WRSB208_95-105	Solid	440-6040986	440-258875-A-16	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	16	WRSB208_95-105	Solid	440-6040986	440-258875-A-16	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	16	WRSB208_95-105	Solid	440-6040986	440-258875-A-16	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	16	WRSB208_95-105	Solid	440-6040987	440-258875-B-16	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	17	WRSB208_105-115	Solid	440-6040988	440-258875-A-17	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	17	WRSB208_105-115	Solid	440-6040988	440-258875-A-17	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	17	WRSB208_105-115	Solid	440-6040988	440-258875-A-17	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52

Internal Chain of Custody Tracking

Login	Smp	Customer Sample ID	Matrix	Container ID	Lab Sample ID	Container Type	Location	Custody User	I/O	ICOC ID	ICOC Date
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	17	WRSB208_105-115	Solid	440-6040989	440-258875-B-17	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	METALS	Mazariegos, Leonel	I	160-191007	02/04/20 16:41
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	Metals Storage Room (Rm	Mazariegos, Leonel	I	160-191017	02/04/20 18:59
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	METALS	Harris, Lorin C	I	160-190717	01/29/20 13:48
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	Shared Samples In-Transi	Dolidze, Lado	O	440-151779	01/28/20 13:47
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	ICOCWI3-10	Mercado, Michael E	I	440-151403	01/20/20 16:40
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-151373	01/20/20 12:36
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	18	FB10	Water	440-6040990	440-258875-A-18	Plastic 250ml - with Nitric Acid	ICOCWI3-10	Dolidze, Lado	I	440-151038	01/10/20 13:52
440-258875	19	WRSB208_115-125	Solid	440-6040991	440-258875-A-19	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	19	WRSB208_115-125	Solid	440-6040991	440-258875-A-19	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	19	WRSB208_115-125	Solid	440-6040991	440-258875-A-19	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	19	WRSB208_115-125	Solid	440-6040992	440-258875-B-19	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	20	WRSB208_125-131.5	Solid	440-6040993	440-258875-A-20	Soil jar 4oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	20	WRSB208_125-131.5	Solid	440-6040993	440-258875-A-20	Soil jar 4oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	20	WRSB208_125-131.5	Solid	440-6040993	440-258875-A-20	Soil jar 4oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	ICOC23R-E	Mercado, Michael E	I	440-151192	01/15/20 11:55
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-151175	01/14/20 13:31
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	ICOC23R-E	Tan, Sarah	I	440-151135	01/13/20 17:00
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	ICOC23R-E	Le, Ha Thanh T	I	440-151130	01/13/20 16:26
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	_Metals Prep	Tan, Sarah	I	440-151134	01/13/20 16:51
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	_General Chemistry	Le, Ha Thanh T	I	440-151129	01/13/20 16:24
440-258875	20	WRSB208_125-131.5	Solid	440-6040994	440-258875-B-20	Soil jar 8oz	ICOC23R-E	Dolidze, Lado	I	440-151037	01/10/20 13:52

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 590204 Batch Start Date: 01/13/20 10:01 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 01/13/20 15:43

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME HCl 00554	ME HNO3 00549	ME ICP PREP S 00033
MB 440-590204/1		3005A, 6010B			25 mL	25 mL	1.25 mL	0.5 mL	
LCS 440-590204/2		3005A, 6010B			25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-258802-L-15		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	
440-258802-L-15 MS		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-258802-L-15 MSD		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-258875-A-10	EB10	3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	
440-258875-A-18	FB10	3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME ICP PREP S 00034					
MB 440-590204/1		3005A, 6010B							
LCS 440-590204/2		3005A, 6010B		0.25 mL					
440-258802-L-15		3005A, 6010B	R						
440-258802-L-15 MS		3005A, 6010B	R	0.25 mL					
440-258802-L-15 MSD		3005A, 6010B	R	0.25 mL					
440-258875-A-10	EB10	3005A, 6010B	R						
440-258875-A-18	FB10	3005A, 6010B	R						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 590204 Batch Start Date: 01/13/20 10:01 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 01/13/20 15:43

Batch Notes	
Temperature - Corrected - End	91 Degrees C
Temperature - Corrected - Start	91 Degrees C
Digestion End Time	01/13/2019 15:20
Digestion Start Time	01/13/2019 11:20
Digestion Unit ID	4
Hydrochloric Acid ID	0000240180
Nitric Acid ID	0000221803
Pipette/Syringe/Dispenser ID	MET201
Thermometer ID	P-141. Loc A9, CF = -1.00
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	92 Degrees C
Temperature - Uncorrected - Start	92 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 590206 Batch Start Date: 01/13/20 10:12 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 01/13/20 15:28

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME HCl 00554	ME HNO3 00549	ME ICPMS ICV 00230
MB 440-590206/1		3005A, 6020			25 mL	25 mL	0.125 mL	0.25 mL	
LCS 440-590206/2		3005A, 6020			25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-258696-Q-1		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	
440-258696-Q-1 MS		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-258696-Q-1 MSD		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-258875-A-10	EB10	3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	
440-258875-A-18	FB10	3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	

Batch Notes	
Temperature - Corrected - End	91 Degrees C
Temperature - Corrected - Start	91 Degrees C
Digestion End Time	01/13/2019 15:05
Digestion Start Time	01/13/2019 11:05
Digestion Unit ID	1
Hydrochloric Acid ID	0000240180
Nitric Acid ID	0000221803
Pipette/Syringe/Dispenser ID	MET201
Thermometer ID	P-135, Loc B9, CF = -2.00
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	93 Degrees C
Temperature - Uncorrected - Start	93 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 591392 Batch Start Date: 01/20/20 12:36 Batch Analyst: Suico, Ethel M

Batch Method: 7470A Batch End Date: 01/20/20 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME 1 PPM HG1 00418	ME H2SO4 00095	ME HNO3 00551
MB 440-591392/1		7470A, 7470A		n/a SU	20 mL	20 mL		1 mL	0.5 mL
LCS 440-591392/2		7470A, 7470A		n/a SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
720-96968-A-2		7470A, 7470A	T	<2 SU	20 mL	20 mL		1 mL	0.5 mL
720-96968-A-2 MS		7470A, 7470A	T	<2 SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
720-96968-A-2 MSD		7470A, 7470A	T	<2 SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
440-258875-A-10	EB10	7470A, 7470A	T	<2 SU	20 mL	20 mL		1 mL	0.5 mL
440-258875-A-18	FB10	7470A, 7470A	T	<2 SU	20 mL	20 mL		1 mL	0.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HYDROX SOL 00117	ME K2S2O8 00093	ME KMNO4 00189			
MB 440-591392/1		7470A, 7470A		2 mL	1.6 mL	3 mL			
LCS 440-591392/2		7470A, 7470A		2 mL	1.6 mL	3 mL			
720-96968-A-2		7470A, 7470A	T	2 mL	1.6 mL	3 mL			
720-96968-A-2 MS		7470A, 7470A	T	2 mL	1.6 mL	3 mL			
720-96968-A-2 MSD		7470A, 7470A	T	2 mL	1.6 mL	3 mL			
440-258875-A-10	EB10	7470A, 7470A	T	2 mL	1.6 mL	3 mL			
440-258875-A-18	FB10	7470A, 7470A	T	2 mL	1.6 mL	3 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 591392 Batch Start Date: 01/20/20 12:36 Batch Analyst: Suico, Ethel M

Batch Method: 7470A Batch End Date: 01/20/20 17:30

Batch Notes	
Batch Comment	MB Loc: B18
Temperature - Corrected - End	94 Degrees C
Temperature - Corrected - Start	94 Degrees C
Digestion End Time	01/20/2020 16:31
Digestion Start Time	01/20/2020 14:31
Digestion Unit ID	8
Sulfuric Acid ID	Lot: 0000234517
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	6040574 @ 01/20/2020 17:00
Potassium Persulfate ID	6032548
Potassium Permanganate ID	6040428
pH Indicator ID	HC998308
Pipette/Syringe/Dispenser ID	122
Analyst ID - Spike Analyst	MM
Thermometer ID	P-120 CF -1 Loc: C2
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, St. Loui Job No.: 440-258875-2

SDG No.:

Batch Number: 459253 Batch Start Date: 02/04/20 16:42 Batch Analyst: Mazariegos, Leonel A

Batch Method: 3010A Batch End Date: 02/05/20 09:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MPREP1-A 00004	MPREP1-B 00004	MPREP2 00022	
MB 160-459253/1		3010A, 6020A		50 mL	50 mL				
LCS 160-459253/2		3010A, 6020A		50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	
440-258875-A-10	EB10	3010A, 6020A	T	50 mL	50 mL				
440-258875-A-18	FB10	3010A, 6020A	T	50 mL	50 mL				
440-258875-A-18 MS	FB10	3010A, 6020A	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	
440-258875-A-18 MSD	FB10	3010A, 6020A	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	

Batch Notes	
Temperature - Corrected - End	D3: 91.9 Degrees C
Temperature - Corrected - Start	A8: 90.8 Degrees C
Digestion End Time	02/05/2020 09:29
Digestion Start Time	02/04/2020 18:46
Digestion Unit ID	HOTBLOCK 1
Hydrochloric Acid ID	1864826
Nitric Acid ID	1854884
Pipette/Syringe/Dispenser ID	MET-12
Analyst ID - Spike Analyst	LAM
Sufficient Volume for Batch QC	YES
Thermometer ID	192152608
Digestion Tube/Cup ID	344749-4653

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

COVER PAGE
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-2

SDG No.:

Project: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID	Lab Sample ID
EB10	440-258875-10
FB10	440-258875-18

Comments:

COVER PAGE
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job Number: 440-258875-2

SDG No.:

Project: ACMS - BP Yerington OU-4b_OU-5 Soil

Client Sample ID	Lab Sample ID
EB10	440-258875-10
FB10	440-258875-18

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: EB10

Lab Sample ID: 440-258875-10

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG ID.:

Matrix: Water

Date Sampled: 01/07/2020 14:29

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.00020	0.00010	mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: EB10

Lab Sample ID: 440-258875-10

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG ID.:

Matrix: Water

Date Sampled: 01/07/2020 14:29

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	0.060	0.10	0.050	mg/L	J		1	6010B
7440-42-8	Boron	ND	50	25	ug/L			1	6010B
7440-70-2	Calcium	0.19	0.10	0.050	mg/L			1	6010B
7439-89-6	Iron	0.080	0.10	0.050	mg/L	J		1	6010B
7439-93-2	Lithium	ND	500	25	ug/L			1	6010B
7439-95-4	Magnesium	0.032	0.020	0.010	mg/L			1	6010B
7723-14-0	Phosphorus	ND	0.20	0.10	mg/L			1	6010B
7440-09-7	Potassium	ND	0.50	0.25	mg/L			1	6010B
7440-23-5	Sodium	ND	0.50	0.26	mg/L			1	6010B
7440-24-6	Strontium	ND	0.020	0.010	mg/L			1	6010B
7440-31-5	Tin	ND	0.10	0.050	mg/L			1	6010B
7440-32-6	Titanium	ND	0.0050	0.0025	mg/L			1	6010B
7440-36-0	Antimony	ND	2.0	0.50	ug/L			1	6020
7440-38-2	Arsenic	ND	1.0	0.50	ug/L			1	6020
7440-39-3	Barium	1.3	1.0	0.50	ug/L			1	6020
7440-41-7	Beryllium	ND	0.50	0.25	ug/L			1	6020
7440-43-9	Cadmium	ND	1.0	0.25	ug/L			1	6020
7440-47-3	Chromium	1.8	2.0	0.50	ug/L	J		1	6020
7440-48-4	Cobalt	ND	1.0	0.50	ug/L			1	6020
7440-50-8	Copper	2.0	2.0	0.50	ug/L			1	6020
7439-92-1	Lead	ND	1.0	0.50	ug/L			1	6020
7439-96-5	Manganese	8.8	1.0	0.50	ug/L			1	6020
7439-98-7	Molybdenum	ND	2.0	0.50	ug/L			1	6020
7440-02-0	Nickel	0.59	2.0	0.50	ug/L	J		1	6020
7782-49-2	Selenium	ND	2.0	0.50	ug/L			1	6020
7440-22-4	Silver	ND	1.0	0.50	ug/L			1	6020
7440-28-0	Thallium	ND	1.0	0.20	ug/L			1	6020
7440-61-1	Uranium	ND	1.0	0.50	ug/L			1	6020
7440-62-2	Vanadium	ND	2.0	1.0	ug/L			1	6020
7440-66-6	Zinc	2.8	20	2.5	ug/L	J		1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FB10

Lab Sample ID: 440-258875-18

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG ID.:

Matrix: Water

Date Sampled: 01/08/2020 12:28

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.00020	0.00010	mg/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: FB10

Lab Sample ID: 440-258875-18

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG ID.:

Matrix: Water

Date Sampled: 01/08/2020 12:28

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.10	0.050	mg/L			1	6010B
7440-42-8	Boron	ND	50	25	ug/L			1	6010B
7440-70-2	Calcium	ND	0.10	0.050	mg/L			1	6010B
7439-89-6	Iron	ND	0.10	0.050	mg/L			1	6010B
7439-93-2	Lithium	ND	500	25	ug/L			1	6010B
7439-95-4	Magnesium	ND	0.020	0.010	mg/L			1	6010B
7723-14-0	Phosphorus	ND	0.20	0.10	mg/L			1	6010B
7440-09-7	Potassium	ND	0.50	0.25	mg/L			1	6010B
7440-23-5	Sodium	ND	0.50	0.26	mg/L			1	6010B
7440-24-6	Strontium	ND	0.020	0.010	mg/L			1	6010B
7440-31-5	Tin	ND	0.10	0.050	mg/L			1	6010B
7440-32-6	Titanium	ND	0.0050	0.0025	mg/L			1	6010B
7440-36-0	Antimony	ND	2.0	0.50	ug/L			1	6020
7440-38-2	Arsenic	ND	1.0	0.50	ug/L			1	6020
7440-39-3	Barium	ND	1.0	0.50	ug/L			1	6020
7440-41-7	Beryllium	ND	0.50	0.25	ug/L			1	6020
7440-43-9	Cadmium	ND	1.0	0.25	ug/L			1	6020
7440-47-3	Chromium	ND	2.0	0.50	ug/L			1	6020
7440-48-4	Cobalt	ND	1.0	0.50	ug/L			1	6020
7440-50-8	Copper	ND	2.0	0.50	ug/L			1	6020
7439-92-1	Lead	ND	1.0	0.50	ug/L			1	6020
7439-96-5	Manganese	ND	1.0	0.50	ug/L			1	6020
7439-98-7	Molybdenum	ND	2.0	0.50	ug/L			1	6020
7440-02-0	Nickel	ND	2.0	0.50	ug/L			1	6020
7782-49-2	Selenium	ND	2.0	0.50	ug/L			1	6020
7440-22-4	Silver	ND	1.0	0.50	ug/L			1	6020
7440-28-0	Thallium	ND	1.0	0.20	ug/L			1	6020
7440-61-1	Uranium	ND	1.0	0.50	ug/L			1	6020
7440-62-2	Vanadium	ND	2.0	1.0	ug/L			1	6020
7440-66-6	Zinc	12	20	2.5	ug/L	J		1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: EB10

Lab Sample ID: 440-258875-10

Lab Name: Eurofins TestAmerica, St. Louis

Job No.: 440-258875-2

SDG ID.:

Matrix: Water

Date Sampled: 01/07/2020 14:29

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-29-1	Thorium	ND	2.0	0.90	ug/L			2	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FB10

Lab Sample ID: 440-258875-18

Lab Name: Eurofins TestAmerica, St. Louis

Job No.: 440-258875-2

SDG ID.:

Matrix: Water

Date Sampled: 01/08/2020 12:28

Reporting Basis: WET

Date Received: 01/10/2020 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-29-1	Thorium	ND	2.0	0.90	ug/L			2	6020A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICV Source: ME ICP ICV2_02380 Concentration Units: mg/L

CCV Source: ME ICP STD3_03091

Analyte	ICV 440-590318/5 01/13/2020 09:18				CCV 440-590318/17 01/13/2020 18:27				CCV 440-590318/29 01/13/2020 18:56			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	1.00		1.00	100	1.00		1.00	100	0.984		1.00	98
Boron	1.01		1.00	101	0.991		1.00	99	0.989		1.00	99
Iron	1.04		1.00	104	1.07		1.00	107	0.995		1.00	100
Lithium	1.01		1.00	101	1.00		1.00	100	0.999		1.00	100
Magnesium	5.16		5.00	103	5.06		5.00	101	5.03		5.00	101
Phosphorus	2.09		2.00	104	1.01		1.00	101	0.984		1.00	98
Potassium	5.10		5.00	102	10.2		10.0	102	10.0		10.0	100
Strontium	1.01		1.00	101	1.00		1.00	100	0.997		1.00	100
Tin	2.02		2.00	101	0.997		1.00	100	0.988		1.00	99
Titanium	1.02		1.00	102	1.01		1.00	101	1.00		1.00	100
Calcium	5.09		5.00	102	4.97		5.00	99	4.94		5.00	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICV Source: ME ICP ICV2_02380 Concentration Units: mg/L

CCV Source: ME ICP STD3_03091

	CCV 440-590318/37 01/13/2020 19:22											
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.982		1.00	98								
Boron	0.988		1.00	99								
Iron	0.994		1.00	99								
Lithium	1.00		1.00	100								
Magnesium	5.05		5.00	101								
Phosphorus	0.987		1.00	99								
Potassium	9.99		10.0	100								
Strontium	0.998		1.00	100								
Tin	0.986		1.00	99								
Titanium	0.990		1.00	99								
Calcium	4.94		5.00	99								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICV Source: ICV SODIUM_00097 Concentration Units: mg/L

CCV Source: ME ICP STD3_03091

Analyte	ICV 440-590318/7 01/13/2020 09:25				CCV 440-590318/17 01/13/2020 18:27				CCV 440-590318/29 01/13/2020 18:56			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	4.96		5.00	99	10.2		10.0	102	10.0		10.0	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICV Source: ICV SODIUM_00097 Concentration Units: mg/L

CCV Source: ME ICP STD3_03091

	CCV 440-590318/37 01/13/2020 19:22											
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	10.1		10.0	101								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICV Source: ME ICP ICV2_02381 Concentration Units: mg/L

CCV Source: ME ICP STD3_03093

	ICV 440-590424/5 01/14/2020 09:24				CCV 440-590424/26 01/14/2020 10:23				CCV 440-590424/35 01/14/2020 10:44			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	4.84		5.00	97	5.13		5.00	103	5.15		5.00	103
Aluminum	0.949		1.00	95	1.04		1.00	104	1.04		1.00	104
Boron	1.01		1.00	101	1.03		1.00	103	1.04		1.00	104
Iron	0.977		1.00	98	1.03		1.00	103	1.03		1.00	103
Lithium	1.02		1.00	102	1.03		1.00	103	1.04		1.00	104
Magnesium	4.83		5.00	97	5.11		5.00	102	5.16		5.00	103
Phosphorus	2.06		2.00	103	1.02		1.00	102	1.02		1.00	102
Potassium	4.79		5.00	96	10.4		10.0	104	10.5		10.0	105
Sodium	5.04		5.00	101	10.3		10.0	103	10.3		10.0	103
Strontium	1.01		1.00	101	1.04		1.00	104	1.04		1.00	104
Tin	2.01		2.00	100	1.03		1.00	103	1.04		1.00	104
Titanium	1.02		1.00	102	1.04		1.00	104	1.05		1.00	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICV Source: MEICPMS ICV_00322 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00320

	ICV 440-590306/6 01/13/2020 09:07				CCV 440-590306/14 01/13/2020 15:54				CCV 440-590306/24 01/13/2020 17:03			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	25.3		25.0	101	48.9		50.0	98	48.2		50.0	96
Arsenic	24.9		25.0	100	49.9		50.0	100	48.5		50.0	97
Barium	25.2		25.0	101	54.8		50.0	110	54.2		50.0	108
Beryllium	23.4		25.0	94	51.2		50.0	102	49.4		50.0	99
Cadmium	25.5		25.0	102	49.8		50.0	100	49.1		50.0	98
Chromium	25.5		25.0	102	49.4		50.0	99	49.0		50.0	98
Cobalt	25.5		25.0	102	49.2		50.0	98	48.9		50.0	98
Copper	25.2		25.0	101	48.5		50.0	97	47.4		50.0	95
Lead	23.9		25.0	95	47.4		50.0	95	45.9		50.0	92
Manganese	25.3		25.0	101	48.9		50.0	98	48.4		50.0	97
Molybdenum	25.1		25.0	100	49.8		50.0	100	49.4		50.0	99
Nickel	25.9		25.0	104	49.3		50.0	99	48.5		50.0	97
Selenium	24.5		25.0	98	50.8		50.0	102	49.1		50.0	98
Silver	23.4		25.0	94	47.3		50.0	95	45.9		50.0	92
Thallium	22.9		25.0	92	52.2		50.0	104	50.5		50.0	101
Uranium	23.1		25.0	93	53.3		50.0	107	51.6		50.0	103
Vanadium	25.2		25.0	101	49.3		50.0	99	48.8		50.0	98
Zinc	25.2		25.0	101	49.4		50.0	99	49.2		50.0	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICV Source: MEICPMS ICV_00322 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00320

	CCV 440-590306/32 01/13/2020 17:24											
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	48.4		50.0	97								
Arsenic	48.7		50.0	97								
Barium	54.4		50.0	109								
Beryllium	49.4		50.0	99								
Cadmium	49.3		50.0	99								
Chromium	49.1		50.0	98								
Cobalt	48.6		50.0	97								
Copper	47.9		50.0	96								
Lead	46.7		50.0	93								
Manganese	48.5		50.0	97								
Molybdenum	49.1		50.0	98								
Nickel	48.3		50.0	97								
Selenium	49.0		50.0	98								
Silver	46.2		50.0	92								
Thallium	51.3		50.0	103								
Uranium	52.3		50.0	105								
Vanadium	48.6		50.0	97								
Zinc	49.7		50.0	99								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICV Source: ME 1 PPM HG1_00419 Concentration Units: ug/L

CCV Source: ME 1 PPM HG1_00418

	ICV 440-591391/1-A 01/21/2020 10:01				CCV 440-591391/3-A 01/21/2020 11:22				CCV 440-591391/3-A 01/21/2020 11:48			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	3.95		4.00	99	4.00		4.00	100	4.03		4.00	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

ICV Source: ME 1 PPM HG1_00419 | Concentration Units: ug/L

CCV Source: ME 1 PPM HG1_00418

	CCV 440-591391/3-A 01/21/2020 12:14											
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.06		4.00	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

ICV Source: MS A ICV_01112 Concentration Units: ug/L

CCV Source: MS A CAL1 LLC_00425

	ICV 160-459475/5 02/06/2020 10:58				CCVL 160-459475/24 02/06/2020 13:07				CCVL 160-459475/35 02/06/2020 14:21			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Thorium	106		100	106	1.98	J	2.00	99	2.08		2.00	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

ICV Source: MS A ICV_01112 Concentration Units: ug/L

CCV Source: MS A CAL2 CCV_00383

	ICV 160-459475/5 02/06/2020 10:58				CCV 160-459475/25 02/06/2020 13:14				CCV 160-459475/36 02/06/2020 14:28			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Thorium	106		100	106	97.5		100	97	96.4		100	96

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Method: 6010B Instrument ID: ICP8

Lab Sample ID: CRI 440-590318/16 Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01149

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.193		97	50-150
Boron	0.100	0.0978		98	50-150
Calcium	0.200	0.226		113	50-150
Iron	0.200	0.213		107	50-150
Lithium	0.100	0.101	J	101	50-150
Magnesium	0.0400	0.0406		102	50-150
Phosphorus	0.400	0.409		102	50-150
Potassium	1.00	1.00		100	50-150
Sodium	1.00	0.929		93	50-150
Strontium	0.0400	0.0404		101	50-150
Tin	0.200	0.198		99	50-150
Titanium	0.0100	0.0103		103	50-150

Lab Sample ID: CRI 440-590318/39 Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01149

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.185		93	50-150
Boron	0.100	0.0970		97	50-150
Calcium	0.200	0.214		107	50-150
Iron	0.200	0.202		101	50-150
Lithium	0.100	0.0995	J	100	50-150
Magnesium	0.0400	0.0412		103	50-150
Phosphorus	0.400	0.406		101	50-150
Potassium	1.00	0.898		90	50-150
Sodium	1.00	0.992		99	50-150
Strontium	0.0400	0.0401		100	50-150
Tin	0.200	0.194		97	50-150
Titanium	0.0100	0.0112		112	50-150

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Method: 6010B | Instrument ID: ICP8

Lab Sample ID: CRI 440-590424/15 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01151

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.196		98	50-150
Boron	0.100	0.0983		98	50-150
Calcium	0.200	0.224		112	50-150
Iron	0.200	0.217		109	50-150
Lithium	0.100	0.0985	J	99	50-150
Magnesium	0.0400	0.0444		111	50-150
Phosphorus	0.400	0.417		104	50-150
Potassium	1.00	1.12		112	50-150
Sodium	1.00	1.03		103	50-150
Strontium	0.0400	0.0415		104	50-150
Tin	0.200	0.201		101	50-150
Titanium	0.0100	0.0108		108	50-150

Lab Sample ID: CRI 440-590424/38 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01151

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.200		100	50-150
Boron	0.100	0.102		102	50-150
Calcium	0.200	0.211		105	50-150
Iron	0.200	0.214		107	50-150
Lithium	0.100	0.100	J	100	50-150
Magnesium	0.0400	0.0443		111	50-150
Phosphorus	0.400	0.430		108	50-150
Potassium	1.00	0.984		98	50-150
Sodium	1.00	1.03		103	50-150
Strontium	0.0400	0.0423		106	50-150
Tin	0.200	0.202		101	50-150
Titanium	0.0100	0.0119		119	50-150

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Method: 6020 | Instrument ID: ICPMS5

Lab Sample ID: CRI 440-590306/10 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00325

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.00	1.18	J	118	50-150
Arsenic	1.00	0.965	J	97	50-150
Barium	1.00	1.01		101	50-150
Beryllium	0.500	0.496	J	99	50-150
Cadmium	1.00	0.996	J	100	50-150
Chromium	1.00	0.993	J	99	50-150
Cobalt	1.00	0.976	J	98	50-150
Copper	1.00	0.975	J	98	50-150
Lead	1.00	0.908	J	91	50-150
Manganese	1.00	0.975	J	98	50-150
Molybdenum	1.00	0.989	J	99	50-150
Nickel	1.00	1.07	J	107	50-150
Selenium	1.00	1.03	J	103	50-150
Silver	1.00	0.974	J	97	50-150
Thallium	1.00	0.872	J	87	50-150
Uranium	1.00	0.869	J	87	50-150
Vanadium	1.00	ND		97	50-150
Zinc	10.0	9.81	J	98	50-150

Lab Sample ID: CRI 440-590306/11 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00322

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.16		108	50-150
Arsenic	2.00	1.95		98	50-150
Barium	2.00	2.04		102	50-150
Beryllium	1.00	0.774		77	50-150
Cadmium	2.00	2.17		108	50-150
Chromium	2.00	2.02		101	50-150
Cobalt	2.00	1.93		97	50-150
Copper	2.00	2.05		102	50-150
Lead	2.00	1.84		92	50-150
Manganese	2.00	1.96		98	50-150
Molybdenum	2.00	1.94	J	97	50-150
Nickel	2.00	2.07		103	50-150

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Method: 6020 | Instrument ID: ICPMS5

Lab Sample ID: CRI 440-590306/11 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00322

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Selenium	2.00	1.85	J	92	50-150
Silver	2.00	1.95		97	50-150
Thallium	2.00	1.73		86	50-150
Uranium	2.00	1.76		88	50-150
Vanadium	2.00	2.00		100	50-150
Zinc	20.0	19.7	J	98	50-150

Lab Sample ID: CRI 440-590306/34 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00322

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.16		108	50-150
Arsenic	2.00	1.89		95	50-150
Barium	2.00	2.09		104	50-150
Beryllium	1.00	0.894		89	50-150
Cadmium	2.00	2.02		101	50-150
Chromium	2.00	1.93	J	96	50-150
Cobalt	2.00	1.94		97	50-150
Copper	2.00	1.90	J	95	50-150
Lead	2.00	1.83		91	50-150
Manganese	2.00	1.92		96	50-150
Molybdenum	2.00	1.98	J	99	50-150
Nickel	2.00	2.01		100	50-150
Selenium	2.00	1.90	J	95	50-150
Silver	2.00	1.91		96	50-150
Thallium	2.00	1.73		86	50-150
Uranium	2.00	1.78		89	50-150
Vanadium	2.00	1.98	J	99	50-150
Zinc	20.0	19.5	J	97	50-150

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Method: 7470A | Instrument ID: CV-HG4

Lab Sample ID: CRA 440-591391/5-A | Concentration Units: ug/L

CRQL Check Standard Source: ME 1 PPM HG1_00418

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.189	J	94	70-130

Lab Sample ID: CRA 440-591391/5-A | Concentration Units: ug/L

CRQL Check Standard Source: ME 1 PPM HG1_00418

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.197	J	99	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

Method: 6020A Instrument ID: ICPMS7700

Lab Sample ID: CRI 160-459475/7 Concentration Units: ug/L

CRQL Check Standard Source: MS A CAL1 LLC_00425

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Thorium	2.00	1.91	J	95	70-130

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 440-590318/10 01/13/2020 09:33		CCB 440-590318/18 01/13/2020 18:32		CCB 440-590318/30 01/13/2020 19:07		CCB 440-590318/38 01/13/2020 19:27	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.10	ND		ND		ND		ND	
Boron	0.050	ND		ND		ND		ND	
Iron	0.10	ND		ND		ND		ND	
Lithium	0.50	ND		ND		ND		ND	
Magnesium	0.020	ND		ND		ND		ND	
Phosphorus	0.20	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Sodium	0.50	ND		ND		ND		ND	
Strontium	0.020	ND		ND		ND		ND	
Tin	0.10	ND		ND		ND		ND	
Titanium	0.0050	ND		ND		ND		ND	
Calcium	0.10	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Concentration Units: mg/L

		ICB 440-590424/9 01/14/2020 09:35		CCB 440-590424/27 01/14/2020 10:26		CCB 440-590424/37 01/14/2020 10:50			
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Calcium	0.10	ND		ND		ND			
Aluminum	0.10	ND		ND		ND			
Boron	0.050	ND		ND		ND			
Iron	0.10	ND		ND		ND			
Lithium	0.50	ND		ND		ND			
Magnesium	0.020	ND		ND		ND			
Phosphorus	0.20	ND		ND		ND			
Potassium	0.50	ND		ND		ND			
Sodium	0.50	ND		ND		ND			
Strontium	0.020	ND		ND		ND			
Tin	0.10	ND		ND		ND			
Titanium	0.0050	ND				ND			

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Concentration Units: ug/L

		ICB 440-590306/8 01/13/2020 09:14		CCB 440-590306/15 01/13/2020 15:57		CCB 440-590306/25 01/13/2020 17:05		CCB 440-590306/33 01/13/2020 17:27	
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND		0.752	J	0.697	J	0.680	J
Arsenic	1.0	ND		ND		ND		ND	
Barium	1.0	ND		ND		ND		ND	
Beryllium	0.50	ND		ND		ND		ND	
Cadmium	1.0	ND		ND		ND		ND	
Chromium	2.0	ND		ND		ND		ND	
Cobalt	1.0	ND		ND		ND		ND	
Copper	2.0	ND		ND		ND		ND	
Lead	1.0	ND		ND		ND		ND	
Manganese	1.0	ND		ND		ND		ND	
Molybdenum	2.0	ND		ND		ND		ND	
Nickel	2.0	ND		ND		ND		ND	
Selenium	2.0	ND		ND		ND		ND	
Silver	1.0	ND		ND		ND		ND	
Thallium	1.0	ND		ND		ND		ND	
Uranium	1.0	ND		ND		ND		ND	
Vanadium	2.0	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 440-591391/2-A 01/21/2020 10:04 Found	C	CCB 440-591391/4-A 01/21/2020 11:24 Found	C	CCB 440-591391/4-A 01/21/2020 11:50 Found	C	CCB 440-591391/4-A 01/21/2020 12:16 Found	C
Mercury	0.20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 160-459475/6 02/06/2020 11:05 Found	C	CCB 160-459475/26 02/06/2020 13:21 Found	C	CCB 160-459475/37 02/06/2020 14:35 Found	C	Found	C
Thorium	2.0	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine
Job No.: 440-258875-2
SDG No.:
Concentration Units: mg/L
Lab Sample ID: MB 440-590204/1-A
Instrument Code: ICP8
Batch No.: 590318

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010B
7439-89-6	Iron	ND			6010B
7439-95-4	Magnesium	ND			6010B
7723-14-0	Phosphorus	ND			6010B
7440-09-7	Potassium	ND			6010B
7440-23-5	Sodium	ND			6010B
7440-24-6	Strontium	ND			6010B
7440-31-5	Tin	ND			6010B
7440-32-6	Titanium	ND			6010B

FORM III-IN

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Concentration Units: ug/L | Lab Sample ID: MB 440-590204/1-A

Instrument Code: ICP8 | Batch No.: 590318

CAS No.	Analyte	Concentration	C	Q	Method
7440-42-8	Boron	ND			6010B
7439-93-2	Lithium	ND			6010B

FORM III-IN

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Concentration Units: mg/L | Lab Sample ID: MB 440-590204/1-A

Instrument Code: ICP8 | Batch No.: 590424

CAS No.	Analyte	Concentration	C	Q	Method
7440-70-2	Calcium	ND			6010B

FORM III-IN

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Concentration Units: ug/L | Lab Sample ID: MB 440-590206/1-A

Instrument Code: ICPMS5 | Batch No.: 590306

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			6020
7440-38-2	Arsenic	ND			6020
7440-39-3	Barium	ND			6020
7440-41-7	Beryllium	ND			6020
7440-43-9	Cadmium	ND			6020
7440-47-3	Chromium	ND			6020
7440-48-4	Cobalt	ND			6020
7440-50-8	Copper	ND			6020
7439-92-1	Lead	ND			6020
7439-96-5	Manganese	ND			6020
7439-98-7	Molybdenum	ND			6020
7440-02-0	Nickel	ND			6020
7782-49-2	Selenium	ND			6020
7440-22-4	Silver	ND			6020
7440-28-0	Thallium	ND			6020
7440-61-1	Uranium	ND			6020
7440-62-2	Vanadium	ND			6020
7440-66-6	Zinc	ND			6020

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Concentration Units: mg/L | Lab Sample ID: MB 440-591392/1-A

Instrument Code: CV-HG4 | Batch No.: 591637

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7470A

✓

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 160-459253/1-A

Instrument Code: ICPMS7700 Batch No.: 459475

CAS No.	Analyte	Concentration	C	Q	Method
7440-29-1	Thorium	ND			6020A

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSA 440-590318/11 | Instrument ID: ICP8

Lab File ID: 200113-1J.csv | ICS Source: ME ICP IFA_02378

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**600**	**621**	**103**
Boron		**-0.0022**	
Iron	**600**	**549**	**92**
Lithium		**-0.0141**	
Magnesium	**600**	**556**	**93**
Phosphorus		**-0.0154**	
Potassium		**-0.511**	
Sodium		**-0.655**	
Strontium		**0.0031**	
Tin		**-0.0216**	
Titanium		**-0.0003**	
Antimony		*-0.0097*	
Arsenic		*-0.0003*	
Barium		*0.0042*	
Beryllium		*-0.0006*	
Cadmium		*0.0001*	
Calcium	*600*	*582*	*97*
Chromium		*0.0003*	
Cobalt		*0.0013*	
Copper		*-0.0006*	
Lead		*-0.0001*	
Manganese		*0.0230*	
Molybdenum		*-0.0031*	
Nickel		*0.0004*	
Selenium		*-0.0158*	
Silicon		*-0.0675*	
Silver		*0.0005*	
Thallium		*-0.0140*	
Tungsten		*-0.0036*	
Vanadium		*0.0017*	
Zinc		*-0.0082*	
Zirconium		*0.176*	

all results < ½ ICSA concentration
∴ no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSAB 440-590318/12 | Instrument ID: ICP8

Lab File ID: 200113-1J.csv | ICS Source: ME ICP IFB_02399

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**601**	**645**	**107**
Boron	**0.500**	**0.521**	**104**
Iron	**601**	**562**	**94**
Lithium	**0.500**	**0.523**	**105**
Magnesium	**603**	**584**	**97**
Phosphorus	**0.500**	**0.480**	**96**
Potassium	**5.00**	**4.93**	**99**
Sodium	**5.00**	**4.70**	**94**
Strontium	**0.500**	**0.510**	**102**
Tin	**0.500**	**0.447**	**89**
Titanium	**0.500**	**0.522**	**104**
Antimony	*0.500*	*0.538*	*108*
Arsenic	*0.500*	*0.482*	*96*
Barium	*0.500*	*0.468*	*94*
Beryllium	*0.500*	*0.518*	*104*
Cadmium	*0.500*	*0.448*	*90*
Calcium	*603*	*606*	*101*
Chromium	*0.500*	*0.483*	*97*
Cobalt	*0.500*	*0.451*	*90*
Copper	*0.500*	*0.557*	*111*
Lead	*0.500*	*0.456*	*91*
Manganese	*0.500*	*0.514*	*103*
Molybdenum	*0.500*	*0.484*	*97*
Nickel	*0.500*	*0.443*	*89*
Selenium	*0.500*	*0.435*	*87*
Silicon	*2.50*	*2.51*	*100*
Silver	*0.250*	*0.272*	*109*
Thallium	*0.500*	*0.430*	*86*
Tungsten	*0.500*	*0.436*	*87*
Vanadium	*0.500*	*0.507*	*101*
Zinc	*0.500*	*0.422*	*84*
Zirconium	*0.500*	*0.446*	*89*

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSA 440-590318/40 | Instrument ID: ICP8

Lab File ID: 200113-1J.csv | ICS Source: ME ICP IFA_02378

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**600**	**610**	**102**
Boron		**0.0024**	
Iron	**600**	**547**	**91**
Lithium		**-0.0099**	
Magnesium	**600**	**556**	**93**
Phosphorus		**-0.0332**	
Potassium		**-0.655**	
Sodium		**-0.566**	
Strontium		**0.0030**	
Tin		**-0.0204**	
Titanium		**-0.0001**	
Arsenic		*-0.0051*	
Barium		*0.0041*	
Beryllium		*-0.0019*	
Cadmium		*0.0000*	
Calcium	*600*	*580*	*97*
Chromium		*-0.0022*	
Cobalt		*-0.0021*	
Copper		*-0.0010*	
Lead		*0.0017*	
Manganese		*0.0179*	
Molybdenum		*-0.0004*	
Nickel		*0.0027*	
Selenium		*-0.0172*	
Silicon		*-0.0615*	
Silver		*0.0005*	
Thallium		*-0.0087*	
Tungsten		*-0.0027*	
Vanadium		*0.0020*	
Zinc		*-0.0075*	
Zirconium		*0.176*	

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSAB 440-590318/41 Instrument ID: ICP8

Lab File ID: 200113-1J.csv ICS Source: ME ICP IFB_02399

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**601**	**636**	**106**
Boron	**0.500**	**0.522**	**104**
Iron	**601**	**560**	**93**
Lithium	**0.500**	**0.522**	**104**
Magnesium	**603**	**582**	**97**
Phosphorus	**0.500**	**0.477**	**95**
Potassium	**5.00**	**4.77**	**95**
Sodium	**5.00**	**4.79**	**96**
Strontium	**0.500**	**0.504**	**101**
Tin	**0.500**	**0.430**	**86**
Titanium	**0.500**	**0.515**	**103**
Antimony	*0.500*	*0.525*	*105*
Arsenic	*0.500*	*0.487*	*97*
Barium	*0.500*	*0.460*	*92*
Beryllium	*0.500*	*0.511*	*102*
Cadmium	*0.500*	*0.442*	*88*
Calcium	*603*	*603*	*100*
Chromium	*0.500*	*0.476*	*95*
Cobalt	*0.500*	*0.443*	*89*
Copper	*0.500*	*0.551*	*110*
Lead	*0.500*	*0.448*	*90*
Manganese	*0.500*	*0.504*	*101*
Molybdenum	*0.500*	*0.480*	*96*
Nickel	*0.500*	*0.438*	*88*
Selenium	*0.500*	*0.432*	*86*
Silicon	*2.50*	*2.48*	*99*
Silver	*0.250*	*0.269*	*107*
Thallium	*0.500*	*0.415*	*83*
Tungsten	*0.500*	*0.426*	*85*
Vanadium	*0.500*	*0.500*	*100*
Zinc	*0.500*	*0.417*	*83*
Zirconium	*0.500*	*0.450*	*90*

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSA 440-590424/10 | Instrument ID: ICP8

Lab File ID: 200114-1b.csv | ICS Source: ME ICP IFA 02379

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Calcium	**600**	**605**	**101**
Aluminum	600	643	107
Antimony		-0.0020	
Arsenic		0.0014	
Barium		0.0045	
Beryllium		-0.0032	
Boron		-0.0025	
Cadmium		0.0005	
Chromium		0.0032	
Cobalt		-0.0034	
Copper		-0.0009	
Iron	600	565	94
Lead		-0.0001	
Lithium		-0.0157	
Magnesium	600	574	96
Manganese		0.0183	
Molybdenum		0.0014	
Nickel		-0.0006	
Phosphorus		-0.0259	
Potassium		-0.500	
Selenium		0.0000	
Silicon		-0.0598	
Silver		0.0013	
Sodium		-0.602	
Strontium		0.0029	
Thallium		-0.0088	
Tin		-0.0229	
Titanium		0.0001	
Tungsten		-0.0078	
Vanadium		0.0013	
Zinc		-0.0080	
Zirconium		0.191	

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSAB 440-590424/11 | Instrument ID: ICP8

Lab File ID: 200114-1b.csv | ICS Source: ME ICP IFB_02400

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Calcium	**603**	**625**	**104**
Aluminum	601	670	112
Antimony	0.500	0.534	107
Arsenic	0.500	0.516	103
Barium	0.500	0.478	96
Beryllium	0.500	0.531	106
Boron	0.500	0.544	109
Cadmium	0.500	0.460	92
Chromium	0.500	0.495	99
Cobalt	0.500	0.460	92
Copper	0.500	0.575	115
Iron	601	578	96
Lead	0.500	0.470	94
Lithium	0.500	0.534	107
Magnesium	603	598	99
Manganese	0.500	0.523	105
Molybdenum	0.500	0.501	100
Nickel	0.500	0.454	91
Phosphorus	0.500	0.485	97
Potassium	5.00	5.08	102
Selenium	0.500	0.482	96
Silicon	2.50	2.58	103
Silver	0.250	0.280	112
Sodium	5.00	4.91	98
Strontium	0.500	0.525	105
Thallium	0.500	0.419	84
Tin	0.500	0.458	92
Titanium	0.500	0.538	108
Tungsten	0.500	0.440	88
Vanadium	0.500	0.518	104
Zinc	0.500	0.436	87
Zirconium	0.500	0.457	91

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSA 440-590424/39 | Instrument ID: ICP8

Lab File ID: 200114-1b.csv | ICS Source: ME ICP IFA 02379

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Calcium	**600**	**615**	**102**
Aluminum	*600*	*668*	*111*
Antimony		*-0.0005*	
Arsenic		*-0.0095*	
Barium		*0.0045*	
Beryllium		*-0.0014*	
Boron		*-0.0017*	
Cadmium		*0.0006*	
Chromium		*-0.0038*	
Cobalt		*-0.0019*	
Copper		*-0.0021*	
Iron	*600*	*589*	*98*
Lead		*0.0097*	
Lithium		*-0.0177*	
Magnesium	*600*	*587*	*98*
Manganese		*0.0167*	
Molybdenum		*-0.0006*	
Nickel		*0.0010*	
Phosphorus		*-0.0262*	
Potassium		*-0.448*	
Selenium		*0.0135*	
Silicon		*-0.0626*	
Silver		*0.0010*	
Sodium		*-0.632*	
Strontium		*0.0036*	
Thallium		*-0.0143*	
Tin		*-0.0127*	
Titanium		*-0.0003*	
Tungsten		*-0.0046*	
Vanadium		*0.0020*	
Zinc		*-0.0080*	
Zirconium		*0.200*	

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSAB 440-590424/40 | Instrument ID: ICP8

Lab File ID: 200114-1b.csv | ICS Source: ME ICP IFB 02400

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Calcium	**603**	**644**	**107**
Aluminum	601	694	116
Antimony	0.500	0.560	112
Arsenic	0.500	0.524	105
Barium	0.500	0.491	98
Beryllium	0.500	0.550	110
Boron	0.500	0.563	113
Cadmium	0.500	0.476	95
Chromium	0.500	0.515	103
Cobalt	0.500	0.478	96
Copper	0.500	0.592	118
Iron	601	602	100
Lead	0.500	0.487	97
Lithium	0.500	0.553	111
Magnesium	603	613	102
Manganese	0.500	0.540	108
Molybdenum	0.500	0.519	104
Nickel	0.500	0.473	95
Phosphorus	0.500	0.507	101
Potassium	5.00	5.35	107
Selenium	0.500	0.494	99
Silicon	2.50	2.69	108
Silver	0.250	0.290	116
Sodium	5.00	5.08	102
Strontium	0.500	0.546	109
Thallium	0.500	0.450	90
Tin	0.500	0.474	95
Titanium	0.500	0.559	112
Tungsten	0.500	0.455	91
Vanadium	0.500	0.539	108
Zinc	0.500	0.451	90
Zirconium	0.500	0.486	97

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSA 440-590306/12 | Instrument ID: ICPMS5

Lab File ID: 014ICSA.d | ICS Source: MEICPMS CRI2_00323

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.331**	
Arsenic		**0.0620**	
Barium		**0.171**	
Beryllium		**-0.0200**	
Cadmium		**0.196**	
Chromium		**0.266**	
Cobalt		**0.300**	
Copper		**0.270**	
Lead		**0.0720**	
Manganese		**0.408**	
Molybdenum	**2000**	**2138**	**107**
Nickel		**0.275**	
Selenium		**-0.0020**	
Silver		**0.0270**	
Thallium		**0.0080**	
Uranium		**0.0080**	
Vanadium		**0.0160**	
Zinc		**0.406**	
Aluminum	*100000*	*92800*	*93*
Cerium		*0.0160*	
Cesium		*0.0160*	
Iron	*100000*	*90511*	*91*
Strontium		*0.882*	
Tin		*0.402*	
Total Heavy Metals		*0.0000*	

ICP MS – no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSAB 440-590306/13 | Instrument ID: ICPMS5

Lab File ID: 015ICSB.d | ICS Source: MEICPMS ICSAB 00275

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**21.0**	**105**
Arsenic	**20.0**	**19.8**	**99**
Barium	**20.0**	**20.6**	**103**
Beryllium	**20.0**	**20.7**	**103**
Cadmium	**20.0**	**19.4**	**97**
Chromium	**20.0**	**19.2**	**96**
Cobalt	**20.0**	**19.2**	**96**
Copper	**20.0**	**18.1**	**91**
Lead	**20.0**	**17.4**	**87**
Manganese	**20.0**	**19.3**	**97**
Molybdenum	**2020**	**2157**	**107**
Nickel	**20.0**	**18.6**	**93**
Selenium	**20.0**	**18.0**	**90**
Silver	**20.0**	**17.6**	**88**
Thallium	**20.0**	**16.5**	**83**
Uranium	**20.0**	**17.7**	**89**
Vanadium	**20.0**	**19.6**	**98**
Zinc	**20.0**	**18.6**	**93**
Aluminum	*100000*	*95089*	*95*
Cerium	*20.0*	*19.2*	*96*
Cesium	*20.0*	*19.4*	*97*
Iron	*100000*	*91900*	*92*
Rubidium	*20.0*	*22.0*	*110*
Strontium	*20.0*	*21.5*	*107*
Thorium	*20.0*	*18.2*	*91*
Tin	*20.0*	*20.5*	*103*
Total Heavy Metals	*120*	*111*	*93*

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSA 440-590306/35 | Instrument ID: ICPMS5

Lab File ID: 090ICSA.d | ICS Source: MEICPMS CRI2_00323

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.324**	
Arsenic		**0.0810**	
Barium		**0.191**	
Beryllium		**-0.0200**	
Cadmium		**0.217**	
Chromium		**0.301**	
Cobalt		**0.298**	
Copper		**0.272**	
Lead		**0.0770**	
Manganese		**0.441**	
Molybdenum	**2000**	**2141**	**107**
Nickel		**0.238**	
Selenium		**-0.0260**	
Silver		**0.0250**	
Thallium		**0.0100**	
Uranium		**0.0130**	
Vanadium		**0.0410**	
Zinc		**0.452**	
Aluminum	*100000*	*94172*	*94*
Cerium		*0.0220*	
Cesium		*0.0180*	
Iron	*100000*	*90672*	*91*
Strontium		*0.816*	
Tin		*0.422*	
Total Heavy Metals		*0.0000*	

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSAB 440-590306/36 | Instrument ID: ICPMS5

Lab File ID: 091ICSB.d | ICS Source: MEICPMS ICSAB_00275

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**20.9**	**104**
Arsenic	**20.0**	**19.6**	**98**
Barium	**20.0**	**20.6**	**103**
Beryllium	**20.0**	**19.1**	**95**
Cadmium	**20.0**	**19.4**	**97**
Chromium	**20.0**	**19.1**	**95**
Cobalt	**20.0**	**18.8**	**94**
Copper	**20.0**	**17.8**	**89**
Lead	**20.0**	**17.6**	**88**
Manganese	**20.0**	**19.2**	**96**
Molybdenum	**2020**	**2164**	**107**
Nickel	**20.0**	**18.2**	**91**
Selenium	**20.0**	**19.8**	**99**
Silver	**20.0**	**17.5**	**88**
Thallium	**20.0**	**16.8**	**84**
Uranium	**20.0**	**18.2**	**91**
Vanadium	**20.0**	**19.5**	**97**
Zinc	**20.0**	**18.7**	**93**
Aluminum	*100000*	*94948*	*95*
Cerium	*20.0*	*19.1*	*96*
Cesium	*20.0*	*19.4*	*97*
Iron	*100000*	*91269*	*91*
Rubidium	*20.0*	*21.8*	*109*
Strontium	*20.0*	*21.5*	*107*
Tin	*20.0*	*20.5*	*103*
Total Heavy Metals	*120*	*111*	*92*

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSA 160-459475/8 Instrument ID: ICPMS7700

Lab File ID: 010ICSA.D ICS Source: MS A ICSA_00334

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Thorium		**0.0520**	
Aluminum	*100000*	*102982*	*103*

no eval

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

Lab Sample ID: ICSAB 160-459475/9 Instrument ID: ICPMS7700

Lab File ID: 011ICSB.D ICS Source: MS A ICSAB 00346

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Thorium	**50.0**	**51.9**	**104**

no eval

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID:

Lab ID: 440-258802-L-15-C MS

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	5.38		3.1		1.00	230	75-125	F1	6010B
Calcium	69.8		60		5.00	199	75-125	4	6010B
Iron	5.33		3.7		1.00	160	75-125	F1	6010B
Magnesium	20.1		14		5.00	122	75-125		6010B
Phosphorus	1.18		0.11	J	1.00	107	75-125		6010B
Potassium	14.2		3.2		10.0	110	75-125		6010B
Sodium	69.3		56		10.0	132	75-125	4	6010B
Strontium	1.58		0.50		1.00	108	75-125		6010B
Tin	1.05		ND		1.00	105	75-125		6010B
Titanium	1.35		0.22		1.00	113	75-125		6010B

SSR = Spiked Sample Result

not in site
∴ no eval

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID:

Lab ID: 440-258802-L-15-C MS

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: ug/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Boron	1160		98		1000	106	75-125		6010B
Lithium	1060		ND		1000	106	75-125		6010B

SSR = Spiked Sample Result

no eval

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID:

Lab ID: 440-258696-Q-1-B MS

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: ug/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	87.7		ND		80.0	110	75-125		6020
Arsenic	84.7		4.3		80.0	101	75-125		6020
Barium	276		190		80.0	106	75-125		6020
Beryllium	85.0		ND		80.0	106	75-125		6020
Cadmium	79.1		ND		80.0	99	75-125		6020
Chromium	81.7		3.5		80.0	98	75-125		6020
Cobalt	76.3		1.2		80.0	94	75-125		6020
Copper	75.4		3.1		80.0	90	75-125		6020
Lead	79.3		1.6		80.0	97	75-125		6020
Manganese	415		310		80.0	125	75-125		6020
Molybdenum	85.7		1.4	J	80.0	105	75-125		6020
Nickel	82.9		11		80.0	90	75-125		6020
Selenium	77.6		ND		80.0	97	75-125		6020
Silver	76.4		ND		80.0	96	75-125		6020
Thallium	79.0		ND		80.0	99	75-125		6020
Uranium	85.9		0.54	J	80.0	107	75-125		6020
Vanadium	86.1		5.5		80.0	101	75-125		6020
Zinc	97.5		22		80.0	94	75-125		6020

SSR = Spiked Sample Result

no eval

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID:

Lab ID: 720-96968-A-2-D MS

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.00382		ND		0.00400	95	75-125		7470A

SSR = Spiked Sample Result

no eval

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID:

Lab ID: 440-258802-L-15-D MSD

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	5.24	1.00	216	75-125	3	20	F1	6010B
Calcium	64.0	5.00	83	75-125	9	20	4	6010B
Iron	5.11	1.00	139	75-125	4	20	F1	6010B
Magnesium	18.8	5.00	94	75-125	7	20		6010B
Phosphorus	1.12	1.00	101	75-125	5	20		6010B
Potassium	13.4	10.0	102	75-125	6	20		6010B
Sodium	64.1	10.0	80	75-125	8	20	4	6010B
Strontium	1.48	1.00	98	75-125	7	20		6010B
Tin	1.00	1.00	100	75-125	5	20		6010B
Titanium	1.32	1.00	110	75-125	3	20		6010B

SDR = Sample Duplicate Result

no eval

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID:

Lab ID: 440-258802-L-15-D MSD

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: ug/L

% Solids:

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Boron	1100	1000	100	75-125	6	20		6010B
Lithium	1010	1000	101	75-125	5	20		6010B

SDR = Sample Duplicate Result

no eval

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID:

Lab ID: 440-258696-Q-1-C MSD

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: ug/L

% Solids:

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	88.3	80.0	110	75-125	1	20		6020
Arsenic	84.9	80.0	101	75-125	0	20		6020
Barium	279	80.0	110	75-125	1	20		6020
Beryllium	86.3	80.0	108	75-125	2	20		6020
Cadmium	79.4	80.0	99	75-125	0	20		6020
Chromium	81.1	80.0	97	75-125	1	20		6020
Cobalt	76.2	80.0	94	75-125	0	20		6020
Copper	75.4	80.0	90	75-125	0	20		6020
Lead	79.5	80.0	97	75-125	0	20		6020
Manganese	414	80.0	123	75-125	0	20		6020
Molybdenum	86.1	80.0	106	75-125	1	20		6020
Nickel	82.6	80.0	89	75-125	0	20		6020
Selenium	75.0	80.0	94	75-125	4	20		6020
Silver	76.6	80.0	96	75-125	0	20		6020
Thallium	79.1	80.0	99	75-125	0	20		6020
Uranium	85.5	80.0	106	75-125	0	20		6020
Vanadium	86.5	80.0	101	75-125	1	20		6020
Zinc	97.4	80.0	94	75-125	0	20		6020

SDR = Sample Duplicate Result

no eval

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID:

Lab ID: 720-96968-A-2-E MSD

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.00352	0.00400	88	75-125	8	20		7470A

SDR = Sample Duplicate Result

no eval

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

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID:

Lab ID: 440-258802-L-15-E PDS

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	4.56		3.1		1.00	148	80-120	W	6010B
Calcium	65.8		60		5.00	NC	80-120		6010B
Iron	5.08		3.7		1.00	136	80-120	W	6010B
Magnesium	19.1		14		5.00	102	80-120		6010B
Phosphorus	1.13		0.11	J	1.00	102	80-120		6010B
Potassium	13.5		3.2		10.0	103	80-120		6010B
Sodium	65.8		56		10.0	96	80-120		6010B
Strontium	1.49		0.50		1.00	99	80-120		6010B
Tin	0.996		ND		1.00	100	80-120		6010B
Titanium	1.29		0.22		1.00	107	80-120		6010B

SSR = Spiked Sample Result

no eval

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

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID:

Lab ID: 440-258802-L-15-E PDS

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: ug/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Boron	1110		98		1000	102	80-120		6010B
Lithium	1010		ND		1000	101	80-120		6010B

SSR = Spiked Sample Result

no eval

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

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID:

Lab ID: 440-258696-Q-1-D PDS

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: ug/L

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	61.1	ND	80.0	76	75-125		6020
Arsenic	86.0	4.3	80.0	102	75-125		6020
Barium	275	190	80.0	104	75-125		6020
Beryllium	82.2	ND	80.0	103	75-125		6020
Cadmium	80.1	ND	80.0	100	75-125		6020
Chromium	82.9	3.5	80.0	99	75-125		6020
Cobalt	77.4	1.2	80.0	95	75-125		6020
Copper	76.7	3.1	80.0	92	75-125		6020
Lead	81.0	1.6	80.0	99	75-125		6020
Manganese	412	310	80.0	121	75-125		6020
Molybdenum	86.6	1.4 J	80.0	106	75-125		6020
Nickel	83.2	11	80.0	90	75-125		6020
Selenium	78.5	ND	80.0	98	75-125		6020
Silver	76.7	ND	80.0	96	75-125		6020
Thallium	80.4	ND	80.0	101	75-125		6020
Uranium	86.7	0.54 J	80.0	108	75-125		6020
Vanadium	87.4	5.5	80.0	102	75-125		6020
Zinc	97.5	22	80.0	95	75-125		6020

SSR = Spiked Sample Result

no eval

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

FORM VB - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: FB10 MS

Lab ID: 440-258875-18 MS

Lab Name: Eurofins TestAmerica, St. Louis

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: ug/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Thorium	1000		ND		1000	100	75-125		6020A

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: FB10 MSD

Lab ID: 440-258875-18 MSD

Lab Name: Eurofins TestAmerica, St. Louis

Job No.: 440-258875-2

SDG No.:

Matrix: Water

Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Thorium	983		1000	98	75-125	2	20		6020A

SDR = Sample Duplicate Result

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

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 440-590204/2-A

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

Sample Matrix: Water | LCS Source: ME ICP PREP S_00033

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	1.00	1.02		102	80	120		6010B
Iron	1.00	1.08		108	80	120		6010B
Magnesium	5.00	5.15		103	80	120		6010B
Phosphorus	1.00	0.995		100	80	120		6010B
Potassium	10.0	10.3		103	80	120		6010B
Sodium	10.0	10.2		102	80	120		6010B
Strontium	1.00	1.02		102	80	120		6010B
Tin	1.00	1.03		103	80	120		6010B
Titanium	1.00	1.05		105	80	120		6010B
Boron	1000	1000		100	80	120		6010B
Lithium	1000	1030		103	80	120		6010B

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 440-590204/2-A

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

Sample Matrix: Water | LCS Source: ME ICP PREP S_00033

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	5.00	5.31		106	80	120		6010B

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 440-590206/2-A

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

Sample Matrix: Water | LCS Source: ME ICPMS ICV_00230

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	80.0	88.4		111	80	120		6020
Arsenic	80.0	80.3		100	80	120		6020
Barium	80.0	81.9		102	80	120		6020
Beryllium	80.0	86.5		108	80	120		6020
Cadmium	80.0	81.0		101	80	120		6020
Chromium	80.0	86.8		109	80	120		6020
Cobalt	80.0	80.7		101	80	120		6020
Copper	80.0	78.6		98	80	120		6020
Lead	80.0	81.7		102	80	120		6020
Manganese	80.0	80.5		101	80	120		6020
Molybdenum	80.0	81.3		102	80	120		6020
Nickel	80.0	81.9		102	80	120		6020
Selenium	80.0	82.4		103	80	120		6020
Silver	80.0	78.5		98	80	120		6020
Thallium	80.0	83.7		105	80	120		6020
Uranium	80.0	84.4		105	80	120		6020
Vanadium	80.0	80.5		101	80	120		6020
Zinc	80.0	83.4		104	80	120		6020

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 440-591392/2-A

Lab Name: Eurofins Irvine

Job No.: 440-258875-2

Sample Matrix: Water

LCS Source: ME 1 PPM HG1_00418

Water(mg/L)

Analyte	True	Found	C	%R	Limits		Q	Method
Mercury	0.00400	0.00395		99	80	120		7470A

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

FORM VIIA - IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 160-459475/11

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

Sample Matrix: Water LCS Source: MS LDR 2_00191

Water(ug/L)

Analyte	True	Found	C	%R	Limits		Q	Method
Thorium	2000	2060		103	90	110		6020A

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

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 160-459253/2-A

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

Sample Matrix: Water LCS Source: MPREP1-A_00004

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Thorium	1000	994		99	80	120		6020A

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 440-258802-L-15-B SD ^5

SDG No:

Lab Name: Eurofins Irvine | Job No: 440-258875-2

Matrix: Water | Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	3.1		2.77		9.8		6010B
Calcium	60		57.2		4.6		6010B
Iron	3.7		3.58		3.8		6010B
Magnesium	14		13.7		2.1		6010B
Phosphorus	0.11	J	ND		NC		6010B
Potassium	3.2		2.66		NC		6010B
Sodium	56		54.7		2.5		6010B
Strontium	0.50		0.485		3.2		6010B
Tin	ND		ND		NC		6010B
Titanium	0.22		0.226		3.3		6010B

no eval

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 440-258802-L-15-B SD ^5

SDG No:

Lab Name: Eurofins Irvine | Job No: 440-258875-2

Matrix: Water | Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Boron	98		ND		NC		6010B
Lithium	ND		ND		NC		6010B

no eval

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 440-258696-Q-1-A SD ^5

SDG No:

Lab Name: Eurofins Irvine | Job No: 440-258875-2

Matrix: Water | Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	ND		ND		NC		6020
Arsenic	4.3		4.10	J	NC		6020
Barium	190		190		1.0		6020
Beryllium	ND		ND		NC		6020
Cadmium	ND		ND		NC		6020
Chromium	3.5		3.55	J	NC		6020
Cobalt	1.2		ND		NC		6020
Copper	3.1		3.14	J	NC		6020
Lead	1.6		ND		NC		6020
Manganese	310		320		1.5		6020
Molybdenum	1.4	J	ND		NC		6020
Nickel	11		8.63	J	NC		6020
Selenium	ND		ND		NC		6020
Silver	ND		ND		NC		6020
Thallium	ND		ND		NC		6020
Uranium	0.54	J	ND		NC		6020
Vanadium	5.5		5.65	J	NC		6020
Zinc	22		49.3	J	NC		6020

no eval

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 440-258875-18

SDG No:

Lab Name: Eurofins TestAmerica, St. Louis Job No: 440-258875-2

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Thorium	ND		ND		NC		6020A

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine | Job Number: 440-258875-2

SDG Number:

Matrix: Water | Instrument ID: ICP8

Method: 6010B | MDL Date: 06/15/2017 17:45

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Aluminum	308.215	0.1	0.05
Boron	249.773	0.05	0.025
Calcium	315.887	0.1	0.05
Iron	238.204	0.1	0.05
Lithium	610.362	0.5	0.025
Magnesium	279.079	0.02	0.01
Phosphorus	214.914	0.2	0.1
Potassium	766.49	0.5	0.25
Sodium	589.592	0.5	0.26
Strontium	421.552	0.02	0.01
Tin	189.933	0.1	0.05
Titanium	334.941	0.005	0.0025

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine | Job Number: 440-258875-2

SDG Number:

Matrix: Water | Instrument ID: ICP8

Method: 6010B | XMDL Date: 06/15/2017 17:46

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Aluminum	308.215	0.1	0.05
Boron	249.773	0.05	0.025
Calcium	315.887	0.1	0.05
Iron	238.204	0.1	0.05
Lithium	610.362	0.5	0.025
Magnesium	279.079	0.02	0.01
Phosphorus	214.914	0.2	0.1
Potassium	766.49	0.5	0.25
Sodium	589.592	0.5	0.26
Strontium	421.552	0.02	0.01
Tin	189.933	0.1	0.05
Titanium	334.941	0.005	0.0025

FORM IX - IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine
Job Number: 440-258875-2
SDG Number:
Matrix: Water
Instrument ID: ICPMS5
Method: 6020
MDL Date: 05/13/2019 10:07
Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121	2	0.5
Arsenic	75	1	0.5
Barium	135	1	0.5
Beryllium	9	0.5	0.25
Cadmium	114	1	0.25
Chromium	52	2	0.5
Cobalt	59	1	0.5
Copper		2	0.5
Lead	208	1	0.5
Manganese	55	1	0.5
Molybdenum	98	2	0.5
Nickel	60	2	0.5
Selenium		2	0.5
Silver	107	1	0.5
Thallium	205	1	0.2
Uranium	238	1	0.5
Vanadium	51	2	1
Zinc	66	20	2.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine | Job Number: 440-258875-2

SDG Number:

Matrix: Water | Instrument ID: ICPMS5

Method: 6020 | XMDL Date: 05/13/2019 10:08

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121	2	0.5
Arsenic	75	1	0.5
Barium	135	1	0.5
Beryllium	9	0.5	0.25
Cadmium	114	1	0.25
Chromium	52	2	0.5
Cobalt	59	1	0.5
Copper		2	0.5
Lead	208	1	0.5
Manganese	55	1	0.5
Molybdenum	98	2	0.5
Nickel	60	2	0.5
Selenium		2	0.5
Silver	107	1	0.5
Thallium	205	1	0.2
Uranium	238	1	0.5
Vanadium	51	2	1
Zinc	66	20	2.5

FORM IX - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine

Job Number: 440-258875-2

SDG Number:

Matrix: Water

Instrument ID: CV-HG4

Method: 7470A

MDL Date: 07/06/2011 10:19

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Mercury		0.0002	0.0001

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine | Job Number: 440-258875-2

SDG Number:

Matrix: Water | Instrument ID: CV-HG4

Method: 7470A | XMDL Date: 11/09/2010 14:01

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.1

FORM IX - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job Number: 440-258875-2

SDG Number:

Matrix: Water Instrument ID: ICPMS7700

Method: 6020A MDL Date: 06/27/2019 14:00

Prep Method: 3010A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Thorium	232	2	0.9

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job Number: 440-258875-2

SDG Number:

Matrix: Water Instrument ID: ICPMS7700

Method: 6020A XMDL Date: 06/27/2019 14:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Thorium	232	2	0.9

FORM IX - IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/13/2020

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Aluminum	396.152		0.000013	-0.000018	0.000025	0.000008	-0.000036	0.000046	0	0.02689	-0.000079	-0.000019	-0.000203	0.000009	0.001073
Antimony	206.834	0.000009	0.000003	0.000006	0.010395	-0.000001	0.000022	0.00005	-0.000075	-0.01878	-0.000037	0.000237	0.000208	0.00005	-0.000369
Arsenic	188.980	0.000011	-0.000005	-0.000018	-0.012816	0.00004	-0.00009	0.000008	-0.000015	0.000025	0.000095	-0.000094	-0.000062	-0.000062	0.000903
Barium	233.527	0	0	-0.000006	-0.000002	0.000001	0.000078	0.000001	0	-0.000191	-0.000007	-0.000001	0.000003	-0.000164	0.000137
Beryllium	234.861	0	0	0.000004	0	0	0.000098	0	-0.000003	-0.000013	-0.000018	0.000001	0.000003	0.000001	0.000004
Boron	249.678	0	0.000001	0.00088	0.000452	-0.00002	-0.00011	0	-0.00007	-0.000017	-0.000005	-0.000014	-0.00003	-0.000018	-0.010398
Cadmium	214.439	-0.000001	0	0.000002	-0.000009	-0.000003	0.00006	0	0.000001	-0.000006	0.000004	0.000001	0.000005	0.000002	-0.000056
Calcium	422.673	-0.000006		0.000876	0.000377	-0.000272	-0.000064	0.000039	-0.000053	-0.000524	-0.000396	-0.000114	-0.000132	0.000387	-0.000193
Chromium	205.560	0.000001	0.000003	-0.000007		0.000042	0.000004	0	0.000025	-0.000681	-0.000317	0.000014	0.000028	-0.000018	0.000386
Cobalt	228.615	0	0.000001		0.000085	0.000016	0.000008	0.000002	-0.000003	0.000019	0.000157	0.000002	0.001777	-0.000007	0.000113
Copper	324.754	0.000001	-0.000019	0.000014	0.000019		0.00001	0.000002	0.000013	0.000217	0.000018	0.000014	0.000206	-0.000092	0.00002
Iron	238.204	-0.000007	0.000002	-0.000338	-0.000187	-0.00013		0.000024	0.000002	-0.000162	-0.000109	-0.000119	-0.000132	-0.000188	-0.000132
Lead	220.353	-0.000039	0.000003	-0.000498	0	-0.00009	-0.000199	-0.0005	0.00009	-0.000819	-0.000019	0.000021	-0.000428	-0.000038	-0.000096
Lithium	670.783	0.000054	0.000021	-0.000148	-0.00023	-0.001097	-0.0001	0.000057	-0.000518	-0.000367	-0.000358	-0.001101	0.000381	-0.001377	-0.000136
Magnesium	279.078	-0.00001	0.000007	-0.000382	-0.000435	-0.0001	-0.000217		0.000627	-0.000188	-0.000014	-0.000068	-0.000188	0.000112	-0.00038
Manganese	259.372	0	0.000001	0.00001	-0.000007	-0.000001	0.0012	0.001474		0.004715	0.000013	0.000005	0.000019	0.00001	0.000005
Molybdenum	204.598	0.000025	0	0.000039	0.000067	0.000001	0.000004	0	0.000022		0.000085	-0.000008	0.00005	-0.000031	0.000033
Nickel	231.604	0.000001	-0.000003	-0.000756	0.000004	-0.000028	-0.000011	-0.000002	-0.000049	-0.000042		0.00006	0.000011	-0.000001	-0.000013
Phosphorus	213.618	0.000001	-0.000013	0.000141	0.000127	-0.03762	0.00005	0.000004	-0.000139	-0.020778	0.000094	-0.000098	0.000151	0.00024	-0.000573
Potassium	744.491	0.000095	0.000087	0.002408	0.001429	-0.000339	0.000196	0.000277	-0.000372	-0.001987	0.001312	0.001861	0.001852	0.001103	0.001579
Selenium	196.026	-0.000006	-0.000007	-0.00066	-0.000051	-0.000370	-0.00035	-0.00032	0.000565	-0.000003	-0.000241	0	-0.000066	-0.000483	0.009364
Silicon	251.611	0.000013	0.00002	0.000136	0.000095	0.000162	-0.000038	0.000048	0.000255	0.010982	0.000192	0.000679	0.004127	0.000213	0.053502
Silver	328.068	0	-0.000003	-0.000013	-0.000026	-0.000003	-0.000041	-0.000002	0.000075	0.000029	0.000003	-0.000009	-0.000107	0.000009	0.000009
Sodium	589.592	0.00003	0.000041	0.000558	0.000239	0.000428	0	0.000018	0.000127	0.002128	0.000479	0.000076	0.000228	-0.00004	0.006467
Strontium	421.552	0	0.00003	0.000002	0.000003	-0.000001	0.000001	0	0	0.000001	0.000002	0.000002	0.000001	0	0.000017
Thallium	190.794	-0.000001	-0.000005	0.003078	0.000156	-0.000039	0.000078	0	0.001388	0.000096	-0.000005	-0.000043	-0.010982	-0.02142	0.000265
Tin	189.925	0.000001	0	0.000083	0.000021	0.000021	0	0.000003	0.000047	0.000038	0.000039		-0.000119	0.000028	0.000028
Titanium	336.122	0	-0.000008	-0.000017	-0.000029	0.000002	0	0	0.000005	-0.00012	-0.000039	0.000005		-0.000364	0.000399
Tungsten	207.912	-0.000006	-0.000009	-0.000082	-0.000001	-0.000042	-0.00005	-0.000001	-0.000021	0.000144	-0.000024	-0.000005	-0.000009	-0.000019	
Vanadium	292.401	0.000004	0.000038	0.000001	0.000214	0.000012	-0.000004	0.000002	0.000014	-0.008504	0.000003	0.000009	0.000907		0.000183

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurcfins Irvine Job Number: 440-258875-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/13/2020

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Yttrium	371.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc	202.548	0.000003	0.000003	0.000013	-0.001604	0.0078	0	-0.00003	0.000044	0.00007	-0.000062	0.000012	0.000048	0.000036	0.000339
Zirconium	343.823	0	0.000002	-0.000097	0.000005	0.000002	-0.00029	-0.0003	-0.000025	-0.000012	-0.000009	0.000007	-0.000025	0.000005	0.000085

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/13/2020

Analyte	Wave Length	Zn	Zr
Aluminum	396.152	-0.00005	0.008541
Antimony	206.834	0.000096	-0.000086
Arsenic	188.980	-0.000075	0.000125
Barium	233.527	0.000001	-0.000001
Beryllium	234.861	0.000001	0.000006
Boron	249.678	0.00002	0.000445
Cadmium	214.439	0.000005	0.000001
Calcium	422.673	-0.000066	-0.000488
Chromium	205.560	0.000037	0.000101
Cobalt	228.615	-0.000013	-0.000003
Copper	324.754	0.000016	0.00004
Iron	238.204	0.00011	0.000622
Lead	220.353	-0.000028	-0.000005
Lithium	670.783	-0.00073	-0.000634
Magnesium	279.078	-0.000119	-0.000067
Manganese	259.372	0.000005	0.000048
Molybdenum	204.598	0.000052	0.000002
Nickel	231.604	0.000023	0.000028
Phosphorus	213.618	-0.00009	0.000028
Potassium	744.491	-0.001412	0.000491
Selenium	196.026	-0.000101	-0.000166
Silicon	251.611	0.001039	0.006759
Silver	328.068	0.000001	0.003947
Sodium	589.592	-0.000112	0.000318
Strontium	421.552	0	-0.00002
Thallium	190.794	-0.000027	0.000028
Tin	189.925	0.000048	0.000557
Titanium	336.122	0.000006	0.000122
Tungsten	207.912	0.008281	0.000004
Vanadium	292.401	0.000024	-0.000008

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/13/2020

Analyte	Wave Length	Zn	Zr
Yttrium	371.029	0	0
Zinc	202.548		0.000117
Zirconium	343.823	0.000003	

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/14/2020

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Aluminum	396.152		0.000013	-0.000018	0.000025	0.000008	-0.000036	0.000046	0	0.02689	-0.000079	-0.000019	-0.000203	0.000009	0.001073
Antimony	206.834	0.000009	0.000003	0.000006	0.010395	-0.000001	0.000022	0.00005	-0.000075	-0.01878	-0.000037	0.000237	0.000208	0.00005	-0.000369
Arsenic	188.980	0.000011	-0.000005	-0.000018	-0.012816	0.00004	-0.00009	0.000008	-0.000015	0.000025	0.000095	-0.000094	-0.000062	-0.000062	0.000903
Barium	233.527	0	0	-0.000006	-0.000002	0.000001	0.000078	0.000001	0	-0.000191	-0.000007	-0.000001	0.000003	-0.000164	0.000137
Beryllium	234.861	0	0	0.000004	0	0	0.000098	0	-0.000003	-0.000013	-0.000018	0.000001	0.000003	0.000001	0.000004
Boron	249.678	0	0.000001	0.00088	0.000452	-0.00002	-0.00011	0	-0.00007	-0.000017	-0.000005	-0.000014	-0.00003	-0.000018	-0.010398
Cadmium	214.439	-0.000001	0	0.000002	-0.000009	-0.000003	0.00006	0	0.000001	-0.000006	0.000004	0.000001	0.000005	0.000002	-0.000056
Calcium	422.673	-0.000006		0.000876	0.000377	-0.000272	-0.000064	0.000039	-0.000053	-0.000524	-0.000396	-0.000114	-0.000132	0.000387	-0.000193
Chromium	205.560	0.000001	0.000003	-0.000007		0.000042	0.000004	0	0.000025	-0.000681	-0.000317	0.000014	0.000028	-0.000018	0.000386
Cobalt	228.615	0	0.000001		0.000085	0.000016	0.000008	0.000002	-0.000003	0.000019	0.000157	0.000002	0.001777	-0.000007	0.000113
Copper	324.754	0.000001	-0.000019	0.000014	0.000019		0.00001	0.000002	0.000013	0.000217	0.000018	0.000014	0.000206	-0.000092	0.00002
Iron	238.204	-0.000007	0.000002	-0.000338	-0.000187	-0.00013		0.000024	0.000002	-0.000162	-0.000109	-0.000119	-0.000132	-0.000188	-0.000132
Lead	220.353	-0.000039	0.000003	-0.000498	0	-0.00009	-0.000204	-0.0005	0.00009	-0.000819	-0.000019	0.000021	-0.000428	-0.000038	-0.000096
Lithium	670.783	0.000054	0.000021	-0.000148	-0.00023	-0.001097	-0.0001	0.000057	-0.000518	-0.000367	-0.000358	-0.001101	0.000381	-0.001377	-0.000136
Magnesium	279.078	-0.00001	0.000007	-0.000382	-0.000435	-0.0001	-0.000217		0.000627	-0.000188	-0.000014	-0.000068	-0.000188	0.000112	-0.00038
Manganese	259.372	0	0.000001	0.00001	-0.000007	-0.000001	0.0012	0.001474		0.004715	0.000013	0.000005	0.000019	0.00001	0.000005
Molybdenum	204.598	0.000025	0	0.000039	0.000067	0.000001	0.000004	0	0.000022		0.000085	-0.000008	0.00005	-0.000031	0.000033
Nickel	231.604	0.000001	-0.000003	-0.000756	0.000004	-0.000028	-0.000011	-0.000002	-0.000049	-0.000042		0.00006	0.000011	-0.000001	-0.000013
Phosphorus	213.618	0.000001	-0.000013	0.000141	0.000127	-0.03762	0.00005	0.000004	-0.000139	-0.020778	0.000094	-0.000098	0.000151	0.00024	-0.000573
Potassium	744.491	0.000095	0.000087	0.002408	0.001429	-0.000339	0.000196	0.000277	-0.000372	-0.001987	0.001312	0.001861	0.001852	0.001103	0.001579
Selenium	196.026	-0.000006	-0.000007	-0.00066	-0.000051	-0.000370	-0.000409	-0.00032	0.000565	-0.000003	-0.000241	0	-0.000066	-0.000483	0.009364
Silicon	251.611	0.000013	0.00002	0.000136	0.000095	0.000162	-0.000038	0.000048	0.000255	0.010982	0.000192	0.000679	0.004127	0.000213	0.053502
Silver	328.068	0	-0.000003	-0.000013	-0.000026	-0.000003	-0.000041	-0.000002	0.000075	0.000029	0.000003	-0.000009	-0.000107	0.000009	0.000009
Sodium	589.592	0.00003	0.000041	0.000558	0.000239	0.000428	0	0.000018	0.000127	0.002128	0.000479	0.000076	0.000228	-0.00004	0.006467
Strontium	421.552	0	0.00003	0.000002	0.000003	-0.000001	0.000001	0	0	0.000001	0.000002	0.000002	0.000001	0	0.000017
Thallium	190.794	-0.000001	-0.000005	0.003078	0.000156	-0.000039	0.000078	0	0.001388	0.000096	-0.000005	-0.000043	-0.010982	-0.02142	0.000265
Tin	189.925	0.000001	0	0.000083	0.000021	0.000021	0	0.000003	0.000047	0.000038	0.000039		-0.000119	0.000028	0.000028
Titanium	336.122	0	-0.000008	-0.000017	-0.000029	0.000002	0	0	0.000005	-0.00012	-0.000039	0.000005		-0.000364	0.000399
Tungsten	207.912	-0.000006	-0.000009	-0.000082	-0.000001	-0.000042	-0.00005	-0.000001	-0.000021	0.000144	-0.000024	-0.000005	-0.000009	-0.000019	
Vanadium	292.401	0.000004	0.000038	0.000001	0.000214	0.000012	-0.000004	0.000002	0.000014	-0.008504	0.000003	0.000009	0.000907		0.000183

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/14/2020

Analyte	Wave Length	Al	Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Sn	Ti	V	W
Yttrium	371.029	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc	202.548	0.000003	0.000003	0.000013	-0.001604	0.0078	0	-0.00003	0.000044	0.00007	-0.000062	0.000012	0.000048	0.000036	0.000339
Zirconium	343.823	0	0.000002	-0.000097	0.000005	0.000002	-0.00029	-0.0003	-0.000025	-0.000012	-0.000009	0.000007	-0.000025	0.000005	0.000085

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/14/2020

Analyte	Wave Length	Zn	Zr
Aluminum	396.152	-0.00005	0.008541
Antimony	206.834	0.000096	-0.000086
Arsenic	188.980	-0.000075	0.000125
Barium	233.527	0.000001	-0.000001
Beryllium	234.861	0.000001	0.000006
Boron	249.678	0.00002	0.000445
Cadmium	214.439	0.000005	0.000001
Calcium	422.673	-0.000066	-0.000488
Chromium	205.560	0.000037	0.000101
Cobalt	228.615	-0.000013	-0.000003
Copper	324.754	0.000016	0.00004
Iron	238.204	0.00011	0.000622
Lead	220.353	-0.000028	-0.000005
Lithium	670.783	-0.00073	-0.000634
Magnesium	279.078	-0.000119	-0.000067
Manganese	259.372	0.000005	0.000048
Molybdenum	204.598	0.000052	0.000002
Nickel	231.604	0.000023	0.000028
Phosphorus	213.618	-0.00009	0.000028
Potassium	744.491	-0.001412	0.000491
Selenium	196.026	-0.000101	-0.000166
Silicon	251.611	0.001039	0.006759
Silver	328.068	0.000001	0.003947
Sodium	589.592	-0.000112	0.000318
Strontium	421.552	0	-0.00002
Thallium	190.794	-0.000027	0.000028
Tin	189.925	0.000048	0.000557
Titanium	336.122	0.000006	0.000122
Tungsten	207.912	0.008281	0.000004
Vanadium	292.401	0.000024	-0.000008

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-258875-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/14/2020

Analyte	Wave Length	Zn	Zr
Yttrium	371.029	0	0
Zinc	202.548		0.000117
Zirconium	343.823	0.000003	

X-IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-258875-2

SDG No.:

Instrument ID: ICP8 Date: 06/15/2017 18:16

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum		600	6010B
Boron		30	6010B
Calcium		600	6010B
Iron		600	6010B
Lithium		30	6010B
Magnesium		600	6010B
Phosphorus		30	6010B
Potassium		1000	6010B
Sodium		1000	6010B
Strontium		30	6010B
Tin		30	6010B
Titanium		30	6010B

FORM XI - IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-258875-2

SDG No.:

Instrument ID: ICPMS5 Date: 07/03/2018 18:30

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		4500	6020
Arsenic		4500	6020
Barium		4500	6020
Beryllium		1800	6020
Cadmium		4500	6020
Chromium		4500	6020
Cobalt		4500	6020
Copper		4500	6020
Lead		4500	6020
Manganese		4500	6020
Molybdenum		4500	6020
Nickel		4500	6020
Selenium		4500	6020
Silver		100	6020
Thallium		2700	6020
Uranium		4500	6020
Vanadium		2700	6020
Zinc		4500	6020

FORM XI - IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-258875-2

SDG No.:

Instrument ID: CV-HG4 Date: 01/01/2019 13:06

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Mercury		10	7470A

FORM XI - IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins TestAmerica, St. Loui Job No: 440-258875-2

SDG No.:

Instrument ID: ICPMS7700 Date: 08/05/2019 16:42

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Thorium		2000	6020A

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 440-590204/1-A	01/13/2020 10:02	590204		25	25
LCS 440-590204/2-A	01/13/2020 10:02	590204		25	25
440-258802-L-15-C MS	01/13/2020 10:02	590204		25	25
440-258802-L-15-D MSD	01/13/2020 10:02	590204		25	25
440-258875-10	01/13/2020 10:02	590204		25	25
440-258875-18	01/13/2020 10:02	590204		25	25

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 440-590206/1-A	01/13/2020 10:12	590206		25	25
LCS 440-590206/2-A	01/13/2020 10:12	590206		25	25
440-258696-Q-1-B MS	01/13/2020 10:12	590206		25	25
440-258696-Q-1-C MSD	01/13/2020 10:12	590206		25	25
440-258875-10	01/13/2020 10:12	590206		25	25
440-258875-18	01/13/2020 10:12	590206		25	25

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 440-591392/1-A	01/20/2020 12:36	591392		20	20
LCS 440-591392/2-A	01/20/2020 12:36	591392		20	20
720-96968-A-2-D MS	01/20/2020 12:36	591392		20	20
720-96968-A-2-E MSD	01/20/2020 12:36	591392		20	20
440-258875-10	01/20/2020 12:36	591392		20	20
440-258875-18	01/20/2020 12:36	591392		20	20

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 160-459253/1-A	02/04/2020 16:43	459253		50	50
LCS 160-459253/2-A	02/04/2020 16:43	459253		50	50
440-258875-10	02/04/2020 16:43	459253		50	50
440-258875-18	02/04/2020 16:43	459253		50	50
440-258875-18 MS	02/04/2020 16:43	459253		50	50
440-258875-18 MSD	02/04/2020 16:43	459253		50	50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 01/13/2020 09:07 End Date: 01/13/2020 19:34

Lab Sample Id	D/F	Type	Time	Analytes										
				Al	B	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
ICIS 440-590318/1	1		09:07	X	X	X	X	X	X	X	X	X	X	X
STD1 440-590318/2 IC			09:09	X	X	X	X	X	X	X	X	X	X	X
STD2 440-590318/3 IC			09:11	X	X	X	X	X	X	X	X	X	X	X
STD3 440-590318/4 IC			09:12	X	X	X	X	X	X	X	X	X	X	X
ICV 440-590318/5	1		09:18	X	X	X	X	X	X		X	X	X	X
ZZZZZZ			09:20											
ICV 440-590318/7	1		09:25							X				
ZZZZZZ			09:27											
ZZZZZZ			09:31											
ICB 440-590318/10	1		09:33	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-590318/11	1		09:35	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-590318/12	1		09:38	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:41											
ZZZZZZ			09:44											
ZZZZZZ			09:47											
CRI 440-590318/16	1		09:49	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590318/17	1		18:27	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590318/18	1		18:32	X	X	X	X	X	X	X	X	X	X	X
MB 440-590204/1-A	1	R	18:34	X	X	X	X	X	X	X	X	X	X	X
LCS 440-590204/2-A	1	R	18:36	X	X	X	X	X	X	X	X	X	X	X
440-258802-L-15-B SD ^5	5	R	18:39	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			18:41											
440-258802-L-15-C MS	1	R	18:43	X	X	X	X	X	X	X	X	X	X	X
440-258802-L-15-D MSD	1	R	18:45	X	X	X	X	X	X	X	X	X	X	X
440-258802-L-15-E PDS	1	R	18:47	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			18:50											
ZZZZZZ			18:52											
ZZZZZZ			18:54											
CCV 440-590318/29	1		18:56	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590318/30	1		19:07	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			19:09											
ZZZZZZ			19:11											
ZZZZZZ			19:13											
440-258875-10	1	R	19:16	X	X	X	X	X	X	X	X	X	X	X
440-258875-18	1	R	19:18	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			19:20											
CCV 440-590318/37	1		19:22	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590318/38	1		19:27	X	X	X	X	X	X	X	X	X	X	X
CRI 440-590318/39	1		19:29	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-590318/40	1		19:31	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-590318/41	1		19:34	X	X	X	X	X	X	X	X	X	X	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 01/13/2020 09:07 End Date: 01/13/2020 19:34

Lab Sample Id	D/F	Type	Time	Al	B	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 01/14/2020 09:13 End Date: 01/14/2020 10:58

Lab Sample Id	D/F	Type	Time	Ca	Analytes
ICIS 440-590424/1	1		09:13	X	
STD1 440-590424/2 IC			09:15	X	
STD2 440-590424/3 IC			09:18	X	
STD3 440-590424/4 IC			09:21	X	
ICV 440-590424/5	1		09:24	X	
ZZZZZZ			09:27		
ZZZZZZ			09:29		
ZZZZZZ			09:32		
ICB 440-590424/9	1		09:35	X	
ICSA 440-590424/10	1		09:37	X	
ICSAB 440-590424/11	1		09:40	X	
ZZZZZZ			09:43		
ZZZZZZ			09:46		
ZZZZZZ			09:48		
CRI 440-590424/15	1		09:51	X	
MB 440-590204/1-A	1	R	09:54	X	
LCS 440-590204/2-A	1	R	10:01	X	
440-258802-L-15-B SD ^5	5	R	10:03	X	
ZZZZZZ			10:05		
440-258802-L-15-C MS	1	R	10:07	X	
440-258802-L-15-D MSD	1	R	10:09	X	
440-258802-L-15-E PDS	1	R	10:12	X	
ZZZZZZ			10:16		
ZZZZZZ			10:18		
ZZZZZZ			10:20		
CCV 440-590424/26	1		10:23	X	
CCB 440-590424/27	1		10:26	X	
ZZZZZZ			10:29		
440-258875-10	1	R	10:31	X	
440-258875-18	1	R	10:33	X	
ZZZZZZ			10:35		
ZZZZZZ			10:37		
ZZZZZZ			10:40		
ZZZZZZ			10:42		
CCV 440-590424/35	1		10:44	X	
ZZZZZZ			10:46		
CCB 440-590424/37	1		10:50	X	
CRI 440-590424/38	1		10:52	X	
ICSA 440-590424/39	1		10:56	X	
ICSAB 440-590424/40	1		10:58	X	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Instrument ID: ICP8 | Analysis Method: 6010B

Start Date: 01/14/2020 09:13 | End Date: 01/14/2020 10:58

Lab Sample Id	D/F	Type	Time	Ca	Analytes

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Instrument ID: ICPMS5 Analysis Method: 6020

Start Date: 01/13/2020 08:55 End Date: 01/13/2020 17:38

Lab Sample Id	D/F	Type	Time	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Se	Tl	U	V	Zn
STD0 440-590306/1 IC	1		08:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-590306/2 IC	1		08:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-590306/3 IC	1		09:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-590306/4 IC	1		09:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD4 440-590306/5 IC	1		09:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-590306/6	1		09:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:11																		
ICB 440-590306/8	1		09:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:16																		
CRI 440-590306/10	1		09:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-590306/11	1		09:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-590306/12	1		09:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-590306/13	1		09:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-590306/14	1		15:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590306/15	1		15:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 440-590206/1-A	1	R	16:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 440-590206/2-A	1	R	16:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			16:27																		
440-258696-Q-1-B MS	1	R	16:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258696-Q-1-C MSD	1	R	16:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258696-Q-1-D PDS	1	R	16:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258696-Q-1-A SD ^5	5	R	16:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			16:56																		
CCV 440-590306/24	1		17:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590306/25	1		17:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-10	1	R	17:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-258875-18	1	R	17:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			17:12																		
ZZZZZZ			17:15																		
ZZZZZZ			17:17																		
ZZZZZZ			17:20																		
CCV 440-590306/32	1		17:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-590306/33	1		17:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-590306/34	1		17:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-590306/35	1		17:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-590306/36	1		17:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Instrument ID: CV-HG4 | Analysis Method: 7470A

Start Date: 01/21/2020 09:48 | End Date: 01/21/2020 14:15

Lab Sample Id	D/F	Type	Time	Analytes	
				Hg	
IC 440-591391/6-A			09:48	X	
IC 440-591391/7-A			09:50	X	
IC 440-591391/8-A			09:53	X	
IC 440-591391/9-A			09:55	X	
IC 440-591391/10-A			09:57	X	
IC 440-591391/11-A			09:59	X	
ICV 440-591391/1-A	1		10:01	X	
ICB 440-591391/2-A	1		10:04	X	
CRA 440-591391/5-A	1		10:06	X	
ZZZZZZ			10:08		
ZZZZZZ			10:10		
ZZZZZZ			10:13		
ZZZZZZ			10:15		
ZZZZZZ			10:17		
ZZZZZZ			10:19		
ZZZZZZ			10:21		
ZZZZZZ			10:23		
ZZZZZZ			10:26		
ZZZZZZ			10:28		
CCV 440-591391/3-A			10:30		
CCB 440-591391/4-A			10:32		
ZZZZZZ			10:34		
ZZZZZZ			10:36		
ZZZZZZ			10:39		
ZZZZZZ			10:41		
ZZZZZZ			10:43		
ZZZZZZ			10:45		
ZZZZZZ			10:47		
ZZZZZZ			10:49		
ZZZZZZ			10:52		
ZZZZZZ			10:54		
CCV 440-591391/3-A			10:56		
CCB 440-591391/4-A			10:58		
ZZZZZZ			11:00		
ZZZZZZ			11:02		
ZZZZZZ			11:05		
ZZZZZZ			11:07		
ZZZZZZ			11:09		
ZZZZZZ			11:11		
ZZZZZZ			11:13		
ZZZZZZ			11:16		
ZZZZZZ			11:18		

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-258875-2

SDG No.:

Instrument ID: CV-HG4 | Analysis Method: 7470A

Start Date: 01/21/2020 09:48 | End Date: 01/21/2020 14:15

Lab Sample Id	D/F	Type	Time	Analytes: Hg
ZZZZZZ			11:20	
CCV 440-591391/3-A	1		11:22	X
CCB 440-591391/4-A	1		11:24	X
ZZZZZZ			11:26	
ZZZZZZ			11:28	
ZZZZZZ			11:31	
MB 440-591392/1-A	1	T	11:33	X
LCS 440-591392/2-A	1	T	11:35	X
ZZZZZZ			11:37	
720-96968-A-2-D MS	1	T	11:39	X
720-96968-A-2-E MSD	1	T	11:42	X
ZZZZZZ			11:44	
ZZZZZZ			11:46	
CCV 440-591391/3-A	1		11:48	X
CCB 440-591391/4-A	1		11:50	X
ZZZZZZ			11:53	
ZZZZZZ			11:55	
440-258875-10	1	T	11:57	X
440-258875-18	1	T	11:59	X
ZZZZZZ			12:01	
ZZZZZZ			12:03	
ZZZZZZ			12:06	
ZZZZZZ			12:08	
ZZZZZZ			12:10	
ZZZZZZ			12:12	
CCV 440-591391/3-A	1		12:14	X
CCB 440-591391/4-A	1		12:16	X
ZZZZZZ			12:19	
ZZZZZZ			12:21	
ZZZZZZ			12:23	
ZZZZZZ			12:25	
ZZZZZZ			12:27	
ZZZZZZ			12:29	
ZZZZZZ			12:32	
ZZZZZZ			12:34	
ZZZZZZ			12:36	
ZZZZZZ			12:38	
CCV 440-591391/3-A			12:40	
CCB 440-591391/4-A			12:43	
ZZZZZZ			12:45	
ZZZZZZ			12:47	
ZZZZZZ			12:50	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Instrument ID: CV-HG4 Analysis Method: 7470A

Start Date: 01/21/2020 09:48 End Date: 01/21/2020 14:15

Lab Sample Id	D/F	Type	Time	Analytes Hg
ZZZZZZ			12:52	
ZZZZZZ			12:54	
ZZZZZZ			12:56	
ZZZZZZ			12:58	
ZZZZZZ			13:01	
ZZZZZZ			13:03	
ZZZZZZ			13:05	
CCV 440-591391/3-A			13:07	
CCB 440-591391/4-A			13:09	
ZZZZZZ			13:11	
ZZZZZZ			13:14	
ZZZZZZ			13:16	
ZZZZZZ			13:18	
ZZZZZZ			13:20	
ZZZZZZ			13:22	
ZZZZZZ			13:25	
ZZZZZZ			13:27	
ZZZZZZ			13:29	
ZZZZZZ			13:31	
CCV 440-591391/3-A			13:33	
CCB 440-591391/4-A			13:36	
ZZZZZZ			13:38	
ZZZZZZ			13:40	
ZZZZZZ			13:42	
ZZZZZZ			13:44	
ZZZZZZ			13:46	
ZZZZZZ			13:49	
ZZZZZZ			13:51	
ZZZZZZ			13:53	
ZZZZZZ			13:55	
ZZZZZZ			13:57	
CCV 440-591391/3-A			14:00	
CCB 440-591391/4-A			14:02	
ZZZZZZ			14:04	
ZZZZZZ			14:06	
ZZZZZZ			14:08	
CRA 440-591391/5-A	1		14:10	X
CCV 440-591391/3-A			14:13	
CCB 440-591391/4-A			14:15	

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

Instrument ID: ICPMS7700 Analysis Method: 6020A

Start Date: 02/06/2020 10:32 End Date: 02/06/2020 14:35

Lab Sample Id	D/F	Type	Time	Analytes Th
ICIS 160-459475/1			10:32	X
IC 160-459475/2	1		10:38	X
IC 160-459475/3	1		10:45	X
IC 160-459475/4	1		10:52	X
ICV 160-459475/5	1		10:58	X
ICB 160-459475/6	1		11:05	X
CRI 160-459475/7	1		11:12	X
ICSA 160-459475/8	1		11:19	X
ICSAB 160-459475/9	1		11:26	X
LRC 160-459475/10			11:33	
LRC 160-459475/11	1		11:39	X
CCV 160-459475/12			11:46	
CCB 160-459475/13			11:53	
ZZZZZZ			12:00	
ZZZZZZ			12:07	
ZZZZZZ			12:13	
ZZZZZZ			12:20	
ZZZZZZ			12:27	
ZZZZZZ			12:33	
ZZZZZZ			12:40	
ZZZZZZ			12:47	
ZZZZZZ			12:54	
ZZZZZZ			13:00	
CCVL 160-459475/24	1		13:07	X
CCV 160-459475/25	1		13:14	X
CCB 160-459475/26	1		13:21	X
ZZZZZZ			13:27	
MB 160-459253/1-A	2	T	13:34	X
LCS 160-459253/2-A	2	T	13:41	X
440-258875-10	2	T	13:48	X
440-258875-18	2	T	13:54	X
440-258875-18 SD	10	T	14:01	X
440-258875-18 MS	2	T	14:08	X
440-258875-18 MSD	2	T	14:14	X
CCVL 160-459475/35	1		14:21	X
CCV 160-459475/36	1		14:28	X
CCB 160-459475/37	1		14:35	X

Prep Types:
T = Total/NA

FORM XIII-IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICP Instrument ID: ICP8 Start Date: 01/13/2020 End Date: 01/13/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICIS 440-590318/1	09:07										
ICV 440-590318/5	09:18	100									
ICV 440-590318/7	09:25	100									
ICB 440-590318/10	09:33	101									
ICSA 440-590318/11	09:35	88									
ICSAB 440-590318/12	09:38	88									
CRI 440-590318/16	09:49	101									
CCV 440-590318/17	18:27	101									
CCB 440-590318/18	18:32	102									
MB 440-590204/1-A	18:34	101									
LCS 440-590204/2-A	18:36	100									
440-258802-L-15-B SD ^5	18:39	102									
440-258802-L-15-C MS	18:43	97									
440-258802-L-15-D MSD	18:45	97									
440-258802-L-15-E PDS	18:47	97									
CCV 440-590318/29	18:56	102									
CCB 440-590318/30	19:07	102									
440-258875-10	19:16	101									
440-258875-18	19:18	100									
CCV 440-590318/37	19:22	101									
CCB 440-590318/38	19:27	101									
CRI 440-590318/39	19:29	101									
ICSA 440-590318/40	19:31	89									
ICSAB 440-590318/41	19:34	88									

FORM XV - IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICP Instrument ID: ICP8 Start Date: 01/14/2020 End Date: 01/14/2020

Internal Standards %RI For:

Lab Sample ID	Time	Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICIS 440-590424/1	09:13										
ICV 440-590424/5	09:24	100									
ICB 440-590424/9	09:35	100									
ICSA 440-590424/10	09:37	88									
ICSAB 440-590424/11	09:40	88									
CRI 440-590424/15	09:51	101									
MB 440-590204/1-A	09:54	99									
LCS 440-590204/2-A	10:01	98									
440-258802-L-15-B SD ^5	10:03	100									
440-258802-L-15-C MS	10:07	95									
440-258802-L-15-D MSD	10:09	95									
440-258802-L-15-E PDS	10:12	95									
CCV 440-590424/26	10:23	99									
CCB 440-590424/27	10:26	100									
440-258875-10	10:31	99									
440-258875-18	10:33	99									
CCV 440-590424/35	10:44	99									
CCB 440-590424/37	10:50	99									
CRI 440-590424/38	10:52	99									
ICSA 440-590424/39	10:56	87									
ICSAB 440-590424/40	10:58	86									

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

ICP-MS Instrument ID: ICPMS5 Start Date: 01/13/2020 End Date: 01/13/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Sc-45	Q	Element Ge	Q	Element In-115	Q	Element Tb-159	Q	Element	Q
STD0 440-590306/1 IC	08:55	100		100		100		100			
STD1 440-590306/2 IC	08:57	99		100		100		98			
STD2 440-590306/3 IC	09:00	100		99		100		99			
STD3 440-590306/4 IC	09:02	103		102		102		101			
STD4 440-590306/5 IC	09:05	103		102		104		102			
ICV 440-590306/6	09:07	101		102		104		102			
ICB 440-590306/8	09:14	95		95		96		97			
CRI 440-590306/10	09:19	97		97		98		100			
CRI 440-590306/11	09:21	99		98		99		100			
ICSA 440-590306/12	09:24	96		91		89		94			
ICSAB 440-590306/13	09:26	96		93		89		93			
CCV 440-590306/14	15:54	97		94		95		97			
CCB 440-590306/15	15:57	93		92		92		94			
MB 440-590206/1-A	16:22	90		87		87		92			
LCS 440-590206/2-A	16:25	91		89		90		94			
440-258696-Q-1-B MS	16:30	91		88		86		92			
440-258696-Q-1-C MSD	16:32	92		88		86		93			
440-258696-Q-1-D PDS	16:34	93		89		88		92			
440-258696-Q-1-A SD ^5	16:53	93		90		89		94			
CCV 440-590306/24	17:03	105		101		101		101			
CCB 440-590306/25	17:05	101		98		97		99			
440-258875-10	17:07	101		97		97		98			
440-258875-18	17:10	100		95		96		98			
CCV 440-590306/32	17:24	98		94		95		96			
CCB 440-590306/33	17:27	95		94		94		96			
CRI 440-590306/34	17:33	97		94		94		98			
ICSA 440-590306/35	17:35	91		86		84		91			
ICSAB 440-590306/36	17:38	94		89		86		91			

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

ICP-MS Instrument ID: ICPMS7700 Start Date: 02/06/2020 End Date: 02/06/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/2	Q	Element Sc/3	Q	Element Ge/2	Q	Element Ge/3	Q
IC 160-459475/2	10:38	100		100		100		101		100	
IC 160-459475/3	10:45	99		103		100		108		104	
IC 160-459475/4	10:52	98		101		99		110		103	
ICV 160-459475/5	10:58	98		100		98		104		102	
ICB 160-459475/6	11:05	100		101		99		100		100	
CRI 160-459475/7	11:12	101		101		99		102		100	
ICSA 160-459475/8	11:19	92		97		96		96		94	
ICSAB 160-459475/9	11:26	91		100		95		100		94	
LRC 160-459475/11	11:39	81		114		98		103		96	
CCVL 160-459475/24	13:07	100		106		105		109		108	
CCV 160-459475/25	13:14	95		103		101		111		107	
CCB 160-459475/26	13:21	99		103		102		105		105	
MB 160-459253/1-A	13:34	99		106		104		109		109	
LCS 160-459253/2-A	13:41	89		100		95		101		100	
440-258875-10	13:48	95		97		98		103		104	
440-258875-18	13:54	95		99		99		103		105	
440-258875-18 SD	14:01	96		99		100		102		104	
440-258875-18 MS	14:08	88		97		95		100		100	
440-258875-18 MSD	14:14	89		97		95		102		101	
CCVL 160-459475/35	14:21	92		96		96		101		100	
CCV 160-459475/36	14:28	91		97		97		105		103	
CCB 160-459475/37	14:35	95		98		99		102		103	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-258875-2

SDG No.:

ICP-MS Instrument ID: ICPMS7700 Start Date: 02/06/2020 End Date: 02/06/2020

Lab Sample ID	Time	Internal Standards %RI For:									
		Element In	Q	Element Ho/2	Q	Element Ho/3	Q	Element Ir/2	Q	Element Ir/3	Q
IC 160-459475/2	10:38	100		100		100		100		100	
IC 160-459475/3	10:45	99		101		101		100		99	
IC 160-459475/4	10:52	97		98		101		97		98	
ICV 160-459475/5	10:58	99		99		100		101		100	
ICB 160-459475/6	11:05	99		100		100		101		99	
CRI 160-459475/7	11:12	99		99		100		99		99	
ICSA 160-459475/8	11:19	88		92		91		85		84	
ICSAB 160-459475/9	11:26	87		93		91		86		83	
LRC 160-459475/11	11:39	89		98		94		89		86	
CCVL 160-459475/24	13:07	107		104		106		105		104	
CCV 160-459475/25	13:14	102		103		104		102		102	
CCB 160-459475/26	13:21	104		103		104		105		103	
MB 160-459253/1-A	13:34	106		104		105		105		104	
LCS 160-459253/2-A	13:41	97		101		104		102		100	
440-258875-10	13:48	103		102		106		105		103	
440-258875-18	13:54	103		101		104		102		103	
440-258875-18 SD	14:01	104		101		103		104		103	
440-258875-18 MS	14:08	98		99		102		98		99	
440-258875-18 MSD	14:14	98		100		102		100		100	
CCVL 160-459475/35	14:21	102		100		103		103		103	
CCV 160-459475/36	14:28	101		101		103		102		102	
CCB 160-459475/37	14:35	103		101		105		104		103	

FORM XV - IN

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 590204 Batch Start Date: 01/13/20 10:01 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 01/13/20 15:43

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME HCl 00554	ME HNO3 00549	ME ICP PREP S 00033
MB 440-590204/1		3005A, 6010B			25 mL	25 mL	1.25 mL	0.5 mL	
LCS 440-590204/2		3005A, 6010B			25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-258802-L-15 MS		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-258802-L-15 MSD		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-258802-L-15 PDS		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-258875-A-10	EB10	3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	
440-258875-A-18	FB10	3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME ICP PREP S 00034				
MB 440-590204/1		3005A, 6010B						
LCS 440-590204/2		3005A, 6010B		0.25 mL				
440-258802-L-15 MS		3005A, 6010B	R	0.25 mL				
440-258802-L-15 MSD		3005A, 6010B	R	0.25 mL				
440-258802-L-15 PDS		3005A, 6010B	R	0.25 mL				
440-258875-A-10	EB10	3005A, 6010B	R					
440-258875-A-18	FB10	3005A, 6010B	R					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 590204 Batch Start Date: 01/13/20 10:01 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 01/13/20 15:43

	Batch Notes
Temperature - Corrected - End	91 Degrees C
Temperature - Corrected - Start	91 Degrees C
Digestion End Time	01/13/2019 15:20
Digestion Start Time	01/13/2019 11:20
Digestion Unit ID	4
Hydrochloric Acid ID	0000240180
Nitric Acid ID	0000221803
Pipette/Syringe/Dispenser ID	MET201
Thermometer ID	P-141. Loc A9, CF = -1.00
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	92 Degrees C
Temperature - Uncorrected - Start	92 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 590206 Batch Start Date: 01/13/20 10:12 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 01/13/20 15:28

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME HCl 00554	ME HNO3 00549	ME ICPMS ICV 00230
MB 440-590206/1		3005A, 6020			25 mL	25 mL	0.125 mL	0.25 mL	
LCS 440-590206/2		3005A, 6020			25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-258696-Q-1 MS		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-258696-Q-1 MSD		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-258696-Q-1 PDS		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-258875-A-10	EB10	3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	
440-258875-A-18	FB10	3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	

Batch Notes	
Temperature - Corrected - End	91 Degrees C
Temperature - Corrected - Start	91 Degrees C
Digestion End Time	01/13/2019 15:05
Digestion Start Time	01/13/2019 11:05
Digestion Unit ID	1
Hydrochloric Acid ID	0000240180
Nitric Acid ID	0000221803
Pipette/Syringe/Dispenser ID	MET201
Thermometer ID	P-135, Loc B9, CF = -2.00
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	93 Degrees C
Temperature - Uncorrected - Start	93 Degrees C

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 591391 Batch Start Date: 01/20/20 12:33 Batch Analyst: Mercado, Michael E

Batch Method: 7470A Batch End Date: 01/20/20 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME 1 PPM HG1 00418	ME 1 PPM HG1 00419	ME H2SO4 00095
ICV 440-591391/1		7470A, 7470A		n/a SU	20 mL	20 mL		80 uL	1 mL
ICB 440-591391/2		7470A, 7470A		n/a SU	20 mL	20 mL			1 mL
CCV 440-591391/3		7470A, 7470A		n/a SU	20 mL	20 mL	80 uL		1 mL
CCB 440-591391/4		7470A, 7470A		n/a SU	20 mL	20 mL			1 mL
CRA 440-591391/5		7470A, 7470A		n/a SU	20 mL	20 mL	4 uL		1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HNO3 00551	ME HYDROX SOL 00117	ME K2S2O8 00093	ME KMNO4 00189
ICV 440-591391/1		7470A, 7470A		0.5 mL	2 mL	1.6 mL	3 mL
ICB 440-591391/2		7470A, 7470A		0.5 mL	2 mL	1.6 mL	3 mL
CCV 440-591391/3		7470A, 7470A		0.5 mL	2 mL	1.6 mL	3 mL
CCB 440-591391/4		7470A, 7470A		0.5 mL	2 mL	1.6 mL	3 mL
CRA 440-591391/5		7470A, 7470A		0.5 mL	2 mL	1.6 mL	3 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 591391 Batch Start Date: 01/20/20 12:33 Batch Analyst: Mercado, Michael E

Batch Method: 7470A Batch End Date: 01/20/20 17:30

Batch Notes	
Batch Comment	ICB Loc: A6
Temperature - Corrected - End	94 Degrees C
Temperature - Corrected - Start	94 Degrees C
Digestion End Time	01/20/2020 16:31
Digestion Start Time	01/20/2020 14:31
Digestion Unit ID	8
Sulfuric Acid ID	Lot: 0000234517
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	6040574 @ 01/20/2020 17:00
Potassium Persulfate ID	6032548
Potassium Permanganate ID	6040428
Pipette/Syringe/Dispenser ID	122
Analyst ID - Spike Analyst	MM
Thermometer ID	P-120 CF -1 Loc: C2
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 Degrees C

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 591392 Batch Start Date: 01/20/20 12:36 Batch Analyst: Suico, Ethel M

Batch Method: 7470A Batch End Date: 01/20/20 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME 1 PPM HG1 00418	ME H2SO4 00095	ME HNO3 00551
MB 440-591392/1		7470A, 7470A		n/a SU	20 mL	20 mL		1 mL	0.5 mL
LCS 440-591392/2		7470A, 7470A		n/a SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
720-96968-A-2 MS		7470A, 7470A	T	<2 SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
720-96968-A-2 MSD		7470A, 7470A	T	<2 SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
440-258875-A-10	EB10	7470A, 7470A	T	<2 SU	20 mL	20 mL		1 mL	0.5 mL
440-258875-A-18	FB10	7470A, 7470A	T	<2 SU	20 mL	20 mL		1 mL	0.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HYDROX SOL 00117	ME K2S2O8 00093	ME KMNO4 00189
MB 440-591392/1		7470A, 7470A		2 mL	1.6 mL	3 mL
LCS 440-591392/2		7470A, 7470A		2 mL	1.6 mL	3 mL
720-96968-A-2 MS		7470A, 7470A	T	2 mL	1.6 mL	3 mL
720-96968-A-2 MSD		7470A, 7470A	T	2 mL	1.6 mL	3 mL
440-258875-A-10	EB10	7470A, 7470A	T	2 mL	1.6 mL	3 mL
440-258875-A-18	FB10	7470A, 7470A	T	2 mL	1.6 mL	3 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-258875-2

SDG No.:

Batch Number: 591392 Batch Start Date: 01/20/20 12:36 Batch Analyst: Suico, Ethel M

Batch Method: 7470A Batch End Date: 01/20/20 17:30

Batch Notes	
Batch Comment	MB Loc: B18
Temperature - Corrected - End	94 Degrees C
Temperature - Corrected - Start	94 Degrees C
Digestion End Time	01/20/2020 16:31
Digestion Start Time	01/20/2020 14:31
Digestion Unit ID	8
Sulfuric Acid ID	Lot: 0000234517
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	6040574 @ 01/20/2020 17:00
Potassium Persulfate ID	6032548
Potassium Permanganate ID	6040428
pH Indicator ID	HC998308
Pipette/Syringe/Dispenser ID	122
Analyst ID - Spike Analyst	MM
Thermometer ID	P-120 CF -1 Loc: C2
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, St. Loui Job No.: 440-258875-2

SDG No.:

Batch Number: 459253 Batch Start Date: 02/04/20 16:42 Batch Analyst: Mazariegos, Leonel A

Batch Method: 3010A Batch End Date: 02/05/20 09:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MPREP1-A 00004	MPREP1-B 00004	MPREP2 00022
MB 160-459253/1		3010A, 6020A		50 mL	50 mL			
LCS 160-459253/2		3010A, 6020A		50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL
440-258875-A-10	EB10	3010A, 6020A	T	50 mL	50 mL			
440-258875-A-18	FB10	3010A, 6020A	T	50 mL	50 mL			
440-258875-A-18 MS	FB10	3010A, 6020A	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL
440-258875-A-18 MSD	FB10	3010A, 6020A	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL

Batch Notes

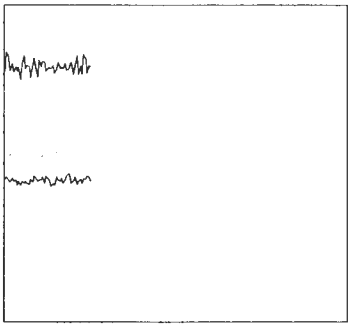
Temperature - Corrected - End	D3: 91.9 Degrees C
Temperature - Corrected - Start	A8: 90.8 Degrees C
Digestion End Time	02/05/2020 09:29
Digestion Start Time	02/04/2020 18:46
Digestion Unit ID	HOTBLOCK 1
Hydrochloric Acid ID	1864826
Nitric Acid ID	1854884
Pipette/Syringe/Dispenser ID	MET-12
Analyst ID - Spike Analyst	LAM
Sufficient Volume for Batch QC	YES
Thermometer ID	192152608
Digestion Tube/Cup ID	344749-4653

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Current Signal

[No Gas]



Mass	Range	Count	Avg. Count	RSD [%]
7	50000	22323	22390.1	2.20
65	500	148	159.1	11.54
89	100000	80995	80927.2	2.42
63	500	386	349.1	8.53
205	100000	51548	52415.1	2.18
156/140	1	0.441 %	0.484 %	7.60
70/140	1	0.621 %	0.639 %	7.02
115	50	12	14.2	44.70
60	100	33	35.2	22.99
220	20	5	2.5	80.08
23	50000	13697	14231.6	18.22
27	5000	3963	4008.2	2.69

Integration Time [sec] 0.10

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	°C
Smpl Depth	8.0	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.50	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-45	V
Extract 2	-155.0	V	Cell Exit	-60	V
Omega Bias	-70	V	Deflect	15.8	V
Omega Lens	8.1	V	Plate Bias	-50	V

Cell Parameters

Use Gas	false		OctP Bias	-10.0	V
He Flow	0.0	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Qpole Parameters

Mass Gain	132	Axis Offset	0.12	
Mass Offset	129	QP Bias	-5.0	V
Axis Gain	1.0008			

Torch Axis Parameters

Torch H	0.1	mm	Torch V	0.2	mm

EM Parameters

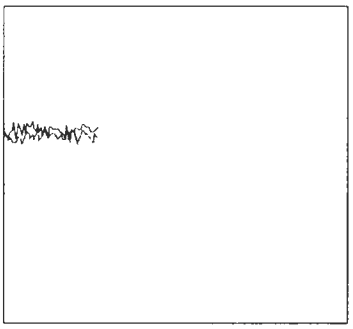
Discriminator	5.7	mV	Pulse HV	1201	V
Analog HV	1800	V			

Meters

IF/BK Press	2.51E+2	Pa	Carrier Gas(BP)	1.76E+2	kPa
Analyzer Press	7.83E-5	Pa	Ar Gas Tank Press	5.76E+2	kPa
Reflected Power	28	W			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	20000	11757	11647.9	2.12
89	20000	11834	11806.7	2.14
140	50000	35193	34557.3	2.24
205	50000	30850	30523.5	2.24
156/140	1	0.321 %	0.307 %	13.46
70/140	1	0.745 %	0.759 %	8.66
51	20	7	7.0	45.58
56	1000	657	654.1	4.95
75	20	0	0.4	200.97
78	50	15	9.0	45.54
Integration Time [sec]		0.10		

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	°C
Smpl Depth	8.0	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.50	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-32	V
Extract 2	-155.0	V	Cell Exit	-70	V
Omega Bias	-70	V	Deflect	2.8	V
Omega Lens	8.1	V	Plate Bias	-60	V

Cell Parameters

Use Gas	true		OctP Bias	-18.0	V
He Flow	4.5	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	4.0	V
3rd Gas Flow	0	%			

Qpole Parameters

Mass Gain	132	Axis Offset	0.12	
Mass Offset	129	QP Bias	-14.0	V
Axis Gain	1.0008			

Torch Axis Parameters

Torch H	0.3	mm	Torch V	0.3	mm

EM Parameters

Discriminator	5.7	mV	Pulse HV	1201	V
Analog HV	1800	V			

Meters

IF/BK Press	2.52E+2	Pa	Carrier Gas(BP)	1.77E+2	kPa
Analyzer Press	2.07E-4	Pa	Ar Gas Tank Press	5.76E+2	kPa
Reflected Power	29	W			

200.8 Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\5_6020ng_template_180115A_3(csrbthFULL).b
Report Comment
Instrument Name ICPMS05 JP12091608

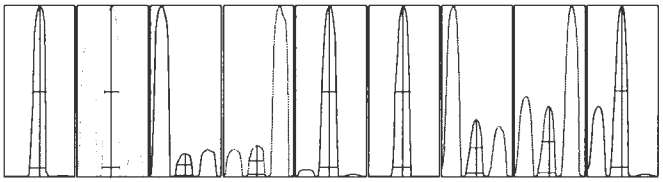
[No Gas]

Mass	Count (Actual)
9	32866
24	136596
25	18664
26	21971
59	252891
115	498602
206	107806
207	94316
208	229120

Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	0.41	5.00	
24	0.76	5.00	
25	0.33	5.00	
26	0.38	5.00	
59	0.40	5.00	
115	0.45	5.00	
206	0.74	5.00	
207	0.59	5.00	
208	0.36	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	32792	32947	32842	33045	32703
24	135349	136054	136269	137457	137851
25	18703	18593	18690	18605	18729
26	22009	21892	22094	21966	21895
59	252752	254567	252703	252666	251768
115	499088	502229	497773	497485	496432
206	108526	108716	107088	107739	106963
207	94750	94921	93508	94256	94143
208	229763	229677	228465	229709	227984

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	5628	9.05	8.9 - 9.1		0.732	0.900	
24	22180	23.95	23.9 - 24.1		0.779	0.900	
25	3021	25.00	24.9 - 25.1		0.761	0.900	
26	3540	25.95	25.9 - 26.1		0.750	0.900	
59	41957	58.95	58.9 - 59.1		0.813	0.900	
115	85030	114.95	114.9 - 115.1		0.800	0.900	
206	20018	206.00	205.9 - 206.1		0.763	0.900	
207	17535	207.00	206.9 - 207.1		0.771	0.900	
208	42190	208.00	207.9 - 208.1		0.768	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

RF Power	1500 W	Carrier Gas	0.55 L/min
RF Matching	1.80 V	Option Gas	0.0 %
Smpl Depth	8.0 mm	Nebulizer Pump	0.10 rps
S/C Temp	2 °C		

Lenses Parameters

Extract 1	0.0 V	Omega Lens	8.1 V
Extract 2	-155.0 V	Cell Entrance	-45 V
Omega Bias	-70 V	Cell Exit	-60 V
Deflect	15.8 V		

Cell Parameters

Use Gas	false	3rd Gas Flow	0 %
He Flow	0.0 mL/min	OctP Bias	-10.0 V
H2 Flow	0.0 mL/min	OctP RF	200 V

200.8 Tune Check Sample Report

Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
Energy Discrimination		5.0 V					

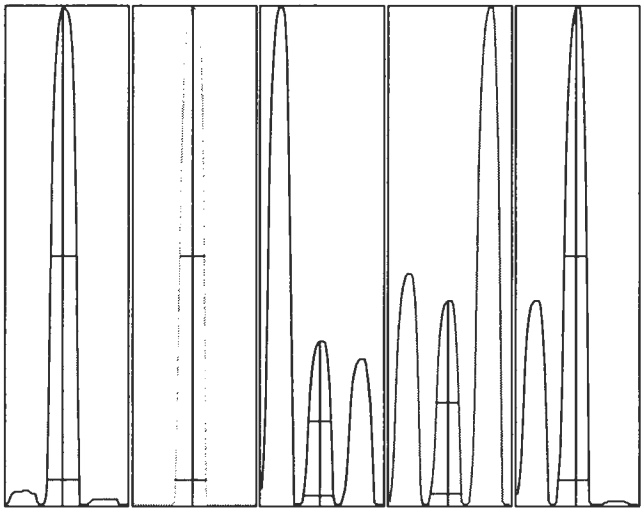
[He]

Mass	Count (Actual)
59	72397
115	100211
206	62087
207	54477
208	132204

Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	0.66	5.00	
115	0.43	5.00	
206	0.59	5.00	
207	0.20	5.00	
208	0.32	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	71551	72677	72484	72631	72643
115	99797	99716	100634	100587	100320
206	61803	61667	62398	62047	62518
207	54437	54652	54516	54375	54403
208	131838	132910	132271	132049	131953

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	12260	58.950	58.9 - 59.1		0.782	0.900	
115	17607	115.000	114.9 - 115.1		0.733	0.900	
206	11892	206.000	205.9 - 206.1		0.726	0.900	
207	10552	207.000	206.9 - 207.1		0.747	0.900	
208	25570	208.000	207.9 - 208.1		0.739	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 136.7 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

RF Power	1500 W	Carrier Gas	0.55 L/min
RF Matching	1.80 V	Option Gas	0.0 %
Smpl Depth	8.0 mm	Nebulizer Pump	0.10 rps
S/C Temp	2 °C		

Lenses Parameters

Extract 1	0.0 V	Omega Lens	8.1 V
Extract 2	-155.0 V	Cell Entrance	-32 V
Omega Bias	-70 V	Cell Exit	-70 V
Deflect	2.8 V		

Cell Parameters

Use Gas	true	3rd Gas Flow	0 %
He Flow	4.5 mL/min	OctP Bias	-18.0 V
H2 Flow	0.0 mL/min	OctP RF	200 V
Energy Discrimination	4.0 V		

P/A Factor Tuning Report

========== Current Sample ==========

Sample Name: RINSE
Data File: 001SMPL.d
Acquired: 01/13/2020 08:50:23

========= Detector Parameters and P/A Factors =========

Discriminator: 5.7 mV
AnalogHV: 1800 V
PulseHV: 1201 V

Acquired: 01/13/2020 08:13:26

Mass[u]	Element	P/A Factor
9	Be	0.084977
24	Mg	0.096325
27	Al	0.100646
45	Sc	0.104487
51	V	0.108386
52	Cr	0.110843
55	Mn	0.112093
59	Co	0.116758
60	Ni	0.118695
65	Cu	0.122006
66	Zn	0.120885
72	Ge	0.119641
75	As	0.118376
95	Mo	0.118998
96	Mo	0.120016
98	Mo	0.119803
100	Mo	0.121285
101	Ru	0.122534
102	Ru	0.122552
104	Ru	0.123703
115	In	0.128771
118	Sn	0.127647
121	Sb	0.126999
138	Ba	0.130389
193	Ir	0.135215
205	Tl	0.138578
208	Pb	0.138796
209	Bi	0.138814
232	Th	0.139383
238	U	0.139537

1-20-20-water

Method: WATER Operator: Admin Date of Analysis: 20 Jan 2020 18:25:19

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs	Method	Chapter
20860	S	IC 440-591391/6-A - 1		21 Jan 2020 09:48:46	-	ug/L	0.0000	370	WATER	1-20-20-water
20861	S	IC 440-591391/6-A - 2		21 Jan 2020 09:48:46	-	ug/L	0.0000	442	WATER	1-20-20-water
20862	S	IC 440-591391/7-A - 1		21 Jan 2020 09:50:56	-	ug/L	0.2000	1291	WATER	1-20-20-water
20863	S	IC 440-591391/7-A - 2		21 Jan 2020 09:50:56	-	ug/L	0.2000	1283	WATER	1-20-20-water
20864	S	IC 440-591391/8-A - 1		21 Jan 2020 09:53:07	-	ug/L	0.5000	2337	WATER	1-20-20-water
20865	S	IC 440-591391/8-A - 2		21 Jan 2020 09:53:07	-	ug/L	0.5000	2365	WATER	1-20-20-water
20866	S	IC 440-591391/9-A - 1		21 Jan 2020 09:55:18	-	ug/L	1.0000	5766	WATER	1-20-20-water
20867	S	IC 440-591391/9-A - 2		21 Jan 2020 09:55:18	-	ug/L	1.0000	5838	WATER	1-20-20-water
20868	S	IC 440-591391/10-A - 1		21 Jan 2020 09:57:28	-	ug/L	5.0000	26544	WATER	1-20-20-water
20869	S	IC 440-591391/10-A - 2		21 Jan 2020 09:57:28	-	ug/L	5.0000	26956	WATER	1-20-20-water
20870	S	IC 440-591391/11-A - 1		21 Jan 2020 09:59:39	-	ug/L	10.0000	52679	WATER	1-20-20-water
20871	S	IC 440-591391/11-A - 2		21 Jan 2020 09:59:39	-	ug/L	10.0000	53302	WATER	1-20-20-water
20872	C	ICV 440-591391/1-A - 1		21 Jan 2020 10:01:52	98.2% 3.9274	ug/L	-	20975	WATER	1-20-20-water
20873	C	ICV 440-591391/1-A - 2		21 Jan 2020 10:01:52	99.5% 3.9791	ug/L	-	21248	WATER	1-20-20-water
20874	C	ICB 440-591391/2-A - 1		21 Jan 2020 10:04:17	-0.0935	ug/L	-	-267	WATER	1-20-20-water
20875	C	ICB 440-591391/2-A - 2		21 Jan 2020 10:04:17	-0.0914	ug/L	-	-256	WATER	1-20-20-water
20876	C	CRA 440-591391/5-A - 1		21 Jan 2020 10:06:32	94.5% 0.1891	ug/L	-	1226	WATER	1-20-20-water
20877	C	CRA 440-591391/5-A - 2		21 Jan 2020 10:06:32	94.4% 0.1887	ug/L	-	1224	WATER	1-20-20-water
20878	U	MB 440-590754/1-C - 1		21 Jan 2020 10:08:42	-0.0278	ug/L	-	80	WATER	1-20-20-water
20879	U	MB 440-590754/1-C - 2		21 Jan 2020 10:08:42	-0.0294	ug/L	-	72	WATER	1-20-20-water
20880	U	LCS 440-590754/2-C - 1		21 Jan 2020 10:10:51	1.9531	ug/L	-	10545	WATER	1-20-20-water
20881	U	LCS 440-590754/2-C - 2		21 Jan 2020 10:10:51	1.9798	ug/L	-	10686	WATER	1-20-20-water
20882	U	LCSD 440-590754/3-C - 1		21 Jan 2020 10:13:03	1.7795	ug/L	-	9628	WATER	1-20-20-water
20883	U	LCSD 440-590754/3-C - 2		21 Jan 2020 10:13:03	1.8126	ug/L	-	9803	WATER	1-20-20-water
20884	U	MRL 440-590754/4-C - 1		21 Jan 2020 10:15:14	0.9604	ug/L	-	5301	WATER	1-20-20-water
20885	U	MRL 440-590754/4-C - 2		21 Jan 2020 10:15:14	0.9754	ug/L	-	5380	WATER	1-20-20-water
20886	U	440-258891-A-2-M - 1		21 Jan 2020 10:17:25	-0.0996	ug/L	-	-299	WATER	1-20-20-water
20887	U	440-258891-A-2-M - 2		21 Jan 2020 10:17:25	-0.0988	ug/L	-	-295	WATER	1-20-20-water
20888	U	440-258891-A-2-N MS - 1		21 Jan 2020 10:19:35	1.9147	ug/L	-	10342	WATER	1-20-20-water
20889	U	440-258891-A-2-N MS - 2		21 Jan 2020 10:19:35	1.9465	ug/L	-	10510	WATER	1-20-20-water
20890	U	440-258891-A-2-O MSD - 1		21 Jan 2020 10:21:44	1.8600	ug/L	-	10053	WATER	1-20-20-water
20891	U	440-258891-A-2-O MSD - 2		21 Jan 2020 10:21:44	1.8785	ug/L	-	10151	WATER	1-20-20-water
20892	U	440-258891-A-6-C - 1		21 Jan 2020 10:23:55	-0.0417	ug/L	-	7	WATER	1-20-20-water
20893	U	440-258891-A-6-C - 2		21 Jan 2020 10:23:55	-0.0454	ug/L	-	-13	WATER	1-20-20-water
20894	U	440-258891-A-11-C - 1		21 Jan 2020 10:26:07	-0.0258	ug/L	-	91	WATER	1-20-20-water
20895	U	440-258891-A-11-C - 2		21 Jan 2020 10:26:07	-0.0269	ug/L	-	85	WATER	1-20-20-water
20896	U	440-258891-A-12-C@5 - 1		21 Jan 2020 10:28:17	0.0178	ug/L	-	321	WATER	1-20-20-water
20897	U	440-258891-A-12-C@5 - 2		21 Jan 2020 10:28:17	0.0204	ug/L	-	335	WATER	1-20-20-water
20898	C	CCV 440-591391/3-A - 1		21 Jan 2020 10:30:26	100.5% 4.0192	ug/L	-	21460	WATER	1-20-20-water
20899	C	CCV 440-591391/3-A - 2		21 Jan 2020 10:30:26	102.1% 4.0837	ug/L	-	21801	WATER	1-20-20-water
20900	C	CCB 440-591391/4-A - 1		21 Jan 2020 10:32:35	-0.0706	ug/L	-	-146	WATER	1-20-20-water
20901	C	CCB 440-591391/4-A - 2		21 Jan 2020 10:32:35	-0.0632	ug/L	-	-107	WATER	1-20-20-water
20902	U	440-258887-A-1-C - 1		21 Jan 2020 10:34:47	0.0664	ug/L	-	578	WATER	1-20-20-water
20903	U	440-258887-A-1-C - 2		21 Jan 2020 10:34:47	0.0607	ug/L	-	548	WATER	1-20-20-water
20904	U	440-258887-A-2-C - 1		21 Jan 2020 10:36:57	-0.0918	ug/L	-	-258	WATER	1-20-20-water
20905	U	440-258887-A-2-C - 2		21 Jan 2020 10:36:57	-0.0930	ug/L	-	-264	WATER	1-20-20-water
20906	U	440-258887-A-3-C - 1		21 Jan 2020 10:39:10	-0.0167	ug/L	-	139	WATER	1-20-20-water
20907	U	440-258887-A-3-C - 2		21 Jan 2020 10:39:10	-0.0148	ug/L	-	149	WATER	1-20-20-water
20908	U	440-258887-A-4-C - 1		21 Jan 2020 10:41:19	-0.0210	ug/L	-	116	WATER	1-20-20-water
20909	U	440-258887-A-4-C - 2		21 Jan 2020 10:41:19	-0.0171	ug/L	-	137	WATER	1-20-20-water
20910	U	440-258887-A-8-C - 1		21 Jan 2020 10:43:27	-0.0167	ug/L	-	139	WATER	1-20-20-water
20911	U	440-258887-A-8-C - 2		21 Jan 2020 10:43:27	-0.0218	ug/L	-	112	WATER	1-20-20-water
20912	U	440-258887-A-9-C - 1		21 Jan 2020 10:45:35	-0.0195	ug/L	-	124	WATER	1-20-20-water
20913	U	440-258887-A-9-C - 2		21 Jan 2020 10:45:35	-0.0123	ug/L	-	162	WATER	1-20-20-water
20914	U	MB 440-590757/1-C - 1		21 Jan 2020 10:47:44	-0.0076	ug/L	-	187	WATER	1-20-20-water
20915	U	MB 440-590757/1-C - 2		21 Jan 2020 10:47:44	0.0036	ug/L	-	246	WATER	1-20-20-water
20916	U	LCS 440-590757/2-C - 1		21 Jan 2020 10:49:52	1.8766	ug/L	-	10141	WATER	1-20-20-water
20917	U	LCS 440-590757/2-C - 2		21 Jan 2020 10:49:52	1.9156	ug/L	-	10347	WATER	1-20-20-water
20918	U	LCSD 440-590757/3-C - 1		21 Jan 2020 10:52:01	1.7969	ug/L	-	9720	WATER	1-20-20-water
20919	U	LCSD 440-590757/3-C - 2		21 Jan 2020 10:52:01	1.8244	ug/L	-	9865	WATER	1-20-20-water
20920	U	MRL 440-590757/4-C - 1		21 Jan 2020 10:54:12	0.9835	ug/L	-	5423	WATER	1-20-20-water
20921	U	MRL 440-590757/4-C - 2		21 Jan 2020 10:54:12	0.9996	ug/L	-	5508	WATER	1-20-20-water
20922	C	CCV 440-591391/3-A - 1		21 Jan 2020 10:56:24	100.0% 4.0005	ug/L	-	21361	WATER	1-20-20-water
20923	C	CCV 440-591391/3-A - 2		21 Jan 2020 10:56:24	101.7% 4.0673	ug/L	-	21714	WATER	1-20-20-water
20924	C	CCB 440-591391/4-A - 1		21 Jan 2020 10:58:34	-0.0716	ug/L	-	-151	WATER	1-20-20-water
20925	C	CCB 440-591391/4-A - 2		21 Jan 2020 10:58:34	-0.0642	ug/L	-	-112	WATER	1-20-20-water
20926	U	440-258891-A-1-M - 1		21 Jan 2020 11:00:47	-0.0318	ug/L	-	59	WATER	1-20-20-water
20927	U	440-258891-A-1-M - 2		21 Jan 2020 11:00:47	-0.0352	ug/L	-	41	WATER	1-20-20-water
20928	U	440-258891-A-1-N MS - 1		21 Jan 2020 11:02:57	1.8874	ug/L	-	10198	WATER	1-20-20-water
20929	U	440-258891-A-1-N MS - 2		21 Jan 2020 11:02:57	1.9048	ug/L	-	10290	WATER	1-20-20-water
20930	U	440-258891-A-1-O MSD - 1		21 Jan 2020 11:05:07	1.9557	ug/L	-	10559	WATER	1-20-20-water
20931	U	440-258891-A-1-O MSD - 2		21 Jan 2020 11:05:07	1.9839	ug/L	-	10708	WATER	1-20-20-water
20932	U	440-258891-A-3-C - 1		21 Jan 2020 11:07:20	-0.0818	ug/L	-	-205	WATER	1-20-20-water
20933	U	440-258891-A-3-C - 2		21 Jan 2020 11:07:20	-0.0826	ug/L	-	-209	WATER	1-20-20-water
20934	U	440-258891-A-4-C@5 - 1		21 Jan 2020 11:09:33	-0.0065	ug/L	-	193	WATER	1-20-20-water
20935	U	440-258891-A-4-C@5 - 2		21 Jan 2020 11:09:33	-0.0061	ug/L	-	195	WATER	1-20-20-water
20936	U	440-258891-A-5-C - 1		21 Jan 2020 11:11:42	-0.0004	ug/L	-	225	WATER	1-20-20-water
20937	U	440-258891-A-5-C - 2		21 Jan 2020 11:11:42	0.0024	ug/L	-	240	WATER	1-20-20-water
20938	U	440-258891-A-7-C - 1		21 Jan 2020 11:13:51	-0.0485	ug/L	-	-29	WATER	1-20-20-water
20939	U	440-258891-A-7-C - 2		21 Jan 2020 11:13:51	-0.0462	ug/L	-	-17	WATER	1-20-20-water
20940	U	440-258891-A-8-C@5 - 1		21 Jan 2020 11:16:00	0.0161	ug/L	-	312	WATER	1-20-20-water
20941	U	440-258891-A-8-C@5 - 2		21 Jan 2020 11:16:00	0.0155	ug/L	-	309	WATER	1-20-20-water
20942	U	440-258891-A-9-C - 1		21 Jan 2020 11:18:09	-0.0195	ug/L	-	124	WATER	1-20-20-water
20943	U	440-258891-A-9-C - 2		21 Jan 2020 11:18:09	-0.0121	ug/L	-	163	WATER	1-20-20-water
20944	U	440-258891-A-10-C@5 - 1		21 Jan 2020 11:20:18	-0.0070	ug/L	-	190	WATER	1-20-20-water
20945	U	440-258891-A-10-C@5 - 2		21 Jan 2020 11:20:18	-0.0048	ug/L	-	202	WATER	1-20-20-water
20946	C	CCV 440-591391/3-A - 1		21 Jan 2020 11:22:28	99.4% 3.9760	ug/L	-	21232	WATER	1-20-20-water
20947	C	CCV 440-591391/3-A - 2		21 Jan 2020 11:22:28	100.7% 4.0290	ug/L	-	21512	WATER	1-20-20-water
20948	C	CCB 440-591391/4-A - 1		21 Jan 2020 11:24:36	-0.0727	ug/L	-	-157	WATER	1-20-20-water
20949	C	CCB 440-591391/4-A - 2		21 Jan 2020 11:24:36	-0.0738	ug/L	-	-163	WATER	1-20-20-water
20950	U	440-258887-A-5-C - 1		21 Jan 2020 11:26:48	-0.0252	ug/L	-	94	WATER	1-20-20-water
20951	U	440-258887-A-5-C - 2		21 Jan 2020 11:26:48	-0.0265	ug/L	-	87	WATER	1-20-20-water
20952	U	440-258887-A-6-C - 1		21 Jan 2020 11:28:57	-0.0093	ug/L	-	178	WATER	1-20-20-water
20953	U	440-258887-A-6-C - 2		21 Jan 2020 11:28:57	-0.0095	ug/L	-	177	WATER	1-20-20-water
20954	U	440-258887-A-7-C - 1		21 Jan 2020 11:31:07	-0.0127	ug/L	-	160	WATER	1-20-20-water
20955	U	440-258887-A-7-C - 2		21 Jan 2020 11:31:07	-0.0138	ug/L	-	154	WATER	1-20-20-water

1-20-20-water

Method: WATER Operator: Admin Date of Analysis: 20 Jan 2020 18:25:19

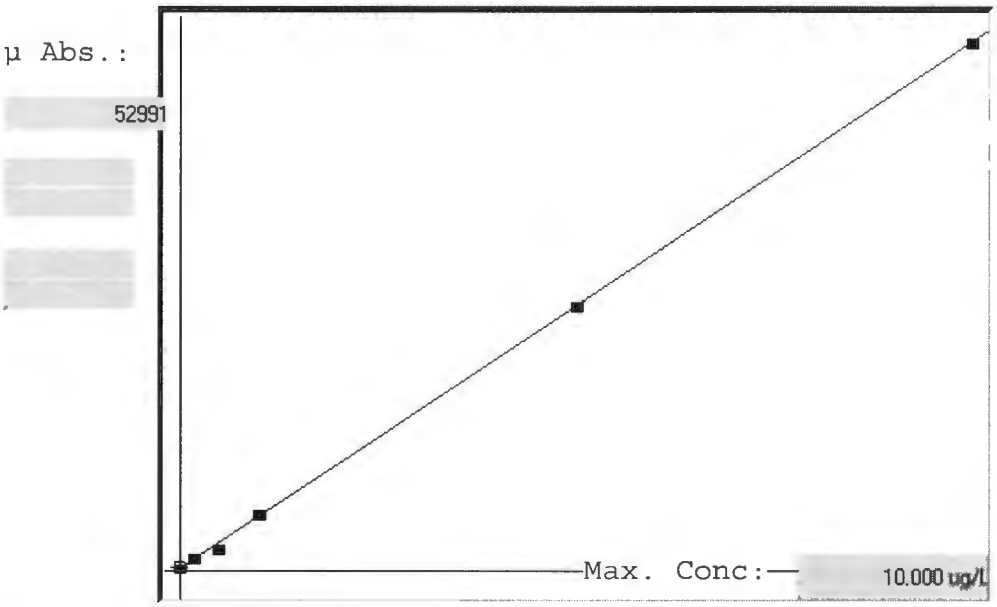
Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs.	Method	Chapter
20956	U	MB 440-591392/1-A - 1		21 Jan 2020 11:33:16	-0.0182	ug/L	-	131	WATER	1-20-20-water
20957	U	MB 440-591392/1-A - 2		21 Jan 2020 11:33:16	-0.0174	ug/L	-	135	WATER	1-20-20-water
20958	U	LCS 440-591392/2-A - 1		21 Jan 2020 11:35:26	3.9230	ug/L	-	20952	WATER	1-20-20-water
20959	U	LCS 440-591392/2-A - 2		21 Jan 2020 11:35:26	3.9723	ug/L	-	21212	WATER	1-20-20-water
20960	U	720-96968-A-2-C - 1		21 Jan 2020 11:37:37	-0.1189	ug/L	-	-401	WATER	1-20-20-water
20961	U	720-96968-A-2-C - 2		21 Jan 2020 11:37:37	-0.1126	ug/L	-	-368	WATER	1-20-20-water
20962	U	720-96968-A-2-D MS - 1		21 Jan 2020 11:39:51	3.7909	ug/L	-	20254	WATER	1-20-20-water
20963	U	720-96968-A-2-D MS - 2		21 Jan 2020 11:39:51	3.8483	ug/L	-	20557	WATER	1-20-20-water
20964	U	720-96968-A-2-E MSD - 1		21 Jan 2020 11:42:03	3.4920	ug/L	-	18675	WATER	1-20-20-water
20965	U	720-96968-A-2-E MSD - 2		21 Jan 2020 11:42:03	3.5494	ug/L	-	18978	WATER	1-20-20-water
20966	U	440-259129-C-1-B - 1		21 Jan 2020 11:44:19	-0.0511	ug/L	-	-43	WATER	1-20-20-water
20967	U	440-259129-C-1-B - 2		21 Jan 2020 11:44:19	-0.0487	ug/L	-	-30	WATER	1-20-20-water
20968	U	720-96968-A-1-H - 1		21 Jan 2020 11:46:31	-0.0066	ug/L	-	192	WATER	1-20-20-water
20969	U	720-96968-A-1-H - 2		21 Jan 2020 11:46:31	-0.0093	ug/L	-	178	WATER	1-20-20-water
20970	C	CCV 440-591391/3-A - 1		21 Jan 2020 11:48:41	100.0% 4.0014	ug/L	-	21366	WATER	1-20-20-water
20971	C	CCV 440-591391/3-A - 2		21 Jan 2020 11:48:41	101.4% 4.0546	ug/L	-	21647	WATER	1-20-20-water
20972	C	CCB 440-591391/4-A - 1		21 Jan 2020 11:50:50	-0.0812	ug/L	-	-202	WATER	1-20-20-water
20973	C	CCB 440-591391/4-A - 2		21 Jan 2020 11:50:50	-0.0907	ug/L	-	-252	WATER	1-20-20-water
20974	U	440-259361-B-1-B - 1		21 Jan 2020 11:53:05	-0.0065	ug/L	-	193	WATER	1-20-20-water
20975	U	440-259361-B-1-B - 2		21 Jan 2020 11:53:05	-0.0085	ug/L	-	182	WATER	1-20-20-water
20976	U	320-57820-A-4-B - 1		21 Jan 2020 11:55:14	0.6564	ug/L	-	3695	WATER	1-20-20-water
20977	U	320-57820-A-4-B - 2		21 Jan 2020 11:55:14	0.6640	ug/L	-	3735	WATER	1-20-20-water
20978	U	440-258875-A-10-C - 1		21 Jan 2020 11:57:23	-0.0926	ug/L	-	-262	WATER	1-20-20-water
20979	U	440-258875-A-10-C - 2		21 Jan 2020 11:57:23	-0.0985	ug/L	-	-293	WATER	1-20-20-water
20980	U	440-258875-A-18-C - 1		21 Jan 2020 11:59:34	-0.0301	ug/L	-	68	WATER	1-20-20-water
20981	U	440-258875-A-18-C - 2		21 Jan 2020 11:59:34	-0.0284	ug/L	-	77	WATER	1-20-20-water
20982	U	440-258909-A-5-D - 1		21 Jan 2020 12:01:43	-0.0070	ug/L	-	190	WATER	1-20-20-water
20983	U	440-258909-A-5-D - 2		21 Jan 2020 12:01:43	-0.0082	ug/L	-	184	WATER	1-20-20-water
20984	U	440-258909-A-28-C - 1		21 Jan 2020 12:03:52	-0.0161	ug/L	-	142	WATER	1-20-20-water
20985	U	440-258909-A-28-C - 2		21 Jan 2020 12:03:52	-0.0178	ug/L	-	133	WATER	1-20-20-water
20986	U	440-258909-A-36-C - 1		21 Jan 2020 12:06:03	-0.0072	ug/L	-	189	WATER	1-20-20-water
20987	U	440-258909-A-36-C - 2		21 Jan 2020 12:06:03	-0.0095	ug/L	-	177	WATER	1-20-20-water
20988	U	440-258909-A-47-C - 1		21 Jan 2020 12:08:15	-0.0083	ug/L	-	183	WATER	1-20-20-water
20989	U	440-258909-A-47-C - 2		21 Jan 2020 12:08:15	-0.0104	ug/L	-	172	WATER	1-20-20-water
20990	U	440-259163-A-6-B - 1		21 Jan 2020 12:10:27	-0.0036	ug/L	-	208	WATER	1-20-20-water
20991	U	440-259163-A-6-B - 2		21 Jan 2020 12:10:27	-0.0023	ug/L	-	215	WATER	1-20-20-water
20992	U	440-259163-A-13-B - 1		21 Jan 2020 12:12:36	0.0004	ug/L	-	229	WATER	1-20-20-water
20993	U	440-259163-A-13-B - 2		21 Jan 2020 12:12:36	-0.0040	ug/L	-	206	WATER	1-20-20-water
20994	C	CCV 440-591391/3-A - 1		21 Jan 2020 12:14:45	100.8% 4.0321	ug/L	-	21528	WATER	1-20-20-water
20995	C	CCV 440-591391/3-A - 2		21 Jan 2020 12:14:45	102.2% 4.0898	ug/L	-	21833	WATER	1-20-20-water
20996	C	CCB 440-591391/4-A - 1		21 Jan 2020 12:16:53	-0.0644	ug/L	-	-113	WATER	1-20-20-water
20997	C	CCB 440-591391/4-A - 2		21 Jan 2020 12:16:53	-0.0665	ug/L	-	-124	WATER	1-20-20-water
20998	U	440-259163-A-29-B - 1		21 Jan 2020 12:19:06	-0.0222	ug/L	-	110	WATER	1-20-20-water
20999	U	440-259163-A-29-B - 2		21 Jan 2020 12:19:06	-0.0210	ug/L	-	116	WATER	1-20-20-water
21000	U	MB 440-591394/1-A - 1		21 Jan 2020 12:21:15	-0.0292	ug/L	-	73	WATER	1-20-20-water
21001	U	MB 440-591394/1-A - 2		21 Jan 2020 12:21:15	-0.0254	ug/L	-	93	WATER	1-20-20-water
21002	U	LCS 440-591394/2-A - 1		21 Jan 2020 12:23:24	3.8337	ug/L	-	20480	WATER	1-20-20-water
21003	U	LCS 440-591394/2-A - 2		21 Jan 2020 12:23:24	3.8714	ug/L	-	20679	WATER	1-20-20-water
21004	U	440-259362-A-1-A - 1		21 Jan 2020 12:25:33	-0.1191	ug/L	-	-402	WATER	1-20-20-water
21005	U	440-259362-A-1-A - 2		21 Jan 2020 12:25:33	-0.1197	ug/L	-	-405	WATER	1-20-20-water
21006	U	440-259362-A-1-B MS - 1		21 Jan 2020 12:27:46	3.8051	ug/L	-	20329	WATER	1-20-20-water
21007	U	440-259362-A-1-B MS - 2		21 Jan 2020 12:27:46	3.8449	ug/L	-	20539	WATER	1-20-20-water
21008	U	440-259362-A-1-C MSD - 1		21 Jan 2020 12:29:55	3.7502	ug/L	-	20039	WATER	1-20-20-water
21009	U	440-259362-A-1-C MSD - 2		21 Jan 2020 12:29:55	3.7977	ug/L	-	20290	WATER	1-20-20-water
21010	U	440-259287-C-1-D - 1		21 Jan 2020 12:32:07	-0.1513	ug/L	-	-572	WATER	1-20-20-water
21011	U	440-259287-C-1-D - 2		21 Jan 2020 12:32:07	-0.1524	ug/L	-	-578	WATER	1-20-20-water
21012	U	440-259362-A-2-A - 1		21 Jan 2020 12:34:23	0.1772	ug/L	-	1163	WATER	1-20-20-water
21013	U	440-259362-A-2-A - 2		21 Jan 2020 12:34:23	0.1840	ug/L	-	1199	WATER	1-20-20-water
21014	U	440-259362-A-3-A - 1		21 Jan 2020 12:36:32	-0.0140	ug/L	-	153	WATER	1-20-20-water
21015	U	440-259362-A-3-A - 2		21 Jan 2020 12:36:32	-0.0123	ug/L	-	162	WATER	1-20-20-water
21016	U	440-259362-A-4-A - 1		21 Jan 2020 12:38:43	-0.0445	ug/L	-	-8	WATER	1-20-20-water
21017	U	440-259362-A-4-A - 2		21 Jan 2020 12:38:43	-0.0492	ug/L	-	-33	WATER	1-20-20-water
21018	C	CCV 440-591391/3-A - 1		21 Jan 2020 12:40:53	99.7% 3.9889	ug/L	-	21300	WATER	1-20-20-water
21019	C	CCV 440-591391/3-A - 2		21 Jan 2020 12:40:53	101.3% 4.0537	ug/L	-	21642	WATER	1-20-20-water
21020	C	CCB 440-591391/4-A - 1		21 Jan 2020 12:43:02	-0.0801	ug/L	-	-196	WATER	1-20-20-water
21021	C	CCB 440-591391/4-A - 2		21 Jan 2020 12:43:02	-0.0733	ug/L	-	-160	WATER	1-20-20-water
21022	U	440-259362-A-5-A - 1		21 Jan 2020 12:45:14	3.5456	ug/L	-	18958	WATER	1-20-20-water
21023	U	440-259362-A-5-A - 2		21 Jan 2020 12:45:14	3.5155	ug/L	-	18799	WATER	1-20-20-water
21024	U	440-259366-A-1-A - 1		21 Jan 2020 12:47:23	-0.2355	ug/L	-	-1017	WATER	1-20-20-water
21025	U	440-259366-A-1-A - 2		21 Jan 2020 12:47:23	-0.2383	ug/L	-	-1032	WATER	1-20-20-water
21026	U	440-259366-A-2-A - 1		21 Jan 2020 12:50:12	-0.0712	ug/L	-	-149	WATER	1-20-20-water
21027	U	440-259366-A-2-A - 2		21 Jan 2020 12:50:12	-0.0710	ug/L	-	-148	WATER	1-20-20-water
21028	U	440-259366-A-3-A - 1		21 Jan 2020 12:52:24	-0.0101	ug/L	-	174	WATER	1-20-20-water
21029	U	440-259366-A-3-A - 2		21 Jan 2020 12:52:24	-0.0167	ug/L	-	139	WATER	1-20-20-water
21030	U	440-259366-A-4-A - 1		21 Jan 2020 12:54:33	-0.0307	ug/L	-	65	WATER	1-20-20-water
21031	U	440-259366-A-4-A - 2		21 Jan 2020 12:54:33	-0.0311	ug/L	-	63	WATER	1-20-20-water
21032	U	440-259366-A-5-A - 1		21 Jan 2020 12:56:44	0.1401	ug/L	-	967	WATER	1-20-20-water
21033	U	440-259366-A-5-A - 2		21 Jan 2020 12:56:44	0.1452	ug/L	-	994	WATER	1-20-20-water
21034	U	440-259366-A-6-A - 1		21 Jan 2020 12:58:54	-0.1393	ug/L	-	-509	WATER	1-20-20-water
21035	U	440-259366-A-6-A - 2		21 Jan 2020 12:58:54	-0.1405	ug/L	-	-515	WATER	1-20-20-water
21036	U	440-259366-A-7-A - 1		21 Jan 2020 13:01:06	-0.0517	ug/L	-	-46	WATER	1-20-20-water
21037	U	440-259366-A-7-A - 2		21 Jan 2020 13:01:06	-0.0521	ug/L	-	-48	WATER	1-20-20-water
21038	U	440-259366-A-8-A - 1		21 Jan 2020 13:03:16	0.0041	ug/L	-	249	WATER	1-20-20-water
21039	U	440-259366-A-8-A - 2		21 Jan 2020 13:03:16	-0.0021	ug/L	-	216	WATER	1-20-20-water
21040	U	440-259366-A-9-A - 1		21 Jan 2020 13:05:26	-0.0155	ug/L	-	145	WATER	1-20-20-water
21041	U	440-259366-A-9-A - 2		21 Jan 2020 13:05:26	-0.0142	ug/L	-	152	WATER	1-20-20-water
21042	C	CCV 440-591391/3-A - 1		21 Jan 2020 13:07:35	98.0% 3.9189	ug/L	-	20930	WATER	1-20-20-water
21043	C	CCV 440-591391/3-A - 2		21 Jan 2020 13:07:35	99.3% 3.9706	ug/L	-	21203	WATER	1-20-20-water
21044	C	CCB 440-591391/4-A - 1		21 Jan 2020 13:09:43	-0.0534	ug/L	-	-55	WATER	1-20-20-water
21045	C	CCB 440-591391/4-A - 2		21 Jan 2020 13:09:43	-0.0492	ug/L	-	-33	WATER	1-20-20-water
21046	U	440-259345-A-3-A - 1		21 Jan 2020 13:11:56	0.4270	ug/L	-	2483	WATER	1-20-20-water
21047	U	440-259345-A-3-A - 2		21 Jan 2020 13:11:56	0.4369	ug/L	-	2535	WATER	1-20-20-water
21048	U	440-259389-A-1-A - 1		21 Jan 2020 13:14:06	0.1365	ug/L	-	948	WATER	1-20-20-water
21049	U	440-259389-A-1-A - 2		21 Jan 2020 13:14:06	0.1512	ug/L	-	1026	WATER	1-20-20-water
21050	U	440-259390-A-1-A - 1		21 Jan 2020 13:16:16	-0.0413	ug/L	-	9	WATER	1-20-20-water
21051	U	440-259390-A-1-A - 2		21 Jan 2020 13:16:16	-0.0248	ug/L	-	96	WATER	1-20-20-water

1-20-20-water

Method: WATER Operator: Admin Date of Analysis: 20 Jan 2020 18:25:19

Seq ID	Type	Sample ID	Extended ID	Date	Conc.	Units	Stnd Conc	µ Abs.	Method	Chapter
21052	U	190-22074-D-1-E - 1		21 Jan 2020 13:18:29	-0.2134	ug/L	-	-900	WATER	1-20-20-water
21053	U	190-22074-D-1-E - 2		21 Jan 2020 13:18:29	-0.2145	ug/L	-	-906	WATER	1-20-20-water
21054	U	440-259373-H-1-C - 1		21 Jan 2020 13:20:44	-0.0210	ug/L	-	116	WATER	1-20-20-water
21055	U	440-259373-H-1-C - 2		21 Jan 2020 13:20:44	-0.0239	ug/L	-	101	WATER	1-20-20-water
21056	U	MB 440-591227/1-B - 1		21 Jan 2020 13:22:54	-0.0157	ug/L	-	144	WATER	1-20-20-water
21057	U	MB 440-591227/1-B - 2		21 Jan 2020 13:22:54	-0.0142	ug/L	-	152	WATER	1-20-20-water
21058	U	LCS 440-591227/2-B - 1		21 Jan 2020 13:25:03	3.7987	ug/L	-	20295	WATER	1-20-20-water
21059	U	LCS 440-591227/2-B - 2		21 Jan 2020 13:25:03	3.8475	ug/L	-	20553	WATER	1-20-20-water
21060	U	440-259164-A-1-B - 1		21 Jan 2020 13:27:13	-0.0914	ug/L	-	-256	WATER	1-20-20-water
21061	U	440-259164-A-1-B - 2		21 Jan 2020 13:27:13	-0.0950	ug/L	-	-275	WATER	1-20-20-water
21062	U	440-259164-A-1-C MS - 1		21 Jan 2020 13:29:27	4.1184	ug/L	-	21984	WATER	1-20-20-water
21063	U	440-259164-A-1-C MS - 2		21 Jan 2020 13:29:27	4.1542	ug/L	-	22173	WATER	1-20-20-water
21064	U	440-259164-A-1-D MSD - 1		21 Jan 2020 13:31:37	4.0271	ug/L	-	21502	WATER	1-20-20-water
21065	U	440-259164-A-1-D MSD - 2		21 Jan 2020 13:31:37	4.0737	ug/L	-	21748	WATER	1-20-20-water
21066	C	CCV 440-591391/3-A - 1		21 Jan 2020 13:33:49	97.1% 3.8859	ug/L	-	20756	WATER	1-20-20-water
21067	C	CCV 440-591391/3-A - 2		21 Jan 2020 13:33:49	98.5% 3.9389	ug/L	-	21036	WATER	1-20-20-water
21068	C	CCB 440-591391/4-A - 1		21 Jan 2020 13:36:01	-0.0799	ug/L	-	-195	WATER	1-20-20-water
21069	C	CCB 440-591391/4-A - 2		21 Jan 2020 13:36:01	-0.0729	ug/L	-	-158	WATER	1-20-20-water
21070	U	440-258974-A-1-B - 1		21 Jan 2020 13:38:12	0.0115	ug/L	-	288	WATER	1-20-20-water
21071	U	440-258974-A-1-B - 2		21 Jan 2020 13:38:12	0.0130	ug/L	-	296	WATER	1-20-20-water
21072	U	440-259259-A-4-D - 1		21 Jan 2020 13:40:22	-0.0543	ug/L	-	-60	WATER	1-20-20-water
21073	U	440-259259-A-4-D - 2		21 Jan 2020 13:40:22	-0.0534	ug/L	-	-55	WATER	1-20-20-water
21074	U	MB 440-591228/1-B - 1		21 Jan 2020 13:42:32	-0.0146	ug/L	-	150	WATER	1-20-20-water
21075	U	MB 440-591228/1-B - 2		21 Jan 2020 13:42:32	-0.0148	ug/L	-	149	WATER	1-20-20-water
21076	U	LCS 440-591228/2-B - 1		21 Jan 2020 13:44:42	3.8324	ug/L	-	20473	WATER	1-20-20-water
21077	U	LCS 440-591228/2-B - 2		21 Jan 2020 13:44:42	3.8774	ug/L	-	20711	WATER	1-20-20-water
21078	U	440-259164-A-2-B - 1		21 Jan 2020 13:46:53	-0.1191	ug/L	-	-402	WATER	1-20-20-water
21079	U	440-259164-A-2-B - 2		21 Jan 2020 13:46:53	-0.1181	ug/L	-	-397	WATER	1-20-20-water
21080	U	440-259164-A-2-C MS - 1		21 Jan 2020 13:49:06	3.9227	ug/L	-	20950	WATER	1-20-20-water
21081	U	440-259164-A-2-C MS - 2		21 Jan 2020 13:49:06	3.9866	ug/L	-	21288	WATER	1-20-20-water
21082	U	440-259164-A-2-D MSD - 1		21 Jan 2020 13:51:15	4.0300	ug/L	-	21517	WATER	1-20-20-water
21083	U	440-259164-A-2-D MSD - 2		21 Jan 2020 13:51:15	4.0940	ug/L	-	21855	WATER	1-20-20-water
21084	U	440-259162-A-1-B - 1		21 Jan 2020 13:53:28	-0.1285	ug/L	-	-452	WATER	1-20-20-water
21085	U	440-259162-A-1-B - 2		21 Jan 2020 13:53:28	-0.1316	ug/L	-	-468	WATER	1-20-20-water
21086	U	320-57825-A-1-C - 1		21 Jan 2020 13:55:42	-0.0430	ug/L	-	0	WATER	1-20-20-water
21087	U	320-57825-A-1-C - 2		21 Jan 2020 13:55:42	-0.0424	ug/L	-	3	WATER	1-20-20-water
21088	U	320-57825-A-2-C - 1		21 Jan 2020 13:57:51	-0.0212	ug/L	-	115	WATER	1-20-20-water
21089	U	320-57825-A-2-C - 2		21 Jan 2020 13:57:51	-0.0214	ug/L	-	114	WATER	1-20-20-water
21090	C	CCV 440-591391/3-A - 1		21 Jan 2020 14:00:01	98.8% 3.9505	ug/L	-	21097	WATER	1-20-20-water
21091	C	CCV 440-591391/3-A - 2		21 Jan 2020 14:00:01	100.2% 4.0071	ug/L	-	21396	WATER	1-20-20-water
21092	C	CCB 440-591391/4-A - 1		21 Jan 2020 14:02:09	-0.0672	ug/L	-	-128	WATER	1-20-20-water
21093	C	CCB 440-591391/4-A - 2		21 Jan 2020 14:02:09	-0.0693	ug/L	-	-139	WATER	1-20-20-water
21094	U	320-57825-A-3-C - 1		21 Jan 2020 14:04:22	-0.0294	ug/L	-	72	WATER	1-20-20-water
21095	U	320-57825-A-3-C - 2		21 Jan 2020 14:04:22	-0.0303	ug/L	-	67	WATER	1-20-20-water
21096	U	440-259366-A-1-A - 1		21 Jan 2020 14:06:32	-0.0222	ug/L	-	110	WATER	1-20-20-water
21097	U	440-259366-A-1-A - 2		21 Jan 2020 14:06:32	-0.0157	ug/L	-	144	WATER	1-20-20-water
21098	U	190-22074-D-1-E - 1		21 Jan 2020 14:08:42	-0.0136	ug/L	-	155	WATER	1-20-20-water
21099	U	190-22074-D-1-E - 2		21 Jan 2020 14:08:42	-0.0114	ug/L	-	167	WATER	1-20-20-water
21100	C	CRA 440-591391/5-A - 1		21 Jan 2020 14:10:52	97.9% 0.1959	ug/L	-	1262	WATER	1-20-20-water
21101	C	CRA 440-591391/5-A - 2		21 Jan 2020 14:10:52	99.3% 0.1985	ug/L	-	1276	WATER	1-20-20-water
21102	C	CCV 440-591391/3-A - 1		21 Jan 2020 14:13:02	100.6% 4.0220	ug/L	-	21475	WATER	1-20-20-water
21103	C	CCV 440-591391/3-A - 2		21 Jan 2020 14:13:02	101.7% 4.0688	ug/L	-	21722	WATER	1-20-20-water
21104	C	CCB 440-591391/4-A - 1		21 Jan 2020 14:15:11	-0.0672	ug/L	-	-128	WATER	1-20-20-water
21105	C	CCB 440-591391/4-A - 2		21 Jan 2020 14:15:11	-0.0693	ug/L	-	-139	WATER	1-20-20-water

WATER



Linear

A= 0.0000e+000

B= 1.8929e-004

C= -4.2989e-002

Rho= 0.9999099

Accept= Accepted

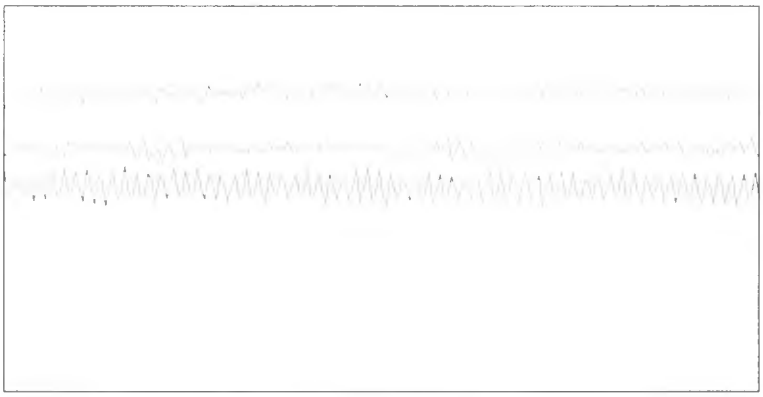
Accepted Date=

01/21/20 10:01

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
IC 440-591391/6-A	0.000	0.034	0.034	406	36.000	370	442			
IC 440-591391/7-A	0.200	0.201	0.001	1287	0.3 %	1291	1283			
IC 440-591391/8-A	0.500	0.402	-0.098	2351	0.6 %	2337	2365			
IC 440-591391/9-A	1.000	1.055	0.055	5802	0.6 %	5766	5838			
IC 440-591391/10-A	5.000	5.021	0.021	26750	0.8 %	26544	26956			
IC 440-591391/11-A	10.000	9.988	-0.012	52990	0.6 %	52679	53302			

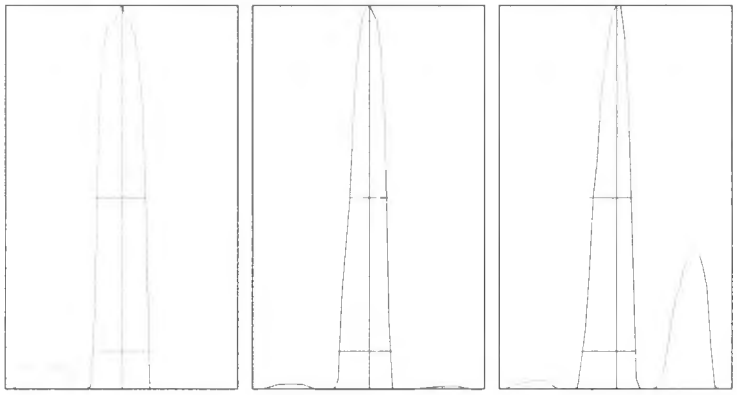
Tune Report

Tune File : autotune.u
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.3100 sec	
n:	200	
Oxide:	156/140	0.640%
Doubly Charged:	70/140	1.451%

m/z	Range	Count	Mean	RSD%	Background
7	50,000	25064.0	26469.9	5.36	1.50
89	200,000	121054.0	125908.4	1.93	3.60
205	100,000	77308.0	77553.9	1.90	10.00



m/z:	7	89	205
Height:	26,828	127,357	77,436
Axis:	7.05	89.05	205.05
W-50%:	0.65	0.50	0.55
W-10%:	0.7500	0.700	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tune Report

Tune File : autotune.u
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	119
RF Matching	:	1.5 V	Extract 2	:	-150 V	AMU Offset	:	127
Smpl Depth	:	8 mm	Omega Bias	:	-75 V	Axis Gain	:	0.9981
Torch-H	:	0.1 mm	Omega Lens	:	7 V	Axis Offset	:	0.09
Torch-V	:	0.2 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	0.55 L/min	Cell Exit	:	-50 V			
Dilution Mode	:	ON	Deflect	:	12.2 V	===Detector Parameters===		
Dilution Gas	:	0.5 L/min	Plate Bias	:	-40 V	Discriminator	:	4.5 mV
Optional Gas	:	0 %	===Octopole Parameters===			Analog HV	:	1949 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	190 V	Pulse HV	:	1280 V
Sample Pump	:	--- rps	OctP Bias	:	-8 V			
S/C Temp	:	2 degC						

===Reaction Cell===								
Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

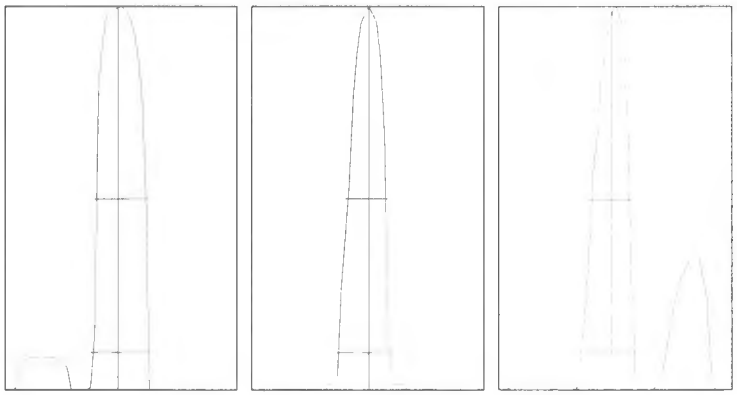
Generated : Feb 06, 2020 08:50:28
Printed : Feb 06, 2020 08:50:32

Tune Report

Tune File : autotune.u
Comment :

Integration Time:	0.1000 sec	
Sampling Period:	0.3100 sec	
n:	200	
Oxide:	156/140	0.701%
Doubly Charged:	70/140	1.462%

m/z	Range	Count	Mean	RSD%	Background
7	100,000	64386.0	64437.4	1.89	2.60
89	200,000	134478.0	135264.0	2.26	3.70
205	100,000	94423.0	93993.3	2.46	9.70



m/z:	7	89	205
Height:	64,408	140,001	94,645
Axis:	7.00	89.05	205.00
W-50%:	0.70	0.55	0.55
W-10%:	0.7500	0.700	0.700

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Feb 06, 2020 09:37:08
Printed : Feb 06, 2020 09:37:10

Tune Report

Tune File : autotune.u
Comment :

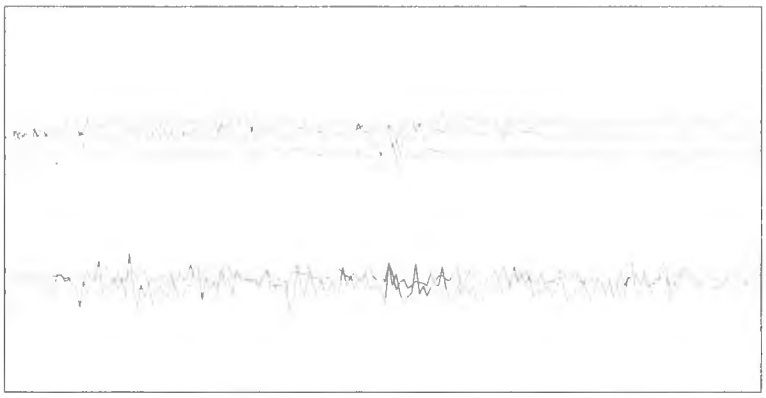
Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	119
RF Matching	:	1.5 V	Extract 2	:	-145 V	AMU Offset	:	127
Smpl Depth	:	8 mm	Omega Bias	:	-100 V	Axis Gain	:	0.9981
Torch-H	:	0.1 mm	Omega Lens	:	9.2 V	Axis Offset	:	0.09
Torch-V	:	0.2 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	0.55 L/min	Cell Exit	:	-50 V			
Dilution Mode	:	ON	Deflect	:	13.2 V	===Detector Parameters===		
Dilution Gas	:	0.5 L/min	Plate Bias	:	-40 V	Discriminator	:	4.5 mV
Optional Gas	:	0 %	===Octopole Parameters===			Analog HV	:	1949 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	180 V	Pulse HV	:	1280 V
Sample Pump	:	--- rps	OctP Bias	:	-8 V			
S/C Temp	:	2 degC						

===Reaction Cell===								
Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

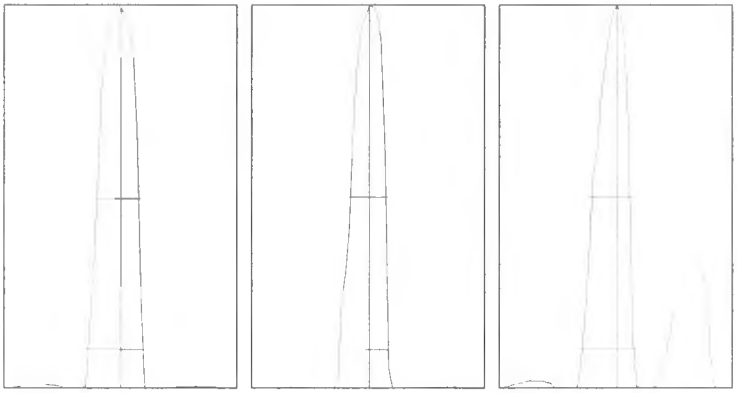
Tune Report

Tune File : he.u
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.297%
Doubly Charged:	70/140	1.457%

m/z	Range	Count	Mean	RSD%	Background
156/140	1	0.281%	0.275%	9.69	
70/140	5	1.544%	1.479%	4.60	
59	50,000	31159.0	30705.1	1.94	0.30
89	50,000	34033.0	33272.5	2.08	0.30
205	100,000	69481.0	69476.1	2.18	0.80



m/z:	59	89	205
Height:	30,014	33,832	71,314
Axis:	59.05	89.05	205.05
W-50%:	0.60	0.50	0.55
W-10%:	0.7500	0.6500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.5600 sec

Y axis : Linear

Generated : Feb 06, 2020 09:44:56
Printed : Feb 06, 2020 09:44:58

Tune Report

Tune File : he.u
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	119
RF Matching	:	1.5 V	Extract 2	:	-145 V	AMU Offset	:	127
Smpl Depth	:	8 mm	Omega Bias	:	-100 V	Axis Gain	:	0.9981
Torch-H	:	0.1 mm	Omega Lens	:	9.2 V	Axis Offset	:	0.09
Torch-V	:	0.2 mm	Cell Entrance	:	-40 V	QP Bias	:	-15 V
Carrier Gas	:	0.55 L/min	Cell Exit	:	-60 V			
Dilution Mode	:	ON	Deflect	:	0 V	===Detector Parameters===		
Dilution Gas	:	0.5 L/min	Plate Bias	:	-60 V	Discriminator	:	4.5 mV
Optional Gas	:	0 %	===Octopole Parameters===			Analog HV	:	1949 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	180 V	Pulse HV	:	1280 V
Sample Pump	:	--- rps	OctP Bias	:	-18 V			
S/C Temp	:	2 degC						

===Reaction Cell===								
Reaction Mode	:	ON						
H2 Gas	:	0 mL/min	He Gas	:	4.3 mL/min	Optional Gas	:	--- %

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 6 Feb 2020 10:17:02 am
Operator: LP 7700
Misc Info:
Vial Number: 1307
Current Method: C:\ICPMH\1\METHODS\TN_6020.m

Minimum Response(CPS)

Element	Actual	Required	Flag

RSD (%)

Element	Actual	Required	Flag
6 Li	1.72	5.00	
59 Co	1.04	5.00	
115 In	2.44	5.00	
205 Tl	0.80	5.00	

Ion Ratio

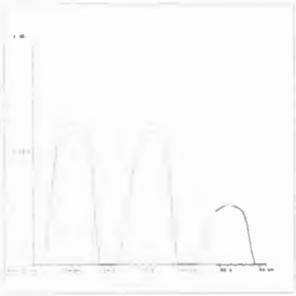
Element	Actual	Required	Flag

Maximum Bkg. Count(CPS)

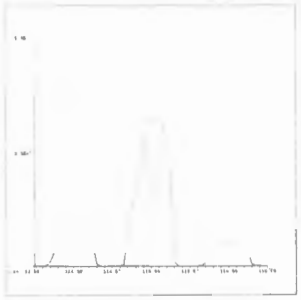
Element	Actual	Required	Flag

C:\ICPMH\1\DATA\020620B1.B\QCTUNE00.D

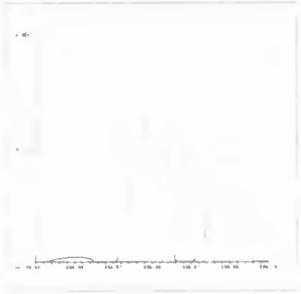
6 Li
Mass Calib.
Actual: 6.05
Required: 5.90-6.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.05
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



115 In
Mass Calib.
Actual: 115.05
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.55
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90-205.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

QC Tune Result:Pass

C:\ICPMH\1\DATA\020620B1.B\QCTUNE00.D

Replicated Data: Tune #1

Mass	Count(CPS)				
6	8228839.00	8156595.00	8141300.00	7832161.00	8019203.00
7	465581.91	462990.19	461448.41	444780.09	454673.09
8	24.00	27.00	25.00	27.00	29.50
58	3266600.00	3262366.00	3214225.00	3244192.00	3171839.00
59	3015716.00	2991935.00	2982765.00	2969626.00	2949835.00
60	1361509.00	1357613.00	1341630.00	1338820.00	1325022.00
95	1354693.00	1358702.00	1339577.00	1355372.00	1337549.00
111	1480552.00	1473212.00	1464201.00	1466313.00	1460654.00
114	3433650.00	3414686.00	3375910.00	3418084.00	3377595.00
115	14195970.00	14194260.00	14552280.00	13642140.00	14288610.00
116	2098063.00	2084001.00	2088895.00	2123102.00	2070772.00
118	1907021.00	1893011.00	1901595.00	1910416.00	1891280.00
204	99612.70	102442.20	102639.60	104314.70	104805.20
205	2976911.00	2937791.00	2979541.00	2994259.00	2977495.00
206	2056748.00	2086936.00	2064237.00	2114300.00	2079182.00
207	1823981.00	1846085.00	1834225.00	1850688.00	1842991.00
208	4368023.00	4427609.00	4450272.00	4471430.00	4439296.00